

# BIRD - BANDING

*A Journal of Ornithological Investigation*

INDEX TO VOLUMES XXII - XXXI

1951 - 1960

COMPILED BY

LAWRENCE M. BARTLETT

EDITED BY

DAVID W. JOHNSTON

PUBLISHED BY

THE NORTHEASTERN BIRD-BANDING ASSOCIATION, INC.

SOUTH LONDONDERRY, VT.

1974

Other indices and back numbers of  
Bird-Banding are available from the  
Treasurer whose name and address  
appear in a current issue of the journal.

PREPARED FOR OFFSET PRINTING

By

Sharp Offset Printing Inc.  
Rutland, Vermont

## I N T R O D U C T I O N

In the preparation of this index I have followed and been aided by Mrs. Hickey's excellent Index to Volumes XII-XXI, 1949-1950. The long lapse of time since I agreed to undertake the compilation of this Index and its completion is due in part to it being a time of unanticipated and increasing administrative duties. My apologies to users for the long delay.

Coverage: Like its predecessor, this Index covers the review articles (there were 2376 reviewed in this ten-year span). I have tried to include every species mentioned, even those mentioned by the reviewer in his discussion of a paper being reviewed and those appearing in Notes and News and in Letters to the Editor and Editorials.

Format: To reduce duplication, I have made liberal use of cross-referencing. I have begun each new letter of the alphabet on a new page. Usually this will provide the user with space for additional notes of his own. Under each major subject heading will be found first a cross-reference to other related topics. Thereafter the major heading is divided, as appropriate, into subtopics. The major headings are very similar to those established by Mrs. Hickey. Feeling that an Index to the major topics and subtopics may be useful to the user, I have included one at the end of this introduction.

Nomenclature: Synonymous names, both common and scientific, and changes in and differences of opinion concerning our understanding of avian relationships, particularly at the generic level, caused me considerable grief at first. I therefore have cross-referenced every name to the one I have used. My guides for nomenclature were those listed on the next page.

Abbreviations: I have made liberal use of abbreviations, most of which should be interpretable without recourse to the list which follows on p. v. For States of the United States I have used the the official U.S. Post-office two-letter abbreviations.

Acknowledgments: I am pleased to thank two former students, Mr. Richard Guerrero and Miss Karen Tucker for assistance in the early stages of the preparation of author and species indexes and Miss Patricia Shaw for some early rough-draft typing.

Errata: In any work of this nature, errors might be found. I will appreciate having brought to my attention errors of commission or omission, with the hope that an erratum list may be published in the future. Notice of such errors should be addressed to: L.M. Bartlett, Dept. of Zoology, Univ. Mass., Amherst, MA. 01002.

References:

- American Ornithologists' Union. 1957. Check-list of North American birds. 5th ed. Baltimore, American Ornithol. Union.
- 1973. Thirty-second supplement to the American Ornithologists' Union check-list of North American birds. *Auk*, 90: 411-419.
- Austin, O.L. 1961. Birds of the world. New York, Golden Press.
- Bannerman, D.A. 1953. The birds of West and Equatorial Africa (2 vols.) Edinburgh, Oliver and Boyd Ltd.
- Blake, E.R. 1953. Birds of Mexico. Chicago, Univ. Chicago Press.
- Bond, J. 1961. Birds of the West Indies. Boston, Houghton-Mifflin Co.
- Clancey, P.A. 1964. The birds of Natal and Zululand. Edinburgh, Oliver and Boyd.
- de Schauensee, R.M. 1970. A guide to the birds of South America. Wynnewood, PA., Livingston Publ. Co.
- Eastman, W.R.Jr. and A.C.Hunt. 1966. The parrots of Australia. Sydney, Angus and Robertson.
- Etchecopar, R.D., and F.Hue. 1967. The birds of North Africa. Edinburgh, Oliver and Boyd.
- Falla, R.A., R.B.Sibson, and E.G.Turbott. 1967. A field guide to the birds of New Zealand. Boston, Houghton-Mifflin Co.
- Grossmann, M.L., and J.Harlet. 1964. Birds of Prey of the world. New York, Clarkson N. Potter, Inc.
- Mackworth-Praed, C.W., and C.H.B.Grant. 1952, 1955. Birds of eastern and northeastern Africa, Series I, 2 vols., London, Longmans, Green and Co.
- - ---. 1962-63. Birds of the southern third of Africa. Series II, 2 vols. London, Longmans, Green and Co.
- Palmer, R.S.(ed.) 1962. Handbook of North American birds, vol. 1. Loons through Flamingos. New Haven, Yale Univ. Press.
- Peters, J.L. 1931-1962. Check-list of birds of the world. Cambridge, Harvard Univ. Press.
- Peterson, R.T., G.Mountfort, and P.A.D.Hollum. 1954. A field guide to the birds of Britain and Europe. Boston, Houghton-Mifflin Co.
- Rand, A.L., and E.T.Gilliard. 1968. Handbook of New Guinea birds. Garden City, Natural History Press.
- Ripley, S.D. 1961. A synopsis of the birds of India and Pakistan. Bombay Nat. Hist. Soc.
- Sclater, P.L. 1971. A field guide to Australian birds, non-passerines. Wynnewood, Livingston Publ. Co.
- Serventy, D.L., and H.M.Whittell. 1967. Birds of western Australia. Perth, Lamb Publications Pty.
- Vaurie, C. 1959, 1965. Birds of the palearctic fauna. 2 vols. London, H.F. and G. Witherby.
- Williams, J.G. 1963. A field guide to the birds of East and Central Africa. Boston, Houghton-Mifflin Co.

ABBREVIATIONS USED

Afr.-Africa	ID.-Idaho	Pac.-Pacific
AK.-Alaska	IL.-Illinois	paras.-parasite
AL.-Alabama	illus.-illustration	path.-pathology
Am.-America	IN.-Indiana	Phil.-Philippines
anal.-analysis	incub.-incubation	phot.-photograph
anat.-anatomy	Ind.-India	physiol.-physiology
ann.-annual	Is.-Island	Pol.-Poland
Ant.-Antarctic	KS.-Kansas	pop.-population
AR.-Arkansas	KY.-Kentucky	PR.-Puerto Rico
Arct.-Arctic	LA.-Louisiana	(r)-in a review
Argen.-Argentina	L.H.-Life History	reprod.-reproduction
Atl.-Atlantic	MA.-Massachusetts	RI.-Rhode Island
Aust.-Australia	MD.-Maryland	s.-south
AZ.-Arizona	ME.-Maine	S.Am.-South America
band.-banding	meas.-measurement	SC.-South Carolina
behav.-behavior	Medit.-Mediterranean	Scan.-Scandinavia
biol.-biology	meth.-method	Scot.-Scotland
Br.Is.-British Isles	Mex.-Mexico	SD.-South Dakota
CA.-California	mgt.-management	s.e.-southeast
Carib-Caribbean	MI.-Michigan	skel.-skeleton
CO.-Colorado	migr.-migration	soc.-social
cons.-conservation	misc.-miscellaneous	sp.-species
CT.-Connecticut	MN.-Minnesota	subsp.-subspecies
Czech.-Czechoslovakia	MO.-Missouri	surv.-survival
DC.-District of Columbia	monogr.-monograph	s.w.-southwest
DE.-Delaware	morph.-morphology	Switz.-Switzerland
Den.-Denmark	mort.-mortality	syn.-synonym
descr.-description	MS.-Mississippi	sys.-systematics
detn.-determination	MT.-Montana	tax.-taxonomy
dev.-development	Mt.-mountain	tech.-technique
distr.-distribution	n.-north	temp.-temperature
e.-east(ern)	nat.-nature	terr.-territory
ecol.-ecology	navig.-navigation	trop.-tropical
embry.-embryology	n.e.-northeast	TN.-Tennessee
Engl.-England	NE.-Nebraska	TX.-Texas
Eur.-Europe	Neth.-Netherlands	U.S.-United States
evol.-evolution	NC.-North Carolina	USF&W.-U.S.Fish &
Finl.-Finland	ND.-North Dakota	Wildlife
FL.-Florida	NH.-New Hampshire	USSR.-Union of Soviet
Fr.-France	NJ.-New Jersey	Socialist Republics
GA.-Georgia	NM.-New Mexico	UT.-Utah
Galap.-Galapagos	nomen.-nomenclature	VA.-Virginia
geog.-geography	Nor.-Norway	var.-variation
geol.-geology	NV.-Nevada	V.I.-Virgin Islands
Ger.-Germany	NY.-New York	VT.-Vermont
Grnl.-Greenland	N.Z.-New Zealand	w.-west
GU.-Guam	O.-Ocean	WA.-Washington
hab.-habit(at)	OH.-Ohio	WI.-Wisconsin
HI.-Hawaii	OK.-Oklahoma	W.Ind.-West Indies
hist.-history	OR.-Oregon	WY.-Wyoming
histol.-histology	orient.-orientation	yr.-year
IA.-Iowa	ornith.-ornithology	zoog.-zoogeography
	PA.-Pennsylvania	

S U B J E C T I N D E X

<u>Pg.</u>	<u>Topic</u>	<u>Pg.</u>	<u>Topic</u>
	Accidents(see Injuries & -)	58	Development
2	Adaptations		Diseases (see Parasites &-)
	Africa	59	Distribution
	Age	63	Ecology
	-life expectancy		-general, of-
3	-longevity, maxima -		-habitats
4	Aggregations	64	-weather influences
5	Alaska	65	Economics
8	Anatomy		Eggs
10	Antarctic		- clutch-
	Anthology	66	- laying
	Anting		Embryology (see Development)
12	Arctic	68	Endocrinology
13	Artificial propagation		England (see British Isles)
	Asia	69	Europe
	Attracting birds	70	Evolution
14	Australia		Extinction
15	Banding		Faeroe Islands (see Oceanic Islands)
	-reports, of species		Faunal dynamics (see Population)
21	Behavior		Faunistics (see Field Identifi- cation & -)
22	-aggressive		Feeding (see Behavior -)
	-breeding	73	Field Identification & Faunistics
23	-coition		Finland (see Europe -)
24	-cooperative	75	Flight
	-courtship		Food
	-displays		Fossils (see Paleontology)
25	-dominance		France (see Europe-)
	-feeding		Germany (see Europe-)
26	-general, of-	83	Greenland
27	-imprinting		Growth (see Development)
28	-pair bond		Habitat (see Ecology -)
	-pair formation		Hawaii (see Oceanic Islands)
	-parental care	88	Hearing
29	-polygamy		Herbicides (see Pesticides)
	-releasers	89	Hibernation
	-responses to-	90	Historical Ornithology
30	-site tenacity		Homing (see Orientation)
	-social		Hungary (see Europe -)
32	Bibliography	92	Hunting
	Biography		Hybrids
33	Books & monographs reviewed	93	Iceland
	Brazil (see South America)		Incubation
38	Breeding	94	Injuries & Accidents
	British Isles		Insecticides (see Pesticides)
42	Canada		Invasions (see Population)
44	Censuses		Iran (see Asia)
45	Central America	96	Japan
47	China	106	Life Histories
50	Conservation		
54	Cycles		
	Denmark (see Europe-)		

<u>Pg.</u>	<u>Topic</u>	<u>Pg.</u>	<u>Topic</u>
	Light (see Photoperiod)		Philippines (see Oceanic Islands)
107	Lists		Photoperiod (see Physiology -)
	-annotated	145	Physiology
108	-check-lists	147	Pigmentation
	Locomotion	149	Plumage
	Longevity (see Age -)	150	Polygamy (see Behavior -)
111	Management		Population
114	Measurements		-changes
116	Mexico	151	-counts
	Micronesia		-cycles
	Migration		-decreases of-
	-diurnal		-densities
	-in -	152	-dynamics
117	-nocturnal		-increases of-
	-of species		-indices
118	-related to-		-invasions
119	-routes of -	153	-of species
120	Molts	154	Predation
	Morphology (see Anatomy)	159	Range
121	Mortality		-extensions
123	Movements	160	-home
	Navigation (see Orientation)		Recoveries & Returns
126	Nest		-abroad, from birds banded in-
	-building	161	-general, of birds banded in-
127	-of species		-of foreign-banded birds in-
	Nesting		-within country of banding
	-habits of-	163	Roosting
129	-success	168	Sex Ratios
	Netherlands (see Europe -)		Sexing (see Techniques)
	Nets (see Techniques -)		Song (see Sounds)
	New Brunswick (see Canada)	171	Sounds
	Newfoundland (see Canada)		-mechanical
	New Zealand		-vocal
	Nomenclature (see Systematics)		- - calls
130	North America	172	- - general, of-
	Norway (see Europe -)		- - song
132	Oceanic Islands	173	South America
	Oil Pollution	175	Status
133	Orientation		Sweden (see Europe -)
	-homing		Switzerland (see Europe -)
	-of species	181	Systematics
134	-sensory basis	184	Techniques
135	Paintings & Photographs		-ageing
	Paleontology	185	-banding
136	Parasites & Diseases		-calculation, determination, or estimation of-
137	Parasitism by Birds		-capture
	Patagonia (see South America)	186	-censusing
	Pathology (see Parasites & Diseases & Teratology)		-marking
142	Pesticides		

<u>Pg.</u>	<u>Topic</u>
	Techniques (cont.)
186	-nets
	-sexing
	-statistical
187	-traps
	-trapping
	Temperature
188	Teratology
	Territory
195	United States
	USSR
198	Vision
	Vocalizations (see Sounds)
	Waterfowl (see Anatidae)
201	Weight
	Yugoslavia (see Europe -)
207	Zoogeography



BIRD-BANDING  
TEN YEAR INDEX  
1951-1960

- Abbott, John, collections of  
24:167(r)
- Acanthis spp. band., see Band. Reports
- cannabina (Linnet)
    - breeding, Belgium 26:166(r)
    - maggots fatal to 28:241(r)
    - migr. 27:132(r)
    - , reversed 27:190(r)
    - song innate 23:188(r); 28:55(r)
  - flammea (Redpoll)
    - census, Sweden 31:105(r)
    - change in breeding area in one season 28:244(r)
    - immigration to Scotland 27:189(r)
    - in book, Ungava Peninsula, 30:137(r)
    - killed in trap by shrike 22:124
    - migr., invasion type related to cone crop 29:49(r)
    - sleep, depth of 23:82(r)
  - flavirostris (Twite)
    - extinction in Faeroe Is. 23:78(r)
    - molt, postnuptial 28:130
    - netting vs. trapping 28:220
  - hornemanni (Hoary Redpoll)
    - killed in trap by shrike 22:123
    - nest, 6 eggs, Lapland 28:180(r)
    - sleep in Arctic summer 24:21(r)
  - linaria (=A. flammea)
- Acanthopneuste borealis (= Phylloscopus borealis)
- Accentor, Alpine (= Prunella collaris)
- ACCIDENTS (see Injuries & -)
- Accipiters, soaring of 30:81
- Accipiter cooperii (Cooper's Hawk)
  - attack trapped Mourning Doves 22:179
  - band., see Band. Reports
  - migr. route, RI. 30:180
  - shooting in AR., in book, 22:198(r)
- gentilis (Goshawk)
  - book, 27:98(r)
  - distr., e. Palearctic 28:53(r)
  - food, amount needed 30:199(r)
  - habits 22:37(r); 25:170(r); 29:206(r)
  - longevity (see AGE)
  - nesting success 25:154(r)
- Accipiter gentilis (cont.)
  - phot. & L.H. study 30:60(r)
  - prey on Eur. Jay 23:86(r)
  - young Red-footed Falcon 27:38(r)
  - Starling flocks not respond to 30:25
  - trap, Bal-Chatrri, for 30:60(r)
  - use in killing ducks, Japan, 29:131(r)
- nisus (Eur. Sparrow Hawk)
  - band., see Band. Reports
  - Blue Tit, reaction to 29:252(r)
  - book, 27:98(r)
  - food 23:116(r); 25:170(r); 29:206(r)
  - hunting success 25:128(r)
  - longevity - see AGE
  - migr. 27:133(r); 28:165(r); 29:247(r); 30:125(r)
  - mounted specimen as substrate for Barn Swallow nest 28:170(r)
  - pop. changes 27:101(r)
  - response of nesting Crag Martins to, 29:194(r)
  - Willow Warbler to, 22:90(r)
- striatus (Sharp-shinned Hawk)
  - attack on Veery 24:103
  - , unsuccessful, on Pileated Woodpecker 29:260(r)
  - Bal-Chatrri trap for, 30:25
  - band size 30:121
  - migr. in RI. 30:180
  - & trapping, Point Pelee 30:38
  - , over water 29:152
  - prey on Evening Grosbeak 29:30
  - shooting in AR., in book 22:198(r)
- velox (=A. striatus)
- Accipitridae, band., see Band. Reports
- in book, N. & Middle Am. 22:43(r)
- Acland, C.M., V.C. Maxse & D.B. Peakall. Bird obs. in Lapland 28:180(r)
- Acrocephalus agricola (Paddyfield Warbler)
  - band., see Band. Reports
  - trapped in Sweden 27:130(r), 146(r)
- arundinaceus (Great Reed Warbler)
  - breeding biol. & syst. in Israel 29:258(r)
  - cuckoo parasitism 23:36(r)

- Acrocephalus arundinaceus* (cont.)  
 nesting terr. 27:194(r)  
 -palustris (Marsh Warbler)  
 band., see Band. Reports  
 recovery in Sweden 26:75(r)  
 -schoenobaenus (Sedge Warbler)  
 increase in Neth. 22:134(r)  
 -scirpaceus (Reed Warbler)  
 breeding study 27:137(r)  
 dispersal in Sweden 28:181(r)  
 increase in Neth. 22:134(r)  
 mist-netting on Fair Isle 28:220  
 -stentoreus (Southern Great Reed  
 Warbler)  
 breeding biol. & syst. 29:258(r)  
*Actitis* (= *Tringa*)  
*Actornithophilus* (a mite)  
 on birds' eggs 25:29(r)  
 -laveni, new sp. from Ringed Plover  
 25:29(r)  
 Acworth, B. Bird & butterfly  
 mysteries 28:55(r)  
 Adams, D.A. & T.L. Quay. Ecol. of  
 Clapper Rail in NC. 30:193(r)  
 -, L. Confidence limits for Peterson  
 of Lincoln Index 22:189(r)  
 -, L.E.G. Nest records of the Barn  
 Swallow 28:235(r)  
 ADAPTATIONS (see also Anatomy,  
 Behavior, Ecology, Evolution,  
 Physiology)  
 -in Dowitchers, for habitat  
 utilization 22:96(r)  
 -in genus *Vireo* 31:58(r)  
 -of egg color in *Turdinae* 30:53(r)  
 -poor, in care of young Black-headed  
 Gull 25:120(r)  
 --, for coastal nesting of White-  
 winged Scoter 29:251(r)  
 -to arctic conditions 30:131(r)  
 -- cliff-nesting, Kittiwake 29:194(r)  
 -- nesting on man-made structures  
 30:52(r)  
 -- new feeding methods, passerines  
 28:173(r)  
 -- new habitats, Black Woodpecker  
 28:108(r)  
 -- new roost sites, Brown Creeper  
 & Great Tit 28:240(r)  
 -- temp., arctic & tropical  
 23:116(r), 117(r)  
 Addy, C.E. Fall migr. of Black Duck  
 25:123(r)  
 Adeltolt, E. Recovery in Den. 1900-'55  
 of birds ringed abroad 30:183(r)
- Aechmophorus occidentalis* (Western  
 Grebe)  
 feather eating & pellet formation  
 28:182(r)  
 migr. west in fall 30:230  
 production & water level 26:129(r)  
*Aegithalos caudatus* (Long-tailed Tit)  
 daily activities 29:252(r); 31:102(r)  
 feeding on scale insects 29:260(r)  
 helps rear Great Tits 28:105(r)  
 nesting behav. 29:196(r)  
 predation by raptors 31:102(r)  
 roost in cavity in ground 28:171(r)  
*Aegolius acadicus* (Saw-whet Owl)  
 band., see Band. Reports  
 injured one kills & eats House  
 Sparrow 24:21(r)  
 -funereus (Boreal = Richardson's Owl)  
 calls & displays, seasonal &  
 daily rhythms 31:102(r)  
 coition 31:102(r)  
 relation of food to clutch size  
 28:180(r)  
 vocalizations 25:158(r)  
*Aegypiidae* (Vultures)  
 in annotated list, Pyrenees  
 28:52(r)  
*Aethia pygmaea* (Whiskered Auklet)  
 in bird guide 28:247(r)  
 AFRICA (see also Banding Reports;  
 Recoveries & Returns)  
 annotated list, Tunisia 28:52(r)  
 checklist, s. Afr. 24:131(r)  
 land birds, L.H. 22:86(r)  
 sea birds, L.H. 22:86(r)  
 South, birds of, book 23:52(r)  
 AGE  
 -breeding, of Goose, Hawaiian  
 23:128(r)  
 --- Gull, California 28:178(r)  
 --- Kittiwake 30:53(r)  
 --- Penguins 29:264(r)  
 --- Shearwater, Short-tailed  
 29:193(r)  
 --- Takahē 30:48(r)  
 -calculation of, Am. Robin 22:92(r)  
 -composition, Grosbeak, Black-  
 headed 23:30(r)  
 --mockingbirds 23:88(r)  
 --Oystercatcher 27:86(r)  
 --Swallow, Barn 24:98  
 --Tern, Common, colonies 27:55  
 -criteria (see Techniques, Ageing)  
 -life expectancy (see also Mortality)  
 --of Chaffinch 25:21(r); 29:190(r)

INDEX TO VOLUMES XXII-XXXI

-3-

- AGE, life expectancy (cont.)
- of Dove, Mourning in MA. 22:173
  - Ducks 24:132(r)
  - Gull, Great Black-backed 22:129(r)
  - Osprey in Sweden 23:115(r)
  - Owl, Barn 24:28(r); 29:51(r)
  - , Tawny 29:51(r)
  - Partridge, Hungarian 29:60(r)
  - Robin, Am. 22:92(r)
  - Starling 25:21(r)
  - Swift, Alpine 25:117(r)
  - Tern, Common 27:60
  - , longevity
  - calculation of 22:92(r)
  - general, in book, AR birds 22:198(r)
  - maxima, general 28:161(r)
  - of Albatross, Royal, 25-yr  
24:131(r)
  - Blackbird, Eur. 9-yr.22:35(r)
  - -,Redwinged 9-yr. 28:238(r)
  - Bluebird, possible case of  
senescence 25:59
  - Buzzard 10-yr 29:113(r); 18-yr.  
27:133(r); 19-yr. 24:83(r);26:  
121(r); 24-yr. 24:83(r)
  - Cardinal 9-yr 22:33
  - Catbird 6-yr. 28:99;8-yr.29:232
  - Chaffinch 8-yr. 25:62(r)
  - Coot, Eur. 19-yr. 25:114(r)
  - Cormorant, Common 12-yr. 24:70(r)  
15-yr. 27:187(r); 17-yr. 29:  
112(r)
  - Crow, Hooded 11-yr. 25:113(r)
  - Curlew 18-yr. 29:186(r); 32-yr.  
31:159(r)
  - Dove, Mourning 10-yr. 22:173
  - Duck, Goldeneye 17-yr. 29:112
  - -,Mallard 12-yr. 24:70(r); 16-yr.  
29:112
  - -,Teal, Green-winged, 20-yr.  
29:112
  - Dunlin 8-yr. 30:235(r); 14-yr.  
24:153
  - Falcon, Peregrine 12-yr. 26:75(r);  
14-yr. 24:71(r)
  - Godwit, Bar-tailed 7-yr. 24:153
  - Goldfinch, Eur. 9-yr. 22:35(r)
  - Goose, White-fronted, 46- or 47-  
yr. in captivity 28:233(r)
  - Goshawk 11-yr. 26:121(r)
  - Grackle, Common 8-yr. 25:111;  
11-yr. 27:32
  - Greenfinch 10-yr. 27:87(r)
  - Grosbeak, Black-headed 5-yr.23:30  
(r)
  - Grosbeak, Evening 6-yr. 27:85
  - Gull, Black-headed 21-yr. 24:  
70(r); 25-yr. 23:54(r)
  - -,Common 13-yr. 30:48(r);22-yr.  
24:70(r); 24-yr. 30:124(r)
  - -,Great Black-backed 17+-yr.  
27:129(r)
  - -,Herring 20-yr. 25:62(r);  
21- & 22-yr. 29:113(r); 23-yr.  
25:153(r); 26-yr. 23:54(r);  
27-yr. 22:129(r); 28-yr. 27:  
129
  - -,Lesser Black-backed 26-yr.  
30:235(r)
  - Harrier, Hen 11-yr. 24:112(r);  
13+-yr. 30:48(r)
  - -,Marsh, 10+-yr. 27:86(r); 11-yr  
24:70(r); 13-yr. 24:112(r)
  - Hawk, Eur. Sparrow 10-yr.24:70(r);  
8-yr. 29:247(r)
  - Heron, Black-crowned Night, 22-  
yr. 22:80
  - -,Gray 16-yr. 24:70(r);  
25:114(r); 20-yr. 26:75(r)
  - Hobby 12-yr. 24:71(r)
  - Ibis, Glossy 20-yr. 29:112
  - Jay, Blue 8-yr. 29:211,217;  
13-yr. 23:168
  - Kite, Black 10-yr. 24:112(r)
  - -,Red 11-yr. 24:112(r)
  - Knot 9-yr. 24:153
  - Lapwing, 7-yr. 26:75(r),163(r);  
9-yr. 27:129(r); 12-yr. 26:  
76(r); 30:48(r)
  - Loon, Red-throated 23-yr.24:70(r)
  - Nuthatch, White-breasted 8-yr.  
22:180
  - Owl, Long-eared, 11-&14-yr.  
26:75(r)
  - -,Screech 8-yr. 25:62(r)
  - -,Tawny 10-yr. 24:70(r)
  - Oystercatcher 7-yr. 26:76(r);  
16-&17-yr. 25:153(r); 18-yr.  
26:121(r); 24-yr. 23:54(r);  
27-yr. 27:86(r), 128.
  - Penguin, Adelie 9-yr. 29:11
  - -,Chinstrap 11-yr. 29:11
  - -,Yellow-eyed 15-yr. 22:47
  - Petrel, Snow 10-yr. 29:25
  - Pigeon, Wood 9-yr. 28:162(r);  
11-yr. 24:70(r)
  - Pipit, Water 5-yr. 29:52(r)
  - Plover, Kentish 11-yr. 29:52(r)
  - Puffin, 21-yr. 31:92(r)

- AGE, longevity, maxima of- (cont.)
- Quail, Bobwhite 5+-yr. 30:190(r)
  - Redwing, 19-yr. 24:70(r)
  - Redstart, Am. 5-yr. 25:151
  - Robin, Am. 9-yr. 31:137
  - Rook, 9-yr. 29:113(r)
  - Skua, Antarctic 8+-yr. 29:21
  - ,McCormick's 10-yr. 29:25
  - Snipe, Eur. 7-yr. 29:186(r)
  - Sparrow, Chipping 5-yr.23:101
  - ,House, 12-yr. in captivity 27:154(r); 13-yr. 30:182
  - Spoonbill, 14-yr. 25:153(r)
  - Starling 8-yr. 28:220; 9-yr. 24:70(r)
  - Swallow, Bank 5-yr. 22:62
  - ,Barn 5-yr. 27:129(r); 16-yr. 23:20(r)
  - ,Tree 6-yr. 25:16
  - Swift, Alpine 10-yr. 28:101(r); 18-yr. 31:49(r)
  - ,Chimney 12-yr. 25:115(r); 13-yr. 24:109
  - ,Eur. 9-yr. 24:70(r); 11-yr. 23:83(r); 12-yr. 26:76(r); 17-yr. 28:168(r)
  - Tanager, Scarlet 9-yr. 29:43
  - Tern, Arctic 17-yr. 24:70(r); 19-yr. 27:129(r),187(r); 23-yr. 22:179; 27-yr. 23:54(r),72.
  - ,Black 7-yr. 25:62(r)
  - ,Caspian 26-yr. 23:72
  - ,Common 23-yr. 24:20; 25-yr. 27:128,187(r)
  - ,Least 21-yr. 23:72
  - ,Sandwich 16-yr. 23:72; 24-yr. 29:113(r)
  - ,Spoty 12-yr. 22:79
  - Titmouse, Tufted 7-yr. 28:136
  - Turnstone 9-yr. 30:48(r)
  - Woodpecker, Pileated 9-yr.23:29; 10-yr. 22:125
  - ratios, graph for detn. 22:189(r)
  - of Japanese birds 28:233(r)
  - Woodcock 27:195(r)
  - relation to albinism, Eur. Blackbird 28:54(r)
  - egg-laying, Penguins 22:185(r)
  - homing ability, Pigeon 31:93(r)
  - parasite load, Canada Goose 25:166(r)
  - sex ratio, California Quail 28:145
  - wt.,geese 27:95(r)
  - senescence, Bluebird 25:59
- Agelaius phoeniceus (Redwinged Blackbird)
- as aid to duck nest success, 30:62(r)
  - band. -see Banding Reports
  - band size 27:79; 29:93
  - breeding behav. 28:238(r)
  - capture, in mist nets 30:42; in Mourning Dove traps, 22:179
  - distr. & pop. in GA. 23:96(r)
  - embry.,compared to chick 29:66(r)
  - L.H. in AR. rice fields 29:59(r)
  - longevity - see Age, maxima-migr. 29:143
  - mobbing behav. 29:251(r)
  - nest construction 31:47(r)
  - nesting behav. 22:187(r)
  - nestling period 26:79(r)
  - newly-hatched, descr. of 27:126
  - pesticides, effect on 24:24(r)
  - plumage aberrations 26:37(r)
  - ricefield, role in economics of 29:59(r)
  - roosting flights, radar observations of 31:227(r)
  - subsp. in GA. 23:96(r)
  - territorial behav., experimental study 23:38(r)
  - weight, sex, age, & diurnal 26:19
- AGGREGATIONS(see also Roosting & Roosts)
- in tropics 22:41(r), 187(r)
  - of Blackgame & Capercaillie 29:197(r)
  - Flycatcher, Scissor-tailed 23:34(r)
  - Junco, Oregon, in winter 27:40(r)
  - mixed spp., winter, in Mex. 30:56(r)
  - Oystercatcher 24:163(r)
  - Pheasant, Ring-necked, winter, in N.Z. 30:56(r)
  - origins of migratory 24:114(r)
  - related to color patterns 22:89(r)
  - review, general 24:116(r)
  - role of family in formation of, Geese 22:187(r)
  - unusual flock behav., Tree Swallow 23:74
- Agriornis montana (Black-billed Shrike-Tyrant),
- roost at night in caves at high altitudes 24:119(r)
- Agrobates galactotes (=Cercotricha

- Ahlin, I. Pallas's Warbler found in Sweden 30:198(r)
- Aimophila aestivalis (Pine Woods Sparrow) type locality restricted 24:168(r)
- Aix galericulata (Mandarin Duck) syst. 24:127(r); 29:205(r)
- sponsa (Wood Duck)
- age of incubated eggs 26:32(r)
  - artificial propagation 22:186(r)
  - band.- see Banding Reports
  - blood parasites 27:203(r)
  - disease, Salmonella mort. 22:186(r)
  - drake feeds mate 27:42(r)
  - food 27:44(r)
  - homing 24:160(r)
  - imprinting 31:100(r)
  - mgt. 25:74(r)
  - migr. 29:47(r)
  - movements, local 30:57(r)
  - nest boxes 24:160(r)
  - nesting studies 27:139(r); 31:54(r)
  - predation 24:160(r)
  - syst. 24:127(r); 29:205(r)
- Akker, J.B. van den & V.T. Wilson.  
Public hunting on Bear River Migr. bird refuge, UT. 23:126(r)
- ALASKA
- list, annotated, Colville River 30:132(r)
- Alauda arvensis (Skylark)
- alighting on sea 27:88(r)
  - band.-see Banding Reports
  - migr. 27:132(r); 30:240(r)
  - & wind 28:166(r)
  - , visible, in Engl. 23:116(r)
  - parasitized by blowfly 31:56(r)
  - pop. changes, Neth. 22:134(r)
  - , decrease, s. Sweden 28:180(r)
  - sexual behav. of adult released by begging of young 28:173(r)
  - song learned 23:188(r)
  - , output of 28:55(r)
  - syst., subspp. 29:258(r)
- Albatross, Black-browed (Diomedea melanophris)
- , Black-footed (D. nigripes)
  - , Buller's (D. bulleri)
  - , Laysan (D. immutabilis)
  - , Royal (D. epomophora)
  - , Short-tailed = Stellar's (D. albatrus)
  - , Sooty (Phoebastria fusca)
  - , Wandering (D. exulans)
- Albatross, Yellow-billed (D. chlororhynchos)
- Albatrosses (Diomedidae)
- Albertin, R.P. (see Hartman, F.A.)
- ALBINISM - see Pigmentation
- Alca torda (Razorbill Auk)
- band. - see Banding Reports
  - breeding, Finl. 23:129(r)
  - egg palatability 24:76(r)
  - in Sweden 25:127(r)
  - migr. in Nor. 25:153(r)
- Alcedinidae (Kingfishers)
- biol. of, in book 22:145(r)
  - decreases in Neth., in book 22:43(r)
- Alcedo atthis (Eur. Kingfisher)
- bathing, brooding & feeding behav. 25:155(r)
  - behav. at nets 27:42(r)
- Alcidae (Auks, Murres, Puffins etc.)
- hazards from ice & oil 28:181(r)
  - in book, Grnl. 23:94(r)
  - pop. decrease, Nor. 22:135(r)
- Alciformes - suggested Order 30:60(r)
- Alcorn, J.R. & F. Richardson. Chukar Partridge in NY. 23:90(r)
- Adler, J. The Dipper's winking 29:57(r)
- Aldrich, E.C. Pterylography & molt, Allen Hummingbird 28:178(r)
- , J.W. (see Kenyon, K.W.; Stewart, R.E.; Jewett, W.T.)
- Investigations of Woodcock, Snipe & Rails in 1951. 23:183(r)
- Source of migrant Mourning Doves in s. FL. 24:112(r)
- & A.J. Duvall. Distr. of gallinaceous game birds 27:102(r)
- - ---- Distr. & migr. of races of Mourning Dove. 29:257(r)
- Alectoris chukar (Chukar Partridge)
- locating by recordings 27:145(r)
  - pesticide effects on 23:127(r)
  - pop. in NV. 23:90(r)
- rufa (Red-legged Partridge)
- pairing & submissive behav. 30:55(r)
  - promiscuous pairing 28:236(r)
  - voice & behav. 27:40(r)
- Alexander, W.B. Index of heron pop. 24:157(r); 25:155(r)
- & R.S.R. Fitter. Am. land birds in w. Eur. 26:131(r)
- Alle alle (Dovekie)
- wintering in Engl. 23:184(r)

- Allee, W.C. Cooperation among animals, with human implications 23:49(r)
- & K.P.Schmidt. Ecological animal geog. 2nd. ed. 23:50(r)
- Allen, A.A. (see Kellogg, P.P.)
- Bristle-thighed Curlew eggs & young. 23:35(r)
- Stalking birds with color camera 23:98(r)
- & P.P.Kellogg. Songbirds of Am. in color, sound & story 25:171(r)
- Allen, D.L. Our wildlife legacy 26:41(r)
- Allen, E.G. History of Am. ornith. before Audubon. 23:93(r)
- Allen, R.P. On the trail of vanishing birds. 29:68(r)
- Allen, R.W. & M.M.Nice. Breeding biol. of Purple Martin. 23:179(r)
- Altmann, S.A. Avian mobbing behav. & predator recognition. 29:251(r)
- Amadina fasciata (Cutthroat Finch) courtship behav. 26:82(r)
- Amadon, D. (see Mayr, E.)
- Hawaiian Honeycreepers, monogr. 22:191(r)
- Amakihi (*Loxops virens*)
- Amann, F. Bonelli's Warbler in the Basel Jura 25:120(r)
- Amazona sp. (Amazon Parrot) number sense 24:80(r)
- Ammodramus henslowii (Henslow's Sparrow)
- band.- see Banding Reports
- ecol., winter, in GA. 28:203
- savannarum (Grasshopper Sparrow)
- band.- see Banding Reports
- band size 29:93
- ecol., winter, in GA. 28:203
- night-lighting for capture 31:40(r)
- soft part colors 27:181
- wt. 27:175
- Ammospiza caudacuta (Sharp-tailed Sparrow)
- band.- see Banding Reports
- breeding behav. 29:52(r)
- leconteii (LeConte's Sparrow)
- band.- see Banding Reports
- ecol., winter, in GA. 28:203
- maritima (Seaside Sparrow)
- band- see Banding Reports
- breeding behav. 29:52
- Anas spp.
- indeterminate laying 27:39(r)
- Anas spp.(cont.)
- syst. 24:127(r)
- acuta (Pintail)
- ageing 24:167(r)
- band.- see Banding Reports
- brood movements 28:176(r)
- color marking 27:34(r)
- in book, Grnl. 22:42(r)
- migr. 25:74(r)
- & mort, hand-reared vs. wild 25:74(r)
- mort. 25:74(r)
- productivity 25:27(r)
- & water level 26:129(r)
- americana (Baldpate = Am.Widgeon)
- ageing 24:167(r)
- band size 29:91
- mgt. 25:74(r)
- wt. 27:175
- carolinensis (=A. crecca)
- clypeata (Northern Shoveler)
- ageing 24:167(r)
- band.- see Banding Reports
- behav. 23:84(r)
- bill growth 26:37(r)
- color marking 27:34(r)
- pop. increase, Iceland 24:161(r)
- productivity & water levels 26:129(r)
- recoveries - see Banding Reports
- crecca (Green-winged Teal)
- band.- see Banding Reports
- dev., postembryonic 26:37(r)
- egg of Red-breasted Merganser in nest of, 25:68(r)
- food 27:44(r)
- mgt. 25:74(r)
- productivity & water level 25:27(r)
- cyanoptera (Cinnamon Teal)
- productivity & water level 26:129(r)
- discors (Blue-winged Teal)
- ageing 24:167(r)
- band.- see Banding Reports
- band size 29:91
- brood movements 28:176(r)
- color marking 27:34(r)
- food 24:165(r); 27:44(r)
- mgt. 25:74(r)
- nesting study 27:138(r)
- parasites - new host of Haemo-  
proteus & Microfilaria 27:203(r)
- pop. losses 22:130(r)
- productivity & water level 25:27(r)
- wt. 27:175

- Anas galapagoensis (Galapagos Pintail)  
 breeding season 22:87(r)
- gibberifrons (Gray Teal)  
 band.- see Banding Reports  
 -, trapping & sexing 25:17(r)  
 minor effect of rice fields in  
 Aust. 29:199(r)
- penelope (Eur. Widgeon)  
 band.- see Banding Reports  
 recovery in USSR 25:62(r);26:121(r)
- platyrhynchos (Mallard)  
 ageing 24:167(r)  
 aspergillosis in 27:96(r)  
 band.- see Banding Reports  
 behav., color preferences 29:255(r)  
 -, courtship of ♀ by ♂ Tufted Duck  
 28:173(r)  
 -, distraction display 25:122(r)  
 -, food competition with pigeons,  
 winter, in London 31:230(r)  
 -, imprinting, review of 29:251(r)  
 -, innate patterns 28:238(r)  
 -, learning, visual, to avoid  
 shock 31:166(r)  
 -, mating of siblings & parental  
 care 25:26(r)  
 brood movements 28:176(r)  
 census, winter 25:126(r)  
 dev., postembryonic 26:37(r)  
 distr. of hunting mort. 23:128(r)  
 eggs in Magpie nest 25:68  
 -, age of incubated 26:32  
 -, of Red-breasted Merganser in  
 nest of 25:68(r)  
 fertility, duration 26:128(r)  
 food 24:165(r); 31:55(r)  
 lead poisoning 26:35(r)  
 - -, physiol. of 22:185(r)  
 male cares for young 25:26(r)  
 mgt. 25:74(r)  
 migr. 25:74(r)  
 - & mort, hand-reared vs. wild  
 25:74(r)  
 -, evol. significance of 27:97(r)  
 -, factors in 27:36(r)  
 mort. 25:74(r)  
 - as index of migr. 23:81(r)  
 - rates 24:27(r)  
 orientation, celestial 29:75  
 oil gland 26:37(r)  
 pop. losses from hunting 22:130(r)  
 prey of Eagle Owl 27:93(r)  
 productivity 30:242(r); & rainfall  
 & water level 25:27(r);26:129(r)
- Anas platyrhynchos (cont.)  
 recoveries - see Banding Reports  
 - of "reward" bands 26:120(r)  
 sex ratios 29:203(r); 30:242(r)  
 sexual maturity, early, in ♀  
 29:55(r)  
 spermatogenesis in 23:118(r)  
 starvation, effects of 25:28(r)  
 tameness of 23:86(r)
- querquedula (Garganey)  
 band.- see Banding Reports
- rubripes (Black Duck)  
 band.- see Banding Reports  
 color marking 27:34(r)  
 food 27:44(r)  
 mgt. 25:74(r); & fall migr.,  
 25:123(r), 124(r)  
 migr., factors in 27:36(r)  
 nest predator identification  
 23:127(r)  
 pop. losses 22:130(r)  
 predation on, by Bald Eagle  
 24:165(r)
- strepera (Gadwall)  
 pop. increase, Iceland 24:161(r)  
 postembryonic dev. 26:37(r)
- superciliosa (Australian Black  
 Duck)  
 band.- see Banding Reports  
 trapping & sexing 25:17(r)
- ANATIDAE (Ducks, Geese, Swans etc)  
 ageing 24:167(r)  
 artificial islands for 28:240(r)  
 attracting of 22:45(r)  
 band.- see Banding Reports  
 band. analysis & flyways 29:58(r)  
 bands, plexiglas leg 25:62(r)  
 beaver, important in mgt. 25:74(r)  
 behav. 23:84(r)  
 - brooding, by downy young 31:230(r)  
 - egg-rolling 25:71(r)  
 - feeding, on mud flats 30:193(r)  
 - following reaction 26:72(r)  
 - imprinting, a review 31:100(r)  
 - - of duckling on Kite foster  
 parent 29:198(r)  
 books, 27:153(r); 29:131(r)  
 coccidiosis in 29:200(r)  
 color marking 27:34(r)  
 conservation 26:85(5)  
 -, on wintering sites, s.e. Caspian  
 Sea 25:76(r)  
 -, in Victoria 26:85(r)  
 cover crops in mgt. 27:143(r)

## ANATIDAE (cont.)

- crop damage by, in CA. 23:182(r)  
 distr., detn. by banding 26:121(r)  
 diving, tech. of capture of 24:  
 111(r)  
 effects of hail on 27:91(r)  
 egg candle for field study 27:  
 195(r)  
 egg laying, incub. & hatching  
 sequence 28:103(r)  
 flight & light intensity 24:117(r)  
 food, identification of pondweed  
 seeds in stomachs 23:116(r)  
 - in WA. 23:188(r)  
 - plants, production & utilization  
 22:184(r)  
 - supplement by farming 24:120(r)  
 - value of marsh plants 30:198(r)  
 hunting on refuges, effect on pop.  
 23:126(r)  
 ice hazards 28:181(r)  
 identification, book 24:88(r)  
 -, in bird guide 22:199(r)  
 L.H. of N. Am., book 23:95(r)  
 lead poisoning 31:55(r)  
 - -, experimental study 22:185(r)  
 mail survey, validity of 27:144(r)  
 mgt., in book 22:194(r)  
 migr. routes, autumn 29:47(r)  
 - -, detn. by banding 26:121(r)  
 mort. from hail 27:91(r)  
 nest predation, causes 28:175(r)  
 - predator identification 23:127(r)  
 oil pollution 25:76(r), 77(r);  
 28:181(r)  
 pop. changes, Iceland 24:161(r)  
 - losses 22:130(r)  
 Prairie Ducks, book 27:50(r)  
 predation on, by Bald Eagle 24:  
 165(r)  
 - - nests, causes of 28:175(r)  
 productivity, effect of fencing  
 reservoirs 28:176(r)  
 - on artificial reservoirs 25:27(r)  
 - spring rainfall & Mallard 26:129  
 (r)  
 - water levels &, 26:129(r)  
 syst. & cytogenetics of 24:126(r)  
 - - serology of 29:205(r)  
 traps for 24:155(r), 156(r)  
 - - nesting 29:236  
 Travels & Traditions of, book  
 27:153(r)  
 value of refuges, IL. 25:165(r)
- visual ability 27:141(r)  
 - field 26:172(r)  
 weather effects on breeding &  
 movement in Aust. 29:193(r)  
 Wildfowl Trust ann. report 27:102(r)  
 wing tagging, in Finl. 22:83(r)
- ANATOMY (see also many other headings)  
 adrenal gland, comparative study  
 27:207(r)  
 aortic arches, phylogeny 27:147(r)  
 arteries near heart, Whooping  
 Crane 27:201(r)  
 beard of Turkey, gross & histol.,  
 30:59(r)  
 bill, dev. of lamellae, ducks  
 26:37(r)  
 - movements, Woodcock chicks  
 25:150  
 brain, cerebral axis, Charadrii-  
 formes 30:246(r)  
 -, dev. of 23:187(r)  
 Bursa of Fabricius, comparative  
 study 29:256(r)  
 --- of Dove, Mourning 23:34(r)  
 --- - Grouse, Blue 29:127(r)  
 --- - Starling 22:20  
 --- - Woodcock 23:34(r)  
 cloacal gland, Eurasian Quail  
 31:103(r)  
 - protruberance & sex. detn. 23:159  
 comparative & syst., Drepaniidae  
 22:191(r)  
 - - -, Eider ducks 29:259(r)  
 differences, two pops, Alder  
 Flycatcher 30:130(r)  
 ecol. relations to, Jays 23:47(r)  
 egg tooth 30:119  
 esophageal, & vocalizations of  
 Umbrella Bird 29:56(r)  
 eye, & acuity, passerines 24:31(r)  
 feather, color & structure 29:256  
 (r)  
 flight, flapping mechanisms 23:  
 123(r)  
 frontal shield of Coot 23:118(r)  
 haematopoesis, altricial vs.  
 precocial 23:118(r)  
 incubation patch 24:129(r)  
 intestinal, Galliformes 24:167(r)  
 locomotor, Blue Coua & other  
 Cuculidae 24:166(r)  
 lung 23:81(r)  
 muscles, Fringillidae 26:131(r)  
 -, hatching, of chick 30:196(r)



- ANATOMY (cont.)  
 muscles, wing of Corvidae 26:173(r)  
 of Barn Swallow, in book on L.H.  
 27:152(r)  
 ovary, dev. of in gulls 23:45(r)  
 pituitary, str. & dev., book  
 25:172(r)  
 pterylosis - see Molt; Plumage  
 pulmonary system, casting in resin  
 29:256(r)  
 refractory period & migr. 24:33(r)  
 reproductive, ♀ California Gull,  
 histol. 28:178(r)  
 salivary glands, Belgian birds  
 22:145(r)  
 -, Chimney Swift 29:256(r)  
 skeletal, Nuthatches 30:133(r)  
 skull, Fringillidae 26:132(r)  
 -, ossification, House Sparrow  
 23:34(r)  
 - -, Starling 22:20  
 - -, Chimney Swift 29:256(r)  
 - phylogeny, passerines 30:59(r)  
 spermatogenesis, Mallard 23:118(r)  
 syrinx, passerines 24:85(r)  
 testis color changes 28:177(r)  
 - cycle, histol. of in California  
 Quail, 27:191(r)  
 - - - - Gambel's Sparrow 22:98(r)  
 - - - - House Sparrow 26:173(r)  
 - -, interstitial, & sex behav.  
 24:22(r), 24(r)  
 - dev. in gulls 23:45(r)  
 - -, precocial, in House Sparrow  
 25:29(r)  
 thyroid, cycle in House Sparrow  
 26:173(r)  
 -, radiosurgery, Oregon Junco  
 25:30(r)  
 tongue of Drepaniidae 22:191(r)  
 - - Tui & plant pollination  
 24:21(r)  
 topography 27:22  
 trachea & vocalizations, Umbrella  
 Bird 29:56(r)  
 - of Eider ducks & syst. 30:134(r)  
 uropygial gland 26:37(r)  
 Andersen, F.S. Bills, eggs & nests of  
 Arctic & Common Terns 31:103(r)  
 Anderson, H.G. Migr. duck food habits  
 in IL. 31:55(r)  
 Andersson, S. Avifauna of coast of  
 middle Angermanland, n. Sweden  
 29:128(r)
- Andersson, T. Migr. by swimming in  
 Podiceps spp. 26:76(r)  
 Andoff, R. (see Speirs, J.M.)  
 Andras, K. Report on bird-band. in  
 Hungary 26:28  
 --- Records of birds ringed abroad  
 found in Hungary, 18th report.  
 27:186(r)  
 Andrew, D.G. (see Pennie, I.D.)  
 Andrew, R.J. Begging responses of  
 buntings 27:193(r)  
 --- Influence of hunger on aggres-  
 sive behav. in Emberiza 29:57(r)  
 --- Aggressive & courtship behav.  
 of Emberizines 29:57(r)  
 --- Comparative study of calls of  
 Emberiza 29:206(r)  
 Ani (Crotophaga ani)  
 -, Groove-billed (Crotophaga sulci-  
 rostris)  
 Anonymous. Dawn song & all day  
 24:86(r)  
 --- Bird band. in Grnl, 1949 under  
 guidance of Finn Salomonsen  
 24:110(r)  
 --- Recoveries of birds ringed in  
 Grnl. 24:111(r)  
 --- Investigations of Woodcock, Snipe  
 & Rails. 24:119(r); 25:165(r);  
 26:170(r); 27:194(r); 29:59(r)  
 --- Needs for research on use & care  
 of natural resources 25:75(r)  
 --- Band. results from Revtangen in  
 1950 25:152(r)  
 --- Phot. study of Snowy Owl 26:125(r)  
 --- Japanese bird songs 26:132(r)  
 --- Recoveries of birds ringed in w.  
 Jutland 27:33(r)  
 --- Mockingbird sings (a recording)  
 27:47(r)  
 --- Tapera naevia and its host species  
 in Surinam 27:138(r)  
 --- Loss of rings 27:187(r)  
 --- Grnl. bird-ringing scheme 28:41(r)  
 --- Nest of White Wagtail on a travel-  
 ing tank 28:237(r)  
 --- Mourning Dove Investigations, 1948-  
 1956, 29:122(r)  
 --- Check-list of N. Am. birds 29:129(r)  
 --- Pasture & range plants 29:134(r)  
 --- Corvidae resting on backs of  
 large mammals 29:198(r)  
 --- Name list of Neth. birds 30:59(r)  
 --- Handlist of Japanese birds 30:136(r)

- Anonymous (cont.)  
 Short-tailed Albatross on Torishima 31:53(r)
- Anous minutus (White-capped Noddy, = Black Noddy =Hawaiian Tern)  
 breeding cycle in Hawaii 23:41(r)  
 in Lesser Antilles, in book 28: 243(r)
- stolidus (Brown Noddy)  
 breeding cycle in Hawaii 23:41(r)  
 pop. decrease in Seychelles 30: 58(r)
- Anser spp. (Geese)  
 white spotting 23:42(r)  
 syst. 24:127(r)
- albifrons (White-fronted Goose)  
 age groups & brood size 24:157(r)  
 aggression among 24:162(r)  
 band.- see Banding Reports  
 longevity - see Age, maxima  
 mort.rate 29:249(r)  
 pop. dynamics 28:232(r)
- anser (Grey Lag Goose)  
 fluoroscopy for lead shot in, 27: 95(r)  
 range, withdrawal from Sweden 28: 181(r)  
 seasonal movements 27:190(r)
- arvensis (= A. fabalis)
- brachyrhynchus (= A. fabalis)
- caerulescens (= Chen caerulescens)
- canagicus (Emperor Goose)  
 body temp. at night in arctic 29:125(r)
- erythropus (Lesser White-fronted Goose)  
 imprinting transference 27:141(r)
- fabalis (Pink-footed (=Bean) Goose)  
 band. - see Banding Reports  
 egg retrieval 25:71(r)  
 fluoroscopy to detn. lead shot in 27:95(r)  
 mated to Barnacle Goose 24:161(r)  
 migr. routes 28:231(r);30:126(r)  
 mort., adult vs. young 24:157(r)  
 movements, late winter 29:48(r)  
 -, seasonal 27:190(r)  
 nest robbed by Glaucous Gull 28: 180(r)  
 nesting study 24:161(r)  
 phot. 27:197(r)  
 trapping, tech. for mass 27:34(r)  
 wt. 27:95(r)
- Anseranas semipalmata (Pied,=Magpie, Goose). syst. 24:127(r)
- Anserinae (Geese)  
 distr. & status, Ireland 29:204(r)  
 marking, plastic collars for 27:34(r)  
 visual acuity 27:141(r)
- ANTARCTIC  
 banding in 28:1; 29:1  
 Brategg expedition 29:132(r)  
 IGY studies 30:114  
 Ross Sea area Penguin, Skua & Giant Petrel colonies 28:1  
 wildlife of subantarctic 23:191(r)
- Antbirds (Formicariidae)
- ANTHOLOGY  
 book, 29:265(r)
- Anthrocothorax mango (Jamaican Mango Hummingbird)  
 band size 29:91  
 soft part colors 27:179  
 wt. 27:175
- Anthus spp (Pipits)  
 habitat selection 23:40(r)
- campestris (Tawny Pipit)  
 in Ger. 25:79(r)
- cervinus (Red-throated Pipit)  
 band. - see Banding Reports  
 song of 29:66(r)
- hodgsoni (Indian Tree Pipit)  
 new record, Nor. 28:164(r)
- pratensis (Meadow Pipit)  
 band. - see Banding Reports)  
 breeding biol. 30:244(r)  
 migr. 27:132(r), 133(r)  
 - & wind 28:166(r)  
 mort. & egg production, relation to altitude 28:44(r); 29:134  
 phot. showing egg removal by Eur. Cuckoo 31:49(r)  
 pop. changes in Neth. 22:134(r)  
 wt., nestling 28:109(r)
- spinoletta (Rock Pipit)  
 band. - see Banding Reports  
 longevity, meas. & wt. 29:52(r)  
 occurrence in Ger. 25:79(r)  
 vagrant on Fair Isle 25:115(r)  
 wt., nestling 28:109(r)
- trivialis (Tree Pipit)  
 band. - see Banding Reports  
 migr. 25:64(r); 27:133(r)  
 pop. estimate, Finl. 24:29(r)  
 song, innate 23:188(r)
- ANTING  
 by Blackbird, Eur. 26:80(r)  
 - Jay, Blue 29:214  
 - -, Eur. 23:86(r)

## ANTING (cont.)

- by Sparrow, House 28:49(r)
- Starling, Grey 29:120(r)
- passerines, British 31:164(r)
- Wryneck 26:80(r)
- enigma of 28:50(r)
- experimental study of 28:238(r)
- reasons for 26:127(r), 128(r)
- reviews of 23:37(r); 29:119(r)
- Antoine, N.J. Blue Tit feeding young  
Trecreepers 31:100(r)
- Ant-pipits (Conopophagidae)
- Anven, B. & A.Enemar. Homing & life  
expectancy in Chaffinch 29:190(r)
- Apalis thoracica (Bar-throated  
Warbler) parasitized by Cuckoo  
24:23(r)
- Apapane (Himatione sanguinea)
- Aphelocoma spp. (Jays)  
ecol. & speciation, monogr.23:47(r)
- coerulescens (Scrub Jay)  
new subspp. of 23:47(r)
- ultramarina (Mexican Jay)  
ecol. & speciation 23:47(r)
- unicolor (Unicolored Jay)  
ecol. & speciation 23:47(r)
- Apodidae (Swifts)  
flapping flight mechanics 23:123(r)
- Apodiformes (Swifts & Hummingbirds)  
band. in USSR 29:111  
biol of, in book 22:145(r)  
heart wt. 27:45(r)
- Aptenodytes forsteri(Emperor Penguin)  
behav., reproductive 25:119(r)  
egg meas. 27:91(r)  
fasting 25:66(r)  
fitting flipper bands 31:79  
pop. study 29:264(r)  
prey of Giant Petrel 25:156(r)  
nesting study 25:119(r); 30:243(r)  
new colony discovered 31:57(r)
- patagonica (King Penguin)  
breeding cycle of 15 months  
29:56(r)  
pop. study 29:264(r)
- Apteryx australis (North Island Kiwi)  
food temp. 28:177(r)  
food of 24:21(r) ; 31:58(r)
- Apus alba (=A. melba)  
- apus (European Swift)  
arrival dates & weather 30:49(r)  
- - for 60 yrs. 30:126(r)  
band. - see Banding Reports  
biol. of 26:124(r),167(r);28:47(r)
- Apus apus (cont.)  
breeding behav. 23:175(r)  
breeding biol. 22:132(r);23:88(r)  
clutch size 22:39(r)  
- - & weather 25:139  
copulation in flight 29:197(r)  
flights, nocturnal & crepuscular  
23:98(r)  
flocking during solar eclipse  
27:130(r)  
Hippoboscid fly on 26:167(r)  
incub. period 25:46  
L.H., relation to weather 22:39(r)  
longevity - see Age, maxima  
migr. 28:167(r)  
-, early, s. Sweden 31:46(r)  
movements, relation to weather  
26:123(r); 30:125(r)  
nest box occupancy, 50-yr. record  
28:180(r)  
- site, adaptation to human habita-  
tion 28:235(r)  
- - tenacity 28:105(r)  
nestling period 22:40(r)  
orientation 24:73(r)  
predation on, by Hobby 24:158(r)  
roosting time & light 28:174(r)  
spend night in air ? 25:122(r);  
26:35(r); 28:172(r)  
teratology, hatched wingless  
28:237(r)  
torpidity 22:39(r)  
- melba(Alpine Swift)  
band. - see Banding Reports  
homing 28:101(r)  
longevity - see Age, maxima  
orient. 24:73(r); 25:114(r)  
phot. & L.H. study 31:49(r)
- Aquila chrysaetos (Golden Eagle)  
attack on fox considered as play  
28:109(r)  
band. - see Banding Reports  
decline in Finl. 27:197(r)  
food, amount necessary 30:199(r)  
- of 24:113(r)  
observations at nest 28:48(r)  
pop. in Austria 25:79(r)  
predation on Marmot 25:79(r)  
recovery 25:152(r)
- clangula (Greater Spotted Eagle)  
migr. in Bosporus 30:125(r)
- heliaca (Imperial Eagle)  
clutch size 29:128(r)
- pomarina (Lesser Spotted Eagle)  
migr. in Bosporus 30:125(r)

- Arbib, R.S.Jr. (see J.J.Elliott)
- Arbous, A.G. & H.S.Sichel. New tech. for anal. of absenteeism data 26:31(r)
- Archaeornis  
considered as new family 23:91(r)
- Archaeospheniscus lopdelli  
new gen.& sp. fossil penguin 25:30(r)
- lowei, n. gen.& sp. fossil penguin 25:30(r)
- Archilochus colubris (Ruby-throated Hummingbird)  
band. - see Banding Reports  
incub. period 25:65(r); 29:117(r)  
metabolism 23:34(r)  
natal down 29:233  
nest construction & var. 31:47(r)  
painting of 22:44(r)  
tangled in spider web 31:91
- ARCTIC  
bird activity in continuous daylight of 24:21(r)  
birds, biol. of, in book on Grnl. 22:42(r), 192(r)  
- of, Canadian, book 28:246(r)  
life in, book 29:265(r)
- Ardea cinerea (Grey Heron)  
attacks own young 31:51(r)  
band. - see Banding Reports  
feeding in water 20 ft. deep 28:245(r)  
- on insects on head of deer 28:171(r)  
longevity - see Age, maxima  
migr. & movements 28:100(r)  
mort rate 24:81(r)  
pop. 25:155(r)  
- index, 1952, 24:157(r)  
recoveries (see banding reports)
- herodias (Great Blue Heron)  
behav. at nest 29:252(r)  
-, breeding, in comparative study 31:234(r)  
history of colonies, Great Salt Lake, UT. 30:201(r)  
syst. of white morph. 30:61(r)  
temp. regulation 26:169(r)
- occidentalis (= A. herodias)
- purpurea (Purple Heron)  
band. - see Banding Reports  
decreases in Neth., in book 22:43(r)  
imprints on humans 29:120(r)  
L.H. in Switz. 29:249(r)
- Ardea wurdemannii (= A. herodias)
- Ardeidae (Herons)  
band. - see Banding Reports  
breeding season, Galapagos 22:87(r)  
dispersal of Japanese egrets 31:105(r)  
mate recognition 23:39(r)  
notes on, of New South Wales 29:204(r)
- Ardeola ibis (= Bubulcus ibis)  
- ralloides (Squacco Heron)  
associate of Little Egret 28:102(r)
- Arenaria sp. (Turnstones)  
migr. as adapt. to arctic life 30:132(r)
- interpres (Ruddy Turnstone)  
baiting with shrimp 25:112  
band. - see Banding Reports  
breeding pop., Finl. 23:129(r)  
longevity- see Age, maxima  
migr. & pop. decrease, NJ. 23:40(r)  
nesting relations with Laridae 24:160(r)  
recovery in Afr. 25:151(r)
- Arm, H. (see Lack, D.)
- Armstrong, E.A. (see Whitehouse, H.L.K.)
- Distraction displays of Little Ringed Plover & terr. competition with Ringed Plover 23:125(r)
- Behav. & breeding biol. of Hebridean Wren 24:118(r)
- Hist., behav., & breeding biol. of St. Kilda Wren 25:25(r)
- Effective distraction display by Mallard 25:122(r)
- The Wren 27:99(r)
- Amateur & study of bird display: suggestions 27:193(r)
- Notes on the Wren in Aran Is., Ireland 29:197(r)
- The folklore of birds 30:199(r)
- Armstrong, W.H. Nesting & food habits of Long-eared Owl in MI. 30:127(r)
- Arn, H. Mixed brood of Great Tits, Blue Tits & Nuthatches, 28:106(r)
- Arn-Willi, H. Phot. studies of Alpine Swift 31:49(r)
- & M. Arn-Willi. Return to Solothurn of Alpine Swift shipped to Nairobi 28:101(r)

- Arnhem, R. On the attitude of adult birds toward young banded in the nest. 30:49(r)
- Arnold, G.A. & M.A. Nesting of pair of Blue Tits. 23:173(r)
- Arnold, L.A. Observations on pop. of N. Pacific Pelagic birds 23:41(r)
- Artama leucorhynchus (Lesser Wood Swallow)  
movement, geogr. var. & subspp. 30:198(r)
- Artamidae (Wood Swallows)  
parental care, in book 24:87(r)
- ARTIFICIAL PROPOGATION  
care of birds in zoos 22:45(r)  
historical, Mute Swan in Engl. 29:208(r)  
of Duck, Wood 22:186(r)  
- parrott-like birds 22:101(r)  
- Penguin, Spectacled 24:166(r)  
- Quail, Eurasian 27:134(r)  
- Woodcock chicks 25:149
- Arvey, M.D. Phylogeny of Waxwings & allied birds 23:97(r)
- Aschoff, J. & J.Meyer-Lohmann.  
Activity of caged Green Finches in 24-hour day with different day-lengths with & without twilight 27:141(r)
- Ash, J. Habituated fear response in Blue Tits 24:25(r)
- Ash, J.S. (see Blank, T.H.)
- Ashmole, N.P., R.G.B.Brown & N. Tinbergen. Feeding association between Coot & Little Grebe 28:182(r)
- Ashton, E.H. Progress reports: bird ringing, 23:77(r); 24:20(r)
- ASIA (see also Recoveries & Returns)  
annotated list, Caspian Sea lowlands 31:109(r)  
migr. routes through Iran 26:166(r)
- Asio flammeus (Short-eared Owl)  
behav., blind in captivity 29:57(r)  
-, breeding 27:190(r), 192(r)  
body temp., night, in Arctic 29:125(r)  
breeding season, Galapagos 22:87(r)  
calls & displays 31:102(r)  
distr. 23:94(r)  
food 26:40(r)  
-, dependence on Lemmings 27:190(r)
- Asio otus (Long-eared Owl)  
band.- see Banding Reports
- Asio otus (cont.)  
calls & displays 31:102(r)  
food 24:74(r); 25:80(r), 129(r); 26:40(r), 169(r); 29:206(r); 30:127(r); 31:232(r)  
longevity - see Age, maxima  
nest study 30:127(r)  
predation on, by Eagle Owl 25:79(r)
- Askaner, T. Observations on breeding behav. & nesting success of Coot 31:162(r)
- Assenmacher, I. Molt in birds & its endocrine determinants 30:246(r)
- Athene spp. tail molt 26:38(r)  
- noctua (Little Owl)  
behav. in captivity 24:79(r)  
food 29:206(r)  
-, winter cache of 30:250(r)  
new record, n. Sweden 29:204(r)
- Atkeson, T.Z. (see Givens, L.S.)
- Atrichornis clamosus (Noisy Scrub-bird)  
L.H. 24:83(r)  
- rufescens (Rufous Scrub-bird)  
L.H. 24:83(r)
- ATTRACTING BIRDS (see also Techniques)  
book 22:45(r); 25:82(r)  
houses, baths, shelters, booklet 27:103(r)  
peanut hearts for Bluebirds 26:27  
Purple Martins, unsuccessful attempts 25:67(r)
- Attwell, G.D. Breeding of Cardinal Woodpecker at Gatooma, s. Rhodesia 24:76(r)
- Atwater, M.G. Canada Geese reneesting in MT. 30:194(r)
- Atwood, E.L. Validity of mail survey data on bagged waterfowl 27:144(r)
- Auber, L. Distr. of structural colors & unusual pigments in Aves, 29:256(r)
- Auks (Alcidae)
- Auk, Great (Pinguinus impennis)  
-, Razorbill (Alca torda)
- Auklet, Whiskered (Aethia pygmaea)
- Austin, O.L.Jr. Group adherence in Common Tern 22:1  
--- Notes on birds of Izu Is., 22:135(r)  
--- Mourning Dove on Cape Cod 22:149  
--- Notes on some Petrels of n. Pacific 24:129(r)

- Austin, O.L. Birds of Japan: status & distr. 25:82(r)
- Notes on banding birds in Antarctica, & on Adelie Penguin colonies of Ross Sea sector 28:1
- Austin, O.L. Sr. Migr. of Common Tern in w. hemisphere 24:39
- & O.L.Austin Jr. Demographic aspects of Cape Cod pop. of Common Terns 27:55
- AUSTRALIA(see also Recoveries and Returns)
- birds of, vagrant in N.Z. 30:133(r)
- waterfowl cons. in 26:85(r)
- AUSTRIA (See Europe -)
- Avocet,Am. (Recurvirostra americana) -,Eur. (R. avosetta)
- Axell, H.E. Predation & protection at Dungeness Bird Reserve 28:51(r)
- Aythya sp.
- flight & light intensity 24:117(r)
- syst. 24:127(r)
- affinis (Lesser Scaup)
- band. - see Banding Reports
- capture tech. 24:111(r)
- color marking 27:34(r)
- food 31:55(r)
- & feeding behav. 30:61(r)
- migr., factors in 27:36(r)
- productivity & water level 26:129(r)
- americana (Redhead)
- ageing 24:167(r)
- band. - see Banding Reports
- migr. & mort., hand-reared vs. wild 25:74(r); 31:165(r)
- mort. 24:27(r); 25:74(r)
- oil gland 26:37(r)
- productivity & water level 26:129(r)
- collaris (Ring-necked Duck)
- ageing 24:167(r)
- band size 29:91
- flight & light intensity 24:118(r)
- L.H., book 30:62(r)
- mgmt. 25:74(r)
- nest predator identification 23:127(r)
- wt. 27:175
- ferina (Common Pochard)
- postembryonic dev. 26:37(r)
- sex ratios 29:203(r)
- fuligula (Tufted Duck)
- band. - see Banding Reports
- behav. 23:84
- , courting ♀ Mallard 28:173(r)
- , imprinting 23:177(r)
- Aythya fuligula (cont.)
- dev., postembryonic 25:78(r); 26:37(r)
- mort. 30:191(r)
- nesting associations with gulls 24:160(r)
- -, need for gulls in marginal areas 31:48(r)
- pop. increase, Iceland 24:161(r)
- predation on, by Black-backed Gulls 23:129(r)
- range changes & climate 29:93(r)
- sex ratios 29:203(r)
- water repellency not nutritional 30:197(r)
- marila (Greater Scaup)
- band - see Banding Reports
- food & feeding behav. 30:61(r)
- recovery in Siberia 26:75(r)
- young in brood of Merganser 24:161(r)
- valisneria (Canvasback)
- ageing 24:167(r)
- , of juv. 31:54(r)
- band. - see Banding Reports
- dev., postembryonic 31:54(r)
- distr. & pops., N. Am. 30:194(r)
- migr. 25:74(r)
- & mort., hand reared vs. wild 25:74(r)
- mort. 25:74(r)
- rate 31:54(r)
- productivity & water level 26:129(r)

- Baan, G. van der (see (Swennen,C.)  
*Baeolophus inornatus* (Plain Titmouse)  
 clutch size 28:140
- Baerg, W.J. Birds of AR. 22:198(r)
- Baemer, E. Behav. studies on domestic hen 28:172(r); 31:50(r)
- Bagenal, T.B. Feeding of nestling St. Kilda Wrens 30:52(r)
- Bagg, A.M. (see Baird, J.)  
 --- Airborne from gulf to gulf 27:34(r)  
 --- Fall migr. of dragon-fly, *Anax junius* 30:185(r)  
 --- N.E. maritime region, 1959 fall migr. 31:222  
 --- et al Barometric pressure pattern & spring bird migr. 22:182(r)
- BAHAMAS (see Oceanic Islands)
- Bailey, A.M. Laysan & Black-footed Albatrosses 24:35(r)  
 --- & R.J.Niedrach. Stepping stones across the Pacific 24:35(r)
- Bailey, N.T.J. On estimating size of mobile pop. from recapture data 23:78(r)
- Bailey, R.E. A collapsible bird trap. 22:107  
 --- Inhibition with prolactin of light-induced gonad increase in White-crowned Sparrows 22:33(r)  
 --- The incubation patch of passerine birds. 24:129(r)  
 --- Radiosurgery and uptake of radioactive iodine by thyroid of Oregon Junco. 25:30(r)
- Bailey, R.W. (see Uhlig, H.G.)
- Bailey, W. Birds in MA: when & where to find them 27:51(r).
- Bailey, W.J.Jr. (see Liscinsky, S.A.)
- Baird, J. (see Nisbet, I.C.T.)  
 --- Postjuvinal molt of ♂ Brown-headed Cowbird. 29:224  
 --- Observ. of diurnal migr. in Narragansett Bay area of RI. 30:171.  
 --- Northward fall migr. on Atlantic coast & its relation to offshore drift. 31:222(r)  
 --- et al. Operation Recovery--report on mist-netting along Atlantic coast 29:137; 30:143
- Baker, E.W. & G.W.Wharton. An introduction to acarology 24:35(r)
- Baker, R.H. Avifauna of Micronesia: origin, evol. & distr. 23:97(r)
- Bakker, D. & A. Stam. Breeding birds of n.e.Polder, 8th report 22:134(r)
- Baldini, J.T. (see Kirkpatrick, C.M.)  
 --- Reproductive cycle of Bobwhite Quail. 23:121(r)
- Baldpate (*Anas americana*)
- Baldwin, P.H. Ann. cycle, environment & evol. in Hawaiian Honeycreepers. 25:122(r)
- Balham, R.W. & W.H.Elder. Colored leg bands for waterfowl. 25:62(r)
- Ball, K.E. Breeding behav. of Ring-necked Pheasants on Pelee Is., Ontario. 23:191(r)
- Bananaquit (*Coereba flaveola*)
- Band, R.M. Albinism related to age. 28:54(r)
- BAND, bands (see also Techniques)  
 -loss, Eur. Robin 27:187(r)  
 -wear, of plastic colored 27:85  
 - -, on Gannets 28:42(r)  
 - -, on Towhees 22:179
- BANDING (see also Banding Reports, Recoveries & Returns, Techniques) & migr., book 23:54(r)  
 book on 25:80(r); 28:185(r)  
 colors proposed for regional use, Evening Grosbeak 22:32.  
 early record of 1846 discredited 26:116  
 for pop. estimation 22:103  
 historical review 23:31(r)  
 -, second banding of Am. bird by John Beck 24:67.  
 "Operation Recovery" descr. 29:137; 30:147.  
 ornithosis &, 28:92.  
 response of adult Horned Larks to banded young 24:19  
 - - - Red-eyed Vireo to banded young 25:61.  
 return rate anal. 24:144.  
 sources of error in studies 30:229  
 summary of 12 yrs, Falkland Is. 29:1  
 use of data for pop. structure & dynamics 24:123(r), 158(r)
- BANDING REPORTS (see also Recoveries-) cooperators listed, 1950, U.S.A. 22:64  
 of *Acanthis* sp. 26:163(r)  
 -- *cannabina* 22:129(r); 25:17(r); 26:166(r).  
 -- *flammea* 31:92(r), 159(r).

## BANDING REPORTS (cont.)

- Acanthis flavirostris* 22:127(r)  
*Accipiter cooperii* 23:25  
 - *nisus* 27:99(r),189(r); 28:161(r)  
 26:166(r)  
*Accipitridae* 29:147, 247(r)  
*Acrocephalus agricola* 27:130(r),  
 146(r)  
 - *palustris* 26:75(r)  
*Aegolius acadicus* 30:147, 170  
*Agelaius phoeniceus* 22:187(r); 23:  
 154; 24:1; 27:170; 29:59(r),142.  
*Aix sponsa* 29:47(r)  
*Alauda arvensis* 23:76(r); 28:162(r)  
*Alca torda* 23:76(r); 24:111(r); 25:  
 153(r); 27:105(r)  
*Ammodramus henslowii* 28:203  
 - *savannarum* 28:203  
*Ammospiza caudacuta* 29:168, 183  
*leconteii* 28:203  
 - *maritima* 29:168, 183  
*Anas acuta* 22:129(r); 24:132(r);  
 27:198(r); 28:42(r)  
 - *clypeata* 22:129(r); 26:75(r),121(r)  
 - *crecca* 22:35(r), 129(r); 23:77(r);  
 24:70(r), 132(r); 25:62(r), 152(r)  
 153(r); 26: 75(r), 76(r),121(r),  
 163(r); 27:129(r), 187(r); 28:  
 162(r); 29:45(r),47(r),112(r),  
 188(r); 30:48(r)  
 - *discors* 29:47(r)  
 - *gibberifrons* 25:17(r); 26:86(r)  
 - *penelope* 25:62(r); 26:121(r); 28:  
 162(r)  
 -*platyrhynchos* 22:129(r); 23:77(r);  
 24:69(r), 70(r), 132(r); 25:  
 152(r); 26:72(r), 74(r), 121(r),  
 163(r); 27:130(r); 28:162(r);  
 29:45(r), 47(r); 30:48(r)  
 - *querquedula* 26:121(r); 29:45(r)  
 -*rubripes* 24:1; 25:123(r),124(r);  
 29:47(r)  
 - *superciliosus* 25:17(r); 26:86(r)  
*Anatidae* 22:83(r); 24:132(r); 26:120  
 (r), 121(r); 28:42(r), 229(r),  
 230(r); 29:45(r), 184(r); 30:  
 235(r)  
*Anser albifrons* 22:83(r); 24:111(r);  
 27:33(r); 28:42(r), 229(r);  
 29:249(r)  
 - *fabalis* 25:171(r); 27:102(r),129(r);  
 28: 162(r), 229(r), 231(r)  
*Anthus cervinus* 25:152(r)  
 - *pratensis* 23:80(r); 28:44(r)  
*Anthus spinoletta* 22:128(r); 23:76(r)  
 - *trivialis* 23:76(r); 25:64(r)  
*Apodiformes* 29:111  
*Apus apus* 23:76(r), 83(r); 26:76(r),  
 124(r), 167(r); 28:105(r), 162(r)  
 - *melba* 23:76(r); 25:114(r)  
*Aquila chrysaetos* 25:152(r)  
*Archilochus colubris* 29:167  
*Ardea cinerea* 22:35(r), 127(r);  
 23:76(r), 77(r); 24:81(r);  
 25:113(r), 114(r); 26:75(r);  
 27:129(r); 28:100(r),162(r)  
 - *purpurea* 22:35(r); 23:77(r); 27:  
 186(r)  
*Ardeidae* 29:184(r)  
*Arenaria interpres* 22:181; 23:76(r);  
 24:147; 25:113(r), 151(r), 152(r)  
 27:130(r); 28:162(r); 30:48(r)  
*Asio otus* 25:62 (r), 114(r); 26:  
 75(r); 28:99  
*Aythya affinis* 24:132(r)  
 - *americana* 31:165(r)  
 - *fuligula* 29:186(r)  
 - *marila* 26:75(r)  
 - *valisneria* 30:194(r)  
*Bombycilla cedrorum* 24:1; 29:167;  
 30:170  
 - *garrulus* 27:185(r)  
*Branta bernicla* 27:129(r)  
 - *canadensis* 22:143(r); 23:1  
 - *leucopsis* 27: 129(r); 28:229(r)  
*Bubo bubo* 22:128(r)  
*Bubulcus ibis* 24:20(r)  
*Bucephala clangula* 22:128(r)  
*Buteo buteo* 26:121(r); 27:133(r),  
 186(r); 29:113(r)  
 - *jamacensis* 29:114(r), 166  
 - *lineatus* 28:99; 29:166; 31:124  
 - *platypterus* 29:166  
*Calamospiza melanocorys* 30:170  
*Calcarius lapponicus* 22:181;  
 28:229(r)  
*Calidris alba* 22:127(r); 24:147;  
 25:113(r); 30:48(r), 184(r)  
 - *alpina* 22:127(r), 128(r), 181;  
 23:76(r); 24:147; 25:113(r), 114  
 (r), 152(r); 26:74(r), 165(r);  
 27:130(r); 28:100(r); 29:185(r),  
 186(r); 30:48(r), 235(r); 31:  
 92(r)  
 - *bairdii* 22:181  
 - *canutus* 22:127(r);23:76(r);24:147;  
 25:113(r),152(r);28:100(r);29:186  
 (r)



- BANDING REPORTS of- (cont.)
- Calidris ferruginea* 24:147  
 - *maritima* 28:42(r)  
 - *minuta* 23:77(r);24:147;25:152(r)  
 - *pusilla* 22:181;29:166;30:170
- Caprimulgus vociferus* 29:166
- Cardinalis cardinalis* 29:168,219,244;  
 31:124
- Carduelis carduelis* 22:35(r);24:20(r)  
 25:17(r) ; 26:75(r)  
 - *chloris* 22:35(r),129(r); 23:77(r),  
 98(r); 25:17(r); 26:72(r);  
 27:87(r); 28:161(r)  
 - *pinus* 22:73; 29:168  
 - *spinus* 22:128(r); 23:77(r);  
 26:163(r); 29:47(r)
- Carpodacus purpureus* 23:26; 24:1;  
 28:34; 29:168; 30:170
- Catharacta skua* 28:1 ; 29:20
- Catharus fuscescens* 23:24; 29:167;  
 30:145  
 - *guttata* 23:24  
 - *minima* 23:24; 29:167; 30:146  
 - *mustelina* 23:24; 29:167; 30:170;  
 31:124  
 - *ustulata* 23:24; 29:167; 30:146
- Centurus carolinus* 31:124
- Cephus grylle* 27:130(r)
- Certhia familiaris* 30:170
- Chaetura pelagica* 23:24, 73; 24:1,17;  
 25:60, 115(r), 150; 26:71;  
 27:83,84; 29:166; 30:127(r);  
 31:87, 93(r)
- Charadrius alexandrinus* 25:153(r)  
 - *dubius* 24:70(r)  
 - *hiaticula* 22:127(r); 23:76(r);  
 24:147; 29:45(r)  
 - *leschenaulti* 27:130(r)  
 - *pecuarius* 23:77(r)  
 - *vociferus* 24:109; 29:166
- Chen caerulescens* 27:198(r);28:230(r)
- Chenonetta jubata* 25:17(r)
- Chionis alba* 29:19
- Chlidonias niger* 25:62(r); 27:186(r)
- Chondestes grammacus* 29:168; 30:170
- Chordeiles minor* 23:109; 27:9
- Ciconia ciconia* 22:35(r), 83(r);  
 27:135(r)
- Circus aeruginosus* 27:86(r)  
 - *approximans* 26:165(r)  
 - *cyaneus* 29:166; 30:48(r)
- Clangula hyemalis* 22:181
- Coccothraustes coccothraustes*  
 23:76(r); 28:163(r)
- Coccyzus erythrophthalmus* 29:166
- Colaptes auratus* 23:25; 29:167;  
 30:170
- Colinus virginianus* 30:190(r)
- Columba oenas* 26:74(r), 123(r)  
 - *palumbus* 28:162(r)
- Columbidae 29:184(r)
- Contopus virens* 31:124
- Corvus brachyrhynchos* 28:99  
 - *corax* 28:42(r)  
 - *corone* 22:127(r); 24:153;25:113(r)  
 - *frugilegus* 22:35(r); 23:98(r); 27:  
 186(r), 188(r)  
 - *monedula* 29:113(r)
- Coturnix sp.* 26:28(r), 74(r)  
 - *coturnix* 27:186(r)
- Cyanocitta cristata* 23:26; 29:167,  
 211; 31:124
- Cygnus buccinator* 26:72(r)  
 - *olor* 31:159(r)
- Daption capense* 29:16
- Delichon urbica* 22:62, 128(r); 23:  
 76(r); 26:163(r)
- Dendrocopos borealis* 25:112  
 - *villosus* 29:167; 31:124  
 - *pubescens* 31:124
- Dendroica caerulescens* 23:24  
 - *castanea* 29:167; 30:170  
 - *coronata* 23:24; 29:167; 30:145  
 - *discolor* 23:24  
 - *fusca* 30:170  
 - *magnolia* 23:24; 29:167; 30:170  
 - *palmarum* 23:24; 29:167; 30:170  
 - *petechia* 29:167; 30:170  
 - *pinus* 23:24; 29:167; 30:170  
 - *striata* 29:167; 30:146  
 - *tigrina* 29:167; 30:146  
 - *virens* 24:1; 30:170
- Diomedea epomophora* 22:40(r),53  
 - *exulans* 22:40(r); 27:188(r)  
 - *melanophris* 26:73(r)  
 - *nigripes* 26:163(r)
- Dolichonyx oryzivorus* 29:167
- Dryocopus pileatus* 31:124
- Dumetella carolinensis* 23:26, 62;  
 24:1; 29:167, 229; 30:145
- Emberiza citrinella* 22:133(r);  
 23:98(r)  
 - *hortulana* 28:161(r)
- Empidonax flaviventris* 29:167  
 - *minimus* 29:167  
 - *traillii* 29:167  
 - *virescens* 31:124

- BANDING REPORTS of- (cont.)
- Erithacus rubecula* 22:128(r); 23:76(r)  
98(r); 25:114(r); 27:130(r);  
28:161(r)
- Eudypetes chrysolophus* 29:12
- *sclateri* 22:53
  - *minor* 22:53
- Euphagus cyanocephalus* 31:93(r)
- Falco columbarius* 29:166, 247(r);  
30:170
- *peregrinus* 24:71(r); 26:75(r);  
29:166, 185(r), 247(r); 30:182
  - *sparverius* 23:25; 29:166
  - *subbuteo* 24:71(r); 28:162(r)
  - *tinnunculus* 29:247(r); 30:184(r);  
31:159(r)
  - *vespertinus* 29:246(r)
- Falconidae 29:247(r)
- Ficedula albicollis* 27:185(r)
- *hypoleuca* 22:35(r), 127(r), 128(r);  
23:76(r); 24:20(r), 71(r);  
27:129(r), 130(r), 142(r), 189(r);  
29:113(r); 31:46(r), 92(r)
- Fratercula arctica* 25:153(r); 27:33(r)  
31:92(r)
- Fregetta tropica* 29:19
- Fringilla coelebs* 22:128(r), 129(r);  
23:77(r); 24:20(r); 25:21(r), 62(r)
- *montifringilla* 26:165(r); 28:43(r)
- Fulica atra* 25:114(r); 27:189(r)
- Fulmarus glacialis* 22:83(r); 24:111(r)
- *glacialoides* 29:16
- Gallinago gallinago* 23:183(r); 26:  
170(r); 29:186(r)
- Gallirallus australis* 30:123(r)
- Garrulus glandarius* 28:161(r)
- Gavia stellata* 24:111(r)
- Gaviidae 29:111
- Geothlypis trichas* 23:24; 27:187(r);  
28:228; 29:167; 30:145; 31:124
- Guiraca caerulea* 30:170
- Gymnorhinus dorsalis* 29:185(r)
- Gyps coprotheres* 23:77(r)
- Haematopus ostralegus* 22:129(r)  
25:153(r); 26:76(r); 27:86(r);  
29:188(r)
- Haliaeetus albicilla* 28:42(r)
- *leucocephalus* 25:82(r)
- Helminthos vermivorus* 29:167; 30:170
- Hesperiphona vespertina* 22:23, 32;  
23:139, 144; 24:14, 108, 135; 25:9;  
27:85; 28:98; 29:27; 31:150
- Hirundo rustica* 22:35(r), 62, 128(r),  
130(r); 23:25, 98(r); 24:20(r), 91,  
155(r); 25:17(r), 62(r); 26:72(r);
- Hirundo rustica* (cont.) 27:129(r),  
185(r); 29:116(r), 167, 186(r)
- Hydroprogne caspia* 28:231(r)
- Icteria virens* 29:167; 30:170
- Icteridae 23:154; 27:170
- Icterus* spp. 23:24
- *galbula* 23:24; 29:167; 30:146
  - *spurius* 23:24
- Iridoprocne bicolor* 25:35, 102, 136;  
26:45; 29:167
- Ixobrychus minutus* 25:115(r)
- Junco hyemalis* 23:26; 24:1; 29:168;  
30:145
- Jynx torquilla* 25:151(r); 28:161(r);  
30:48(r), 184(r)
- Lagopus lagopus* 23:76(r); 25:125(r)
- Lanius collurio* 23:76(r)
- Larus argentatus* 22:128(r), 129(r);  
23:76(r); 25:62(r), 113(r), 153(r);  
27:134(r); 29:113(r); 30:69,  
184(r); 31:92(r)
- *bulleri* 25:62(r)
  - *californicus* 23:31(r)
  - *canus* 22:35(r), 128(r); 23:76(r);  
25:113(r), 153(r); 27:129(r);  
30:48(r)
  - *dominicanus* 25:62(r); 28:42(r);  
29:21
  - *fuscus* 23:76(r); 30:48(r), 235(r)
  - *genei* 30:241(r)
  - *glaucescens* 23:31(r); 31:93(r)
  - *glaucooides* 27:33(r); 28:42(r)
  - *marinus* 22:129(r); 23:76(r);  
25:113(r); 27:129(r); 28:161(r)  
30:184(r); 31:159(r)
  - *melanocephalus* 25:114(r); 26:164(r);  
28:44(r)
  - *novae-hollandiae* 24:21(r); 25:62(r);  
29:188(r)
  - *occidentalis* 23:31(r)
  - *ridibundus* 22:35(r), 127(r), 128(r),  
129(r); 23:76(r), 77(r), 78(r);  
24:81(r); 25:113(r); 26:75(r),  
120(r); 27:129(r), 130(r), 186(r),  
187(r), 207(r); 28:162(r); 29:  
44(r), 113(r), 185(r), 186(r),  
246(r); 30:124(r); 31:231(r)
  - *thayeri* (see *L. argentatus*)
- Leucosticte tephrocotis* 24:141
- Limosa lapponica* 22:127(r); 23:76(r);  
24:147; 27:105(r), 130(r)
- Loxia* sp. 26:163(r)
- *curvirostra* 27:133(r); 31:159(r)
- Luscinia svecica* 29:47(r)
- Lyrurus tetrix* 23:170(r)

- BANDING REPORTS of- (cont.)
- Macronectes giganteus* 23:77(r);  
24:21(r); 26:73(r); 28:1;  
29:13,184(r); 30:50(r)
- Malurus* sp. 29:185(r)
- Megadyptes antipodes* 22:190(r);  
29:264(r)
- Melanerpes erythrocephalus* 30:170
- Melospiza georgiana* 23:27  
- *lincolni* 23:27  
- *melodia* 23:27, 60; 24:1;27:73;  
29:168; 30:145
- Milvus migrans* 25:114(r);29:204(r)
- Mimus polyglottus* 29:167
- Mniotilta varia* 23:24; 28:228;  
29:167; 30:145; 31:124
- Molothrus ater* 23:25; 29:59(r), 142;  
30:170; 31:92(r), 124
- Motacilla alba* 22:128(r); 23:76(r),  
77(r); 25:152(r); 30:48(r)  
- *cinerea* 28:162(r)
- Muscicapa* (see also *Ficedula*)  
- *striata* 22:128(r); 28:162(r)
- Myiarchus crinitus* 23:26
- Notornis mantelli* 29:113(r);30:48(r)
- Numenius arquata* 25:152(r); 29:186(r);  
30:127(r); 31:159(r)
- Nycticorax nycticorax* 22:80;29:246(r)
- Oceanites oceanicus* 29:18
- Oenanthe oenanthe* 27:33(r),189(r);  
31:45(r)
- Oporornis agilis* 29:167; 30:170  
- *formosus* 29:167; 30:170; 31:124  
- *philadelphia* 29:167; 30:170
- Oreoscoptes montanus* 30:170
- Pachyptila desolata* 29:17
- Pagodroma nivea* 29:17
- Pandion haliaetus* 23:54(r),115(r);  
25:151(r);26:75(r); 29:166
- Parula americana* 29:167; 31:124
- Parulidae* 29:146 ; 30:146
- Parus ater* 31:97(r)  
- *atricapillus* 29:167; 30:170  
- *bicolor* 22:41(r); 23:26; 28:135;  
29:167; 31:124  
- *caeruleus* 23:76(r); 31:97(r),159(r)  
- *carolinensis* 29:167; 31:124  
- *major* 22:35(r),128(r); 23:76(r),  
77(r),130(r); 25:17(r); 26:120(r)  
27:129(r),130(r); 29:44(r),113(r);  
31:97(r),159(r)
- Passer domesticus* 26:72(r),73(r);  
28:166(r),167(r); 29:167  
- *hispaniolensis* 27:188(r)
- Passer montanus* 22:129(r);23:84(r);  
29:116(r)
- Passerculus sandwichensis* 28:203;  
29:168; 30:170
- Passerella iliaca* 23:27
- Passerina cyanea* 23:25; 29:168
- Passerines* 29:111
- Pelagodroma marinus* 22:53
- Pelecaniformes* 29:111
- Pelecanus erythrorhynchus* 22:37(r);  
31:159(r)
- Perdix perdix* 29:60(r)
- Petrochelidon pyrrhonota* 22:62;  
27:86(r); 29:167  
- *spilodera* 24:20(r)
- Phalacrocorax atriceps* 29:19  
- *capensis* 24:20(r)  
- *carbo* 24:70(r); 28:42(r); 29:112(r),  
258(r)
- Phalaropus fulicarius* 22:181
- Phasianus colchicus* 24:21(r); 25:75(r)  
26:35(r)
- Pheucticus ludovicianus* 29:168;30:170  
- *melanocephalus* 23:30(r)
- Philohela minor* 23:183(r); 28:241(r);  
29:59(r)
- Philomachus pugnax* 24:147; 29:185(r);  
31:92(r)
- Phoenicurus phoenicurus* 22:35(r),  
128(r); 23:76(r); 25:62(r),114(r)  
- *ochruros* 27:189(r); 31:97(r)
- Phylloscopus sibilatrix* 25:116(r)  
- *trochilus* 22:128(r); 23:76(r);  
25:114(r),116(r); 26:72(r)
- Picus canus* 31:159(r)
- Pipilo erythrophthalmus* 23:26,62;  
24:1; 29:168; 30:145; 31:124
- Piranga ludoviciana* 29:168; 30:170  
- *olivacea* 29:168; 30:170; 31:124  
- *rubra* 29:168; 30:170
- Platalea leucorodia* 25:153(r)
- Electrophenax nivalis* 22:83(r),181;  
24:111(r); 27:33(r); 28:229(r);  
30:48(r),235(r)
- Fluvialis apricaria* 25:152(r);  
30:184(r)  
- *dominica* 22:181  
- *squatarola* 24:147; 26:74(r)
- Podicipedidae* 29:111
- Polioptila caerulea* 30:170;31:124
- Poocetes gramineus* 28:203
- Porzana carolina* 29:166
- Procellariidae* 22:53; 29:111
- Prothonotaria citrea* 29:167

- BANDING REPORTS of- (cont.)
- Puffinus puffinus* 23:170(r); 24:70(r)  
 25:62(r); 26:72(r); 27:105(r),  
 187(r); 28:162(r),230(r);  
 30:184(r)  
 - *tenuirostris* 29:185(r); 30:50(r)  
*Pygoscelis adeliae* 28:1 ; 29:6  
 - *antarctica* 29:6  
 - *papua* 29:6  
*Pyrrhonorax graculus* 25:114(r)  
*Quiscalus quiscula* 23:25; 24:1,154;  
 25:110; 29:59(r),168  
*Rallus longirostris* 23:183(r);25:1  
*Regulus calendula* 23:25  
 - *satrapa* 23:25  
*Riparia riparia* 22:54; 29:167  
*Rissa tridactyla* 22:83(r); 23:170(r);  
 24:70(r),111(r); 30:234(r)  
*Saxicola rubetra* 27:189(r)  
*Sayornis phoebe* 29:167  
 - *saya* 30:170  
*Scolopax rusticola* 25:113(r),151(r);  
 27:105(r)  
*Seiurus aurocapillus* 23:24; 28:228;  
 29:167; 30:146; 31:124  
 - *motacilla* 31:124  
 - *noveboracensis* 23:24; 29:167;  
 30:145  
*Setophaga ruticilla* 23:24; 29:167;  
 30:145; 31:124  
*Sitta canadensis* 29:167; 30:170  
 - *carolinensis* 29:167; 31:124  
*Somateria mollissima* 22:35(r)  
*Sphyrapicus varius* 29:167  
*Spinus tristis* 29:168; 31:124  
*Spiza americana* 29:168,183; 30:170;  
 31:220  
*Spizella arborea* 23:27,28; 24:1;  
 27:32  
 - *pallida* 29:168; 30:170  
 - *passerina* 23:62,101; 30:170  
 - *pusilla* 23:27  
*Sterna albifrons* 25:153(r)  
 - *bergeii* 29:188(r)  
 - *hirundo* 22:1,128(r); 23:77(r);  
 24:39; 25:113(r),153(r);26:120(r)  
 27:55,129(r),130(r); 29:41,113(r)  
 - *paradisea* 22:181; 24:111(r); 25:  
 113(r),153(r); 27:129(r);  
 29:186(r)  
 - *sandvicensis* 24:70(r); 29:113(r)  
 - *striata* 24:21(r); 28:232(r)  
 - *vittata* 29:21  
*Streptopelia turtur* 25:62(r)  
*Strigiformes* 23:25;29:111,113(r),147  
*Strix aluco* 22:128(r); 29:51(r)  
 - *varia* 30:170  
*Sturnus vulgaris* 22:35(r),127(r),  
 128(r),129(r); 23:25,76(r),  
 77(r),98(r); 24:1,20(r),70(r),  
 155(r); 25:21(r),62(r); 26:73(r),  
 75(r),118,120(r); 27:129(r),  
 130(r),136(r),186(r),187(r);  
 28:43(r),161(r),162(r),230(r);  
 29:44(r),113(r),167,186(r);  
 30:234(r); 31:92(r)  
*Sula bassana* 25:62(r); 27:105(r);  
 30:241(r)  
 - *capensis* 30:241(r)  
 - *serrator* 28:42(r); 30:241(r)  
*Sylvia atricapilla* 29:47(r)  
 - *borin* 29:47(r)  
 - *communis* 25:116(r); 29:47(r)  
 - *curruca* 25:152(r); 29:47(r)  
*Tetrao urogallus* 23:170(r)  
*Thryothorus ludovicianus* 29:167  
*Toxostoma rufum* 23:26,61; 29:167;  
 30:170  
*Tringa erythropus* 28:100(r),161(r)  
 - *glareola* 28:100(r)  
 - *hypoleucos* 23:76(r),77(r); 25:  
 114(r); 26:163(r)  
 - *totanus* 23:76(r); 24:147; 31:92(r)  
*Troglodytes aedon* 23:25  
 - *troglodytes* 23:25  
*Turdidae* 23:77(r); 29:44(r)  
*Turdus merula* 23:76(r); 24:20(r),  
 81(r); 25:17(r),62(r); 26:72(r),  
 76(r); 27:129(r),189(r); 28:  
 162(r); 29:112(r); 30:49(r);  
 31:91(r)  
 - *migratorius* 23:25; 24:1,156(r);  
 28:99; 29:167; 30:121,122,170,  
 228; 31:137,159(r),160(r),221  
 - *musicus* 22:128(r); 24:70(r);  
 26:75(r),76(r); 27:129(r)  
 - *philomelos* 24:81(r); 25:152(r);  
 26:72(r),76(r)  
 - *pilaris* 22:127(r),128(r),129(r);  
 23:76(r); 25:113(r),151(r);  
 26:120(r); 27:129(r),130(r);  
 31:92(r)  
 - *sibiricus* 27:187(r)  
 - *torquatus* 26:76(r)  
 - *viscivorus* 24:81(r)  
*Tyrannus tyrannus* 29:167  
 - *verticalis* 29:167; 30:170  
*Tyto alba* 23:77(r); 25:149; 27:  
 130(r),131(r); 28:99; 29:51(r);  
 30:182

- BANDING REPORTS of- (cont.)  
 Uria spp. 24:111(r); 27:33(r)  
 - aalge 25:153(r)  
 - lomvia 22:83(r); 28:229(r)  
 Vanellus vanellus 22:127(r),128(r),  
 129(r); 23:76(r); 24:81(r);  
 25:113(r),152(r); 26:72(r),75(r),  
 76(r),121(r),163(r); 27:105(r),  
 129(r); 28:162(r); 29:112(r);  
 30:48(r),184(r); 31:159(r)  
 Vermivora celata 23:24; 30:170  
 - leucobronchialis 23:24  
 - peregrina 30:170  
 - pinus 29:167; 30:170  
 Vireo flavifrons 29:167; 31:124  
 - gilvus 29:167  
 - griseus 29:167; 30:170  
 - olivaceus 23:24; 29:167; 30:145;  
 31:92(r),124  
 Waterbirds 30:48(r)  
 Wilsonia canadensis 30:170  
 - citrina 29:167; 30:170; 31:124  
 Xanthocephalus xanthocephalus  
 29:167; 30:170  
 Zenaida macroura 22:149,181(r);  
 23:26,28; 24:1; 26:83(r); 27:43(r)  
 29:42,122(r); 31:124,220  
 Zonotrichia albicollis 22:86(r);  
 23:27; 27:33; 29:168; 30:145  
 - atricapilla 23:30(r)  
 - leucophrys 23:27, 30(r); 24:1;  
 27:33; 28:99; 30:145  
 - querula 27:33  
 Zosterops lateralis 24:21(r)  
 Bangert, H. Coordinations between  
 head and leg movements in domestic  
 fowl 31:231(r)  
 Banke, P. & H.Messenburg. Display of  
 the Ruff 26:34(r)  
 Barbet, Black-collared (Lybius  
 torquatus)  
 Barick, F.B. Effect of lesser vegeta-  
 tion of certain Adirondack Forest  
 types with particular reference to  
 deer & grouse 22:197(r)  
 Barker, D. & A.Stam. Breeding birds  
 of the Northeast Polder 22:134(r)  
 Barnard,G.A. Time intervals between  
 accidents - a note of Maguire,  
 Pearson & Wynn's paper 25:22(r)  
 Barnes, J.A.G. Delayed emigration of  
 certain birds in autumn,1954.  
 28:44(r)  
 Barruel,P. (see Geroudet,P.)  
 Barry, T.W. A nesting colony of Am.  
 Brant 28:45(r)  
 Barth, E.K. (see Hagen,Y.)  
 - Calculations of egg volume based  
 on loss of weight during incuba-  
 tion 25:23(r)  
 Bartholomew, G.A.Jr. Effect of light  
 intensity & day length on reproduc-  
 tion in the House Sparrow 23:45(r)  
 --- Temp. regulation in young Peli-  
 cans, Herons & Gulls 26:169(r)  
 --- & W.R.Dawson. Body temps. in  
 California & Gambel's Quail.  
 30:59(r)  
 Bartleson, F.D.Jr. & O.F.Jensen  
 Purple Finch winter wts. 27:45(r)  
 Bartlett,L.M. Wt. of Chimney Swift  
 23:157(r)  
 Bartramia longicauda (Upland Sand-  
 piper)  
 migr. & increase in NJ 23:41(r)  
 nesting study 23:178(r)  
 Bartsch, P. First bird-banding in  
 Am. 23:59  
 Basecke, K. Differences in Great  
 Grey Shrike behav. in two bio-  
 types in Lower Saxony 28:103(r)  
 Baskett, T.S. (see Marsden,H.M.;  
 Murphy,D.A.)  
 Basova, D. (see Kadlec, O.)  
 Bassini, E. Preliminary investiga-  
 tions of bird catching 30:246(r)  
 Bastock, M., D.Morris, & M.Moynihan.  
 Comments on conflict & thwarting in  
 animals 25:72(r)  
 Bateson, P.P.G. & R.C.Plowright.  
 Breeding biol. of Ivory Gull in  
 Spitzbergen 30:243(r)  
 Beard, E.B. Importance of beaver in  
 waterfowl mgt. 25:74(r)  
 Beckwith,S.L. (see Michael,V.C.)  
 Bee-eaters (Meropidae)  
 Bee-eater (Merops apiaster)  
 -,Blue-cheeked (M.superciliosus)  
 Beer,J.R. & D.Tibbitts. Nesting  
 behav. of Red-winged Blackbird  
 22:187(r)  
 --- , L.D.Frenzel & N.Hansen.  
 Minimum space requirements of some  
 nesting passerine species. 28:234(r)  
 BEHAVIOR(see also Anting,Flight,Food,  
 Hibernation,Incubation,Life Histor-  
 ies,Movements,Nesting,Orientation,  
 Parasitism,Predation,Roosting,

- BEHAVIOR (cont. - see also-Sounds, Territory, Vision)
- abnormal, leads to predation 25:128(r)
  - activity, light duration &, of Greenfinch 27:141(r)
  - patterns, daily, Titmice 31:102(r)
  - -, in caged migr. birds 28:239(r)
  - adoption experiments, interspecific among plovers 24:119(r)
  - aggressive, comparative study, Emberizine Buntings 29:57(r)
  - , effects of hunger on, Buntings 29:57(r)
  - , fighting, among trapped Tufted Titmice 26:70
  - - & social hierarchy, Chaffinch, 27:141(r)
  - , in winter flocks, Corvidae, 28:174(r)
  - , mobbing & predator recognition, 29:251(r)
  - , of:
    - Blackbird, Redwinged 23:38(r)
    - Duck, Flying Steamer 30:57(r)
    - Finch, Spice 26:126(r)
    - , Zebra 26:81(r)
    - Fowl 31:50(r)
    - Goose, White-fronted 24:162(r)
    - Grebe, Eared 30:191(r)
    - Gull, Black-headed 24:26(r)
    - Hawk, Sharp-shinned, attacks Pileated Woodpecker 29:260(r)
    - Oriole, Golden 31:49(r)
    - Pheasant, Ring-necked 22:91(r)
    - Plovers, Ringed 23:125(r)
    - Starlings, toward raptors, 31:51(r), 103(r)
    - Waders, toward humans 27:193(r)
    - Warbler, Grasshopper, toward weasel 31:102(r)
    - Woodpecker, Green 29:198(r)
  - ontogeny of, N.Am. Gulls 31:101(r)
  - plumage abnormalities &, 23:124(r)
  - regurgitation as, Northern Fulmar 31:163(r)
  - anticipatory food-bringing, Prairie Warbler 30:192(r)
  - associations, Corvids rest on backs of large mammals 29:198(r)
  - interspecific, of: Dunlin, Golden Plover & Purple Sandpiper 24:162(r)
  - - Fieldfare, Eur. Kestrel & Grey Shrike 29:195(r)
  - associations, interspecific, of Redshank & Lapwing 29:195(r), 196(r)
  - of individuals, meth. of estimating 22:119(r)
  - banding, responses of Blackbird parent to banded young 30:49(r)
  - , of Shrikes at traps 22:121
  - , of Pine Siskin 22:72
  - bathing, of Eur. Kingfisher 25:155(r)
  - begging, of ♂ Red-backed Shrike to ♀ 24:77(r)
  - , relation to light 23:176(r)
  - body care, Bearded Tit 23:124(r)
  - books on, 23:191(r); 25:70(r), 81(r), 84(r)
  - breeding, comparative, of Collared, Semi-collared & Pied Flycatchers 31:50(r)
  - , effect of deafness on, Bullfinch 30:129(r)
  - , evolution of 22:87(r)
  - of:
    - Albatrosses 22:40(r)
    - birds nesting in nests of social insects 31:98(r)
    - Blackbird, Brewer 23:172(r)
    - , Eur. 29:56(r)
    - , Redwinged 28:238(r)
    - Bluethroat, White-spotted 29:47(r)
    - Bullfinch 28:172(r)
    - Bunting, Painted 30:1
    - Coot, Eur. 31:162(r)
    - Crossbill, Parrot 31:229(r)
    - Cuckoo, Common 25:69(r)
    - Curlow, Common 28:169(r)
    - Dove, Diamond 31:230(r)
    - , Indian Ring 27:145(r)
    - , Ring 24:116(r)
    - , Stock 26:123(r)
    - Finch, Zebra 26:81(r)
    - Flamingo, Greater 30:129(r)
    - Flycatcher, Alder, differences in two pops. 30:130(r)
    - , Pied 26:126(r); 27:142(r); 30:192(r)
    - , Scissor-tailed 23:34(r)
    - Gannet, Australian 30:244(r)
    - Goldfinch, Am. 22:188(r)
    - Grebe, Eared 30:191(r)
    - , Great Crested 28:106(r)
    - Grouse, Black 25:71(r)
    - Gull, Herring 23:45(r)
    - , Lesser Black-backed 23:45(r)

- BEHAVIOR, breeding, of- (cont.)
- Gull, Thayer's, on Bylot Is. 31:6
- Jaeger, Pomatorhine 27:190(r)
- Jay, Blue 29:211
- Junco, Slate-colored 31:50(r)
- Kestrel, Eur. 27:192(r); 31:49(r)
- Lapwing, in captivity 31:48(r)
- Martin, House 31:228(r)
- Nene 30:245(r)
- Nuthatch, Eur. 29:207(r); 30:56(r)
- Owl, Barn 24:28(r)
- , Short-eared 27:190(r)
- , Snowy 27:190(r); 29:250(r)
- passerines, USSR. 30:251(r)
- Pheasant, Ring-necked 22:91(r); 23:181(r)
- Plover, Crowned 24:115(r)
- , Kentish 24:75(r); 29:52(r)
- , Little Ringed 28:105(r)
- , Semipalmated 26:137
- Quail, California 27:191(r)
- , S. Afr. Button 31:48(r)
- Redshank, raised by Lapwing, 31:48(r)
- Redstart, Eur. 25:172(r)
- Rook 26:168(r)
- Ruff 31:101(r)
- Scoter, White-winged 29:251(r)
- Shearwater, Short-tailed 29:185(r), 193(r)
- Shrike, Lesser Grey 29:195(r)
- Sparrow, Gambel's 22:98(r)
- , House, precocious 25:29(r)
- , Seaside & Sharp-tailed, comparative 29:52(r)
- Starling in N. Am. 29:191(r)
- Swallow, Barn, in Belgium 31:99(r)
- Swift, Chimney 30:127(r)
- , Eur. 22:132(r); 23:175(r)
- , Scissor-tailed 30:55(r)
- Takahe 30:48(r)
- Tern, Caspian 25:158(r)
- , Common 22:1
- Thrush, Mistle 23:175(r); 24:75(r)
- , Rock 28:102(r)
- Tinamou, Highland 29:56(r)
- Tit, Great 22:131(r)
- , Marsh 25:70(r)
- Titmice 22:88(r)
- Titmouse, Tufted 28:135
- Vireo, Red-eyed 30:127(r)
- Veery 24:100
- Waders 31:101(r)
- Waxbill, Blue-breasted, in captivity 31:164(r)
- Waxwing, Cedar 22:186(r)
- Weaver, Pink-billed 28:46(r)
- Weaverbird, Black-headed 31:229(r)
- Wren, Blue 30:245(r)
- , Carolina 22:87(r)
- , Winter, in Ireland 29:197(r)
- , -, on outer Hebrides 24:118(r)
- , synchronization of in House Sparrow colony 26:80(r)
- broodiness, var. in Fowl 24:162(r)
- brooding, of Eur. Kingfisher 25:155(r)
- - Fringillids in Arctic 28:53(r)
- - Snowy Owl 26:125(r)
- - Water Rail chick by 2-week-old Avocet 31:101(r)
- - White-throated Sparrow 27:38(r)
- reflex, young of precocial spp. & significance for imprinting 31:230(r)
- , releasers of 25:72(r)
- captive, in Zoos 22:45(r)
- , of songbirds 24:175(r)
- coitation attempts between Reeves 26:34(r)
- by juv. Mistle Thrushes 25:159(r)
- of:
- Blackbird, Brewer 23:172(r)
- Cowbirds 22:188(r)
- Gulls 23:45(r)
- Owl, Boreal 31:102(r)
- Pheasant, Ring-necked 22:91(r)
- Shrike, Fiscal 23:84(r)
- Starling 25:156(r)
- Swift, Chimney, first descr. of, 30:127(r)
- , Eur. 22:132(r); 29:197(r)
- colonial, House Sparrow 26:80(r)
- comparative, concepts of 26:80(r)
- of:
- Finches, Estrildine 31:50(r)
- Hérons, 4 spp of N. Am. 31:234(r)
- Nuthatch, White-breasted 26:82(r)
- Tits 23:191(r)
- Waders 31:101(r)
- competition for nest holes, Red-bellied Woodpecker & Flicker 28:41
- - - -, Starling, Woodpeckers & Nuthatch 28:103(r)
- conditioned, 22:90(r)

## BEHAVIOR (cont.)

- cooperative, in books 23:37(r),  
49(r)
- of:
- Flycatcher, Pied, two clutches  
in one nest 29:118(r)
- Maggie, Western, in breeding  
28:235(r)
- Mergansers, uniting broods  
28:107(r)
- Nuthatch, Eur. 28:106(r)
- Tit, Bearded 23:38(r)
- , Blue & Great, mixed broods  
29:196(r)
- , Great 28:105(r), 106(r)
- , Long-tailed 28:105(r), 106(r)
- courtship, of:
- Albatross, Yellow-nosed 23:122(r)
- Buntings, Emberizine, comparative  
29:57(r)
- Chaffinch 25:26(r)
- Duck, Oldsquaw 28:180(r)
- Ducks, interspecific, ♂ Tufted &  
♀ Mallard 28:173(r)
- Finch, Cutthroat 26:82(r)
- Flamingo, 29:203
- Flycatcher, Collared 23:85(r)
- Gannet, Cape 23:122(r)
- Grebe, Eared 30:191(r)
- Grouse, Black 25:71(r)
- Gulls 23:45(r)
- Hermit, Little 23:122(r)
- Hummingbirds, analysis of, 26:81(r)
- Ibis, Hadad 23:123(r)
- Pheasant, Ring-necked 22:91(r)
- Pochard, Red-crested 30:56(r)
- Rail, King 30:57(r)
- Ruff 23:178(r)
- Sandpiper, Spotted 23:36(r)
- Tit, Bearded 23:38(r)
- Waxwing, Cedar 22:186(r)
- daily, calling rhythm of Tawny Owl  
25:157(r)
- , of Emperor Penguin 25:119(r)
- , of Long-tailed Tit 29:252(r);  
31:102(r)
- defensive (see also enemy-)
- at nest, Cardinal Woodpecker  
24:76(r)
- of Gulls in new vs, old colonies  
23:124(r)
- of Turkey Vulture, death-feigning,  
23:37(r)
- dev. of patterns in young Buntings  
& Herring Gulls 27:193(r)
- dev. of, in young Buntings &  
Caspian Tern 28:170(r)
- displacement, biol. significance  
& evol. of 24:24(r)
- of Bee-eaters 25:158(r)
- - Black-headed Gull 24:162(r);  
25:72(r)
- - Song Sparrow 25:72(r)
- - Waders 27:193(r)
- sleeping of Avocet & Oyster-  
catcher 25:122(r)
- - of Grasshopper Warbler  
28:170(r)
- displays, appeasement, functions  
of 31:163(r)
- as social signals 28:106(r)
- , comparative, pigeons 28:49(r)
- , cryptic, of Hoopoe 28:172(r)
- , distraction, of:
- Mallard 25:122(r)
- Plover, Kentish 24:75(r)
- , Little Ringed 23:125(r)
- Sandpiper, Spotted 23:36(r)
- Waders 27:193(r)
- , -, toward predators 24:78(r)
- of:
- Albatrosses 22:40(r)
- Bird-of-Paradise, Six-plumed  
29:121(r)
- Bowerbirds, Spotted & Tooth-  
billed 24:25(r)
- & their bowers 25:72(r)
- Chicken, Prairie in fall  
23:123(r)
- Crane, Eur. in fall 28:165(r)
- Dove, Diamond 31:230(r)
- Duck, Goldeneye 31:51(r)
- Finch, Cutthroat 26:82(r)
- Fulmar, Northern 31:163(r)
- Grouse, Black 25:71(r)
- , Blue 31:166(r)
- Gull, Black-headed 23:125(r)
- Gulls, comparative 31:163(r)
- , ontogeny of in N. Am. spp.  
31:101(r)
- Jay, Eur. 23:37(r)
- Lark, Horned 26:1
- Maggie 23:188(r)
- Manakin, White-bearded 30:55(r)
- Owl, Boreal 31:102(r)
- Owls 31:102(r)
- Penguin, Adelle 23:179(r)
- Pigeon, Wood 30:56(r)
- Plover, Little Ringed 25:121(r)
- Ruff 26:34(r); 31:101(r)



BEHAVIOR (cont.)

- displays of: (cont.)
  - Swan, Mute 30:245(r)
  - Tit, Bearded 23:124(r)
  - Titmice 22:88(r)
  - Umbrella Bird 29:56(r)
  - Warbler, Rufous 31:231(r)
  - Weaver, Black-headed 31:229(r)
- , origin & evol. of 24:24(r)
- , territorial, Am. Robin 23:85(r)
- , value of amateur in description of 27:193(r)
- diving, depth of, Grebe, Loon & Scoter 28:50(r)
- dominance among Chaffinches 27:141(r)
  - - Curlews 28:169(r)
  - - Fowl 31:50(r)
  - - Ruffs 25:156(r)
  - - Marsh Tits 25:70(r)
- , general, birds & mammals 22:89(r); 23:37(r)
- , interfamily, Canada Geese 24:163(r)
- patterns, penguins & geese 22:89(r)
- relations, Ring-necked Pheasants 23:87(r)
- drinking, of Chukar Partridge 23:90(r)
- , Weaver Finches, by sucking up water 25:71(r)
- , visual properties of water as releasers of, 29:255(r)
- during solar eclipse, of Eur. Swift 27:130(r)
- egg-laying, of Emperor Penguin 25:119(r)
  - of Starling 25:156(r)
- egg removal when damaged, Plovers 28:236(r)
  - rolling, many spp. 25:71(r)
  - - of Nighthawk 30:54(r)
  - - of shorebirds 28:234(r)
- enemy recognition, characters for 22:89(r)
  - - by Bullfinch 23:176(r)
- eye-winking of Dipper 29:57(r)
- family bond, Blue Jays 22:126
  - -, Sandhill Crane 23:35(r)
- , dispersal of, Takaha 23:122(r)
- recognition 24:80(r)
- feeding, association with Army Ants 26:168(r)

feeding (cont.)

- associations, Coot & Little Grebe 28:182(r)
- , cooperative 25:159(r)
- , - Bluebird young assisting parents 29:117(r)
  - Jackdaws feed orphaned young 25:121(r)
  - Redstart ♂ at two nests 31:100(r)
  - Robin, Eur. 24:78(r)
  - Tit, Long-tailed 29:196(r)
- , courtship, of:
  - Cuckoo, Emerald 28:168(r)
  - Didric 28:168(r)
  - Flycatcher, Pied 26:126(r)
  - Grosbeak, Evening 29:28
  - Hummingbirds, & sexual dimorphism 26:81(r)
  - Jay, Eur. 23:37(r)
  - Nuthatch, Eur. 26:34(r)
  - Pochard, Red-crested 27:42(r)
  - Starling, Redwing 27:142(r)
  - Titmouse, Tufted 28:137
- , cronism proposed as term for eating own young; with examples 31:51(r)
- , -, in Hawks & Owls 28:104(r); 31:51(r)
- ecology, Aland Archipelago 23:129(r)
- , effects of DDT on tree-top, 22:189(r)
- , - of solar eclipse on 27:194(r)
- , feather-eating functions, Great Crested Grebe 28:182(r)
- , foot-pattering of Lapwing chicks 28:182(r)
- frequency of Anis, factors in 24:163(r)
  - - - Cormorant, Eur. 25:169(r)
  - - - Great Tit young 26:127(r), 128(r)
  - - - Long-tailed Tit 29:196(r)
  - - - St. Kilda Wren 30:52(r)
- , hunting success, Eur. Sparrow Hawk 25:128(r)
- , interspecific, Blue Tit feeds young Brown Creeper 31:100(r)
- , -, Spotted Flycatcher feeds Blackbird 24:77(r)
- , -, Eur. Nuthatch feeds Starling 27:140(r)
- , -, Winter Wren feeds Great Tit 31:49(r)

## BEHAVIOR (cont.)

feeding methods, adaptability,  
wild passerines 28:173(r)  
- -, Northern Shrike, on mice  
28:239(r)  
- of:  
Albatross young, "starvation  
theory" wrong 26:39(r)  
Blackgame 29:197(r)  
Capercaillie 29:197(r)  
Chough 31:167(r)  
Cowbirds, young 23:38(r)  
Crossbill, Red 27:104(r)  
Ducks 30:193(r)  
-, conditioning of 23:84(r)  
Eagle, Golden, young 28:48(r)  
Egret, Little, prey seizure  
29:198(r)  
Falcon, Peregrine young, by ♂  
25:128(r)  
Finch, Zebra, young 26:81(r)  
Flycatcher, Pied 26:126(r)  
-, Pied, of ♀ by ♂, importance  
in incub. 30:54(r)  
-, Pied, young, stimulus for  
25:22(r)  
Goldfinch, Eur., juv. feeding  
juv. 23:39(r)  
-, Lawrence & Lesser 29:53(r)  
Goosander, young 27:140(r)  
Grebes, feather-eating 28:182(r)  
Gull, Black-headed, in winter  
25:122(r)  
Gulls 30:193(r)  
-, learning to, after mine ex-  
plosion 23:39(r)  
Gyr Falcon, young by adults 30:  
52(r)  
Hermit, Little, young 23:122(r)  
Heron, Grey, on insects on head  
of Fallow Deer 28:171(r)  
Hobby 24:158(r)  
Hoopoe 24:114(r)  
-, young in s. Sweden 28:172(r)  
Jackdaw, young 23:119(r)  
Jay, Blue, food-burying 29:215  
-, Eur., young 23:38(r)  
Kestrel 25:68(r)  
Kingfisher, Belted 27:202(r)  
-, Eur. 25:155(r)  
Kite, Black, fish-catching  
29:55(r)  
-, -, young 23:38(r)  
Lark, Horned, young 26:1  
Owl, Screech, injured, on House  
Sparrow 24:21(r)

Owl, Snowy, mate 26:125(r)  
Oystercatcher, amount eaten,  
29:260(r)  
Pigeons, feral 26:126(r);28:  
245(r)  
Raven, of water to young 28:  
48(r)  
Scaup, Greater & Lesser 30:61(r)  
shorebirds 30:193(r)  
Shrike, Fiscal, young 23:84(r)  
Sparrow, House, soaks hard  
bread 31:58(r)  
-, Ipswich 29:241  
Starling, in winter with sheep  
31:51(r)  
-, Redwing, young 23:36(r)  
Swallow, Barn, after injury  
27:94(r)  
Swallows, following tractor  
23:39(r)  
Swan, Mute 28:183(r)  
Swift, Alpine 31:49(r)  
Thrushes, snail-eating 25:128(r)  
Tit, Great 22:132(r)  
-, -, by Winter Wren 31:49(r)  
-, Long-tailed, on scale insects  
29:260(r)  
Towhee, Rufous-sided 26:79(r)  
Woodpecker, Green 23:173(r)  
Wood Pigeon, one by another  
31:58(r)  
- -, color preferences 30:250(r)  
Wren, Carolina, of incub. mate  
22:87(r)  
-, -, young 22:88(r)  
-, review of 24:116(r)  
-, social 25:159(r)  
-territories, Sandhill Crane  
23:35(r)  
-, unusual, of Common Heron &  
Greenshank 28:245(r)  
fledging, of Fulmar 26:168(r)  
-, of Green Woodpecker 27:140(r)  
-, of Nightjar 27:38(r)  
-, of Ravens 26:167(r)  
flock (see Aggregations)  
gaping, of young passerines  
25:26(r)  
general, of:  
Flackbird 27:43(r)  
Blackbird, Redwinged 22:238(r)  
books on 26:134(r);30:64(r),138(r)  
Chaffinch, monogr. 29:138(r)  
Chicken 28:172(r)  
-, review 27:141(r)  
Dove, Stock 26:123(r)

- BEHAVIOR, general, of- (cont.)
- Duck, Bolivian Torrent 26:72(r)
  - , Muscovy 24:118(r)
  - during continuous daylight of Arctic 24:21(r)
  - solar eclipse 27:193(r)
  - Falkland Is. birds 29:1
  - Flicker, notes on 28:40
  - Flycatcher, Hammond's 26:32(r)
  - Goosander 27:140(r)
  - Grosbeak, Evening, captive 25:95
  - Harrier, Pallid, captive 27:149(r)
  - Jay, Eur. 24:117(r)
  - , Lanceolated 24:117(r)
  - , - , in captivity 26:125(r)
  - Nighthawk, young 22:84(r)
  - Ontario birds, in book 22:193(r)
  - Owl, blind Short-eared, in captivity 29:57(r)
  - Partridge, Red-legged 27:40(r)
  - Pigeons, feral 26:126(r); 27:42(r)
  - , Passenger, in book 26:133(r)
  - Redstart, Eur., book 25:172(r)
  - Shrike, Gray, differences in two biotypes 28:103(r)
  - , Red-backed, young 22:88(r)
  - Soft-wing, White-whiskered 30:54(r)
  - Sparrow, Ipswich 29:241
  - Starling, Redwing 23:36(r)
  - Stork, White, with one foot missing 31:100(r)
  - Swallow, Barn, in book 27:152(r)
  - , Tree 26:64
  - Tern, Caspian, hand-reared 28:170(r)
  - Tit, Great 23:191(r)
  - Titmice 22:88(r)
  - Titmouse, Tufted 28:135
  - Tui, notes on 24:21(r)
  - group adherence, Bank Swallow 22:59
  - - Blue Jay young 22:126
  - - Common Tern 22:1
  - - Mourning Dove 22:160
  - guiding of Honeyguides 27:202(r)
  - - , using Genet 30:128(r)
  - habituation 22:90(r); 23:39(r)
  - of fear response, Blue Tit 24:25(r)
  - of mobbing response, Chaffinch 26:34(r)
  - history of study 23:91(r)
  - hoarding (see Food-)
  - hormones &, a review 22:84(r)
  - imitation 23:39(r)
  - imprinting:
    - brooding reflex, significance for experimentation on 31:230(r)
    - color preferences and 31:100(r)
    - critical age, factors limiting in chicks 31:166(r)
    - general 23:39(r)
    - importance in mixed spp. colonies for habitat recognition. 28:239(r)
    - innate patterns as indicators of critical periods for 31:101(r)
    - nest appropriation & 28:48(r)
    - of: Blackbird, Eur. to humans 29:57(r)
    - Bullfinch, to humans 28:173(r)
    - Coots & Moorhen 28:107(r)
    - Curlew, Common 22:91(r)
    - duck, Mallard 30:129(r)
    - duckling on Kite foster parent 29:193(r)
    - ducks 23:84(r), 177(r); 26:72(r)
    - Heron, Purple, to humans 29:120(r)
    - Trumpeter, Grey-winged, to man 24:78(r)
    - reviews of 29:251(r); 31:100(r)
    - song-learning as 23:87(r)
    - transference of, wild gosling 27:141(r)
  - innate:
    - bill color & feeding of young Franklin's Gull 29:58(r)
    - book on study of 23:132(r)
    - calls of Meadowlarks 28:249(r)
    - comparative meth. of study 22:89(r)
    - fear of scorpion model, Engl. birds 27:142(r)
    - fish call, Caspian Tern 28:170(r)
    - food selection 26:33(r)
    - host egg ejection by Eur. Cuckoo 23:36(r); 28:168(r)
    - improvement by maturation & learning 23:176(r)
    - in enemy recognition by Eur. Jay 23:86(r)
    - maternal, & young Goosander 27:140(r)
    - maturation of, Bee-eaters 25:158(r)

- BEHAVIOR, innate- (cont.)
- patterns as indicators of critical periods for imprinting 31:101(r)
  - of Common Gull 28:172(r)
  - of Mallard 28:238(r)
  - vocalizations, White-throated Sparrow 26:33(r)
  - water, properties of for selection 29:255(r)
  - insight 22:90(r)
  - of Great Tit 30:130(r)
  - of Titmice 30:195(r)
  - interspecific (see also cooperation)
  - , of flocks in tropics 22:41(r), 187(r)
  - learning ability 22:90(r); 23:39(r) 124(r)
  - - in acoustic isolation, Eur. Blackbird 31:232(r)
  - - Titmice & Nuthatch 30:195(r)
  - - , to discriminate rates of metronome beats, Jackdaw 31:231(r)
  - of family members 24:80(r)
  - of song, Bullfinch 31:107(r)
  - - -, Canary 31:56(r)
  - - -, Meadowlarks 28:249(r)
  - to pull up fishermen's lines, Hooded Crow & Raven 29:119(r)
  - mate, attachment to, Oystercatcher 27:86(r)
  - mating, interspecific, Barnacle & Pink-footed Geese 24:161(r)
  - , of Cowbirds 22:187(r)
  - , sibling, Mallard 25:26(r)
  - memory in birds 23:39(r), 125(r)
  - migratory, of Swift 23:39(r)
  - restlessness 23:82(r)
  - , rudimentary in Eur. Nuthatch & Magpie 22:94(r)
  - mobbing by Jays of nesting passerines 25:26(r)
  - by Redwinged Blackbird 29:251(r)
  - , Owl characters releasing 22:89(r)
  - response, dev. & habituation of, Chaffinch 26:34(r)
  - netting, differences in response to 27:42(r)
  - nocturnal, of Wilson's Snipe 26:170(r)
  - number concept 22:90(r)
  - sense of Parrots 24:80(r)
- pair bond:
    - Brewer Blackbird 23:172(r)
    - Curllew, Common 29:117(r)
    - Jaeger, Parasitic, stability of 31:98(r)
    - Loon, Common, not maintained in spring migr. 28:44(r)
    - passerines, 9 spp. remating in subsequent years 30:123
    - Swallow, Tree 26:66
    - Tit, Great 23:130(r)
    - , - remating during incubation 31:48(r)
  - pair formation:
    - Blackbird, Eur. 25:159(r)
    - Bullfinch 28:172(r)
    - Flycatcher, Collared 23:85(r)
    - , Pied, bigamous 30:245(r)
    - Goldfinch, Am. 22:188(r)
    - Grosbeak, Evening 29:29
    - Gull, Black-headed 23:125(r)
    - , Herring 24:78(r)
    - Nuthatch, White-breasted 26:82(r)
    - Partridge, Red-legged 30:55(r)
    - , -, promiscuous 28:236(r)
    - Penguin, Emperor 25:119(r)
    - , Yellow-eyed 22:190(r)
    - Pigeon, Wood 30:56(r)
    - Skua, Great 30:48(r)
    - Sparrow, House 30:54(r)
    - Starling 25:156(r)
    - Swallow, Barn, bigamous 28:168(r)
    - , Tree 26:66
    - Swift, Chimney 27:83
    - Takahe 30:48(r)
    - Towhee, Rufous-sided 26:79(r)
    - Waxwing, Cedar 22:186(r)
    - Woodpecker, Red-bellied 30:193(r)
    - Yellowhammer 22:133(r)
  - paper-tearing, by Tits 24:118(r)
  - parent recognition in Caspian Tern 28:170(r)
  - parental care in:
    - Albatrosses 24:131(r)
    - Barbet, Black-collared 23:83(r)
    - Blackbird, Brewer 23:172(r)
    - book 24:86(r)
    - Gulls 25:120(r)
    - Mallard, by ♂ 25:26(r)
    - Ruff 25:156(r)
    - Sparrow, White-throated 27:38(r)
    - Starling 25:156(r)
  - pattern preferences, Carrion Crow & Jackdaw 30:195(r)

## BEHAVIOR (cont.)

patterns, derivation of, 7 spp. of Pigeons 27:193(r)  
 - of head movement, Green Woodpecker 28:107(r)  
 peck-right (see dominance, above)  
 play of Eur. Jay 23:86(r)  
 - - Golden Eagle in attacking fox 28:109(r)  
 polyandry, in book, AR. birds 22:198(r)  
 - in Eur. Cuckoo 23:36(r)  
 polygamy in:  
 Blackbird, Brewer, extent of, 23:172(r)  
 Buffalo-Weaver, African, 30:243(r)  
 Bunting, Painted 30:1  
 Finch, Black Weaver 27:94(r)  
 Flycatcher, Pied, effect on feeding of young 25:22(r)  
 Quail, Bobwhite 23:121(r)  
 Ruff 25:156(r)  
 Swallow, Barn 28:168(r); 29:194(r)  
 Wheatear 26:82(r)  
 Wrens 24:118(r); 29:197(r)  
 Yellowhammer 22:133(r)  
 postnuptial, Woodcock 27:195(r)  
 postures (see also displays, above)  
 function of Cormorant spread-wing 29:120(r)  
 in various activities, Bee-eaters 23:121(r)  
 of Black-headed Weaver Finch 31:229(r)  
 pre-egg, of Albatrosses 22:40(r)  
 -, of Gulls 23:45(r)  
 -, - -, Herring 24:78(r)  
 -, - Penguin, Yellow-eyed 22:190(r)  
 -, - Titmice 22:88(r)  
 recognition, of individuals 23:39(r)  
 releasers of:  
 aggression, Green Woodpecker 29:198(r)  
 begging of young, & adult copulatory response to 28:173(r)  
 - response, Herring Gull 22:91(r)  
 feeding behav., Pied Flycatcher 25:22(r)  
 flocking, young Goosander 27:140(r)  
 - & following, Mallard ducklings 30:129(r)  
 gaping, Redwing Starling 27:142(r)  
 gobbling, Turkey 26:168(r)

releasers of (cont.)  
 nest-building, ecological, 31:47(r)  
 mobbing, Owl plumage patterns as 22:89(r)  
 of Internal Releasing Mechanisms, physiol. of 25:26(r)  
 re-nesting of Waxwing, Cedar 22:186(r)  
 Robin, Am. 23:29  
 Takahe 30:48(r)  
 Tern, Common 22:8  
 Terns, Sooty & Noddy 30:58(r)  
 -, value of 29:199(r)  
 responses:  
 dev. of begging, fear & aggressive in Buntings 27:193(r)  
 following, of young Coot & Moorhen 28:107(r)  
 to banded young, Horned Lark 24:19  
 - - -, Red-eyed Vireo 25:61  
 - begging, Herring Gull 22:91(r)  
 - humans by waders 27:193(r)  
 - Jays by nesting passerines 25:26(r)  
 - model scorpion & lizard on feeding tray 27:142(r)  
 - parental warning calls, Limicolines 30:130(r)  
 - predators by Blue Tit 29:252(r)  
 - - - Crag Martin 29:194(r)  
 - - - Starling flocks; not to Goshawks 30:25  
 - prevention of laying in established nest 28:237(r)  
 - stuffed Cuckoos & Hawks by Willow Warbler 22:90(r)  
 - various stimuli by Blue Tit 29:252(r)  
 reviews of recent advances, 23:177(r); 24:114(r)  
 roosting (see Roosting)  
 scratching movements, Whydahs & Honey Buzzard 25:71(r)  
 sex (see also coition, above)  
 aberrant, Am. Robin 27:93(r)  
 and cyclic reproduction, book 23:96(r)  
 and interstitial cycle 24:22(r)  
 of adult released by begging of young Sandwich Tern & Skylark 28:173(r)  
 of Bowerbirds 24:25(r)

## BEHAVIOR, sex, of- (cont.)

- Cowbird 22:187(r)
- Duck, Flying Steamer 30:57(r)
- Finch, Spice 26:126(r)
- Penguins, monogr. 22:190(r)
- recognition of, Yellowhammer 22:133(r)
- singing, monotony threshold of 28:54(r)
- posts, use of buildings as 26:169(r)
- site tenacity of:
  - Blackbird, Redwinged 22:187(r)
  - Chaffinch 29:190(r)
  - Curlew 29:117(r)
  - Dove, Mourning 22:160
  - , Stock 26:123(r)
  - Flycatcher, Pied 31:46(r)
  - Grosbeak, Scarlet, & range extension 30:248(r)
  - Grouse, Blue 31:166(r)
  - Gulls, in Ger. 25:153(r)
  - Gull, Black-headed 29:249(r)
  - Kittiwake 30:53(r)
  - Oystercatcher 25:153(r); 27:86(r)
  - Petrel, Storm 29:54(r)
  - Plover, Kentish 25:152(r)
  - , -, 9 yrs. in one place 29:52(r)
  - Scoter, White-winged 31:46(r)
  - Shearwater, Short-tailed 29:185(r)
  - Sparrow, Eur. Tree 23:84(r)
  - , Tree, in winter 27:32
  - Swallow, Bank 22:59
  - , Cliff 27:86(r)
  - Swift, Eur. 23:83(r)
  - , Alpine 28:105(r)
  - Takahe 30:48(r)
  - Terns, in Ger. 25:153(r)
  - Tern, Arctic 31:103(r)
  - , Common 22:1
- sleep, depth of, passerines 23:82(r)
- of Hoary Redpoll in Arctic summer 24:21(r)
- of small birds in winter 28:174(r)
- sleeping posture, Great Tit in nest boxes 29:120(r)
- social:
  - and survival 24:116(r); 29:197(r)
  - -, Emperor Penguin 30:246(r)
  - book, Herring Gull 25:81(r)
  - dev. of 24:115(r)
  - experiment, Savannah Sparrow 31:173

## social (cont.)

- facilitation 23:39(r)
- in learning to avoid shock, Muscovy & Mallard ducks 31:166(r)
- family ties, duration, Tufted Titmouse 22:41(r)
- feather posture in 28:106(r)
- hierarchy, of hand-reared Herring Gulls 25:72(r)
- interspecific, among galliform game birds 29:61(r)
- intolerance, of Crag toward House Martin 29:194(r)
- of:
  - Bee-eaters 23:121(r)
  - Buffalo-Weaver, African 30:243(r)
  - Bullfinches, deafened 30:129(r)
  - Chaffinch 27:141(r)
  - Dove, Necklace 28:106(r)
  - Duck, Tufted, nesting with Gulls 31:48(r)
  - Egret, Little 28:101(r)
  - Finch, Spice 26:126(r)
  - Goose, Canada 22:143(r)
  - Gulls inland in winter, Engl. 29:121(r)
  - Junco, Oregon, in winter 27:40(r)
  - Mallard ducklings 30:129(r)
  - Pheasant, Ring-necked, in N.Z. 30:56(r)
  - Plovers, Ringed 23:129(r)
  - Quelea, Red-billed 31:229(r)
  - Raven 29:58(r)
  - Sparrow, Java 28:106(r)
  - Swallow, Cliff 24:22(r)
  - Tit, Bearded 23:124(r)
  - vertebrates 23:37(r)
  - , book 25:83(r)
  - Vulture, Turkey 23:37(r)
  - Waxwing, Cedar 22:186(r)
- releasers of 22:90(r)
- study of, comparative method 22:89(r)
- submissive, of Red-legged Partridge 30:55(r)
- sun-bathing, Bearded Tit 23:38(r)
- , Bee-eaters 25:158(r)
- swimming, diving duck movements 26:34(r)
- , of Pied Wagtail 27:94(r)
- tameness of various wild species 23:86(r)

- BEHAVIOR (cont.)  
 temp. regulating 23:116(r),117(r)  
 territorial (see TERRITORY)  
 tool-using 22:90(r)  
 - by Great Tit 30:130(r)  
 torpidity (see also hibernation)  
 - in Hummingbirds 23:33(r)  
 - - in high Andes 24:119(r)  
 - - Swift 22:39(r)  
 trial & error 22:90(r)  
 vacuum, of Bee-eaters 25:158(r)  
 visual field &, ducks 26:172(r)  
 - properties of water, chick preferences 29:255(r)
- Behle, W.H. Bird life of Great Salt Lake 30:201(r)
- Bell, J.F., G.W.Sciple & A.A.Hubert  
 Microenvironment concept of epizology of avian botulism 27:96(r)
- Bell, M.A.(see Authbertson,E.I.)
- Bellrose, F.C. Housing for Wood Ducks 24:160(r)  
 --- Value of waterfowl refuges in IL 25:165(r)  
 --- Comparison of recoveries from reward and standard bands 26:120(r)  
 --- Celestial orient. by wild Mallard 29:75  
 --- Lead poisoning as a mort. factor in waterfowl pops. 31:55(r)  
 --- & E.B.Chase Pop. losses in Mallard, Black Duck & Blue-winged Teal 22:130(r)
- Bendell, J.F. Age, molt & wt. characteristics of Blue Grouse 29:127(r)
- Bennett, H.R. Fall migr. of birds at Chicago 24:112(r)
- Benson, C.W. Syst. & migr. of Pearl-breasted Swallow 22:84(r)
- Bent, A.C. L.H. of N.Am. wildfowl 23:95(r)  
 --- L.H. of N.Am. Wood Warblers 25:69(r)
- Benton, A.H. Effects on wildlife of DDT used for control of Dutch Elm Disease 22:188(r)
- Berg, P.F. Waterfowl broods in e. MT. with special reference to movements & relationship of reservoir fencing to production 28:176(r)
- Berger, A.J. (see VanTyne, J.-)  
 --- Ten consecutive nests of a Song Sparrow 23:119(r)
- Berger, A.J. (cont.)  
 Locomotor anat. of *Coua caerulea* 24:166(r)
- Berger, D.D. Artificial nests for Great Horned Owl in WI. 29:60(r)  
 --- & H.C.Mueller. The Bal-Chatrri: a trap for birds of prey 30:18
- Berglund, T. Cormorants of Kalmarsund 29:258(r)
- Bergman, G. Migr. physiol. in Thrushes -- blood sugar, body temp. & action of adrenalin 22:130(r)  
 --- Depth of sleep in passerines 23:82(r)  
 --- Effect of a deficient adaptation of the Black-headed Gull to an ocean environment 25:120(r)  
 --- Behav. & biol. of Caspian Tern 25:158(r)  
 --- Relation between ground color & color of chicks of Caspian & Arctic Terns 27:150(r)  
 --- Influence of man on fauna of Finl. & on interrelations between some culture-influenced mammals & birds 27:197(r)  
 --- Uniting of broods of *Mergus serrator* & *M. merganser* 28:107(r)  
 --- Behav. of young Caspian Terns 28:170(r)  
 --- Viewpoints relating to White-tailed Eagle 28:176(r)  
 --- Mixed colonies: Tufted Duck & Gulls 31:48(r)
- Bergman, S. Displays of six-plumed Bird-of-Paradise 29:121(r)
- Bergman's Rule & long distance migrants 30:49(r)  
 - - applies to Blackgame & Capercaillie 30:57(r)
- Bergstrom, E.A. The South Windsor Bank Swallow colony 22:54  
 --- & W.H.Drury, Jr. Migr. sampling by trapping 27:107
- Bernhoft-Osa, A. Band. results from Revtangen Station 22:127(r); 30:234(r); 31:92(r)  
 --- The singing of a ♀ Pine Grosbeak 28:184(r)
- Bernis, F. Vital statistics & ecol. of White Stork in Spain 27:136(r)
- Besslere, C (see Tuzet, O.-)
- Betts, M.M. Experiments with an artificial nestling 26:34(r);28:49(r)

- Betts, M.M. Behav. of a pair of Great Tits at the nest 26:128(r)  
 Biaggi, V. Jr. The Puerto Rican Honeycreeper 27:37(r)  
 BIBLIOGRAPHY  
   Chinese birds 24:125(r)  
   diseases, wild birds & mammals 27:103(r)  
   history of journal, Orn. Mitteil. 29:202(r)  
   of birds, Finding Index 30:251(r)  
   of recent publications, Neth., in book 22:43(r)  
 Biehn, E.R. Crop damage by wildlife in CA. with special emphasis on deer & waterfowl 23:182(r)  
 BIOGRAPHY  
   A.O.U. members, obituaries, book, 26:87(r)  
   Audubon, J.J. 28:251(r)  
   bird, of Audubon, book 28:251(r)  
   Bartram, William, travels of, 29:263(r)  
   Hudson, W.H., letters on Ornith. of Buenos Ayres 22:196(r)  
   Miller, Loye, autobiog. 22:101(r)  
   Naturalists of Rocky Mts. 22:100(r)  
   Naumann, J.F. 29:67(r)  
 Biology of birds, books on, 24:173(r); 26:134(r)  
 Bird-of-Paradise, Six-plumed (Parotia sefilata)  
 Birds, Sea-, cons. 26:35(r)  
 Birnbaum, A. Procedures for comparing Poisson processes for pop. 25:118(r)  
 Bishop, D.W. (see Prosser, C.L.-)  
 Bittern (Botaurus stellaris)  
   -, Am. (B. lentiginosus)  
   -, Little(Ixobrychus minutus)  
 Bjerring, A. (see Johansen, H.-)  
 Blackader, A.K. Periodic wind var. 30:239(r)  
 Blackbirds (Icteridae)  
 Blackbird, Brewer (Euphagus cyanocephalus)  
   -, Eur. (Turud merula)  
   -, Redwinged (Agelaius phoeniceus)  
   -, Rusty (Euphagus carolinus)  
   -, Yellow-headed (Xanthocephalus xanthocephalus)  
 Blackcap (Sylvia atricapilla)  
 Blackgame (Lyrrurus tetrax)  
 Blagbrough, H.P. (see Mitchell, R.T.)  
 Blake, C.H. Meth. of comparing traps 22:110  
 Blake, C.H. Top-opening tree trap 22:113  
   --- The problem of the return of migr. birds 22:114  
   --- Sexual bias in trapping 22:117  
   --- Estimating association of individuals 22:119  
   --- A pop. balance for Black-capped Chickadee 23:165  
   --- Turnover ratios 24:7  
   --- Overall anal. of return rates 24:144  
   --- Leg sizes & band sizes 25:11; 27:76; 29:90  
   --- Wing length of Purple Finch 25:97  
   --- Gape color in Purple Finches 25:133  
   --- The Eastern Purple Finch 26:89  
   --- Wt. changes in birds 27:16  
   --- Topography of a bird 27:22  
   --- Differential contributions of year classes 27:171  
   --- Bird wts. from Jamaica 27:174  
   --- Soft parts of some Jamaican birds 27:178  
   --- The Streamer-tailed Hummingbird 27:181  
   --- Female E. Purple Finches 28:26  
   --- Juvenal Purple Finches 28:29  
   --- Diseases & injuries of Jamaican birds 28:157  
   --- Respiration rates 29:38  
 Blake, E.R. Birds of Mex. 24:171(r)  
 Blanc, T. A winter food cache of Little Owl 30:250(r)  
 Blanchard, B.D. & M.M.Erickson. Cycle in Gambel Sparrow 22:98(r)  
 Blank, T.H. & J.S.Ash. Marker for game birds 28:163(r)  
 Blaszyk, P. Inland breeding of the Oystercatcher 24:160(r)  
 Bleitz, D. Meth. for band size detn. 31:159(r)  
 Blotzheim, U.G. von. Hoarding behav. of Nutcracker 28:50(r)  
 Blouch, R.I. & L.L.Eberhardt. Hatching curves from different areas of MI Pheasant range. 25:75(r)  
 Bluebird(s)(Sialia sp.)  
   -, Eastern Sialia sialis  
   -, Mountain (S. currucoides)  
   -, Western (S. mexicana)



- Bluetail, Red-flanked (Tarsiger cyanurus)  
 Bluethroat (Luscinia (=Erithacus, = Cyanosylvia) svecica)  
 Blume, D. Behav. patterns of Green Woodpeckers during breeding season 28:107(r)  
 --- Behav. studies on Black Woodpecker: use of decoys 28:173(r)  
 --- Behav. studies of Green Woodpecker 29:198(r)  
 --- & G. Jung. Vocal sounds of Black, Green, Grey-headed, & Great Spotted Woodpeckers 28:183(r)  
 Boase, H. Display, nesting & moult of Mute Swan 30:245(r)  
 Bobolink (Dolichonyx oryzivorus)  
 Bobwhite (Colinus virginianus)  
 Bodenstein, G. Acceptance of colored grain by wild birds 30:250(r)  
 Bohl, W.H. Locating wild Chukar Partridges by recorded calls 27:145(r)  
 Bohringer, R. (see Schuz, E.)  
 Boldt, W. & G.O.Hendrickson. Mourning Dove production in ND. shelterbelts 23:184(r)  
 Bombycilla cedrorum (Cedar Waxwing)  
 band.- see Banding Reports  
 band size 25:13  
 descr., newly-hatched 27:125  
 L.H. 22:186(r)  
 mort. of, by shooting 22:180  
 natal down 29:235  
 - garrulus (Bohemian Waxwing)  
 band.- see Banding Reports  
 depth of sleep 23:82(r)  
 distr., winter 23:41(r)  
 evol. significance of migr. 27:96(r)  
 invasions, central Europe 22:36(r)  
 -, Scandinavia 30:124(r)  
 nesting, n. Sweden 28:180(r)  
 phylogeny 23:98(r)  
 pop. cycles 22:96(r)  
 status in Ger. 27:36(r)  
 - japonica (Japanese Waxwing)  
 phylogeny 23:98(r)  
 Bombycillidae (Waxwings)  
 mass mort., TX 28:231(r)  
 phylogeny 23:97(r)  
 Bonasa umbellus (Ruffed Grouse)  
 census meth. 25:27(r)  
 -, evaluation of 30:194(r)  
 cycles 22:96(r),138(r); 23:180(r)  
 ecol. in NY 22:197(r)  
 hatching dates in WI 22:186(r)  
 L.H., comparison with Hazel Grouse 27:92(r)  
 mort., cyclic 25:161-164(r)  
 nesting success 22:186(r)  
 sexing juv. 30:196(r)  
 trap for 27:86(r),144(r)  
 unusual density 26:128(r)  
 Bond, J. Origin of bird fauna of W. Indies 22:93(r)  
 Bondar (see McLeod, J.A.)  
 Bobbies (Sulidae)  
 BOOKS AND MONOGRAPHS REVIEWED:  
 Acarology, Introduction to 24:35(r)  
 Albatrosses, Laysan & Black-footed 24:35(r)  
 -, post-egg period 24:131(r)  
 -, Wandering 31:168(r)  
 Am. Gallinaceous Game Birds, Distr. of 27:102(r)  
 Am. Wildlife & Plants 23:51(r)  
 Arctic birds of Canada 28:246(r)  
 Arctic Year 29:265(r)  
 Attracting Birds 22:45(r)  
 Audubon, J.J., an evaluation 28:251(r)  
 Avian Pituitary, Structure & Development 25:172(r)  
 Barn Swallow 27:152(r)  
 Bartram, William, Travels of 26:175(r); 29:263(r)  
 Bibliography of birds, Part 4, Finding Index 30:251(r)  
 Biographies of members of A.O.U. 26:87(r) (see also Audubon, Bartram, Naumann)  
 Biol. investigations in Mexico 23:52(r)  
 Biol. of birds 24:173(r)  
 Bird & butterfly mysteries 28:55(r)  
 Bird biographies of J.J.Audubon 28:251(r)  
 Bird folk on far journeys 23:54(r)  
 Bird houses, baths and feeding shelters 27:103(r)  
 Bird in hand 31:234(r)  
 Bird life 26:134(r)  
 Bird life throughout the year 30:200(r)  
 Bird navigation 27:48(r)  
 Bird portraits 22:44(r)

## BOOKS &amp; MONOGRAPHS REVIEWED (cont.)

- Bird recognition 26:175(r)  
 - - II. Birds of Prey & Waterfowl  
 24:88(r)  
 Bird-ringing 25:80(r);28:185(r)  
 Birds 30:64(r)  
 Birds & mammals of Shetland 27:101  
 (r)  
 Birds & men 27:205(r)  
 Birds in color 23:192(r)  
 Birds of:  
 AR. 22:198(r)  
 Belgium 22:145(r)  
 Brazil, s.e., 30:65(r)  
 CA., Distributional 23:44(r)  
 central Europe 23:51(r)  
 Cleveland region 22:144(r)  
 Crater Lake Park 24:173(r)  
 GA. 30:137(r)  
 GA., s.w., summer 23:95(r)  
 Great Salt Lake 30:201(r)  
 Greenland, Pt.I 22:42(r); Pt.II  
 22:192(r); Pt.III 23:94(r)  
 IA dooryard 23:134(r)  
 Japan, Handlist of 30:136(r)  
 -, status & distr. 25:82(r)  
 LA. 28:184(r)  
 London area since 1900. 28:248(r)  
 Lower Chippewa River, WI. 27:  
 101(r)  
 MD. & DC 30:65(r)  
 MA, annotated check list 27:100(r)  
 MA., where & when to find 27:51(r)  
 Mexico 24:171(r)  
 -, Distr. check-list, Pt. I  
 22:97(r)  
 MI. 23:94(r)  
 Micronesia, origin, evol, & distr  
 23:97(r)  
 Middle Am. 27:103(r)  
 MN., where to find 22:145(r)  
 Monadnock 27:207(r)  
 Montezuma & Tuzigoot 23:99(r)  
 Netherlands, breeding 22:43(r)  
 Newfoundland 23:46(r)  
 N.Z. 27:151(r)  
 NJ. annotated list 27:205(r)  
 N. & Middle Am. 22:43(r)  
 Northland 31:168(r)  
 Ontario 22:193(r)  
 Rocky Mt. National Park 23:54(r)  
 S. Africa 23:52(r)  
 - -, check list 24:131(r)  
 Saskatchewan River 31:109(r)  
 S. Caspian lowlands 31:109(r)
- Serbia 22:43(r)  
 Surinam 27:206(r)  
 Sweden 22:196(r)  
 Ungava peninsula 30:136(r)  
 Veracruz, Mexico 23:98(r)  
 WA State 25:192(r)  
 WI 22:196(r)  
 World, check-list of, vol. VII,  
 22:142(r); vol. IX, 31:233(r)  
 Bird Watcher's anthology 29:265(r)  
 - - reference book 28:110(r)  
 - Watching, guide 24:174(r)  
 "Brategg" expedition, ornith. of,  
 29:132(r)  
 Breeding biol. of *Larus argentatus*  
 & *L. fuscus* 23:45(r)  
 Burroughs, John, selections from  
 writings of 23:53(r)  
 Butterflies, Field Guide 23:52(r)  
 Chaffinch, behav. of 29:133(r)  
 Check-lists of:  
 MA. 27:100(r)  
 Mex. 22:97(r)  
 S. Afr. 24:131(r)  
 N. Am. birds 29:129(r)  
 NJ 27:205(r)  
 World, birds of 22:142(r);  
 31:233(r)  
 Coloration in animal kingdom  
 25:33(r)  
 Comparative animal physiol. 22:46(r)  
 Comparative biol. of Meadowlarks  
 in WI. 28:249(r)  
 - breeding behav. of N.Am. Herons  
 31:234(r)  
 Condor, California 24:172(r)  
 Cons. of natural resources 22:94(r)  
 County Parish 23:98(r)  
 Crip, come home 23:135(r)  
 Curious naturalists 30:138(r)  
 Diseases of wild mammals & birds,  
 bibliography of references  
 27:103(r)  
 Dove, Mourning, in NC 22:197(r)  
 Ducks, Paddling of 29:131(r)  
 -, Prairie 27:50(r)  
 -, Ring-necked in Northeast  
 30:62(r)  
 Eagle man 25:82(r)  
 Ecological Animal Geography, 2nd  
 ed., 23:50(r)  
 Ecology of animals 3rd ed. 22:  
 195(r)  
 Effect of lesser vegetation of  
 Adirondack Forest Types 22:107(r)

- BOOKS & MONOGRAPHS REVIEWED (cont.)
- Endocrinology, Comparative 31:59(r)
- Energy metabolism of two species of  
genus *Emberiza* as correlated with  
distr. & migr. 27:99(r)
- Evolution, 2nd ed. 23:54(r)
- Evol. at pop. Level 22:136(r)
- Evol. emerging 22:140(r)
- Evol. of vertebrates 27:150(r)
- Evol, textbook of 24:36(r)
- Excretion, biogeochemistry of  
vertebrate, pt.3, 22:192(r)
- Extinct & vanishing birds of World  
29:262(r)
- Field book - see Guides, below
- Finl., recent climatic fluctuations  
& consequences 24:34(r)
- Fleas, Flukes & Cuckoos 25:36(r)
- Flight among animals 23:98(r)
- Fluctuations in numbers, mammals &  
birds, n. parts of n. hemisphere  
22:95(r)
- Folklore of birds 30:199(r)
- Food habits of birds of prey  
23:189(r)
- Fulmar 24:31(r)
- Game cycles, Way to game abundance  
22:138(r)
- Geese, Canada, of MS. Flyway 22:  
143(r)
- , Thousaand, 25:171(r)
- Geography, Ecological animal, 2nd  
ed. 23:50(r)
- Goshawk & Sparrow Hawk 27:98(r)
- Great Tit, Behav. of 23:191(r)
- Guides:  
Audubon Water Birds 22:199(r)  
Bird-finding e. of Ms. River  
23:53(r)  
- - w. of Ms. River 25:83(r)  
Mammals of N. Am. 26:87(r)  
N. Am. Wildlife 31:108(r)  
Pocket, to birds, 24:88(r)  
-, to nests & eggs 26:174(r)  
Voices of birds 23:134(r)  
Western Birds 28:247(r)
- Hawks, Owls & Wildlife 29:69(r)
- Heredity, understanding it 23:190(r)
- Hérons (see above, Comparative -)
- Herring Gull's World, study of  
social behav of birds 25:81(r)
- Hist. of Am. Ornith. before Audubon  
23:93(r)
- - NH game & furbearers 30:136(r)
- Hist. of Ornith. at Univ. MI. Biol.  
Station 27:207(r)
- - Ornith. from Aristotle to  
present time 23:91(r)
- Honeycreepers, Hawaiian 22:191(r)
- Honeyguides 27:98(r)
- Hudson, W.H., letters of 22:196(r)
- Insects in birds' Nests, Check-list  
& bibliography 31:61(r)
- Instinct, study of 23:132(r)
- Jays, of genus *Aphelocoma* 23:47(r)
- King Solomon's Ring 23:192(r)
- Laboratory & Field manual of  
Ornith. 27:154(r)
- Lifelong boyhood 22:101(r)
- Light intensity & day length, effect  
on reproduction in English  
Sparrow 23:45(r)
- Listening in the dark 30:63(r)
- Little bird book 24:35(r)
- Little book of the woods 26:87(r)
- Man's role in changing face of  
earth 29:133(r)
- Meadowlarks - see above, Comparative-  
Memoirs of a bird man 27:203(r)
- Menaboni's birds 22:44(r)
- Mendelism & evol. 5th ed. 22:195(r)
- Migr. of birds 22:94(r), 142(r);  
23:49(r), 135(r); 24:130(r);  
25:131(r); 28:55(r)
- Name that animal 22:196(r)
- N. Am. Wildfowl, L.H. 23:95(r)
- Natural Hist. of birds 29:68(r)
- Naumann, J.F., life & works 29:67(r)
- Navigation of birds 27:48(r)
- Nests, finding 25:83(r)
- Nocturnal migr. of birds, quanti-  
tative study 23:43(r)
- Nuthatch 29:207(r)
- Of men & marshes 29:132(r)
- Ornith. Congress, Proceedings of  
Xth International, 24:32(r)
- Ornithologists' guide, overseas,  
28:184(r)
- Ornith., fundamentals of 31:59(r)
- Parental care & its evol. in  
birds 24:86(r)
- Parrot-like birds bred in U.S.A.,  
records of, 22:101(r)
- Passenger Pigeon, Natural hist. &  
extinction 26:133(r)
- Passerine birds, Breeding life,  
30:251(r)
- Pasture & range plants 29:134(r)

- BOOKS & MONOGRAPHS REVIEWED (cont.)
- Patagonia, Zoologist in steppes & forests of 24:174(r)
- Paths across the earth 29:107(r)
- Penguins, pop. study 29:264(r)
- , Pygoscelid 30:251(r)
- , sexual behav. 22:190(r)
- Photographing birds 28:249(r)
- Physiol., avian 25:173(r)
- , comparative, vol. IV 22:46(r)
- Picture book of birds 30:135(r)
- Pituitary, avian 25:172(r)
- Poultry breeding 24:34(r)
- Quest of divine 29:134(r)
- Redstart 25:172(r)
- Rocky Mountain naturalists 22:100(r)
- Shorebirds, geogr. var. & the species problem 22:96(r)
- Social behav. in animals, special reference to vertebrates 25:84(r)
- Sold for a farthing 27:154(r)
- Songbirds in your garden 25:82(r)
- of Ger., 9th ed. 23:50(r)
- Sparrow, fall of 23:49(r)
- , Gambel's, cycle of 22:98(r)
- Stalking birds with color camera 23:98(r)
- Stepping stones across Pacific 24:35(r)
- Storks 27:50(r)
- , White, life of 22:145(r)
- Stray feathers from a bird man's desk 26:135(r)
- Swan, Mute, in Engl. 29:208(r)
- Tern, Least, in MS. valley 28:250(r)
- Those of the forest 25:85(r)
- Towhees, Red-eyed, of Mex., species formation 22:142(r)
- Turkey, wild, in LA. 23:47(r)
- Urban Am. Cons. easements 31:169(r)
- Vanishing birds, Trail of 29:68(r)
- Vertebrate sexual cycles 23:96(r)
- Warblers of Am. 29:129(r)
- Watching birds 24:88(r)
- Waterfowl & their food plants in WA. 23:188(r)
- Waterfowl bandings 1939-1950 24:132(r)
- Waterfowl, travels & traditions 27:153(r)
- Waxwings & allies, phylogeny of 23:97(r)
- What flies there? 24:89(r)
- Wild animals in captivity:outline of biol. of zoological gardens 22:45(r)
- Wildfowl Trust, 7th annual report 27:102(r)
- Wildlife cons., practice of 22:104(r)
- in color 23:99(r)
- in subantarctic 23:191(r)
- legacy 26:41(r)
- of Mexico 31:167(r)
- World outside my door 27:51(r)
- Borg, K. (see Høglund, N.)
- Long-tailed Tits roosting in cavity in ground 28:171(r)
- Bill length & body wt. in Herring & Great & Lesser Black-backed Gulls 31:166(r)
- Borror, D.J. Var. in Carolina Wren songs 28:55(r)
- & W.W.H.Gunn. Songs of warblers of e. N. Am. 29:261(r)
- - ---. Songs of Fringillidae of e. & central N.Am. 31:232(r)
- Bosenberg, K. Sex ratios & mort. in nestling House Sparrows 30:51(r)
- Botaurus lentiginosus (Am. Bittern) mort. at ceilometer 22:183(r)
- stellaris (Bittern) absent, 1956-57 census, Krankesjon, Sweden 31:106(r)
- Boudoint, Y. Biol. of Short-toed Eagle 25:24(r)
- & M.Laferriere. Short notes & observations from central Pyrenees. 28:52(r)
- Bouet, G. Life of White Stork 22:145(r)
- Bouldin, L.E. House Martin colonies in e. Lancashire 30:243(r)
- Bourdelle, M.E. & M.J.Giban. Activities of Fr. bird-band. stations, 1946-1947. 22:35(r)
- Bourke, P.A. Nest fauna of Fairy Martin 29:124(r)
- Bourliere, F. (see Morel, G.; Prevost, J.; Sapin-Jaloustre, J)
- Bourne, W.R.P. Visible migr. 31:45(r)
- Birds of Cape Verde Is. 27:137(r)
- Bowerbird, Spotted (Chlamydera maculata)
- , Tooth-billed (Scenopoeetes dentirostris)
- Bowerbirds (Ptilonorhynchidae)
- Bowman, R.I. Chimney Swift band. at Kingston, Ontario 1928-47. 25:115(r)

- Boyd, A.W. A country parish: Great Budworth in county of Chester. 23:98(r)
- Boyd, E.M. Birds & some human diseases 29:34
- Boyd, H. (see Scott, P.)
- Field counts of age-group ratios & brood size 24:157(r)
- Relative mort. of adult & young Pink-footed Geese 24:157(r)
- Encounters between wild White-fronted Geese in winter flocks 24:162(r)
- The "wreck" of Leach's Petrels, autumn, 1952. 26:39(r)
- Mort. & fertility of White-fronted Goose 28:232(r)
- Early sexual maturity of ♀ Mallard 29:55(r)
- Mort. & kill among British-ringed *Anas crecca* 29:188(r)
- Survival of White-fronted Geese ringed in Grnl. 29:249(r)
- Boyle, G.L. Behav. of Lapwing after eggs had been crushed 27:94(r)
- Lapwing chicks "pattering" & feeding on tadpoles 28:182(r)
- Braaksma, S. (see Bruuns, M.F.M.)
- Roosting places of the Crane in Neth. 30:249(r)
- Brachyramphus brevirostris* (Kittlitz's Murrelet) in bird guide, w. U.S. 28:247(r)
- Brackbill, H. Light intensity & water-fowl pre-flight activities 24:117(r)
- Bradford, M.C. Nuthatch roosting times in relation to light. 26:127(r)
- Bradley, E. & J. Behav. & plumage of Blue Wrens 30:245(r)
- Brainerd, J.W. (see Stewart, R.E.)
- Brakhage, G.K. Migr. & mort. of ducks hand-reared & wild-trapped at Delta, Manitoba 25:74(r)
- Brambling (*Fringilla montifringilla*)
- Brander, T. Goldeneye nesting boxes. 30:130(r)
- Brant, Am. (*Branta bernicla*) - , Black (*B. nigricans*)
- Branta* sp. white-spotting 23:42(r) syst. 24:127(r)
- *bernicla* (Am. Brant = Brent Goose) band. - see Banding Reports 1st specimen from Shikoku 22:135(r)
- nest study, Hudson Bay 28:45(r)
- night body temp. in arctic 29:125(r)
- painting of 22:45(r)
- pop. cycles 22:96(r)
- seasonal movements 27:190(r)
- status, Nor. 29:61(r)
- Branta canadensis* (Canada Goose) band. - see Banding Reports bands, colored leg 25:62(r)
- blood parasites 24:165(r)
- census, Engl. 28:179(r)
- filaria in 27:149(r)
- fluoroscopy for lead shot 27:95(r)
- food 24:165(r); 31:55(r)
- general study 22:143(r)
- Gizzard Worm in 26:131(r)
- in book, Grnl. birds 22:42(r)
- interfamily dominance 24:163(r)
- migr., map of 22:143(r)
- nesting study 31:53(r)
- , tech. to increase 24:120(r)
- parasites of young 25:166(r)
- plastic collar markers 27:34(r); 28:163(r)
- pop. study 23:1
- , in Sweden 31:169(r)
- productivity 28:240(r)
- & water levels 26:129(r)
- renesting study 30:194(r)
- role of family in flock formation 22:187(r)
- syst. & new subspp. 23:91(r)
- white spotting 23:42(r)
- *leucopsis* (Barnacle Goose) band. - see Banding Reports mated to Pink-footed Goose 24:161(r)
- nest robbed by Glaucous Gull 28:180(r)
- terr. & dominance in zoo 22:89(r)
- *nigricans* (Black Brant) records & migr. in AK. 27:36(r)
- *sandvicensis* (Nene = Hawaiian Goose) at Slimbridge, Engl. 27:102(r)
- breeding in captivity 24:155(r)
- restoration program 23:127(r)
- Braun, H. Ability of parrots to distinguish unnamed numbers 24:80(r)
- Brauner, J. Reactions of Poor-wills to light & temp. 24:79(r)
- BRAZIL (see South America -)
- Breckenridge, W.J. Nesting study of Wood Ducks 27:139(r)

- BREEDING (see also Behavior-; & L.H.)  
 biol. of:  
 Crossbills, Red, early winter in  
 Den. 29:191(r), 192(r)  
 Cuckoo, Common 25:69(r)  
 Curlew 28:169(r)  
 Flycatcher, Pied 30:192(r)  
 Ger. birds, notes on 31:100(r)  
 Goose, Snow, on Bylot Is., Can.  
 30:243(r)  
 Guillemot 29:251(r); 31:47(r)  
 Gull, Ivory, in Spitzbergen  
 30:243(r)  
 -, Thayer's 31:63  
 Jaeger, Long-tailed 31:63  
 Linnets, in Belgium 26:166(r)  
 Nene 30:245(r)  
 passerines, in USSR 30:251(r)  
 Pigeon, Wood 30:244(r)  
 Plover, Little Ringed 28:105(r)  
 -, Semipalmated 26:137  
 Quail, California, in N.Z. 30:203  
 -, S. Afr. Button, 31:48(r)  
 Shearwater, Short-tailed 29:193(r)  
 Sparrow, Rufous-collared, near  
 equator 30:129(r)  
 Starling, in N.Am. 29:191(r)  
 Swallow, Barn 31:99(r)  
 Swift, Eur. 26:124(r)  
 Tern, Arctic 31:63  
 Waders 31:101(r)  
 Xerophilous birds, Aust. 31:98(r)  
 change in area in one season, of  
 Redpoll 28:244(r)  
 comparative, Meadowlarks 28:249(r)  
 -, Meadow Pipit in Lapland & Engl.  
 30:244(r)  
 -, Eur. Swift in Engl. & Switz.  
 28:47(r)  
 correlated with rains, Afr. 27:  
 137(r)  
 - - -, Aust. 31:98(r)  
 cycles (see also pop. cycles)  
 day length & migr. 25:77(r)  
 15-month of King Penguin 29:56(r)  
 density, Mourning Dove in GA.  
 28:241(r)  
 energy resources for 22:38(r)  
 factors controlling in n.w.Afr.  
 25:24(r)  
 grounds of Pink-footed Goose  
 25:171(r)  
 in interior, Oystercatcher 24:160(r)  
 irregular, of ducks in inland Aust.  
 29:193(r)
- records of:  
 captive parrots in U.S. 22:101(r)  
 Dove, Collared Turtle, s.w.  
 Sweden 28:169(r)  
 Egret, Cattle, Surinam 30:250(r)  
 Grosbeak, Evening, in MA. 30:226  
 Nutcracker, Slender-billed, in  
 Sweden 27:146(r)  
 Tern, Roseate, in Nova Scotia  
 28:41  
 requirements, for Plovers on new  
 land in Neth. 26:124(r)  
 season, early in Engl. 30:243(r)  
 -, related to food supply,  
 Starling 27:136(r)  
 -, winter, in Afr. 27:137(r)  
 sequence in colony establishment,  
 Black-headed Gull 28:179(r)  
 weather effects on (see Ecology,  
 weather-)  
 Brewer, R. & J.A. Ellis. Anal. of  
 migr. birds killed at a television  
 tower 30:188(r)  
 Briche, L. Nest of Crested Lark  
 parasitized by Cuckoo 29:56(r)  
 Brickenstein-Stockhammer, C. &  
 R. Drost. Return, occupation of  
 terr. & passage of White-spotted  
 Bluethroat 29:47(r)  
 Bringer, K. Birds of a southward-  
 sloping mountain in Lapland  
 29:66(r)  
 Brinkman, M. The White Stork in  
 Osnabruck 26:77(r)  
 BRITISH ISLES  
 Am. land birds in 26:131(r)  
 Birds & mammals of Shetland Is.,  
 book 27:101(r)  
 Birds of London since 1900, book  
 28:248(r)  
 B.T.O. 18th ann. report (1951)  
 23:170(r)  
 Fair Isle, a visit to 30:240(r)  
 Myrtle Warbler, first record in  
 26:169(r)  
 Broadbills (Eurylaimidae)  
 Brock, H. & P. Fjeld. Band. by Oslo  
 Univ., 1940-1952. 26:74(r)  
 Brodkorb, P. Geogr. var. in Gray  
 Kingbird. 23:43(r)  
 Broekhuysen, G.J. Nesting activities  
 of the Redwing Starling, especially  
 feeding of young 23:36(r)  
 --- Biol. of Cape Sugarbird 31:228(r)

- Broekhuysen, G.J. & G.Rudebeck. The Cape Gannet. 23:122(r)
- Brolley, M.J. Eagle Man 25:82(r)
- Brood size, evol. of in Pied Fly-catcher 26:126(r)
- - of White-fronted Goose 24:157(r)
- - (see also Breeding; L.H.)
- Brooks-King, M. & H.G.Hurrell. Intelligence tests with Tits 30:195(r)
- Bross, I. A confidence interval for a percentage increase. 26:31(r)
- Brosset, A. Length of incub. in Short-toed Eagle 25:24(r)
- Birds of e. Morocco from Mediterranean to Berguent. 28:243(r)
- Brouwer, G.A. Oceanic oil pollution 25:27(r)
- Brown, F.A. (see Prosser, C.L.)
- Brown, L.H. Breeding of the Greater Flamingo at Lake Elmenteita, Kenya 30:129(r)
- Brown, M. "Homing" Cowbirds at Hawk Mountain 31:92(r)
- Brown, P.E. (see Huxley, J.S.)
- Brown, R.C.B. Migr. of Coot in relation to Engl. 27:189(r)
- Brown, R.G.B. (see Ashmole, N.P.)
- Brown, R.H.S. Flapping flight 23:123(r)
- Browne, K.&E. Anal. of wt. of birds trapped on Skokholm 28:108(r)
- Browne, P.W.P. Nocturnal migr. of thushes in Ireland 25:116(r)
- Browning, R.L. (see Hanson, W.C.)
- Brownlow, H.G. Design, construction & operation of Helgoland trap 24:71(r)
- Reconstruction of Helgoland traps 27:188(r)
- Bruhn, J.F.W. Autumn migr. of 1957 in s. Spain 30:187(r)
- Bruns, H. Arrival of migr. birds & beginning of song in n. & w. Ger. 22:183(r)
- Warning & concealing coloration in animals 25:33(r)
- Increase in pop. & ecol. behav. of Mistle Thrush in n.w. Eur. 25:79(r)
- Selective choice of food by birds 26:40(r)
- Visual cues of food places & food objects & their significance for food-seeking Titmice 26:125(r)
- Attempt at bird colonization in a Frankish Oak-Hornbeam Wood 28:104(r)
- Results of bird colonization experiments in Beech woods 28:175(r)
- Choice of nest boxes with & without Marten protection by hole-nesting songbirds 28:236(r)
- Functions & goals of Hamburg City Bird Sanctuary 29:124(r)
- Pop. densities of birds in coniferous forests 29:189(r)
- Experiments in raising breeding density of birds in oak & part oak forests 29:254(r)
- Arrival dates of the Swift in Ger. 30:49(r)
- Bruuns, M.F.M. & S. Braaksma. Status of White Stork in Neth., 1950. 27:46(r)
- Bryens, O.M. Activities of Northern & Migrant Shrikes 22:121
- Bub, H. Nesting associations of Redshank & Lapwing 29:195(r)
- & H. Kumerlovee. Crossbill invasion of 1953 in Eur. with particular regard to Ger. 27:46(r)
- Bubalornis albirostris (African Buffalo-Weaver) behav., ecol. & syst. 30:243(r)
- Bubalornithidae (Buffalo-Weavers) proposed new family 30:244(r)
- Bubo spp.  
tail molt 26:38(r)
- bubo (Eagle Owl)  
band. - see Banding Reports  
egg rolling 25:71(r)  
faunal dynamics 22:41(r)  
food habits 25:79(r); 26:132(r)  
27:93(r)  
in Franconian Alps 25:79(r)  
L.H. & photo, study 29:128(r)  
pop. decrease 27:93(r)  
prey on Hooded Crow 22:41(r)  
reintroduced, Sweden 29:60(r)
- virginianus (Great Horned Owl)  
anting 29:120(r)  
artificial nests for 29:60(r)  
band, locking type for 31:90  
cave roosting in high Andes 24:119(r)  
damage to nets by 28:125

- Bubo virginianus* (cont.)  
 illus. in book 22:193(r)  
 mort. rates 24:28(r)  
 syst., subspp. 30:61(r)  
*Bubulcus ibis* (Cattle Egret)  
 band. - see Banding Reports  
 first breeding, Surinam 30:250(r)  
 spread to N. Am. 27:90(r)  
 - - Aust. 29:204(r)  
 status in s. Afr. 24:170(r)  
 Bucconidae (Puffbirds)  
 nest in termitaria 31:98(r)  
*Bucephala* spp.  
 syst. & cytogenetics 24:127(r)  
 - *albeola* (Bufflehead)  
 capture tech. 24:111(r)  
 flight & light intensity 24:117(r)  
 new host of *Leucocytozoon* 27:203(r)  
 - *clangula* (Am. Goldeneye)  
 band. - see Banding Reports  
 displays 31:51(r)  
 nestboxes for 23:175(r); 30:130(r)  
 new host of *Microfilaria* 27:203(r)  
 sex ratios 29:203(r)  
 - *islandica* (Barrow's Goldeneye)  
 capture tech. 24:111(r)  
 Buddenbrock, W. von. Comparative  
 Physiology 22:46(r)  
 Budgerygah (*Melanopsittacus undulatus*)  
 Bulbul (*Pycnonotus* & *Hypsipetes*)  
 Bull, P.C. Ringing operations, Great  
 Britain 25:62(r); 28:42(r)  
 --- A marked pop. of Blackbirds at  
 Lower Hutt. 25:62(r)  
 --- Distr. & abundance of the Rook  
 in N.Z. 29:127(r)  
 Bull, T.C. Stomach contents of a  
 North Island Kiwi 31:58(r)  
 Bullfinch (*Pyrrhula pyrrhula*)  
 -, Antillean (*Loxigilla violacea*)  
 Bullis, H.R., Jr. Trans-gulf migr.,  
 spring, 1952. 26:29(r)  
 --- & F.C. Lincoln. A trans-gulf migr.  
 24:111(r)  
 Bullock, D.S. N. Am. bird migrants  
 in Chile 22:37(r)  
 Bullough, W.S. Vertebrate sexual  
 cycles. 23:96(r)  
 Buntings (*Emberizinae*)  
 -, Cirl (*Emberiza ciris*)  
 -, Indigo (*Passerina cyanea*)  
 -, Lapland (= Longspur, Lapland)  
 -, Lark (*Calamospiza melanocorys*)  
 -, Ortolan (*Emberiza hortulana*)  
 Bunting, Painted (*Passerina ciris*)  
 -, Reed (*Emberiza schoeniclus*)  
 -, Snow (*Plectrophenax nivalis*)  
 -, Yellow (= Yellowhammer)  
 Burckhardt, D. Do our Little  
 Bitterns winter in w. Afr?  
 25:115(r)  
 --- Waterfowl censuses, including  
 international census of 1952-53  
 25:126(r); 29:259(r)  
 --- Do predatory birds play a role  
 as "health police"? 25:128(r)  
 --- Embryonic ptilosis of some  
 passerines. 28(54(r))  
 Bureau, L. Observations on Short-  
 toed Eagle in w. Fr. 25:24(r)  
 Burger, J.W. Review of experimental  
 investigations on seasonal repro-  
 duction in birds 22:185(r)  
 Burhinus sp. (Thicknees)  
 in Caribbean Is. 28:243(r)  
 - oedicnemus (Stone Curlew)  
 decrease in Neth., in book 22:43(r)  
 feeding behav. of young 31:101(r)  
 Burleigh, T.D. (see Peters, H.S.)  
 --- Georgia Birds. 30:137(r)  
 Burr, F. Bohemian Waxwing in Ger.,  
 1946-1954. 27:36(r)  
 Burton, J.F. (see Owen, D.F.)  
 Burton, P.J.K. & M.H. Thurston. Arctic  
 Terns in Spitzbergen 30:145(r)  
 Bushwarblers (see Sylviidae)  
 Buss, I.O. (see Johnsgard, P.A.)  
 --- Upland Plover in s.w. Yukon  
 Territory 23:178(r)  
 ---, R.K. Meyer & C. Kabat. WI.  
 Pheasant reproduction studies  
 based on ovulated follicle tech.  
 22:184(r)  
 --- & H.M. Mattison. A half century  
 of change in bird pops. of Lower  
 Chippewa River, WI. 27:101(r)  
 Bustard, Great (*Otis tarda*)  
 -, Houbara (*Chlamydotis undulatus*)  
 Buteo sp.  
 migr. counts, Ger. & Den. 28:165(r)  
 - brachyurus (Short-tailed Hawk)  
 records in FL. 25:127(r)  
 - buteo (Buzzard)  
 age - see Age, maxima  
 attacked by Starlings 31:51(r),  
 103(r)  
 band. - see Banding Reports  
 breeding in Ger. 25:21(r)



- Buteo buteo (cont.)  
 eats mushrooms 29:206(r)  
 food of 28:182(r)  
 hatches duck eggs 29:198(r)  
 "nest-decorating" around young on  
 ground 30:191(r)  
 old nest of used by Black Kite  
 27:146(r)  
 palatability of eggs 24:76(r)  
 pop. study 25:20(r)  
 status, past & present, Engl.  
 28:244(r)
- galapagoensis (Galapagos Hawk)  
 rear young in dry season 22:87(r)
  - jamaicensis (Red-tailed Hawk)  
 band. - see Banding Reports  
 shooting of, in book on AR. birds  
 22:198(r)  
 trapping 30:25, 180
  - lagopus (Rough-legged Hawk)  
 attacks Snowy Owl 26:149.  
 trapping 30:25, 132(r)
  - lineatus (Red-shouldered Hawk)  
 band. - see Banding Reports  
 trapping 30:25, 180
  - nitidus (Gray Hawk)  
 trapping 30:25
  - platypterus (Broad-winged Hawk)  
 band. - see Banding Reports  
 trans-gulf migrant 29:45(r)  
 trapping 30:25, 180
- Butorides virescens (Green Heron)  
 band size 29:91; 30:121  
 breeding behav. 31:234(r)  
 trans-gulf migrant 29:45(r)  
 wt. 27:175
- Butterfield, A. Meas. of a Blackbird  
 27:45(r)
- Buttiker, W. Meth. of collecting  
 parasites of birds. 24:123(r)
- Buxton, E.J.M. (see Thomson, A.L., ed.)  
 --- Migr. of Oystercatcher in Engl.,  
 results of ringing 29:188(r)
- Buxton, J. The Redstart 25:172(r)
- Buzzard (Buteo buteo)  
 -, Honey (Pernis apivorus)

- Cade, T.J. (see Kessel, B.)  
 --- Black Brant in Yukon basin & the question of a spring migr. route. 27:36(r)  
 --- Winter terr. of Am. Kestrel 27:41(r)
- Cairina moschata (Muscovy Duck)  
 cytogenetics & syst. 24:127(r)  
 ethology 24:118(r)  
 serology & syst. 29:205(r)  
 visual learning to avoid shock 31:166(r)
- Calamospiza melanocorys (Lark Bunting)  
 band. - see Banding Reports
- Calcaricus lapponicus (Lapland Longspur)  
 band. - see Banding Reports  
 incub. period 22:38(r)  
 invasion in Engl. 27:133(r)  
 L.H. 28:235(r)
- Calidris spp.  
 migr. as adaptation to arctic life 30:132(r)  
 scarcity in migr., Sweden 28:161(r)
- alba (Sanderling)  
 baiting with shrimp 25:113  
 band. - see Banding Reports  
 migr. in n. Eur. 25:19(r)  
 - & increase in NJ 23:40(r)
- alpina (Dunlin)  
 age- see Age, maxima  
 associating with Golden Plover & Purple Sandpiper 24:162(r)  
 band. - see Banding Reports  
 lipids of 25:167(r)  
 meas. of Swedish migrants 30:196(r)  
 migr. & increase in NJ. 23:40(r)  
 - in n. Eur. 26:165(r)  
 seasonal occurrence, CA. 23:32(r)
- bairdii (Baird's Sandpiper)  
 band. - see Banding Reports  
 breeding in Grnl. 22:192(r)
- canutus (Red Knot)  
 age - see Age, maxima  
 band. - see Banding Reports  
 migr. & increase in NJ. 23:40(r)  
 subsp in Grnl. 22:192(r)
- ferruginea (Curlew Sandpiper)  
 band. - see Banding Reports  
 occurrences in N. Am. 31:161(r)
- maritima (Purple Sandpiper)  
 association with Dunlin 24:162(r)  
 band. - see Banding Reports  
 pop. decrease in Faeroes 27:199(r)
- Calidris mauri (Western Sandpiper)  
 band size 29:91  
 decoys for netting 31:90  
 migr. & increase in NJ. 23:40(r)  
 seasonal occurrence, CA. 23:32(r)
- melanotus (Pectoral Sandpiper)  
 leg & band size 30:121
- minuta (Little Stint)  
 band. - see Banding Reports
- minutilla (Least Sandpiper)  
 band size 25:14; 29:91  
 - - & leg size 30:121
- pusilla (Semipalmated Sandpiper = Stint)  
 angle of cerebral axis 30:246(r)  
 band. in AK. 22:181  
 band size 25:14; 29:91  
 - - & leg size 30:121  
 decoys for netting 31:90  
 migr. 30:149, 180
- testacea (= C. ferruginea)
- Callipepla squamata (Scaled Quail)  
 hybrid with Bobwhite Quail 26:32(r)  
 sex & age determination 27:201(r)
- Calypte anna (Anna Hummingbird)  
 energy requirements 26:172(r)  
 metabolism 22:33(r)  
 temp. & nest attentiveness 26:124(r)
- Campbell, B. (see Cohen, E.)  
 --- Finding nests 25:83(r)
- Campbell, H. Avian malaria in relation to survival & growth of young Gambel's Quail in captivity 26:36(r)
- Campephilus principalis (Ivory-billed Woodpecker)  
 in book on vanishing species 29:262(r)
- Canachites canadensis (Spruce Grouse)  
 mort., cyclic 25:161(r)
- CANADA (see also Recoveries & Returns)  
 Arctic, book on birds of 28:246(r)  
 cons. of birds, in book 23:46(r)  
 folk names of birds 29:201(r)  
 Keewatin, birds of 24:169(r)  
 list, annotated, of:  
 Alberta, Elk Is. Nat. Park 24:30(r)  
 Bylot Is. 31:106(r)  
 James & Hudson Bays 25:31(r)  
 New Brunswick 24:124(r)  
 Saskatchewan, Prince Albert Nat. Park 24:30(r)

- CANADA (cont.)  
 list, annotated, Saskatchewan River 31:109(r)  
 New Brunswick, book on birds of 24:124(r)  
 Newfoundland, book on birds of 23:46(r)  
 Ontario birds, book 22:193(r)  
 -, summer birds of western 26:38(r)  
 Perry River region, geog. of birds & mammals 27:198(r)  
 Ungava peninsula, birds of 30:136(r)  
 Canary (*Serinus canaria*)  
 CANNIBALISM (see Behavior, feeding)  
 Canvasback (*Aythya valisneria*)  
 Capella gallinago (= Gallinago gallinago)  
 Capercaillie (*Tetrao urogallus*)  
 -, Black-billed (*T. parvirostris*)  
 Caprimulgidae (Goatsuckers)  
 biol. of, in book 22:145(r)  
 Caprimulgus carolinensis (Chuck-will's Widow)  
 netting, & band size 31:158  
 - europaeus (Nightjar)  
 fledging 27:38(r)  
 nest study 29:54(r)  
 song rhythm 27:142(r)  
 torpidity 28:242(r)  
 - vociferus (Whip-poor-will)  
 band. - see Banding Reports  
 band size 27:77 ; 31:158  
 Caracara, Guadalupe (*Polyborus lutosa*)  
 -, Yellow-headed (*Milvago chimachima*)  
 Cardinal (*Cardinalis cardinalis*)  
 age - see Age, maxima  
 band. - see Banding Reports  
 band size 25:15; 29:93  
 DDT mort. 22:189(r); 28:108(r)  
 natal down 29:236  
 netting 30:43  
 roadside census, frequency in 29:171  
 sex, age & daily wt. 26:19  
 subspp. in GA. 23:96(r)  
 trapping effect on repeat data 29:219  
 wing lengths 30:233  
 Carduelis cannabina (= *Acanthis cannabina*)  
 - carduelis (European Goldfinch)  
 band. - see Banding Reports  
 clutch size decrease after introduction to Aust. 29:119(r)  
 eaten by Short-toed Eagle 25:24(r)  
 juvenile feeds juvenile 23:39(r)  
 longevity - see Age, maxima  
 migr. 27:132(r)  
 - chloris (Greenfinch)  
 band. - see Banding Reports  
 day-length & activity 27:141(r)  
 migr. 27:87(r)  
 wing length 25:99  
 - flammea (= *Acanthis flammea*)  
 - flavirostris (= *A. flavirostris*)  
 - hornemanni (= *A. hornemanni*)  
 - pinus (Pine Siskin)  
 band. - see Banding Reports  
 band size 25:15  
 winter pop. study 22:71  
 - spinus (European Siskin)  
 band. - see Banding Reports  
 migr. 27:133(r)  
 pop. increase, Sweden 31:105(r)  
 Carney, S.M. & G.A. Petrides. Var. among participants in Pheasant cock-crowing censuses 30:194(r)  
 Carpodacus cassinii (Cassin's Finch)  
 metabolism, temp. & distr. 24:122(r)  
 - erythrinus (Scarlet Grosbeak)  
 breeding in n. Sweden 28:181(r)  
 plumage, mature 30:248(r)  
 range extensions 23:132(r); 28:181(r); 30:248(r)  
 song in migr. 27:133(r)  
 - mexicanus (House Finch)  
 band size 29:93  
 killed in trap by shrike 24:67  
 metabolism, temp. & distr. 24:122(r)  
 nesting attempts after volcano, Mexico 31:47(r)  
 origin & status in e. U.S. 24:170(r)  
 plumage var. 26:111  
 - purpureus (Purple Finch)  
 band. - see Banding Reports  
 band size 25:13  
 diurnal migr. 30:171  
 gape color 25:133; 28:30  
 homing 25:151  
 hurricane effects on 26:119  
 killed by Blue Jay 29:244  
 metabolism, temp. & distr. 24:122(r)  
 migr sampling by trapping 27:107  
 plumages 26:89  
 - & molt 28:26, 29  
 respiratory rate 29:39

- Carpodacus purpureus* (cont.)  
 wt. 27:16, 44(r)  
 wing length 25:97; 28:32  
 winter movements 22:180
- Carrick, R. (see Hitchcock, W.B.)  
 Aust. bird-band. scheme 29:184(r)  
 --- & K.Keith & N. Turnbull. Annual reports of Aust. bird-band. scheme. 29:184(r), 185(r)  
 ---, W.R.Wheeler & M.D.Murry. Seasonal dispersal and mort. in Silver Gull & Crested Tern in Aust. 29:188(r)
- Cartwright, B.W. & J.T.Law. Waterfowl band., 1939-1954 by Ducks Unlimited. 24:132(r); 28:229(r)
- Cascara spp.  
 syst. 24:127(r)
- Cassidix mexicanus (Boat-tailed, = Great-tailed, Grackle)  
 nestling period 26:79(r)
- Catbird, Gray (*Dumetella carolinensis*)
- Catharacta skua (Great Skua)  
 band. - see Banding Reports  
 behav. during banding 28:11  
 egg temp., by telemetry 30:115, 242(r)  
 IGY studies on 30:114  
 observations on Campbell Is. 23:191(r)  
 predation on albatrosses 23:122(r); 31:53(r)  
 - maccormicki (= *C. skua*)  
 - lonnbergi (= *C. skua*)
- Cathartes aura (Turkey Vulture)  
 social behav. 23:37(r)
- Catharus spp.  
 syst. 22:136(r)  
 - fuscescens (Veery)  
 band. - see Banding Reports  
 band size 25:14; 27:78; 29:92  
 L.H. 24:100  
 migr. sampling by trapping 27:107  
 natal down 29:235  
 newly hatched young, descr. 27:127  
 removes banded young Cowbird from nest 27:184  
 respiratory rate 29:39  
 - guttata (Hermit Thrush)  
 band. - see Banding Reports  
 band size 27:78  
 newly hatched young, descr. 27:124  
 - minima (Gray-cheeked, = Bicknell's, Thrush)  
 activity in arctic summer 24:21(r)
- Catharus minima* (cont.)  
 band. - see Banding Reports  
 band size 25:14; 27:78  
 migr., map of 22:143(r)  
 vagrant of Fair Isle 25:115(r)  
 - mustelina (Wood Thrush)  
 alarm call 30:47  
 band. - see Banding Reports  
 band size 25:14; 27:77; 29:92  
 DDT effects on 22:189(r)  
 molt, prenuptial, of captive 29:245  
 natal down 29:234  
 nest construction & var. 31:47(r)  
 newly hatched young, descr. 27:124  
 respiratory rate 29:39  
 - ustulata (Swainson's, = Olive-backed, Thrush)  
 band. - see Banding Reports  
 band size 25:14; 27:78  
 vernacular name 23:47(r)
- Catoptrophorus semipalmatus (Willet)  
 baiting with shrimp 25:113  
 breeding dates, GA. 28:234(r)  
 in Saskatchewan 24:30(r)  
 migr. & increase in NJ. 23:41(r)
- Cedeno, R. (see McClure, H.E.)
- CENSUSES (see also Population, Status, & Techniques-)  
 breeding bird, compared with net-recapture for breeding pop. estimation 31:115  
 comparison of two indices, Pheasant 24:120(r)  
 in book 22:194(r)  
 for pop. estimates 23:184(r); 31:115  
 of:  
 coniferous forest 22:189(r)  
 Dove, Mourning 25:74(r)  
 Eagle, White-tailed in Sweden & Finl. 28:176(r)  
 fruit orchards, Rumania 30:62(r)  
 Gannet, Australian, in N.Z. 24:82(r)  
 Goose, Canada, in Engl. 28:179(r)  
 -, Cape Barren at Bass Straits 29:123(r)  
 Grouse, Ruffed, by drumming counts 25:27(r)  
 -, -, evaluation of 30:194(r)  
 Puffin, Sweden 27:200(r)  
 Quail, Bobwhite, fall in IA. 27:195(r)  
 Rails, N.Am. 26:170(r); 27:194(r)  
 29:59(r)

CENSUSES (cont.)

- of:  
 Redpoll, Sweden 31:105(r)  
 Rouzic Is., second 28:52(r)  
 sea birds, Stockholm 29:203(r)  
 shorebirds in CA. 23:32(r)  
 Snipe, Wilson's in N.Am. 26:170(r);  
 27:194(r); 29:59(r)  
 Stork, White, in Ger. 25:79(r)  
 Swallow, Barn, Engl. 25:23(r);  
 26:32(r)  
 Swan, Mute, Engl. 28:179(r)  
 -, - Scania, Sweden 30:248(r)  
 Swans, Sweden 26:31(r); 27:200(r)  
 Warbler, Kirtland's 24:169(r)  
 water birds, Switzerland 25:126(r);  
 29:202(r),259(r); 30:249(r)  
 waterfowl, international,29:259(r)  
 woodcock, anal. of in n.e.U.S.  
 25:165(r); 26:170(r); 27:194(r);  
 29:59(r)  
 Wren, Winter in Britain 30:133(r)  
 results, var. among participants  
 30:194(r)  
 roadside, spp. frequency in 29:171  
 -, factors influencing, for Pheasant  
 27:44(r)  
 -, log transformation anal. of, for  
 Pheasant 27:143(r)  
 sixty-yr., s. central Sweden 31:57(r)

CENTRAL AMERICA

- annotated list, Barro Colorado Is.  
 23:132(r)  
 birds of 27:103(r)  
 - -, book 22:43(r)  
 northern birds summering in Panama  
 23:81(r)  
*Centrocercus urophasianus* (Sage  
 Grouse)  
 pesticide effects on 23:127(r)  
 sex & age detn. 27:44(r)  
*Centurus carolinus* (Red-bellied  
 Woodpecker)  
 band. - see Banding Reports  
 band size 29:91  
 competition for Flicker nest hole  
 28:41  
 pairing & hole selection 30:193(r)  
 - supercilarius (West Indian Red-  
 bellied Woodpecker)  
 band size 29:91  
*Ceophloeus pileatus* (= *Dryocopus*  
*pileatus*)

- Cephalopterus ornatus* (Umbrella  
 Bird)  
 breeding, food & voice 29:56(r)  
*Cephus* spp. (Guillemots)- see also  
 Uria spp.  
 arctic adaptations 30:132(r)  
 - grylle (Black Guillemot)  
 at Karslo, Sweden 25:127(r)  
 band. - see Banding Reports  
 breeding pop. in Finl. 23:129(r)  
 nesting in Spitzbergen 30:248(r)  
 pop. in Norway 22:135(r)  
*Cercotrichas galactotes* (Rufous  
 Warbler)  
 behav. & syst. 31:231(r)  
*Cereopsis novaehollandiae* (Cape  
 Barren Goose)  
 counting by aerial survey  
 29:123(r)  
 syst. 24:127(r)  
*Certhia* (Creepers)  
 band. results 29:147  
 fleas in nestboxes 31:56(r)  
 - brachydactyla (Short-toed Tree  
 Creeper)  
 use of artificial nests 29:196(r)  
 winter sleep habits 27:139(r);  
 28:174  
 - familiaris (Tree, = Brown,Creeper)  
 band. - see Banding Reports  
 band size 29:92  
 nest boxes for increasing pop.  
 28:104(r)  
 roosts, adaptation to new sites in  
 Sequoia bark 28:240(r)  
 -, winter 28:174(r)  
 use of artificially provided bark  
 for nest 29:196(r)  
 young fed by Blue Tit 31:100(r)  
*Certhiaxis cinnamomea* (Yellow-  
 throated Spinetail)  
 host of Lark Cuckoo 27:138(r)  
*Chachalaca* (*Ortalis vetula*)  
*Chaetura* spp (Swifts)  
 changing nest sites 23:87(r)  
 - pelagica (Chimney Swift)  
 age - see Age, maxima  
 band. - see Banding Reports  
 L.H. 26:71  
 migr. 30:173  
 nest cooperatively 24:115(r)  
 sex, age & salivary glands 29:256(r)  
 trapping tech. 22:79  
 wt. 23:157; 29:98, 256(r)

- Chaffinch (*Fringilla coelebs*)
- Chalcites (= *Chrysococcyx*)
- Chamaea fasciata (*Wrentit*)  
 mobbing predator models 29:251(r)  
 survival pattern 23:30(r)
- Chamberlain, J.L. Gulf coast marsh  
 vegetation as food of wintering  
 waterfowl 30:198(r)
- Chambers, R.E. & P.F. English. Modifi-  
 cations of Ruffed Grouse traps  
 30:184(r)
- Chapman, D.G. Some properties of  
 hypergeometric distrib. with appli-  
 cations to zoological sample cen-  
 suses 23:184(r)
- Chapman, L.B. Studies of Tree  
 Swallow 26:45
- Charadriiformes (Shorebirds & Waders)
- band. report, "Operation Recovery"  
 29:147
- band. in USSR 29:111
- clutch size, control of 28:46(r)
- distr. & abundance in NJ. 23:40(r)
- evol. of 29:204(r)
- feeding behav. on mud flats  
 30:193(r)
- heart wt. 27:45(r)
- migrant status, Chile 22:37(r)
- migr. & spring weather, Engl.  
 29:48(r)
- & transatlantic vagrancy 31:45(r)
- of Grnl., in book 22:192(r)
- predator reaction toward humans  
 27:193(r)
- summering in Panama 23:81(r)
- syst. 22:190(r)
- Charadriidae (Plovers)
- band. report, "Operation Recovery"  
 29:147
- egg-rolling behav. 25:71(r)
- paleontology & evol. in Tertiary  
 & Pleistocene 29:205(r)
- Charadrius alexandrinus (Kentish  
 Plover)
- band. - see Banding Reports
- behav. 25:122(r)
- breeding history 26:124(r)
- distraction display 23:39(r)
- interspecific adoption experiment  
 24:119(r)
- L.H. 24:75(r)
- longevity - see Age, maxima
- pop. changes in Neth. 22:134(r)
- remove damaged eggs 28:236(r)
- site tenacity 25:153(r)
- voice 26:169(r)
- Charadrius apricarius (= *Pluvialis*  
*apricaria*)
- dubius (Little Ringed Plover)  
 band. - see Banding Reports
- breeding hist., Neth. 26:124(r)
- displays 25:121(r)
- , distraction 23:125(r)
- egg retrieval 28:234(r)
- interspecific adoption experiment  
 24:119(r)
- L.H. 25:121(r)
- nesting on newly exposed lake  
 shore 28:244(r)
- pop. changes in Neth. 22:43(r),  
 134(r)
- pop. increase on reclaimed land  
 in Neth. 25:80(r)
- hiaticula (Common Ringed Plover)  
 band. - see Banding Reports
- behav. 25:122(r)
- breeding hist., Neth. 26:124(r)
- clutch, mixed with Oystercatcher  
 30:244(r)
- size, detn. of 28:46(r)
- egg palatability 24:76(r)
- retrieval 28:234(r)
- evol. significance of migr. 27:97(r)
- n. spp. of louse & mite from  
 25:29(r)
- nesting in newly exposed lake shore  
 28:244(r)
- pop. changes, Neth. 22:134(r)
- removal of damaged eggs 28:236(r)
- social relations 23:129(r)
- terr. aggression 23:125(r)
- melodus (piping Plover)  
 migr. & increase in NJ. 23:41(r)
- pecuarius (Kittlitz's Sandplover)  
 band. - see Banding Reports
- semipalmatus (Semipalmated Plover)  
 angle of cerebral axis 30:246(r)
- band size 25:14; 29:91
- breeding 26:137
- vociferus (Killdeer)  
 band. - see Banding Reports
- leg & band size 30:121
- sex, age & daily wt. 26:19
- Charlton, F.C. (see Erlund, C.R.)
- Chat, Yellow-breasted (*Icteria*  
*virens*)
- Chats, Palm (*Dulinae*)
- Check-list - see Lists; Systematics
- Chen caerulescens (Snow, = Blue,  
 Goose)

- Chen caerulescens* (cont.)  
 band. - see Banding Reports  
 breeding biol., Can. 30:243(r)  
 capture while flightless 25:63(r)  
 mass trapping tech. 27:34(r)  
 migr. route 28:23(r)  
 pop. cycles 22:96(r)  
 - *rossi* (Ross' Goose)  
 first banded 27:198(r)  
 nesting 27:198(r)
- Chenonetta jubata* (Maned Goose)  
 band. - see Banding Reports  
 damage to rice fields, Aust.  
 29:199(r)  
 trapping & sexing 25:17(r)
- Chettleburgh, M.E. Collection &  
 burial of acorns by Jays 24:74(r)
- Chiba, M. Unaccountable death of  
 birds 26:78(r)
- Chickadees* (*Parus* spp.)  
 -, Black-capped (*P. atricapillus*)  
 -, Boreal (= Acadian, = Brown-capped,  
*Parus hudsonicus*)  
 -, Carolina (*P. carolinensis*)
- Chicken (= Domestic Fowl) (*Gallus  
 gallus*)  
 -, Prairie (*Tympanuchus cupido*)
- Chiffchaff (*Phylloscopus collybita*)  
 CHINA  
 bibliog., birds of 24:125(r)
- Chionis alba* (Sheathbill)  
 band. - see Banding Reports
- Chisholm, A.H. Scrub-birds 24:83(r)  
 --- Bird-insect nesting associations  
 in Aust. 24:124(r)
- Chitty, D. (see Leslie, P.H.)
- Chivers, N. (see Farmer, D.S.)
- Chlamydera maculata* (Spotted Bower-  
 bird)  
 display & sex cycle 24:25(r)
- Chlamydotis undulata* (Houbara Bustard)  
 hunting, with Goshawk 30:60(r)
- Chlidonias hybrida* (Whiskered Tern)  
 occurrences in Fr. 28:53(r)  
 - *leucopterus* (White-winged Black  
 Tern)  
 occurrence in Fr. 28:53(r)  
 - *niger* (Black Tern)  
 band. - see Banding Reports  
 migr., in Engl. 26:165(r)  
 -, trans-gulf 29:45(r)  
 nesting in NY. 26:162
- Chloephaga melanoptera* (Andean Goose)  
 cave roosting, high Andes 24:119(r)
- Chloris chloris* (= *Carduelis chloris*)  
*Chlorophonia* spp. (*Chlorophonias*)  
 nesting period 26:79(r)
- Chondestes grammacus* (Lark Sparrow)  
 alarm calls 30:232  
 band. - see Banding Reports  
 natal down 29:236
- Chordeiles acutipennis* (Lesser,  
 = Trilling, Nighthawk)  
 hibernation 27:41(r)  
 - minor (Common Nighthawk)  
 band. - see Banding Reports  
 behav. of young 22:84(r)  
 incub. behav. 30:54(r)  
 migr. & nesting 22:84(r)  
 mort. of migrants 28:231(r)  
 nesting study 23:109; 27:9
- Christensen, H. Breeding habits of  
 the Crossbill 29:192(r)
- Christisen, D.M. Hist. & status of  
 Ring-necked Pheasant in MO.  
 23:90(r)
- Chough (*Pyrrhocorax phyrrocorax*)  
 -, Alpine *P. graculus*)
- Chuck-will's-widow (*Caprimulgus  
 carolinensis*)
- Church, A.C. (see Richardson, R.A.)
- Church, H.F. Roosting times of the  
 Swift 28:174(r)  
 --- Mute Swan pop. of e. borders  
 28:179(r)
- Chrysococcyx caprius* (Didric (Cuckoo))  
 courtship feeding 28:168(r)  
 L.H. & paras. habits 24:23(r)  
 - *klaasi* (Klaas' Cuckoo)
- Chrysolophus pictus* (Golden Pheasant)  
 response to warningly colored  
 insects 23:86(r)
- Ciconia ciconia* (White Stork)  
 age at maturity 27:135(r)  
 band. - see Banding Reports  
 behav., after foot lost in trap  
 31:100(r)  
 censuses 25:79(r), 155(r)  
 decreases in Neth., in book  
 22:43(r)  
 eat own young 31:51(r)  
 food in Neth. 30:249(r)  
 habitat in Neth. 30:249(r)  
 L.H. 22:145(r)  
 migr. 22:83(r); 25:64(r)  
 - & orient. 23:32(r)  
 - & winter home 22:36(r)  
 - routes 25:64(r); 28:44(r); 29:248(r)

- Ciconia ciconia* (cont.)  
 migr. routes (cont.) 30:125(r)  
 nesting associates 24:122(r)  
 nesting census 24:115(r)  
 pop. fluctuations 23:131(r); 26:  
 77(r); 27:46(r), 89(r), 135(r),  
 136(r); 30:249(r)  
 productivity 27:135(r)  
 - *nigra* (Black Stork)  
 extinction in Japan 30:58(r)  
 cronism suspected 31:51(r)  
 range withdrawl from s. Sweden  
 28:181(r)
- Ciconiidae (Storks)  
 book 27:50(r)
- Ciconiiformes  
 band., USSR 29:111  
 Venezuelan spp. 27:164(r)
- Cinclus cinclus* (Dipper)  
 behav. at nets 27:42(r)  
 breeding study, Engl. 28:167(r)  
 eye-wink behav. 29:57(r)  
 pop. movements 25:154(r)  
 - *mexicanus* (North American Dipper)  
 natal down 29:234
- Cinnyricinclus leucogaster* (Violet-  
 backed Starling)  
 migr. 22:84(r)
- Cinnyris afer* (= *Nectarinia afer*)
- Circaetus gallicus* (Short-toed Eagle)  
 biol. & incub. 25:24(r)  
 L.H. & food 25:24(r)  
 observed in Jura Mts. 28:52(r)
- Circus aeruginosus* (Marsh Harrier)  
 age - see Age, maxima  
 band. - see Banding Reports  
 clutch size & success 25:23(r)  
 field identification 30:197(r)  
 migr. counts, Ger. & Den. 28:165(r)  
 range extension to s. Sweden  
 28:181(r)  
 roosting 31:51(r)  
 - *approximans* (Swamp Harrier)  
 band. - see Banding Reports  
 - *cyaneus* (Marsh Hawk = Hen Harrier)  
 age - see Age, maxima  
 attack on, by Starling 31:51(r),  
 103(r)  
 band. - see Banding Reports  
 field identification 30:197(r)  
 migr. counts, Ger. & Den. 28:165(r)  
 mort. rates 24:27(r)  
 nest success 23:36(r)  
 - *macrourus* (Pallid Harrier)  
 behav., molt, color 27:149(r)
- Circus macrourus* (cont.)  
 field identification 30:197(r)  
 - *pygargus* (Montague's Harrier)  
 field identification, roosting,  
 & Starling attacks on 30:197(r)
- Cistothorus platensis* (Short-  
 billed Marsh Wren)  
 type locality 24:168(r)
- Clamator glandarius* (Great Spotted  
 Cuckoo)  
 ecol. & behav. 28:243(r)  
 L.H. 23:122(r)  
 - *jacobinus* (Black and White  
 Cuckoo)  
 host ejection 24:23(r)  
 L.H. 23:122(r)
- Clancey, P.A. & A. Von Jordans.  
*Luscinia megarhynchos* Brehm in  
 the w. Palearctic region, & a new  
 race from the British Isles  
 23:43(r)
- Clangula* sp.  
 syst. 24:127(r)
- *hyemalis* (Oldsquaw = Long-tailed  
 Duck)  
 band. - see Banding Reports  
 courtship 28:180(r)  
 flight & light intensity 24:117(r)  
 lipids of 25:167(r)  
 nesting with Arctic Terns 30:245(r)  
 oil killed 29:65(r)  
 pop. decrease, Iceland 24:161(r)
- Clark, C.T. & M.M. Nice. William  
 Dreuth's study of bird migr. in  
 Lincoln Park, Chicago 22:183(r)
- Clark, G.M., D. O'Meara & J.W.  
 VanWeelder. Epizootic among Eider  
 Ducks involving an acanthocephalid  
 worm. 30:195(r)
- Clark, W.C. & E.W. Dawson. The trans-  
 Tasman dispersal of White-fronted  
 Tern. 28:231(r)
- Clay, T. (see Rothschild, M.)
- Cobb, S. Angle of cerebral axis in  
 Woodcock 30:246(r)
- Coburn, D.R., D.W. Metzler & R.  
 Treichler. Absorption & retention  
 of lead in wild waterfowl in rela-  
 tion to clinical evidence of lead  
 poisoning 22:185(r)
- Coccothraustes coccothraustes*  
 (Hawfinch)  
 band. - see Banding Reports  
 food study 29:206(r)



- Coccyzus* sp.  
skeletal anat. 24:167(r)
- *americanus* (Yellow-billed Cuckoo)  
band size 27:77; 29:91  
identification of immatures by  
plumage 31:166(r)  
vagrant on Fair Isle 25:115(r)  
wt. 27:175
  - *erythroptalmus* (Black-billed  
Cuckoo)  
band. - see Banding Reports  
identification of immatures by  
plumage 31:166(r)  
mort. of migrants 28:231(r)  
vagrant in Shetlands 25:115(r)
  - *minor* (Mangrove Cuckoo)  
band size 29:91  
wt. 27:175
- Cochran, W.W. (see Graber, R.R.)
- Ceophloeus pileatus* (= *Dryocopus  
pileatus*)
- Coereba flaveola* (Bannanaquit)  
band size 29:92  
injuries & scaly-leg 28:157  
L.H. 27:37(r)  
soft part colors 27:180  
wt. 27:175
- Coerebidae  
book, L.H. 26:78(r)  
relations to Hawaiian Honeycreepers  
22:191(r)  
wts., Surinam 24:130(r)
- Coffey, B.B.Jr. A banding of Chimney  
Swifts at Shreveport, LA. & Tex-  
arkana, AR. 31:93(r)
- Coffey, L.C. Weight of some Chimney  
Swifts at Memphis 29:98
- Cogswell, H.L. Recoveries of Robins  
banded at Oakland, CA. 31:159(r)
- Cohen, E. Feeding of juvenile Gold-  
finch by another juvenile. 23:39(r)
- & B. Campbell. Nestboxes. 23:174(r)
- Coil, W.H. & D.K. Wetherbee. The  
cloacal gland of Eurasian Quail.  
31:103(r)
- Colaptes auratus* (Flicker)  
band. - see Banding Reports  
band size 25:14; 29:91  
distr., not breeding in Grnl.  
23:94(r)  
drumming of 24:18  
egg tooth 30:120  
illus., in book 22:193(r)  
indeterminate laying 27:39(r)
- Colaptes auratus* (cont.)  
natal down 29:233  
observations of a wintering bird  
28:40  
sex, age & daily wt. 26:19
- Colbert, E.H. Evol. of vertebrates  
27:150(r)
- Cole, L.C. Pop. cycles & random  
oscillations 23:88(r)
- Features of random pop. cycles  
25:160(r)
- Coleman, I.A. (see Klonglan, E.D.)
- Colinus virginianus* (Bobwhite Quail)  
age of incubated eggs 26:32(r)  
ageing 29:60(r)  
- by wings 27:195(r)  
aids for study of 24:21(r)  
band. - see Banding Reports  
census, winter tech. 29:60(r)  
cons. of, in book 22:195(r)  
control of enteritis by Strepto-  
mycin 24:166(r)  
food 27:44(r), 201(r)  
frequency, in roadside census  
29:171  
hunting pressure 25:28(r)  
hybrid, x Scaled Quail 26:32(r)  
insecticide toxicity 26:128(r)  
mgt., using shrub *Lespedeza*  
28:175(r)  
mort. rate 30:190(r)  
movements 24:121(r); 26:35(r)  
photoperiodism, factors in,  
27:148(r)  
pop. 27:195(r)  
-, hunting effects on 25:28(r)  
reproductive cycle 23:121(r)  
- effect of gunshot on 23:128(r)  
var. among participants in census  
30:194(r)  
wt. 28:222  
- & different photoperiods 29:125(r)
- Collias, E.C. & N.E. Response of  
chicks of Franklin's Gull to  
parental bill color 29:58(r)
- Collias, N.E. Hormones & behav. with  
special reference to birds and the  
mechanism of hormone action 22:84(r)
- Var. in grouping & dominance  
patterns among birds & mammals  
22:89(r)
  - Social life and the individual  
among vertebrates 23:37(r)

- Collias, N.E. (cont.)  
 Dev. of social behav. in birds  
 24:115(r)
- Breeding behav. of Black-headed  
 Weaver-bird in Belgian Congo  
 31:229(r)
- & M. Joos. Spectrographic anal.  
 of sound signals of domestic fowl  
 25:77(r)
- & R.D.Taber. Field study of  
 grouping & dominance relations in  
 Ring-necked Pheasants 23:87(r)
- Collins, H.H.Jr. Birds of Montezuma  
 & Tuzigoot 23:99(r)
- Field guide to Am. Wildlife  
 31:108(r)
- Collocalia brevirostris (Himalayan  
 Swiftlet)  
 echolocation confirmed 30:64(r)  
 Coloeus monedula (= Corvus monedula)
- Color - see Pigmentation
- Columba spp.  
 voice & displays 28:49(r)
- fasciata (Band-tailed Pigeon)  
 trapping tech. 27:86(r)
- leucocephala (White-crowned Pigeon)  
 band size 29:91  
 wt. 27:175
- livia (Pigeon, =Domestic=Feral=  
 Homing=Rock Dove)  
 biol. of 26:126(r)  
 bleeding tech. 26:36(r)  
 breeding behav. 28:245(r)  
 control in cities 29:254(r)  
 determinate laying 25:71(r)  
 ecol. in inner London 31:230(r)  
 egg rolling 25:71(r)  
 egg tooth 30:119  
 orientation 25:25(r); 30:125(r),  
 126(r),186(r),237(r),238(r).  
 -, effect of experimental accelera-  
 tion on 31:244(r)  
 -, homing abilities 26:28(r)  
 -, -, factors affecting 29:64(r);  
 31:93(r), 224(r)  
 -, -, Italian vs. German 22:184(r)  
 -, not hindered by wing magnets  
 23:179(r)  
 -, by sun 26:164(r)  
 pairing, homosexual 24:117(r)  
 trichomoniasis in 24:11
- oenas (Stock Dove)  
 band. - see Banding Reports  
 behav. 26:123(r)  
 clutch numbers 25:69(r)
- food habits 26:86(r)  
 increase in Neth., in book 22:43(r)  
 nest sites 27:40(r)  
 predation on, by Jackdaws 25:69(r)
- palumbus (Wood Pigeon=Wood Dove)  
 band. - see Banding Reports  
 behav., color preferences 30:250(r)  
 breeding pop. study 30:244(r)  
 clutch numbers 25:69(r)  
 covering eggs when disturbed  
 25:121(r)  
 ecol. in inner London 31:230(r)  
 food habits 26:86(r)  
 longevity - see Age, maxima  
 migr., fall, Sweden 29:50(r)  
 -, height & speed 23:80(r)  
 -, large numbers, s. Sweden  
 29:186(r)  
 one adult feeds flightless adult  
 31:58(r)  
 pairing, display & terr. 30:56(r)  
 palatability of eggs 24:76(r)  
 pop. changes 27:101(r)  
 range expansion & climate 22:93(r)  
 song, anal. of 25:129(r)
- Columbidae (Pigeons & Doves)  
 behav., comparative 27:42(r)  
 -, drinking & scratching 25:71(r)  
 - patterns 27:193(r)  
 -, social, dev. of 24:115(r)  
 biol. of, in book 22:145(r);23:51(r)  
 coccidiosis in 29:200(r)  
 laying, incub. & hatching sequence  
 28:103(r)
- Columbigallina (=Columbina)
- Columbina passerina (Ground Dove)  
 band size 29:91  
 soft part colors 27:179  
 wt. 27:175
- Colymbidae (=Podicipedidae)
- Colymbus arcticus (= Gavia arctica)
- stellatus (= G. stellata)
- Combassou, Senegal (Hypochoera  
 chalybeata)
- Common, A.M. "Anting" by House  
 Sparrow. 28:49(r)
- Conder, J.P. Hovering of the Wheatear  
 25:159(r)
- Condor, California (Gymnogyps  
 californianus)
- , Andean (Vultur gryphus)
- Congress, Proc. XI International  
 Ornithological 24:32(r)
- CONSERVATION (see also Nests, artifi-  
 cial & Techniques)

- CONSERVATION (cont.)  
 artificial lakes & ponds for,  
 29:255(r)  
 biol. pest control 29:199(r),200(r)  
 books 22:94(r), 194(r); 23:49(r),  
 99(r); 26:41(r)  
 cycles, & problems of 23:89(r)  
 easements for 31:169(r)  
 in the Camargue 30:132(r)  
 - - Caribbean, need for 25:165(r)  
 - France 26:134(r)  
 - Grnl. 26:171(r)  
 - Newfoundland, in bird book 23:46  
 (r)  
 mining and, in Lapland 29:66(r)  
 need for research 25:75(r)  
 netting and, in Italy 30:246(r)  
 of Albatross, Yellow-nosed 23:122(r)  
 - birds of Caspian Sea lowlands  
 31:109(r)  
 - Brant, in Nor. 29:61(r)  
 - Crane, Corn, rearing orphaned  
 young 28:103(r)  
 - Crane, Eur. in Neth. 30:249(r)  
 - Grouse, Sharp-tailed 24:24(r),  
 84(r)  
 - gull & tern colonies, Engl.  
 28:51(r)  
 - Kakapo 28:243(r)  
 - Nene, restoration program  
 23:127(r)  
 - sea bird colonies 26:35(r)  
 - - birds of Seychelles 30:58(r)  
 - Swallow, in Eur. 26:36(r)  
 - waterfowl in Caspian Sea 25:76(r)  
 - - in Victoria 26:85(r)  
 Contopus caribaeus (Lesser Antillean  
 Pewee)  
 band size 29:92  
 - richardsoni (Western Wood Pewee)  
 in book review 24:171(r)  
 - virens (Eastern Wood Pewee)  
 band. - see Banding Reports  
 band size 29:92  
 DDT effects on 22:189(r)  
 nest construction & var. 31:47(r)  
 Control (see also Economics)  
 -of Albatrosses, Midway Is.  
 29:254(r); 31:51(r)  
 -of gulls by egg sterilization,  
 Sweden 25:128(r)  
 Conuropsis carolinensis (Carolina  
 Paroquet)  
 in book, extinct birds 29:262(r)
- Conuropsis carolinensis (cont.)  
 in book, Travels of William  
 Bartram 29:263(r)  
 Cooch, G. Tech. for mass capture of  
 flightless Blue & Lesser Snow  
 Geese 25:63(r)  
 --- Autumn migr. of Blue Geese  
 28:230(r)  
 Coombes, R.A.H. Moults migr. of  
 Sheld-Duck 22:83(r)  
 Coot, Am. (*Fulica americana*)  
 -, Eur. (*F. atra*)  
 Cope, J.B. (see Stewart, R.E.;  
 Hensley, M.M.)  
 Coraciiformes  
 biol. of, in book 22:145(r)  
 heart wt. 27:45(r)  
 Coracias garrulus (Eur. Roller)  
 decline in Sweden 28:181(r)  
 in book review 22:145(r)  
 Cormorant (= Great, or Eur.)  
 (*Phalacrocorax carbo*)  
 -, Blue-eyed (*P. atriceps*)  
 -, Cape (*P. capensis*)  
 -, Crowned (*P. coronatus*)  
 -, Double-crested (*P. auritus*)  
 -, Rock (*P. magellanicus*)  
 Corncrake (*Crex crex*)  
 Cornwallis, R.K. Pattern of migr.  
 in 1953 at East Coast bird  
 observatories 26:123(r)  
 --- & A.E.Smith. The bird in the  
 hand. 31:234(r)  
 Corvidae  
 natal plumages 29:126(r)  
 predation on gulls 25:120(r)  
 - - - & terns 28:51(r)  
 - - Short-eared Owl 27:192(r)  
 resting on backs of large mammals  
 29:198(r)  
 syst. 22:190(r)  
 wing muscles 26:173(r)  
 Corvus sp. (Crows)  
 eating wool 27:47(r)  
 - brachyrhynchos (Common Crow)  
 attracting or repelling by calls  
 29:67(r)  
 band. - see Banding Reports  
 descr., newly-hatched 27:123  
 frequency in roadside census  
 29:171  
 identification of, as duck nest  
 predator 23:127(r)  
 migr. in RI. 30:175

- Corvus brachyrhynchos* (cont.)  
 natal down 29:234  
 sex, age & daily wt. 26:19  
 wing muscles 26:173(r)  
 - *corax* (Raven)  
 band. - see Banding Reports  
 carrying water to young 28:48(r)  
 fledging 26:167(r)  
 in vicinity of Hudson's Bay, Can.  
 24:169(r)  
 learns to pull up ice fishermen's  
 lines 29:119(r)  
 pop. increase, Switz. 28:48(r)  
 prey of gulls 25:127(r)  
 resting on backs of large mammals  
 29:198(r)  
 social behav. 29:58(r)  
 - *cornix* (= *C. corone*)  
 - *corone* (Hooded Crow)  
 band. - see Banding Reports  
 color & pattern preferences 30:  
 195(r)  
 egg predation by, 23:129(r)  
 feeding of young 23:38(r)  
 fighting in winter flocks 28:174(r)  
 learns to pull up ice fishermen's  
 lines 29:119(r)  
 longevity - see Age, maxima  
 migr. height 31:45(r)  
 prey of Eagle Owl 22:141(r); 25:  
 79(r); 29:128(r)  
 recordings to repel 28:110(r)  
 roosting habits 27:139(r)  
 - *frugilegus* (Rook)  
 band. - see Banding Reports  
 counting flocks by photo. 29:67(r)  
 destroys eggs of Red-footed  
 Falcon 27:38(r)  
 distr. & pop. in N.Z. 29:127(r)  
 fighting in winter flocks 28:174(r)  
 food of nestling, detn. by collar  
 method 31:167(r)  
 - storage & recovery 30:198(r)  
 migr. height 31:45(r)  
 - - & speed 23:80(r)  
 nest building 22:133(r)  
 pop. changes 27:101(r)  
 radar display characteristics  
 31:43(r)  
 recordings to repel 28:110(r)  
 reprod. behav. 26:168(r)  
 testis cycle & sexual behav. 24:22(r)  
 - *monedula* (Jackdaw)  
 ability to discriminate rates of  
 metronome beats 31:231(r)
- band. - see Banding Reports  
 behav. during solar eclipse 27:194(r)  
 color & pattern preferences 30:195(r)  
 communal spirit 25:121(r)  
 distr., postglacial 22:135(r)  
 feed orphaned young 25:121(r)  
 fighting in winter flocks 28:174(r)  
 L.H. 23:119(r)  
 migr. height 31:45(r)  
 pop. changes 27:101(r); 29:203(r)  
 predation on dove eggs 25:31(r),  
 69(r)  
 - - *Scops Owl* 29:203(r)  
 recordings to repel 28:110(r)  
 resting on backs of large mammals  
 29:198(r)  
*Cossypha caffra* (Cape Robin)  
 egg ejection by Red-chested Cuckoo  
 23:175(r)  
 Cotingidae  
 nesting with social insects 31:98(r)  
 Cott, H.B. Palatability of bird eggs  
 24:76(r); 25:69(r)  
 Cotter, W.B. Jr. Serological anal. of  
 anatid classifications 29:205(r)  
 Cottrille, W.P. & B.D. Great Blue  
 Heron: behav. at nest 29:252(r)  
*Coturnix* sp.  
 band. - see Banding Reports  
 invasive character of movements  
 28:165(r)  
 - *coturnix* (Eurasian Quail)  
 band. - see Banding Reports  
 brain dev. 23:187(r)  
 cloacal gland 31:103(r)  
 fate of introduction in GA. 29:  
 198(r)  
 feeding on Potato Beetles 26:40(r)  
 growth & molt 29:257(r)  
 introduction in TN. 29:199(r)  
 propogation, maturity, & migr.  
 27:134(r)  
 - *novaezealandiae* (Koreke)  
 habitat now used by California  
 Quail 24:121(r)  
*Coua caerulea* (Blue Coua)  
 locomotor anat. 24:166(r)  
 Coulson, J.C. Mort. & egg production  
 of Meadow Pipit with reference to  
 altitude 28:44(r)  
 --- & E.White. Mort. rates of Shag  
 estimated by two independent  
 methods 29:51(r)  
 --- Effect of age on breeding biol.  
 of Kittiwake 30:53(r)

- Coulson, J.C. (cont.)  
 Observations on breeding of  
 Kittiwake. 30:53(r)
- Coulter, M.W. Spring food habits of  
 surface-feeding ducks in ME.  
 27:44(r)
- New waterfowl nest trap. 29:236
- Courtship - see Behavior,-
- Cowan, I. & J.Hatter. trap & tech.  
 for capture of diving waterfowl.  
 24:111(r)
- Cowan, J.B. L.H. & productivity of a  
 pop. of Mourning Doves in CA.  
 24:159(r)
- Cowbird, Brown-headed (*Molothrus ater*)  
 -, Red-eyed (*Tangavius aeneus*)  
 -, Shiny (*Molothrus bonariensis*)
- Cox, B. (see Frings, H.)
- Cox, D.R. Some approximate tests for  
 Poisson variates. 25:118(r)
- Craig, C.C. Utilization of marked  
 specimens in estimating pop. of  
 flying insects. 25:22(r)
- Estimating biol. pop. in the  
 field. 25:22(r)
- Craighead, J.J. (see Fevold, H.R.)
- & F.C. Hawks, owls & wildlife.  
 29:69(r)
- Cramp, S. Terr. & other behav. of  
 Wood-pigeon 30:56(r)
- , A.pettet & J.T.R.Sharrack.  
 Irruption of Tits in autumn, 1957.  
 31:227(r)
- Cranes (Gruiformes)
- , European (*Grus grus*)  
 -, Sandhill (*G. canadensis*)  
 -, White-naped (*G. vipio*)  
 -, Whooping (*G. americana*)
- Creepers (*Certhia* spp.)
- , Brown, = Tree (*C. familiaris*)  
 -, Plain-headed (*Rhabdornis inornatus*)  
 -, Short-toed Tree (*C. brachydactyla*)
- Creutz, G. Results of band. Black-  
 headed Gulls in Saxony & neighbor-  
 ing areas. 23:78(r)
- Reproductive biol. of Eur. Tree  
 Sparrow. 23:84(r)
- Influence of weather on nesting.  
 23:173(r)
- Meas. & wt. of Swallow. 25:78(r)
- Pied Flycatcher. 27:142(r)
- Observations of breeding biol.  
 31:100(r)
- Crex crex (Corncrake)
- pop. decreases in Eur. 22:43(r);  
 31:105(r)
- successful rearing 28:103(r)
- Crispens, C.G.Jr. (see Semones, V.D.)
- Crissey, W.F. Use of banding data in  
 detn. waterfowl migr. & distr.  
 26:121(r)
- Crittenden, D.N. (see Killpack, M.L.)
- Crocethia (= *Calidris*)
- Crocker, A.M. (see Gunn, W.W.H.)
- Cronan, J.M.Jr. Food & feeding habits  
 of Scaup in CT. waters. 30:61(r)
- Crook, J. Gulls of Southampton waters  
 25:122(r)
- Crook, J.H. Social behav. of  
*Bubalornis albirostris*. 30:243(r)
- Social behav. of *Quelea quelea*  
 in Fr. w. Afr. 31:229(r)
- Crooks, M.P. & G.O.Hendrickson. Field  
 Sparrow L.H. in central IA.  
 24:115(r)
- Crossbill, Red (*Loxia curvirostra*)  
 -, Parrot (*L. pytyopsittacus*)  
 -, White-winged (*L. leucoptera*)
- Crotophaga sp.  
 anat., locomotor 24:167(r)
- ani (*Ani*)  
 band size 29:91  
 soft part colors 27:179  
 wt. 27:175
- *sulcirostris* (Groove-billed Ani)  
 factors in feeding rate 24:163(r)
- Crow, Common (*Corvus brachyrhynchos*)  
 -, Hooded, = Carrion (*C. corone*)
- Crowe, R.W. (see Simmons, K.E.L.)
- Parental care in the Whitethroat  
 27:38(r)
- Cryptoglaux *acadica* (= *Aegolius*  
*acadicus*)
- Cuckoos (*Cuculidae*)
- , Black (*Cuculus clamosus*)  
 -, Black & White = Black-crested  
 (*Clamator jacobinus*)  
 -, Black-billed (*Coccyzus*  
*erythrophthalmus*)  
 -, Didric = Bronze (*Chrysococcyx*  
*caprius*)  
 -, Emerald (*C. cupreus*)  
 -, European = Grey = Common (*Cuculus*  
*canorus*)  
 -, Great Spotted (*Clamator glandarius*)  
 -, Klaas' (*Chrysococcyx klaasi*)  
 -, Lark (*Tapera naevia*)  
 -, Mangrove (*Coccyzus minor*)

- Cuckoos (cont.)  
 -, Red-chested (*Cuculus solitarius*)  
 -, Yellow-billed (*Coccyzus americanus*)  
*Cuculidae* (Cuckoos)  
 breeding & dev. of young 28:168(r)  
 incub. periods 25:65(r)  
 wt. of heart 27:45(r)  
 syst. 22:190(r)  
*Cuculus canorus* (Eur. Cuckoo)  
 breeding biol. 25:69(r)  
 eggs laid on edges of Redstart  
 nests 31:100(r)  
 Crested Lark as host 29:56(r)  
 migr. & winter home 23:79(r)  
 number of eggs laid 28:47(r)  
 photo series showing removal of  
 host egg 31:49(r)  
 polyandry 23:36(r)  
 response of Willow Warbler to  
 stuffed 22:90(r)  
 Warbler, Great Reed as host 23:36(r)  
 - clamorous (Black Cuckoo)  
 host ejection 24:23(r)  
 - solitarius (Red-chested Cuckoo)  
 ejection of Cape Robin egg  
 23:175(r)  
 - - host young & dev. of 28:168(r)  
 L.H. 23:122(r)  
 Cullen, E. Kittiwake adaptations to  
 cliff-nesting. 29:194(r)  
 Cullen, J.M. Plumage, age & mort. in  
 Arctic Tern. 29:126(r)  
 Cunningham, J.M. Ringing operations:  
 summary for 1951 & 1952. 23:77(r);  
 24:20(r)  
 Curio, E. Behav. studies on Pied  
 Flycatcher. 30:192(r)  
 --- Return to birthplace & life ex-  
 pectancy of young Pied Flycatchers.  
 31:46(r)  
 --- Semi-collared Flycatcher in its  
 Macedonian breeding region. 31:50(r)  
 Curlew, Bristle-thighed (*Numenius*  
*tahitiensis*)  
 -, Common (*N. arquata*)  
 -, Eskimo (*N. borealis*)  
 -, Hudsonian, = Whimbrel (*N. phaeopus*)  
 -, Stone, = Thicknee (*Burhinus*  
*oedicnemus*)  
 Curry-Lindahl, K. Status of Eagle  
 Owl in Sweden. 22:41(r)  
 --- Physiol. & climatological factors  
 concerning mird migr. in central  
 Afr. 25:19(r)
- Curry-Lindahl, K. (cont.)  
 --- Symbiosis between Grey Heron &  
 Fallow Deer. 28:171(r)  
 --- What do raptors eat? 28:182(r)  
 --- Phot. studies of Eagle Owl.  
 29:128(r)  
 --- - - of Pygmy Owl 29:195(r)  
 --- Vertebrate fauna of Sarek &  
 Padjelanta alpine regions  
 in Swedish Lapland. 30:248(r)  
 --- Our birds of the Northland.  
 31:168(r)  
 --- & C.Edelstam. A list of  
 swedish birds 22:196(r)  
 Curtius, A.R. Innate behav. of  
 chickens. 26:33(r)  
 Cutcliffe, A.S. Notes on breeding  
 habits of the Swift. 22:132(r);  
 26:167(r)  
 Cuthbertson, E.I., G.T. Foggitt &  
 M.A. Bell. Census of Common Sand-  
 pipers in Sedbergh area, 1951.  
 23:185(r)  
 ---, --- & G.E. Taylor. Census of  
 Swallows in Sedbergh area, R.W.  
 Yorkshire, 25:23(r); 26:32(r)  
*Cyanocitta cristata* (Blue Jay)  
 age detn. 26:27  
 - - of first-year 29:43  
 band. - see Banding Reports  
 band size 25:13, 59 ; 27:77  
 behav., family adherence 22:126  
 deformed bill 31:158  
 descr., newly hatched 27:123  
 food & water requirements 22:39(r)  
 kills Purple Finch 29:244  
 longevity - see Age, maxima  
 migr. 29:43  
 mort. from DDT 28:108(r)  
 - rates 24:28(r)  
 respiratory rate 29:39  
 wt., sex, age, & daily var. 26:19  
*Cyanosylvia svecica* (= *Luscinia*  
*svecica*)  
 CYCLES (see also Behavior, daily-,  
 seasonal- ; Pop.-)  
 activity, diurnal & annual, of  
 Tawny Owl 25:157(r)  
 annual, calling of Boreal Owl  
 25:158(r)  
 of mort. 25:161(r)  
 symposium on 25:160(r)  
*Cygnus* sp. (Swans)  
 syst. 24:127(r)

- Cygnus bewickii (Bewick's Swan)  
 in Japan 27:197(r)
- buccinator (Trumpeter Swan)  
 band. - see Banding Reports  
 trapping 26:72(r); 31:109(r)
  - columbianus (Whistling Swan)  
 in Sweden 26:31(r)
  - cygnus (Whooping Swan)  
 breeding in Iceland 24:161(r)  
 census in Sweden 26:31(r)  
 in Japan 27:196(r)  
 in Grnl., in book 22:42(r)  
 painting of 22:45(r)  
 phot. 27:197(r)
  - olor (Mute Swan)  
 attack on ducklings 25:122(r)  
 band. - see Banding Reports  
 census, Engl. 28:179(r)  
 -, Sweden 27:200(r); 30:248(r)  
 display, nesting & molt 30:245(r)  
 feeding & seasonal movements 28:  
 183(r)  
 history of Swan-keeping in Engl.  
 29:208(r)  
 pop. increases, Den. 23:132(r)
- Cypseloides  
 saliva NOT used in nest-building  
 29:256(r)
- niger (Black Swift)  
 first record of nest in sea cave  
 28:168(r)  
 weather-related movements  
 26:123(r)

- Dachy, P. (see Spaepen, J.)  
 --- Biol. of Swift. 26:124(r)
- Dahlen, J.H. & A.O.Haugen. Toxicity of insecticides to Bobwhite Quail & Mourning Dove. 26:128(r)
- Dahlka, K.J. (see Hunt, G.S.)
- Dale, F.H. The refuge in Pheasant mgt.& research 23:182(r)  
 --- Sex ratios in Pheasant research & mgt. 23:182(r)  
 --- Role of calcium in reproduction of Ring-necked Pheasant 27:91(r)
- Dalquest, W.W. (see Lowery, G.H.Jr.)
- Dane, B., C. Walcott & W.H.Drury. Form & duration of display actions of Goldeneye 31:51(r)
- Daniel, J.C.Jr. Embryological comparison of Domestic Fowl & Redwinged Blackbird. 29:66(r)
- Daniel, O. Double brood of Pied Flycatcher. 29:118(r)
- Danielson, B. Reversed migration. 27:190(r)  
 --- Activities of Ottenby Bird Station. 28:164(r); 30:124(r); 31:159(r)  
 --- Swedish recoveries of birds banded abroad. 29:185(r)
- Daption capense (Cape Pigeon) band. - see Banding Reports egg meas. 27:91(r) incub. 25:156(r)
- Darling, F.F. Social behav. & survival 24:116(r)
- Darnton, I. Display of Manakin. 30:55(r)
- Darwin. J.H. Pop. differences between spp. growing according to simple birth & death processes. 25:118(r)
- Dathe, H. & G. Niethammer. Ten years of Ornithologische Mitteilungen. 29:202(r)
- Davis, B.S. (see Davis, J.)
- Davis, D.E. Anal. of pop. by banding 22:103  
 --- Breeding biol. of Hammond's Flycatcher. 26:32(r)  
 --- Determinate laying in Barn Swallows & Black-billed Magpies. 27:39(r)  
 --- Pop. changes & roosting time of Starlings. 28:50(r)  
 --- Relation of clutch size to number of ova ovulated, Starling. 30:55(r)  
 --- Comments on migr. of Starlings in e. U.S. 31:216
- Davis, J. Precocious sexual dev. in juv. House Sparrow. 25:29(r)  
 --- & B.S. Annual gonad & thyroid cycles of House Sparrow in s. CA. 26:173(r)
- Davis, L.I. Mex. bird songs. 29:261(r)
- Davis, P. (see Williamson, K.)  
 --- Pattern of migr. in 1953 at Irish Sea bird observatories. 26:122(r)  
 --- Breeding of Storm Petrel 29:54(r)
- Davis, S.J.J.F. Breeding of Meadow Pipit in Swedish Lapland. 30:244(r)
- Davis, T.A.W. Breeding distr. of Great Black-backed Gull in Engl. & Wales, in 1956. 30:144(r)
- Davison, V.E., L.M.Dickerson, K. Graetz, W.W.Neely & L. Roof. Measuring yield & availability of game bird foods. 27:45(r)
- Dawson, E.W. (see Clark, W.C.)  
 --- Food of young Black-billed Gulls in a breeding colony. 30:134(r)
- Dawson, M.J. Flightless Wood Pigeon fed by another. 31:58(r)
- Dawson, W.R. (see Bartholomew, G.A.; Howell, T.R.)  
 --- & F.C.Evans. Relations of growth & dev. to temp. regulation in Field & Chipping Sparrows 29:125(r)
- Day, K.C. Home life of Veery 24:100
- deBalsac, H.H. Behav. of normal birds to aberrant ones. 23:124(r)  
 --- Animal community in nest of White Stork. 24:122(r)  
 --- Sexual rhythm & fecundity of birds in n.w.Afr. 25:24(r)
- deBont, A.F. Notes on the Swallow on its wintering ground. 29:116(r)
- Decker, E. Study of Wood Ducks on a PA. marsh. 31:54(r)
- deGraaf, C. Crepuscular or nocturnal flights of Swifts. 23:88(r)
- deGrousaz, G. Migr. in spring across Swiss-Italian Alps. 27:87(r)
- Deignan, H.G. Races of Collared Scops Owl. 23:43(r)
- Delacour, J. Taxonomy of Canada Geese. 23:91(r)
- Delichon urbica (House Martin) artificial nests for 25:157(r)



- Delichon urbica (cont.)  
 band. - see Banding Reports  
 distr. & mort., Engl. 30:243(r)  
 dominated by Crag Martin 29:194(r)  
 ecol. & ethology 31:228(r)  
 feeding following tractor 23:39(r)  
 nesting, weather effects on,  
 23:173(r)  
 pop. changes in Neth. 22:135(r)
- Delmee, E. Behav. of Stock Dove.  
 26:123(r)
- Demandt, C. Twilight for Peregrine.  
 27:40(r)
- Puzzling behav. of Peregrine  
 pairs. 31:49(r)
- deMeillon, B. Fleas of sea birds in  
 s. ocean. 24:123(r)
- Dementiev, G.P. Distr. of Goshawk in  
 e. Palearctic. 28:53(r)
- Dendragapus obscurus (Blue Grouse)  
 age, molt & wt. 29:127(r)  
 mgt., in book 22:195(r)  
 production, movements & pop. in  
 MT. 31:166(r)
- Dendrocolaptidae (Woodcreepers)  
 anting 29:120(r)
- Dendrocopos spp.  
 distr. & evol. 25:168(r)  
 -, historical 22:93(r)
- borealis (Red-cockaded Woodpecker)  
 first banded 25:112
- leucotos (White-backed Woodpecker)  
 damage to timber 27:196(r)
- major (Great Spotted Woodpecker)  
 Starling competition for nestboxes  
 28:103(r)  
 vocalizations 28:183(r)
- martius (= Dryocopus martius)
- minor (Lesser Spotted Woodpecker)  
 begging behav. & light 23:176(r)
- pileatus (= Dryocopus pileatus)
- pubescens (Downy Woodpecker)  
 band. - see Banding Reports  
 band size 25:59; 27:77; 29:91  
 drumming of 24:18  
 egg tooth 30:120  
 mort. from DDT 28:108(r)  
 natal down 29:233  
 respiratory rate 29:39  
 sex, age & daily wts. 26:19  
 trap for 22:110
- villosus (Hairy Woodpecker)  
 band. - see Banding Reports  
 band size 27:77; 29:91
- female drumming 30:47  
 sex, age & daily wts. 26:19
- Dendrocygna (Tree Ducks)  
 cyto genetics in syst. 24:127(r)
- Dendroica aestiva (= D. petechia)  
 - auduboni (= D. coronata)  
 - caerulescens (Black-throated Blue  
 Warbler)  
 band. - see Banding Reports  
 band size 27:78; 29:93  
 descr., newly hatched 27:125  
 in book, as Cairns' Warbler,  
 24:174(r)  
 wt. & meas. 29:109
- castanea (Bay-breasted Warbler)  
 band. - see Banding Reports  
 band size 27:78  
 fat depots in tower kills 29:205  
 leg color in field identification  
 25:16  
 mass mort., TX. 28:230(r)
- cerulea (Cerulean Warbler)  
 trapping 23:24; 30:42
- coronata (Yellow-rumped,=Myrtle  
 Warbler)  
 aggressive to other spp. 26:169  
 band. - see Banding Reports  
 band size 27:78  
 crosses Atlantic on ship 31:57(r)  
 in Engl. 26:169(r)  
 migr. in RI. 30:176  
 mobbing behav. innate 29:251(r)  
 - of predator models 29:261(r)  
 respiratory rate 29:39  
 wt. & meas. 29:109
- discolor (Prairie Warbler)  
 anticipatory food-bringing  
 30:192(r)  
 band. - see Banding Reports  
 band size 29:93  
 breeding, s. limit in GA. 23:96(r)  
 natal down 29:235// wt. 27:175
- dominica (Yellow-throated Warbler)  
 band size 29:93
- fusca (Blackburnian Warbler)  
 band. - see Banding Reports  
 wt. & meas. 29:109
- kirtlandii (Kirtland's Warbler)  
 census 24:169(r)  
 mist-netted & meas. at Point  
 Pelee 30:234
- magnolia (Magnolia Warbler)  
 band. - see Banding Reports  
 band size 25:15; 29:92

- Dendroica magnolia* (cont.)  
 fat depots in tower kills 29:105  
 mass mort. in TX. 28:230(r)  
 wt. & meas. 29:109
- *palmarum* (Palm Warbler)  
 band. - see Banding Reports  
 band size 27:78; 29:93  
 evol. significance of migr. 27:97(r)  
 wt. 27:175  
 - & meas. 29:109
- *pensylvanica* (Chestnut-sided Warbler)  
 band size 29:93  
 descr., newly hatched 27:125  
 mass mort. in TX. 28:230(r)  
 wt. & meas. 29:109
- *petechia* (Yellow, = Golden, Warbler)  
 band. - see Banding Reports  
 band size 29:92  
 descr., newly hatched 27:125  
 migr. 23:32(r)  
 -, sampling by trapping 27:107  
 nest construction & var. 31:47(r)  
 sex, age & daily wts. 26:19  
 soft part color 27:180  
 terr. size on small Is. 28:234(r)  
 wt. & meas. 29:109
- *pinus* (Pine Warbler)  
 band - see Banding Reports  
 band size 29:93
- *potomac* (Sutton's Warbler)  
 in record of songs 31:108(r)
- *striata* (Blackpoll Warbler)  
 band. - see Banding Reports  
 band size 27:78  
 leg color in field identification  
 25:16  
 migr., map of 22:143(r)  
 migr. sampling by trapping 27:107
- *tigrina* (Cape May Warbler)  
 band. - see Banding Reports  
 band size 27:78 ; 29:93  
 wt. 27:175  
 - & meas. 29:109
- *virens* (Black-throated Green Warbler)  
 band. - see Banding Reports  
 band size 27:78  
 wt. & meas. 29:109
- Dendronessa galericulata* (= *Aix galericulata*)
- Dendroicos fuscescens* (Cardinal Woodpecker)  
 breeding behav. 24:76(r)
- DENMARK (see Europe - )  
 Dennis, J.V. (see Baird, J.)  
 --- Meteorological anal. of occurrence of grounded migrants at Smith Point, TX. 1951. 26:30(r)  
 --- Experiments with all-purpose trap. 26:152  
 --- Breeding ecol. of Yellow-breasted Chat. 29:169  
 --- Can oil pollution be defeated? 31:164(r)  
 --- & L.J. Whittles. Riddle of fall migr. on Nantucket. 27:88(r)  
 DeRuiter, L. Adaptive significance of countershading in caterpillars 27:139(r)  
 Deutsch, H.F. (see McCabe, R.A.)
- DEVELOPMENT  
 embryonic mort., chicken 22:34(r)  
 -, of Redwinged Blackbird compared to chick 29:66(r)  
 -, of Sooty Tern 30:58(r)  
 feathers, of Titmice 22:88(r)  
 fledging period, Scarlet-rumped Tanager 22:134(r)  
 gonad, of Great Tit, factors affecting 25:166(r)  
 of brain, nidifugous vs. nidicolous birds 23:187(r)  
 of mobility, young gulls 24:76(r)  
 of pituitary, book 25:172(r)  
 postembryonic, of:  
 Condor, California 24:173(r)  
 Crane, Sandhill 23:35(r)  
 Cuckoos, s. Afr. 23:122(r)  
 Curlew 28:169(r)  
 Duck, Canvasback 31:54(r)  
 -, Tufted 25:78(r)  
 Ducks 26:37(r)  
 Flycatcher, Scissor-tailed 23:34(r)  
 Hermit, Little 23:122(r)  
 Jays, Aphelocoma 23:47(r)  
 Kittiwake, growth rate & brood size 30:53(r)  
 Penguins, Adelle & Spectacled 24:166(r)  
 Phasianids 29:257(r)  
 Quail, Bobwhite, on different light-dark cycles 29:125(r)  
 -, California, in N.Z. 30:203  
 Rail, King 30:197(r)  
 -, Water 29:252(r)  
 Starling 22:132(r); 29:191(r)  
 Stonechat 23:83(r)

- DEVELOPMENT (cont.)  
 postembryonic, of:  
   Sugarbird, Cape 31:228(r)  
   Swallow, Tree 25:35, 102  
   Swift 23:82(r)  
   Waders 31:101(r)  
   Waxwing, Cedar 22:186(r)  
 reproductive, of Rufous-collared Sparrow near equator 30:129(r)  
 Devlin, J.M. Effects of weather on nocturnal migr. 26:29(r)  
 Dewar, D.R. Letters on ornith. of Buenos Ayres by W.H.Hudson. 22:196(r)  
 Dewey, J. Birds of Prince Albert & Elk Is. National Parks, Can. 24:30(r)  
 Dexter, R.W. Band. & nesting study of e. Nighthawk 23:109; 27:9  
 --- Extra-parental cooperation in nesting of Chimney Swifts. 24:115(r)  
 --- Evening Grosbeak returns to n.e. Ohio. 31:167(r)  
 Dicaeum hirundinaceum (Mistletoe Flowerpecker)  
   ecol. & var. 30:193(r)  
 Dichromonassa rufescens (Reddish Egret)  
   breeding behav. 31:234(r)  
 Dickcissel (Spiza americana)  
 Dickens, R.F. Passage of Black Terns through Engl. 26:165(r)  
 Dickerman, R.W. (see Phillips, A.R.)  
 Dickerson, L.M. (see Davison, V.E.)  
 Dickinson, J.C. Jr. Geographic var. in Red-eyed Towhee. 24:127(r)  
 Didric, = Bronze Cuckoo (Chrysococcus caprius)  
 Dierschke, F. Dependence of pop. density of birds on size, shape & density of smaller forests. 29:189(r)  
 Diesselhorst, G. Sex recognition & pair formation of Yellowhammer. 22:133(r)  
 --- Loss of song bird broods through slugs. 25:77(r)  
 --- Number of eggs laid by Cuckoo. 28:47(r)  
 Dinemellia sp. (Buffalo-Weavers)  
   behav. & syst. 30:244(r)  
 Dinnendahl, L. Night migr. & wind direction on Helgoland. 27:132(r)  
 --- & G. Kramer. Homing ability of Homing Pigeons. 22:184(r)  
 Diomedea albatrus (Short-tailed, = Stellar's, Albatross)  
   L.H. 24:35(r)  
 Diomedea albatrus (cont.)  
   pop. increase 31:53(r)  
   rediscovery of, Japan 26:86(r)  
   status in Japan 27:196(r)  
 - bulleri (Buller's Albatross)  
   behav., courtship 22:40(r)  
   -, post-egg-laying 24:131(r)  
 - chlororhynchus (Yellow-billed Albatross)  
   L.H. 23:122(r)  
 - epomophora (Royal Albatross)  
   band. - see Banding Reports  
   band. tech. 22:53  
   behav., courtship & pair formation 22:40(r)  
   -, post-egg-laying 24:131(r)  
   longevity - see Age, maxima  
   nesting habitat 31:53(r)  
   Skua as predator 31:53(r)  
   starvation theory 26:39(r)  
 - exulans (Wandering Albatross)  
   band. - see Banding Reports  
   book 31:168(r)  
   - fusca (= Phoebetria fusca)  
   - immutabilis (Laysan Albatross)  
   aircraft strikes, Midway Is. 29:254(r); 31:51(r)  
   book 24:35(r)  
 - melanophris (Black-browed Albatross)  
   band. - see Banding Reports  
 - nigripes (Black-footed Albatross)  
   aircraft strikes, Midway Is. 29:254(r); 31:51(r)  
   band. - see Banding Reports  
   book 24:35(r)  
   counts in n. Pacific 23:41(r)  
   nesting in Japan 27:196(r)  
 Diomedidae (Albatrosses)  
   as guano producers 22:193(r)  
   behav., comparison with Penguins 22:190(r)  
   -, post-egg-laying 24:131(r)  
   -, pre-egg-laying 22:40(r), 146  
   observations on Campbell Is. 23:191(r)  
   parasites of, ticks & fleas 24:123(r)  
 Dipper (Cinclus cinclus)  
   -, N. Am. (C. mexicanus)  
 DISEASES (see Parasites & -)  
 DISPLAYS (see Behavior, -)  
 DISTRIBUTION (see also, Movements; Pop; Invasions; Range; Zoogeography)  
   altitudinal, in Pyrenees, s. Spain 29:258(r)

## DISTRIBUTION (cont.)

- band. data in detn of waterfowl  
26:121(r)
- birds of:
- Afr. 22:86(r); 23:52(r)
  - CA., monogr. 23:44(r)
  - Eur., & climate changes 22:92(r)
  - Eur., central 23:51(r)
  - Grnl. 22:192(r)
  - Mediterranean Is., of banded  
birds recovered in, 31:158(r)
  - Mexico, check-list 22:97(r)
  - Micronesia 23:97(r)
  - Newfoundland, book 23:46(r)
  - Ontario, Can. 22:193(r)
  - Serbia, by biotypes 22:44(r)
  - U.S., Rocky Mt. National Park  
23:54(r)
  - , s.w. GA. 23:95(r)
  - West Indies 22:93(r)
- breeding, of
- Grosbeak, Evening 24:135;25:87(r);  
27:157
  - Gull, Great Black-backed, in Engl.  
& Wales 30:244(r)
  - N. Am. migrant spp. 31:104(r)
  - Sandpiper, Wood, in Den. 31:106(r)
  - Tit, Blue, in Sweden 25:160(r)
- ecology and, books 23:40(r),50(r)
- , climatic effect on Red-backed  
Shrike 23:129(r)
- general, in book 22:45(r)
- geographic (see Zoogeography)
- new records of:
- breeding birds, n. Israel  
29:258(r)
  - Brant, Black, in Shikoku  
22:135(r)
  - Dove, Collared Turtle, in Engl.  
-, Mourning, S. Am. 29:42
  - Fieldfare, Jura Mts. 28:52(r)
  - Grosbeak, breeding, n. Sweden  
28:181(r)
  - Gull, Black-headed, Lapland  
28:180(r)
  - , Great Black-backed, Sweden  
29:128(r)
  - , Little, breeding, n. Sweden  
29:204(r)
  - Ibis, Glossy, breeding in VA.  
28:98
  - Nutcracker, Slender-billed,  
breeding, Nor. 27:146(r)
  - Owl, Little, n. Sweden 29:204(r)
- Pipit, Siberian Tree, in Nor.  
28:164(r)
  - Sandpiper, Semipalmated,  
Scotland 28:220
  - Scandinavian & Norwegian birds  
28:164(r)
  - Shrike, Steppe, s.w. Nor.  
27:147(r)
  - Tern, Common, breeding 26:161
  - , -, - in Caribbean 28:243(r)
  - , -, - in Australia 29:41
  - Warbler, Grasshopper, breeding,  
central Sweden 28:170(r)
  - , Yellow-rumped, Engl.26:169(r)
  - , Pallas', w. Sweden 30:198(r)
  - , Reed, Scandinavia 27:146(r)
- of:
- Blackbird, Redwinged in GA.  
23:96(r)
  - Bullfinches, origin & 22:93(r)
  - Bunting, Ortolan, Sweden  
25:160(r)
  - Bustard, historical, in Ger.  
29:128(r)
  - Crane, Sandhill 23:35(r)
  - Dove, Mourning 29:257(r)
  - Duck, Canvasback 30:194(r)
  - gallinaceous game birds, Am.  
27:102(r)
  - Geese, Ireland 29:204(r)
  - Goose, Canada 22:143(r); 23:1
  - Goshawk, e. Palearctic 28:53(r)
  - Jackdaw, postglacial 22:135(r)
  - Jays, Aphelocoma, ecol. of,  
23:47(r)
  - Loon, Arctic 27:132(r)
  - Martin, House, Engl. 30:243(r)
  - Nuthatch, Eur., Sweden 27:146(r)
  - Pheasant, Ring-necked, in N.Z.  
29:123(r)
  - , - & calcium sources 27:91(r)
  - Philippine birds 24:169(r)
  - Quail, California, in HI.23:35(r)
  - Rook, in N.Z. 29:127(r)
  - Serin, n.w.Eur. 29:65(r)
  - Shorebirds in NJ. 23:40(r)
  - Shrike, Red-backed 23:129(r)
  - songbirds in Ger. 23:50(r)
  - Sparrow, House in Aust.29:204(r)
  - Swallow, Barn, in book 27:152(r)
  - Tern, Arctic, Aust. 30:249(r)
  - , Sooty in AR. 22:79
  - , White-winged, Fr. 28:53(r)
  - Turkey, in WV. 23:128(r)

- DISTRIBUTION (cont.)  
of: (cont.)  
waders, Palearctic, in N. Am.  
31:161(r)  
Warbler, Great Reed 29:258(r)  
-, Pallas' in Sweden 30:198(r)  
-, Reed, & dispersal, in Sweden  
28:181(r)  
origins of Bobwhite Quail in N.Z.  
28:244(r)  
related to energy metabolism, of  
Buntings 27:99(r)  
vertical, during day 31:161(r)  
winter, of Am. Robin e. of Rocky  
Mts. 26:29(r)  
Diver (see Loon)  
Dixon, K.L. Ecol. anal. of interbreed-  
ing of Crested Titmice 27:197(r)  
--- Plain Titmouse terr. & survival  
28:167(r)  
Dixon, W.J. Processing data for  
outliers. 25:118(r)  
Dobben, W.H.van (see Thomson, A.L., ed.)  
--- Food of Cormorant in Neth.  
25:169(r)  
Dodson, E.O. Textbook of evol. 24:36(r)  
Dohring, E. Troubles from feral Rock  
Doves 29:254(r)  
Dolichonyx oryzivorus (Bobolink)  
band. - see Banding Reports  
leg & band sizes 30:121  
migr. & distr. 27:36(r)  
- in RI. 30:176  
Donark, T. List of Danish bird-ring-  
ing reports 25:114(r)  
Donner, K.O. Visual acuity of non-  
passerine birds. 24:31(r)  
Dorney, R.S. & H.M. Mattison. Trapping  
tech. for Ruffed Grouse. 27:144(r)  
---, D.R. Thompson, J.B. Hale & R.F.  
Wendt. Evaluation of Ruffed Grouse  
drumming counts. 30:194(r)  
Dorst, J. Syst. of genus Turdus.  
22:136(r)  
--- Migr. of birds. 28:55(r)  
Doves (Columbidae)  
-, Collared Turtle (*Streptopelia*  
*decaocto*)  
-, Diamond (*Geopelia cuneata*)  
-, Galapagos (*Zenaida galapagoensis*)  
-, Ground (*Columba passerina*)  
-, Indian Ringed (= Collared Turtle)  
-, Mourning (*Zenaida macroura*)  
-, Necklace (= Spotted)  
Dove, Peaceful (*Geopelia placida*)  
-, Pink-headed Turtle (*Streptopelia*  
*roseogrisea*)  
-, Rock (= Pigeon, Domestic)  
-, Spotted (*S. chinensis*)  
-, Stock (*Columba oenas*)  
-, Turtle (*Streptopelia turtur*)  
-, White-bellied (*Leptotila*  
*jamaicensis*)  
-, White-winged (*Zenaida asiatica*)  
-, Wood (= Pigeon, Wood)  
Dovekie (Plautus = Alle alle)  
Dowitcher, Long-billed (*Limnodromus*  
*scolopaceus*)  
-, Short-billed (*L. griseus*)  
Downes, M.C. Arctic Terns in sub-  
antarctic 24:83(r)  
--- Waterfowl conservation in  
Victoria 26:85(r)  
---, A.M. Gwynn, & P.F. Howard. Band.  
of Giant Petrels at Heard &  
Macquarie Is. 26:73(r)  
Downing, R.L. Significance of  
ground nesting by Mourning Doves.  
30:194(r)  
Downs, E.H. Evening Grosbeaks at  
S. Londonderry, VT. 29:27  
Drepaniidae (Hawaiian Honeycreepers)  
annual cycle, environment & evol.  
25:122(r)  
monogr., review, relations to  
Parulidae & Coerebidae. 22:191(r)  
Drepanis sp. (Mamos)  
food limitation & extinction  
25:123(r)  
in monogr. on Honeycreepers  
22:191(r)  
Drinnan, R.E. Observations on feeding  
of Oystercatcher in captivity.  
29:260(r)  
--- & M.G. Ridpath. Counting flocks of  
roosting birds by phot. 29:67(r)  
Driver, E.C. Name that animal.  
22:196(r)  
Driver, P.M. A possible fundamental  
in behav. of young nidifugous  
birds. 31:230(r)  
Droit, J. Ingenious tech. of Great  
Tit. 30:130(r)  
Drost, R. (see Brickenstein-  
Stockhammer, C)  
--- Behav. of Herring Gulls outside  
the breeding season. 24:78(r)  
--- Site tenacity among Ger. marine  
birds. 25:153(r)

- Drost, R. (cont.)
- Problems of controlled sea bird protection. 26:35(r)
  - Hist. of young North Sea Herring Gulls released inland. 27:134(r)
- Drury, W.H.Jr. (see Dane, B.&C.Walcott Helms, C.W.; Bergstrom, E.A.)
- Ornith. field stations in Europe. 28:187
  - Breeding activities of Long-tailed Jaeger, Herring Gull & Arctic Tern on Bylot Is., Canada. 31:63
  - Radar & bird migr. 31:225(r)
- Dryobates (= Dendrocopos)
- Dryocopos sp.
- competition & habitat selection 23:40(r)
  - martius (Black Woodpecker)
    - decoys for behav. study 28:173(r)
    - pop. density 28:108(r)
    - vocalizations 28:183(r)
  - pileatus (Pileated Woodpecker)
    - avoids attack by Sharp-shinned Hawk 29:260(r)
    - band. - see Banding Reports
    - longevity - see Age, maxima-
- Ducks (Anatidae)
- Baldpate (*Anas americana*)
  - Black (*A. rubripes*)
  - , Australian (*A. superciliosa*)
  - Bufflehead (*Bucephala albeola*)
  - Canvasback (*Aythya valisineria*)
  - Domestic (see Mallard)
  - Gadwall (*Anas strepera*)
  - Garganey (*A. querquedula*)
  - Goldeneye, Am. (*Bucephala clangula*)
  - , Barrow's (*B. islandica*)
  - Long-tailed (see Oldsquaw)
  - Mallard (*Anas platyrhynchos*)
  - Mandarin (*Aix galericulata*)
  - Muscovy (*Cairina moschata*)
  - Oldsquaw (*Clangula hyemalis*)
  - Pintail (*Anas acuta*)
  - Redhead (*Aythya americana*)
  - Ring-necked (*A. collaris*)
  - Ruddy (*Oxyura jamaicensis*)
  - Scaup, Greater (*Aythya marila*)
  - , Lesser (*A. affinis*)
  - Shoveler (*Anas clypeata*)
  - Teal, Blue-winged (*A. discors*)
  - , Cinnamon (*A. cyanoptera*)
  - , Gray (*A. gibberifrons*)
  - , Green-winged (*A. crecca*)
- Ducks (cont.)
- Torrent, S.Am. (*Merganetta armata*)
  - Tufted (*Aythya fuligula*)
  - Widgeon, Am. (=Baldpate) (*Anas americana*)
  - , Eur. (*A. penelope*)
  - Wood (*Aix sponsa*)
- Due, L.A. & C.E.Ruhr. Coturnix quail in TN. 29:199(r)
- Dulinae (Palm Chats)
- phylogeny 23:97(r)
- Dumetella carolinensis (Gray Catbird)
- age - see Age, maxima-
  - band. - see Banding Reports
  - band size 25:14
  - DDT effects on 22:189(r)
  - deformed bills 31:158
  - descr., newly hatched 27:124
  - distr., s. breeding limit in GA. 23:96(r)
  - in book, Can. birds 30:137(r)
  - recoveries 29:148
  - remating percent 30:123
  - respiratory rate 29:39
  - sex, age & daily wt. 26:19
  - trapping tech. 22:33
- Dunkelmann, U. Rare causes of death in Gulls. 28:241(r)
- Dunlin (*Calidris alpina*)
- Dunnet, G.M. Breeding of Starling in relation to food supply. 27:136(r)
- Dunnock (*Prunella modularis*)
- Duntroonis parvus n. gen. et sp.
- fossil penguin, tertiary, N.Z. 25:30(r)
- Durango, S. Effect of climate on distr. & breeding success of Red-backed Shrike. 23:129(r)
- Birds in color 23:192(r)
  - Nest site of Stock Dove. 27:40(r)
- Dustman, E.H. (see Stewart, P.A.)
- Duvall, A.J. (see Aldrich, J.W.)
- Dzubin, A. Growth & plumage dev. of wild-trapped juv. Canvasback 31:54(r)

- Eagles  
 in folklore 30:200(r)  
 persecution of 22:198(r)  
 prey on Herring Gull 30:98  
 -, Bald (*Haliaeetus leucocephalus*)  
 -, Booted (*Hieraetus pennatus*)  
 -, Golden (*Aquila chrysaetos*)  
 -, Imperial (*A. heliaca*)  
 -, Sea (*Haliaeetus albicilla*)  
 -, Short-toed (*Circaetus gallicus*)  
 -, Spotted, Greater (*Aquila clangula*)  
 -, -, Lesser (*A. pomarina*)  
 -, White-tailed (*Haliaeetus albicilla*)  
 Eaton, S.W. Var. in N. Waterthrush  
 29:66(r)  
 Eber, G. Feeding biol. of finches  
 29:206(r)  
 Eberhardt, L.L. (see MacMullan, R.A.)  
 ECOLOGY  
 Allen's Rule & Vireo adaptations  
 31:58(r)  
 alpine, & Lapland birds 29:66(r)  
 altitude effect on egg-laying  
 dates, Dark-eyed Junco 31:50(r)  
 and distr., birds of s.w. GA.  
 23:95(r)  
 - -, Tits of Sweden 25:160(r)  
 - speciation in Jays 23:47(r)  
 arctic, & origin of avifauna  
 30:131(r)  
 Bergmann's Rule & Bobwhite Quail  
 wts. 28:226  
 - - & Vireos 31:58(r)  
 biomes & biotic provinces (see  
 below, Life Zones)  
 books 22:138(r), 195(r)  
 -, ecol. in zoos 22:45(r)  
 breeding, of:  
 Buffalo-Weaver, Afr. 30:243(r)  
 Chat, Yellow-breasted 29:169  
 Egret, Little, Fr. 28:101(r)  
 Owl, Snowy 29:250(r)  
 Scoter, White-winged 25:67(r);  
 29:251(r)  
 Tern, Arctic 28:57  
 Wren, Winter 30:133(r)  
 comparative, Wood & feral pigeons  
 in London 31:230(r)  
 competition among birds 23:40(r)  
 - - gallinaceous game birds 29:61(r)  
 - - House & Bewick's Wrens 28:181(r)  
 - for food & water in London in  
 winter 31:230(r)  
 density & terr., Titmice 25:160(r)  
 effects of man on, book 29:133(r)
- general, of:  
 Alaska, northern 30:132(r)  
 Camargue 30:132(r)  
 - & Coto Donana 29:203(r)  
 Dove, Indian Ring 27:145(r)  
 Flycatcher, Collared, pops.  
 29:121(r)  
 Lemming predators, Jaegers & Owls  
 26:169(r)  
 Martin, House in Finl. 31:228(r)  
 Mistletoe & Mistletoe bird, Aust.  
 30:193(r)  
 Nuthatch, Eur. 29:207(r)  
 Partridge, Hungarian in UT.  
 26:129(r)  
 Pochard, Red-crested 29:199(r)  
 Rail, Clapper in NC. 30:193(r)  
 Sparrow, Song in salt marshes  
 27:191(r)  
 Sparrows in winter, GA. 28:203  
 Swallow, Barn, in book 27:152(r)  
 Titmice, Crested 27:197(r)  
 Univ. KA. Nat. Hist. Reservation  
 29:58(r)  
 Gloger's Rule & Vireo adaptations  
 31:58(r)  
 invasions, factors affecting 29:  
 49(r)  
 habitats & breeding differences,  
 Eur. Blackbird 30:53(r)  
 - as isolating mechanisms,  
 Chickadees 24:125(r)  
 -, Beaver effects on waterfowl 25:  
 74(r)  
 -, conifer succession & avifaunal  
 changes 29:253(r)  
 -, coniferous forest, bird density  
 in, 22:189(r)  
 -, deforestation effects on Philip-  
 pine birds 30:250(r)  
 -, forest communities & bird pops.  
 in Slovakia 27:95(r)  
 -, forests of Ger., book 26:87(r)  
 -, improvement for Turkey in WV.  
 23:128(r)  
 -, marshes, book 29:132(r)  
 -, meth. for descr. of 31:119  
 -, oak-hornbeam avifauna 22:188(r)  
 - of:  
 Albatross, nesting 31:53(r)  
 birds of peat bogs, Hungary  
 29:253(r)  
 Crane, Sandhill 23:35(r)  
 Dove, Mourning in MA. 22:160

## ECOLOGY (cont.)

## habitats (cont.)

of:

Flycatcher, Alder, differences in two pops. 30:130(r)  
 -, Hammond's 26:32(r)  
 -, Pied 27:142(r)  
 Goldfinch, Am. 24:75(r)  
 Grouse, Ruffed in NY. 22:197(r)  
 Gull, Black-headed, breeding 28:179(r)  
 Honeycreepers, Hawaiian 25:122(r)  
 Israel, n., Huleh Swamp Lake 29:258(r)  
 Ontario birds 22:193(r)  
 passerines in SC. 23:40(r)  
 - in spruce-fir forest 24:84(r)  
 petrels of Adelie Land 25:156(r)  
 Pheasant, Ring-necked in N.Z. 29:123(r)  
 Pigeons, feral 26:126(r)  
 Quail, California, in HI. 23:35(r)  
 -, - in N.Z. 24:121(r)  
 reclaimed land, Neth. 25:80(r)  
 Scrub-birds 24:83(r)  
 Shrike, Fiscal 23:83(r)  
 -, Red-backed 27:104(r)  
 Sparrow, White-crowned, winter preferences 31:106(r)  
 Stork, White 27:136(r)  
 -, -, preferences in Neth. 30:249(r)  
 Takaha 23:122(r)  
 Tern, Arctic, breeding 28:62  
 Thrush, Mistle, n.w.Eur. 25:79(r)  
 -, Rock, breeding 28:102(r)  
 Warbler, Bonelli's 25:120(r)  
 -, Great Reed 29:258(r)  
 waterfowl, nesting on artificial reservoirs 25:27(r)  
 requirements of Wood Warbler, central Sweden 31:167(r)  
 reservoirs, effects on avifauna 23:90(r)  
 selection, by birds 23:40(r)  
 -, by Black-headed Gull 29:249(r)  
 -, in e. Morocco 28:243(r)  
 -, in winter, by Sparrows 28:203  
 -, genetic evol. of mechanisms for 23:40(r)  
 species stratification in forests 24:29(r)  
 Willow-Cottonwood, nesting birds of 23:41(r)

Life Histories (see, LIFE HISTORIES)  
 outline for ecol. study of 22:134(r)  
 Life Zones (see Zoogeography)  
 Pop., 24:33(r)  
 Reproductive, of Stonechat 23:83(r)  
 water levels & waterfowl production 26:129(r)  
 weather influences on:  
 avifaunas 24:33(r)  
 - of Faeroe Is. 27:199(r)  
 -, symposium, Finl. 24:34(r)  
 breeding seasons in Afr. 22:86(r)  
 - - - Eur. 22:87(r)  
 - - - Galapagos Is. 22:87(r)  
 - - - Indonesia 22:87(r)  
 - success, Arctic Tern 28:59  
 - -, ducks, interior Aust. 29:193(r)  
 - -, Eur. Blackbird 30:53(r)  
 - -, Tree Swallow 26:56  
 census results, Pheasant 27:44(r)  
 cycles 22:92(r); 23:88(r)  
 - of Goldcrest 29:253(r)  
 - of Partridge & Hare, Finl. 29:253(r)  
 distr. 23:73  
 - of Winter Wren, n. Sweden 29:128(r)  
 energy resources & temp., House Sparrow 22:38(r)  
 faunal distr., n. Eur. 22:92(r)  
 homing ability, Pigeons 29:64(r)  
 island avifaunas, origins, West Indies 22:93(r)  
 migr. 23:60  
 - & ocean wind currents, procel-lariiformes 30:50(r)  
 - arrival times, Swift in Ger. 30:49(r)  
 - in n.e.U.S. 30:151; 31:162(r)  
 - in Sweden 22:94(r); 29:50(r)  
 - of waders, Engl. 29:48(r)  
 -, spring, of Scarlet Tanager 29:198(r)  
 movement of ducks, interior Aust. 29:193(r)  
 nesting of Ger. birds 23:173(r)  
 - - Honey Buzzard 28:180(r)  
 pop. of Barn Swallow 24:93  
 - - Bluebird 24:82(r)  
 - - Pheasant, fall, in IA. 26:130(r)  
 - - Prairie Chicken 27:43(r)  
 productivity of Mallard & spring rainfall 26:126(r)  
 - - Western Grebe & water levels 26:129(r)



- ECOLOGY, weather influences on (cont)  
 range extensions 30:248(r), 249(r)  
 - - in Scandinavia 27:89(r)  
 roosting time of Swift 28:174(r)  
 social behav. of Raven 29:58(r)  
 Shrike, Red-backed 23:129(r)  
 Sparrow, Gambel's 22:98(r)  
 Swallow, Bank 22:58  
 Swift 22:39(r)  
 Tit, Great 23:131(r)  
 Titmice 22:88(r)  
 vocalizations, daily beginning &  
 ending 28:110(r)  
 - of Chaffinch, time of awakening  
 song 24:86(r)  
 - of Goatsucker, Eur., song rates  
 27:142(r)  
 - of Tawny Owl 25:157(r)  
 winter range, Little Auk 23:184(r)  
 wt. & fat, diurnal & seasonal, Am.  
 Buntings 30:1  
 - - -, winter temp. & 22:85(r)  
 X-ray, effects of on Bluebird  
 30:191(r)
- ECONOMICS  
 agricultural importance of food of  
 Partridge in Hungary 27:202(r)  
 control of Albatrosses on Midway Is.  
 29:254(r)  
 - - birds, general 31:229(r)  
 - - grain damage by Red-billed  
 Qulea 30:54(r)  
 damage to plants, recognition of  
 birds responsible 29:206(r)  
 - - rice crop by blackbirds in U.S.  
 29:59(r)  
 - - - - by ducks in Aust. 29:199(r)  
 - - timber & telephone poles by  
 Woodpeckers 27:196(r)  
 encephalitis in Japanese egrets  
 31:105(r)  
 forest insect control by increasing  
 bird pops. 28:104(r), 175(r);  
 29:254(r) ; 30:130(r)  
 nuisance of Rock Doves 29:254(r)  
 protection of pine buds against  
 Blackgame 31:103(r)  
 relation of birds to arthropod-  
 borne diseases 29:200(r)  
 status of Herring Gull in New  
 Brunswick 24:113(r)  
 use of recordings to repel Corvids  
 28:110(r)  
 - - - - Starlings & Gulls  
 26:172(r)
- Ectopistes migratorius (Passenger  
 Pigeon)  
 book, natural hist. & extinction  
 26:133(r)  
 in book on extinct & vanishing spp.  
 29:262(r)  
 trichomoniasis as possible cause  
 of extinction 23:186(r)  
 Edberg, R. Record of Steppe Shrike  
 & other observations on Utsira.  
 27:147(r)  
 --- Bird observations on Utsira,  
 1917-1954. 28:164(r)  
 --- Winter mort. of Tawny Owl in  
 central Sweden 30:190(r)  
 --- Migr. through Kalmar Sound.  
 31:227(r)  
 Edelstam, C. (see Curry-Lindahl, K.)  
 Edfelt, A. Visit to Fair Isle  
 30:240(r)  
 Edwards, G., E. Hosking & S. Smith.  
 Reactions of passerine birds to  
 stuffed Cuckoo. 22:90(r)  
 Eggeling, W.J. Bird ringing at night.  
 22:181(r)  
 Egging, effect on Lapwing pop. in  
 Neth. 23:120(r)  
 -, - - Yellow-nosed Albatross pop.  
 23:122(r)  
 Eggs:  
 broken, in Peregrine eyries  
 29:195(r)  
 color, & host acceptance of  
 Cuckoo's 25:69(r)  
 clutch numbers of , Wood Pigeon  
 25:69(r)  
 - - -, Stock Dove 25:69(r); 26:124(r)  
 -, mixed species of:  
 Gull, Black-headed & Common Tern  
 25:68(r)  
 Merganser, Red-breasted & other  
 ducks 25:67(r), 68(r)  
 Oystercatcher & Common Tern  
 28:236(r)  
 - & Ringed Plover 30:244(r)  
 Tits, Blue & Pied Flycatcher as  
 result of competition 29:118(r)  
 - size & altitude, Meadow Pipit  
 28:44(r); 29:134  
 - - & ecol., Titmice, Engl. 27:  
 192(r)  
 - - & mort. rates, Blue Tit 28:  
 45(r)  
 - - & number ovulated 30:55(r)

## Eggs (cont.)

clutch size (cont.)

- - decrease of Eur. Goldfinch in Aust. 29:119(r)
- - dependence on Lemming pop., Snowy Owl 26:125(r)
- - - - -, Tengmalm's Owl 28:180(r)
- - - - pop. density, Great Tit 23:131(r)
- - - - season, decrease, Spotted Flycatcher 23:173(r)
- -, detn. of, Charadriiformes 28:46(r)
- - effect of age, Yellow-eyed Penguin 22:185(r)
- - - - artificial light on, Bob-White Quail 23:121(r)
- -, geogr. var., game spp. 22:136(r)
- - of:
  - Blackbird, Redwinged 22:187(r)
  - Bunting, Cirl 27:93(r)
  - Crane, Sandhill 23:35(r)
  - Dipper in Engl. 28:167(r)
  - Dove, Stock 26:124(r)
  - Eagle, Imperial 29:128(r)
  - Eider, Common 23:119(r)
  - Flycatcher, Scissor-tailed 23:34(r)
  - Goldfinch, Am. 22:188(r)
  - Goosander 27:140(r)
  - Gull, Herring 23:45(r)
  - , Lesser Black-backed 23:45(r)
  - Harrier, Marsh 23:36(r); 25:23(r)
  - Hermit, Little 23:122(r)
  - Ibis, Hadad 23:123(r)
  - Merganser, Red-breasted 28:102(r)
  - Nighthawk 22:84(r)
  - Owls, Barn & Tawny 29:51(r)
  - Partridge, Chukar 23:90(r)
  - Penguin, Adelie 23:120(r)
  - Rail, Clapper 23:35(r)
  - , Sora & Virginia 26:125(r)
  - Redpoll, Hoary, with 6 eggs 28:180(r)
  - Robin, Am. 23:29, 46(r); 27:93(r)
  - Sandpiper, Spotted 23:36(r)
  - Scoter, White-winged 29:195(r)
  - Shrike, Fiscal 23:84(r)
  - , Red-backed 23:129(r)
  - Sparrow, Eur. Tree 23:84(r)
  - Stonechat 23:83(r)
  - Swallow, Barn, in Engl. 25:23(r) 28:235(r)

- Swallow, Barn, in Switz. 24: 75(r)
- , Tree 23:35, 102, 136; 26:63
- Swift, Eur. 22:39(r); 23:83(r)
- Tern, Arctic 28:72
- , Sandwich 28:234(r)
- Tit, Long-tailed 29:196(r)
- Tits 22:88(r), 131(r); 27:192(r)
- Warbler, Great Reed 29:258(r)
- , Reed 27:137(r)
- comparative study, Turdus thrushes 22:136(r)
- descr. of Honeycreepers, Hawaiian, in monogr. 22:191(r)
- - songbirds of Ger., color plate in book 23:51(r)
- - Waxwing, Cedar 22:186(r)
- destruction of Tree Swallow's by House Wren 26:59
- experimental addition & removal, effects on Gull laying 23:46(r)
- gloss, changes in last laid 30:192(r)
- guide to, Engl. 26:174(r)
- hatching 30:119
- dates, Ruffed Grouse in WI. 22:186(r)
- laying by Honeyguides 30:128(r)
- by petrels 25:157(r)
- , dates, effect of age on, Yellow-eyed Penguin 22:185(r)
- , - of:
  - Nighthawk 22:84(r)
  - Pheasant, Ring-necked 22:184(r)
  - Starling 29:53(r)
  - Swallow, Barn, in Engl. 28:235(r)
  - Tit, Long-tailed 29:196(r)
  - Willet in GA. 28:234(r)
- , determinate, Barn Swallow & Black-billed Magpie 27:39(r)
- , indeterminate, Eared Grebe 30:191(r)
- , mort. during, Emperor Penguin 30:243(r)
- rates, Clapper Rail 23:35(r)
- , related to food abundance, Tits 27:192(r)
- , response to prevention of 28:237(r)
- sequence & incub. & hatching relations 28:103(r)
- measurements, birds of Adelie Land 27:91(r)

- Eggs, measurements of (cont.)  
 - - Gannet, Cape 23:122(r)  
 Penguin, Yellow-eyed 29:264(r)  
 -, -, effect of age 22:185(r)  
 Scoter, White-winged 29:194(r)  
 Sparrow, Chipping 23:107  
 Starling 25:156(r)  
 -, Gray 30:52(r)  
 Tern, Arctic & Common 31:103(r)  
 Titmice, wt. of 22:88(r)  
 number laid by Cuckoo 28:47(r)  
 palatability of 24:76(r); 25:69(r)  
 retrieval of displaced, by shore-  
 birds 28:234(r)  
 rolling of, many spp. 25:71(r)  
 shape, anal of, fowl 25:121(r)  
 -, tech. for detn. 25:23(r)  
 temps., birds of Adelie Land 27:91(r)  
 - during incub. Tits 22:88(r), 131(r)  
 tolerance to exposure, Pheasants  
 25:28(r)  
 volume, calculation of by wt. loss  
 in incub. 25:23(r)  
 Egler, F.E. Science, industry & abuse  
 of rights of way 29:200(r)  
 Egret, Cattle (Bubulcus ibis)  
 -, Reddish (Dichromonassa rufescens)  
 -, Snowy (Egretta thula)  
 Egretta garzetta (Little Egret)  
 nesting behav. & ecol. in Fr.  
 28:101(r)  
 prey seizure 29:198(r)  
 vagrant in N.Z. 30:133(r)  
 - thula (Snowy Egret)  
 behav. 31:234(r)  
 Ehlert, W. Food of Herring Gull in  
 pre-breeding season  
 Ehrstrom, C. (see Engstrom, K.)  
 --- Song rhythm of Goatsucker  
 27:142(r)  
 --- Behav. of birds during solar  
 eclipse, June 30, 1954. 27:193(r)  
 --- Birds of northeastland of  
 Spitzbergen 30:248(r)  
 Eichler, W. Mallophaga in birds'  
 nests. 25:29(r)  
 Eider, Common (Somateria mollissima)  
 -, King (S. spectabilis)  
 -, Steller's (Polysticta stelleri)  
 Eipper, A.W. Differences in vulnera-  
 bility of prey of nesting Kingfish-  
 ers. 27:202(r)  
 Eisenmann, E. Northern birds summering  
 in Panama. 23:81(r)
- Eisenmann, E. (cont.)  
 --- Annotated list of birds of  
 Barro Colorado Is., Panama  
 Canal Zone. 23:132(r)  
 --- Species of Middle Am. birds.  
 27:103(r)  
 --- Palearctic waders in e. N. Am.  
 31:161(r)  
 Eklund, K. Fearless Grasshopper  
 Warbler 31:102(r)  
 Elaenia martinica (Caribbean Elaenia)  
 band size 29:92  
 Elanoides forficatus (Swallow-  
 tailed Kite)  
 wt. 27:175  
 Elanus caeruleus (Black-winged Kite)  
 syst. 29:260(r)  
 Elder, W.H. (see Balham, R.W.)  
 --- Effect of lead poisoning on  
 fertility & fecundity of domestic  
 Mallard ducks. 26:36(r)  
 --- Oil gland of birds. 26:37(r)  
 --- Fluoroscopic meas. of shooting  
 pressure on Pink-footed & Grey Lag  
 Geese. 27:95(r)  
 --- Relation of age & sex to wt. of  
 Pink-footed & Grey Lag Geese. 27:  
 95(r)  
 --- Biol. & mgt. of Hawaiian Goose.  
 30:245(r)  
 --- & N.L. Elder. Role of family in  
 formation of goose flocks. 22:  
 187(r)  
 --- & M.W. Weller. Duration of fertil-  
 ity in domestic Mallard Hen after  
 isolation from drake. 26:128(r)  
 Eleutherornis helveticus - new  
 family, Eleutherornithidae,  
 proposed 23:91(r)  
 Ellarson, R.S. Cowbird parasitizing  
 e. Bluebird. 25:157(r)  
 Elliott, H.F.I. Ornith. of Tristan  
 da Cunha group. 29:257(r)  
 Elliott, J.J. & R.S. Arbib Jr. Origin  
 & status of House Finch in e. U.S.  
 24:170(r)  
 Ellis, J.A. (see Scott, T.G.;  
 Brewer, R.)  
 Elton, C. Ecol. of animals, 3rd ed.  
 22:195(r)  
 Emberiza spp. (Buntings)  
 begging responses 27:193(r)  
 brood size 26:127(r)  
 calls, comparative study 29:206(r)

- Emberiza cirulus (Cirl Bunting)  
 winter song & reproduction 27:93(r)
- citrinella (Yellowhammer = Yellow Bunting)  
 aggression, effect of hunger on 29:57(r)  
 band. - see Banding Reports  
 book 27:99(r)  
 migr. 27:133(r)  
 -, temp. & metabolism 22:113(r)  
 nest 27:93(r)  
 pop. decrease, Sweden 31:105(r)  
 - estimate, Finl. 24:29(r)  
 sex recognition & pair formation 22:133(r)  
 sleep, depth of 23:82(r)  
 slug kills nestlings 25:77(r)  
 song counts & late season songs 30:62(r)  
 temp. tolerance 27:131(r)  
 visual acuity 24:31(r)
- hortulana (Ortolan Bunting)  
 band. - see Banding Reports  
 book 27:99(r)  
 distr. in Sweden 25:160(r)  
 migr. 24:73(r); 30:189(r)  
 -, temp. & metabolism 24:113(r)  
 temp. tolerance 27:131(r)
- schoeniclus (Reed Bunting)  
 pop. changes 22:134(r); 27:101(r)  
 song innate 23:188(r)  
 visual acuity 24:31(r)
- Emberizinae (Buntings, see also Emberiza, above)  
 behav., comparative aggression & courtship 29:57(r)  
 -, scratching 25:71(r)
- EMBRYOLOGY (see Development)
- Emeis, W. Storks in Schleswig-Holstein, 1948 & '51. 25:155(r)
- Emlen, J.T.Jr. (see Nero, W.)  
 --- Social behav. in nesting Cliff Swallows 24:22(r)  
 --- Flocking behav. in birds. 24:116(r)  
 --- Juv. mort. in Ring-billed Gull colony. 28:233(r)
- Empidonax alnorum (Alder Flycatcher) (see E. traillii, below)  
 - hammondi (Hammond's Flycatcher) breeding biol. 26:32(r)  
 - difficilis (Western Flycatcher) breeding biol. 26:32(r)  
 - flaviventris (Yellow-bellied Flycatcher)  
 band. - see Banding Reports  
 breeding biol. 26:32(r)  
 leg & band sizes 30:121  
 nesting, observations on 29:53(r)
- fulvifrons (Buff-breasted Flycatcher)  
 breeding biol. 26:32(r)
- minimus (Least Flycatcher)  
 band. - see Banding Reports  
 band size 29:91  
 breeding biol. 26:32(r)  
 natal down 29:233(r)  
 territory & song 22:187(r)  
 var. & syst. 25:30(r)
- traillii (Willow, includes Alder, Flycatcher)  
 band. - see Banding Reports  
 behav., ecol., & morphological differences in two pops. 30:130(r)  
 breeding biol. 26:32(r)  
 nest construction & var. 31:47(r)  
 var. & syst. 29:30(r)
- virescens (Acadian Flycatcher)  
 band. - see Banding Reports  
 breeding biol. 26:32(r)  
 - pop. 31:124  
 var. & syst. 29:30(r)
- wrightii (Gray Flycatcher)  
 breeding biol. 26:32(r)
- ENDOCRINOLOGY (see Physiology-)
- Enemar, A. (see Anven, B.)  
 --- Band. activities at Falsterbo bird station, 1947-'53. 27:130(r)  
 --- Birds killed at lighthouses in S. Sweden 29:50(r)  
 --- Band. activities at Falsterbo bird station, 1954-'56. 29:185(r)  
 --- Initiation of incub. in Blackbird. 30:52(r)
- Eng, R.L. Effects on bird pop. of chlordane bait & aldrin spray. 24:24(r)  
 --- Meth. for obtaining Sage Grouse age & sex ratios from wings. 27:44(r)
- ENGLAND (see British Isles)
- England, M.D. Phot. studies of Osprey. 28:182(r)
- Englemann, C. Memory of the hen. 23:125(r)  
 --- Visual field of ducks. 26:172(r)  
 --- Experiments on seeing ability of Goose 27:141(r)
- English, P.F. (see Chambers, R.E.)

- Engstrom, K. Distr. of Ortolan Bunting & Blue Tit in Sweden. 25:160(r)  
 --- & C. Ehrstrom. Sea-bird census in Stockholm, winter, 1954-'55. 29:203(r)
- Erard, C. Breeding & wintering ground & migr. of Slender-billed Gull. 30:241(r)  
 --- Diet of Black Redstart. 31:107(r)
- Eremophila alpestris (Horned Lark)  
 banded young rejected by parent 25:61  
 breeding 26:138  
 Dieldrin effects on 31:164(r)  
 natal down 29:233  
 nesting 26:1  
 response of adult to banded young 24:19
- Erickson, A.B. Passerine bird pop. of Savannah River Refuge, SC. 23:40(r)
- Erickson, M.M. (see Blanchard, B.D.)
- Erithacus rubecula (European Robin)  
 abnormal breeding 26:167(r)  
 artificial nests, use of 29:196(r)  
 band. - see Banding Reports  
 banded young rejected by parents 25:61  
 behav., three adults feed one brood 24:78(r)  
 -, sex, testis cycle & 24:22(r)  
 brood size related to food & day length 25:109, 139  
 migr. from Sweden 23:76(r)  
 pesticide, effects of E-605 forte 27:149(r)  
 sleep, depth of 23:82(r)  
 song, all-day totals 23:87(r)  
 tameness of 23:85(r); 24:175(r)  
 visual acuity 24:31(r)  
 voice of fledglings 27:141(r)  
 wt. changes 27:19
- svecica (= Luscinia svecica)
- Erlund, C.R. Antarctic ornith. studies during the IGY. 30:114  
 --- & F.C. Charlton. Temp. telemetering system in incubating eggs of Antarctic birds. 30:242(r)
- Erolia (= Calidris)
- Errington, P.L. Hazards of overemphasizing numerical fluctuations in studies of "cyclic" phenomena in Muskrat pops. 25:163(r)  
 --- Of men & marshes 29:132(r)
- Erythropgyia (= Cercotrichas)
- Estrilda melpoda  
 syst. 29:205(r)  
 - troglodytes (Grey Waxbill)  
 behav. & dev. of young 31:50(r)
- Estrilidae  
 behav. 31:50(r)  
 drinking & scratching behav. 25:71(r)  
 intraspecific var. in Aust. 30:198(r)  
 syst. 29:205(r)
- Etchecopar, R.D. Oologic contributions to syst. study of genus Turdus. 22:136(r)  
 --- New Fr. organization for migr. research. 29:184(r)  
 --- & J. Prevost. Oological data on avifauna of Adelie Land. 27:91(r)
- Eudyptes chryllophus (Macaroni Penguin)  
 band. - see Banding Reports  
 egg-laying & incub. 25:65(r)  
 - crestatus (Rockhopper Penguin)  
 egg-laying & incub. 25:65(r)  
 observations of Campbell Is. 23:191(r)  
 - sclateri (Erect-crested Penguin)  
 band. tech. 22:53
- Eudyptula minor (Little Blue Penguin)  
 band. tech. 22:53(r)
- Euneornis campestris (Orangequit)  
 band size 29:92  
 broken leg healed 28:158  
 soft part colors 27:180  
 wt. 27:175
- Euodice cantans (Silverbill)  
 winter breeding 27:137(r)
- Euphagus carolinus (Rusty Blackbird)  
 band. 31:122  
 migr. 30:181  
 - cyanocephalus (Brewer Blackbird)  
 band. - see Banding Reports  
 breeding behav. 23:172(r)  
 pair bond 26:68
- Euphonia, Jamaican (Pyrrhuphonia jamaica)
- EUROPE (see also Banding Reports, Distribution, Recoveries & Returns, Zoogeography)
- Austria:  
 annotated list, e. 28:243(r)  
 effect of reservoirs on avifauna 23:90(r)

## EUROPE (cont.)

## Denmark

annotated list, w. coast  
27:199(r)

birds of Nissum Fjord 27:199(r)

## Finland

nesting birds of Aland Archipelago. 23:129(r)

## France

annotated list, 25:78(r)

- -, Jura Mts. 28:52(r)

birds of, new journal 25:32(r)

conservation in 26:134(r);30:  
132(r)

## General, of

annotated list, s.w. 29:203(r)

- -, Pyrenees, central 28:52(r)

book, birds of central 23:51(r)

breeding seasons 22:87(r)

northern, range changes & winter  
climate 22:92(r)

## Germany

sanctuary, Hamburg City, goals &  
functions of 29:124(r)

songbirds of, book 23:50(r)

## Hungary

annotated list, by habitats  
29:253(r), 258(r)

## Israel

annotated list, breeding birds  
of n. 29:258(r)

## Italy

annotated list, Sardinia & Sicily  
28:108(r)

- - Montecristo Is. 26:39(r)

## Netherlands

breeding birds, book 22:43(r)

## Norway

annotated list, Spitzbergen  
28:180(r)

## Spain

annotated list, Coto Donana  
29:128(r)

## Sweden

annotated list 22:196(r)

- -, Gavle 28:180(r)

- -, Jamtland, 65-yr records  
28:180(r)

- -, Krankesjon Lake region  
31:106(r)

- -, Lapland 28:180(r); 29:66(r);  
30:50(r)

- -, Stora Karlso Is. 25:127(r);  
29:65(r) ; 30:50(r)

## Sweden (cont.)

birds of north 29:128(r)

- - -, book 31:168(r)

migr. in 22:94(r)

Pleistocene glaciation & Nuthatch

distr. 25:168(r); 27:146(r)

var. in breeding birds, 60-yr.

31:57(r)

vertebrates of Lapland 30:248(r)

## Switzerland

Common Tern colonies of

25:120(r)

## Eurylaimidae (Broadbills)

in check-list, birds of world

22:142(r)

Evans, C.D. (see Stewart, R.E.)

Evans, F.C. (see Dawson, W.R.)

## EVOLUTION (see also Anatomy, Paleontology, Systematics)

and significance of migr. 27:96(r)

book, general 23:54(r); 24:36(r)

-, of vertebrates 27:150(r)

-, dynamics of 22:140(r)

genetic basis of pop. 22:136(r)

history of avian, in book 23:91(r)

Mendelism &, book 22:195(r)

natural selection & food of

Thrushes. 25:170(r)

## of:

altricial condition 29:66(r)

birds of Micronesia 23:97(r)

- - West Indies 22:93(r)

breeding cycles, Europe 22:87(r)

Bullfinches 22:93(r)

Charadrii 29:204(r)

Hawaiian Honeycreepers 22:191(r)

incubation patterns 29:193(r)

Jays, Aphelocoma 23:47(r)

passerine skull 30:59(r)

Penguins 30:60(r)

Red-eyed Towhees 22:142(r)

Waxwings & allies 23:97(r)

Wryneck 27:150(r)

## Ewan, J. Rocky Mt. Naturalists.

22:100(r)

## EXTINCTION (includes vanishing spp. or pops.)

Albatross, Short-tailed, rediscovered 26:86(r)

birds of Cebu, Philippines, by  
deforestation 30:250(r)

books, general 23:49(r); 29:68(r)

-, Passenger Pigeon 26:133(r)

-, birds of world 29:262(r)

## EXTINCTION (cont.)

of:

- Hawaiian Honeycreepers, in monog.  
22:191(r)
  - Kakapo, nearness of 28:243(r)
  - Ontario birds, in book 22:193(r)
  - Ring-Dove, Eastern, in Japan  
22:135(r)
  - Scrub-bird, Noisy, nearness of  
24:83(r)
  - Stork, Black, nearness of in  
Japan 30:58(r)
  - Twite, in Faeroe Is. 23:78(r)
- Eygenraam, J.A. Sex ratio & produc-  
tion of the Mallard. 30:242(r)

- Faber, A. Homologization of bird sounds. 28:183(r)
- Fables, D. Jr. Annotated list of NJ. birds. 27:205(r)
- Fabricius, E. Behav. of young ducks. 23:84(r)
- Imprinting phenomena in ducks 23:177(r)
- What makes plumages of birds water-repellent? 30:197(r)
- Faeroe Is. (see Oceanic Islands)
- Falco columbarius (Merlin, = Pigeon Hawk)
- attacked by flock at Starling roost. 31:51(r)
- band. - see Banding Reports
- band from Cowbird in gizzard 24:110
- food of 28:182(r)
- hunting success 25:128(r)
- in Nor. 27:145(r)
- migr. 26:123(r)
- & Bergmann's Rule 30:49(r)
- counts, Ger. & Den. 28:165(r)
- sampling by trapping 27:107
- eleonorae (Eleonora's Falcon)
- natural hist., food & pop. decrease, isles off Crete 31:58(r)
- naumanni (Lesser Kestrel)
- attacks on, by Starlings 31:103(r)
- peregrinus (Peregrine Falcon, = Duck Hawk)
- age - see Age, maxima
- band. - see Banding Reports
- breeding failure in Ger. 31:49(r)
- broken eggs in eyries 29:195(r)
- catching prey 28:109(r)
- decrease in clutch size 27:40(r)
- food of 25:170(r); 26:149; 27:196(r); 28:182(r)
- hunting success 25:128(r)
- migr. counts, Ger & Den. 28:165(r)
- nesting ♂ raises young 25:128(r)
- on buildings 24:114(r); 25:67(r)
- success 25:154(r)
- on Baffin Is. 26:147
- pop, low in migr., Sweden 31:46(r)
- rusticolus (Gyr Falcon)
- breeding 25:169(r)
- feeding on Ptarmigan 25:169(r)
- of young 30:52(r)
- sparverius (Am. Kestrel)
- band. - see Banding Reports
- band size 29:91
- cave roosting, high Andes 24:119(r)
- in mist nets 28:117
- in Ungava Peninsula 30:137(r)
- molest doves in traps 22:179
- molts & plumages 28:242(r)
- preying on sick Mourning Dove, a possible mechanism of spread of trichomoniasis to raptors 31:220
- syst., in book 22:43(r)
- winter terr. 27:41(r)
- subbuteo (Hobby)
- band. - see Banding Reports
- food of 24:158(r); 28:182(r)
- migr. & winter home 23:79(r)
- migr. counts, Ger. & Den. 28:165(r)
- nesting success 25:154(r)
- tinnunculus (Eur. Kestrel)
- attacks on, by Starlings 31:103(r)
- band. - see Banding Reports
- breeding biol. 25:68(r); 27:192(r)
- eat own young 31:51(r)
- food of 28:182(r)
- migr. counts, Ger. & Den. 28:165(r)
- nest in nest of White Stork 24:122(r)
- nesting study 25:68(r)
- success 25:154(r)
- palatability of eggs 24:76(r)
- pop. changes 27:101(r)
- vespertinus (Red-footed Falcon)
- band. - see Banding Reports
- L.H. 27:38(r)
- measures to increase pop. 29:253(r)
- young as prey of Goshawk 27:38(r)
- Falcon, Carrion (Milvago chimachina)
- , Eleonora's (Falco eleonorae)
- , Peregrine (F. peregrinus)
- , Red-footed (F. vespertinus)
- Falconer, D.D. (see McNally, J.)
- Falconidae (Falcons)
- band. - See Banding Reports
- in book, N. & Middle Am. 22:43(r)
- Falconiformes
- automatic bow net for trapping 25:115(r)
- book 29:69(r)
- cannibalism among 28:104(r)
- coccidiosis in 29:200(r)
- food habits 23:189(r)
- heart wt. 27:45(r)
- laying, incub. & hatching sequence 28:103(r)
- of Grnl., in book 23:94(r)
- rodenticides & mort. 25:75(r)



- Falconiformes (cont.)  
 Starling flock defense at roost  
 31:51(r)
- Falconry, Goshawk in 30:60(r)  
 -, Goshawk to kill ducks, Japan  
 29:131(r)
- Falla, R.A. Nesting season of  
 Notornis 23:120(r)  
 ---, C.A.Flemming, B.J.Marples, R.B.  
 Sibson, R.H.D. Stidolph & E.C. Turbott.  
 Checklist of N.Z. birds 25:32(r)
- Fallis, A.M. & E.C. Hope. Cycles of  
 Ruffed Grouse in s. Ontario.  
 23:180(r)
- Fänge, R. (see Schmidt-Nielsen, K.)
- Farkas, T. Breeding biol. & ethology  
 of Rock Thrush. 28:102(r)
- Farner, D.S. (see Mewaldt, L.R.)  
 --- Annual stimulus for migr. 22:85(r)  
 --- Age groups & longevity in Am.  
 Robin. 22:92(r)  
 --- Band. data in study of dynamics &  
 structures of avian pop. 24:123(r)  
 --- Birds of Crater Lake Park  
 24:173(r)  
 --- Incub. & body temps. in Yellow-  
 eyed Penguin 30:195(r)  
 --- & L.R. Mewaldt. Natural termina-  
 tion of refractory period in White-  
 crowned Sparrow 28:53(r)  
 --- & ---. Recording diurnal activity  
 patterns in caged birds. 24:55(r)  
 ---, N. Chivers & T. Riney. Body  
 temps. of North Island Kiwis  
 28:177(r)
- FAUNAL DYNAMICS (See Populations, -)
- FAUNISTICS (See Field Identification-  
 FEEDING (see Behavior -)
- Fehring, O. Birds of central Europe  
 23:51(r)
- Felix, J. Daily activity of Parus &  
 Aegithalos. 29:252(r); 31:102(r)
- Ferdinand, L. Migr. of Sanderling in  
 n. Europe. 25:19(r)
- Ferguson-Lees, I.J. (see Nicholson, E.)  
 --- Phot. studies of Great Grey  
 Shrike. 29:67(r)
- Ferren, R.L. Mort. at Dow Air Base  
 ceilometer. 31:97(r)
- Ferry, C. Number of eggs in a clutch  
 in Laro-Limicolae. 28:46(r)
- Fevold, H.R. & J.J. Craighead. Food  
 requirements of Golden Eagle.  
 30:199(r)
- Ficedula albicollis (Collared  
 Flycatcher)  
 band. - see Banding Reports  
 breeding biol. 31:50(r)  
 courtship & pair formation 23:85(r)  
 ethology 31:50(r)  
 feather markings 26:86(r)  
 pop. ecol. 29:121(r)  
 - hypoleuca (Pied Flycatcher)  
 band. - see Banding Reports  
 behav., begging & light 23:176(r)  
 -, breeding, & ecol. 30:192(r)  
 -, brooding, temp. effect 28:235(r)  
 -, feeding young 25:22(r)  
 -, mating, bigamous 30:245(r)  
 -, nesting 24:159(r)  
 feeding biol. 26:126(r)  
 flea pop. in nest boxes 31:56(r)  
 food of nestling, study tech.  
 26:34(r)  
 incub. rhythm &  $\sigma$  presence 30:54(r)  
 L.H. 27:142(r)  
 - - & ethology 31:50(r)  
 migr. routes 25:153(r)  
 nest box design study 28:236(r)  
 - - preferences 28:104(r)  
 - boxes for increasing pops.  
 28:104(r), 175(r)  
 pop. dynamics 24:28(r)  
 returns to birthplace 31:46(r)  
 two clutches incubated in one nest  
 29:118(r)  
 weather effects on nesting 23:173(r)  
 - parva (Red-breasted Flycatcher)  
 extension to Sweden 29:65(r)  
 plumages 30:248(r)  
 - semitorquata (= F. albicollis)
- Fichter, E. Mourning Dove production  
 in ID. orchards. 31:165(r)
- FIELD IDENTIFICATION & FAUNISTICS
- AZ., birds of 23:99(r)  
 Canada, birds of Perry River Region  
 27:198(r)  
 -, - - w. Ontario 26:38(r)  
 Caribbean Is., birds of 28:242(r)  
 Carpodacus finches 27:155  
 Christmas count, value of 26:131(r)  
 Den., Nissum Fjord 27:199(r)  
 Eur., w., Am. land birds in  
 26:131(r)  
 Fr., new journal on birds of  
 25:32(r); 26:42(r), 134(r);  
 27:104 (r), 105(r), 207(r)

FIELD IDENTIFICATION & FAUNISTICS  
(cont.)

- Guides to:  
 bird songs & recordings, e. &  
 central N. Am. 31:107(r)  
 birdwatching 24:174(r)  
 Crater Lake National Park  
 24:173(r)  
 Engl., 24:88(r); 26:175(r)  
 -, nests & eggs 26:174(r)  
 Ger. 24:89(r)  
 MA., where to find 27:51(r)  
 MN., where to find 22:145(r)  
 U.S., localities in 23:53(r)  
 - - water birds 22:199(r)  
 - -, western 28:247(r)  
 - -, -, finding in 25:83(r)  
 West Indies 22:196(r)  
 Wildlife, Am. 31:108(r)  
 Harriers, in Sweden 30:197(r)  
 Hawk, Short-tailed, FL. records  
 25:127(r)  
 Japan, birds of Toroshima 27:196(r)  
 LA., book on birds of 28:184(r)  
 Loons in flight 31:228(r)  
 Neth. West Indies, birds of 27:  
 198(r)  
 Nor., Iceland Merlin in 27:145(r)  
 N.Z. book, birds of 27:151(r)  
 OH., Cleveland region 22:144(r)  
 Pipits, Tawny & Water, occurrence  
 in Ger. 25:79(r)  
 Pochard, Red-crested 29:199(r)  
 Siberia, w. 25:168(r)  
 Tern, Arctic, in subantarctic  
 24:83(r)  
 WA., book on birds of 25:129(r)  
 Warblers, Blackpoll & Baybreasted,  
 leg color 25:16  
 -, Connecticut vs. Mourning 27:185  
 Fieldfare (*Turdus pilaris*)  
 Figala, J. Growth & molt of Phasian-  
 idae 29:257(r)  
 Finch, Black Weaver (*Textor*  
*nigerrimus*)  
 -, Cassin's (*Carpodacus cassini*)  
 -, Cutthroat (*Amadina fasciata*)  
 -, Gray-crowned Rosy (*Leucosticte*  
*tephrocotis*)  
 -, Gray-hooded Sierra (*Phrygilus gayi*)  
 -, Green (*Chloris chloris*)  
 -, House (*Carpodacus mexicanus*)  
 -, Purple (*C. purpureus*)  
 -, Saffron (*Sicalis flaveola*)  
 -, Spice (*Lonchura punctulata*)
- Finch, Steel-green Widow (*Hypochera*  
*chalybeata*)  
 -, Yellow-backed (*Loxipasser*  
*anoxanthus*)  
 -, Zebra (*Poephila castenotis*)  
 Finches, Australian  
 moth larvae in nests of 24:124(r)  
 nest association with wasps 28:  
 49(r)  
 syst. 30:198(r)  
 -, Darwin's (*Geospizidae*)  
 -, Weaver (*Estrildidae*)  
 -, European  
 migr. 25:18(r); 29:114(r)  
 mort. in migr. 30:126(r)  
 -, ornithosis in 29:35  
 FINLAND (see Europe-)  
 Firecrest (*Regulus ignicapillus*)  
 Fire-finch, Rosy (*Lagonosticta*  
*senegala*)  
 Fischer, R.B. Bird. phot. for  
 beginners. 23:63  
 --- Breeding biol. of Chimney Swift  
 30:127(r)  
 Fisher, H.I. (see Richardson, F.)  
 --- Major arteries near heart in  
 Whooping Crane. 27:201(r)  
 --- Hatching muscle in the chick.  
 30:196(r)  
 Fisher, J. (see Scott, P.)  
 --- The Fulmar 24:31(r)  
 --- Bird recognition. 24:88(r);  
 26:175(r)  
 --- Watching birds. 24:88(r)  
 --- Collared Turtle Dove in Eur.  
 25:31(r)  
 Fitch, F.W.Jr. (see Rosene, W.Jr.)  
 --- L.H. & ecol. of Scissor-tailed  
 Flycatcher. 23:34(r)  
 Fitch, H.S. & V.R. Summer Tanager in  
 n.e.KS. 27:39(r)  
 --- & R.L.McGregor. Forest habitat  
 of Univ. of KS. Nat. Hist. Reser-  
 vation. 29:58(r)  
 Fitter, R.S.R. (see Alexander, W.B.)  
 --- Pocket guide to birds. 24:88(r)  
 --- Pocket guide to nests & eggs.  
 26:174(r)  
 Fitzpatrick, J.L.G. Thoughts on  
 natural flight. 24:30(r)  
 Fjeld, P. (see Broch, H.)  
 Flack, B. Birds of Stora Karlso.  
 25:127(r); 29:65(r)  
 --- Visit to Coto Donana, Spain.  
 29:128(r)

- Flack, B. & R. vonShultz. Birds of Stora Karlso 30:50(r)
- Flamingo (*Phoenicopterus ruber*)
- Flamingoes (*Phoenicopteridae*)
- Flemming, C.A. (see Falla, R.A.)
- Notornis in Feb., 1950. 23:122(r)
- & K.A.Wodzicki. Census of Gannet in N.Z. 24:82(r)
- Flicker, Common (=Gilded, = Red-shafted, = Yellow-shafted) (*Colaptes auratus*)
- FLIGHT (see also Anatomy)
- aerodynamics of 24:30(r)
- altitude, increase over sea, of Hedge Sparrow 29:50(r)
- behav., Red-backed Shrike 23:39(r)
- circling, of Starlings at night 31:227(r)
- courtship, of Hummingbirds 26:81(r)
- diving, as response to danger, of Common Sandpiper 27:42(r)
- flapping, anat. & function of 23:123(r)
- hovering, of Wheatear 25:159(r)
- movements related to weather, Swifts 22:39(r)
- nocturnal & crepuscular of Swift 23:88(r)
- of Albatross, Wandering 31:168(r)
- Fulmar, Northern 31:163(r)
- Swift, Chimney, 270 miles in half day 27:84
- patterns, Woodcock 27:195(r)
- physics & biol. of, book 23:98(r)
- soaring, of Accipiters 30:81
- , use of thermals 27:42(r)
- speed, Alpine Swift 31:49(r)
- Swift, spending night in air question. 25:122(r); 26:35(r); 28:172(r)
- Flowerpecker, Mistletoe (*Dicaeum hirundinaceum*)
- Fluck, P.H. Red-eyed Vireo at Washington Crossing. 31:92(r)
- Flycatcher (*Tyrannidae*; *Muscicapidae*)
- , Acadian (*Empidonax virescens*)
- , Alder (*E. alnorum*)
- , Buff-breasted (*E. fulvifrons*)
- , Collared (*Ficedula albicollis*)
- , Crested (*Myiarchus crinitus*)
- , Dusky-capped (*M. tuberculifer*)
- , Gray (*Empidonax wrightii*)
- , Hammond's (*E. hammondi*)
- , Least (*E. minimus*)
- Flycatcher (cont.)
- , Loggerhead (*Tyrannus caudifasciatus*)
- , Olive-sided (*Nuttallornis borealis*)
- , Pied (*Ficedula hypoleuca*)
- , Red-breasted (*F. parva*)
- , Rufous-tailed (*Myiarchus validus*)
- , Sad (*M. barbirostris*)
- , Scissor-tailed (*Muscivora forficata*)
- , Silky (*Ptilogonatidae*)
- , Spotted (*Muscicapa striata*)
- , Traill's (= Willow)
- , Western (*Empidonax difficilis*)
- , Willow (*E. traillii*)
- , Yellow-crowned (*Myiopagis cotta*)
- Fog, J. & K.W.Petersen. Torpidity in Nightjars. 28:242(r)
- Foggitt, G.T. (see Cuthbertson, E.I.)
- Fontaine, V. Bird-banding by Mus. of Nat. Hist., Goteborg. 22:35(r); 24:69(r); 26:75(r); 27:187(r); 28:162(r); 29:113(r)
- Hybridization between Fieldfare & Blackbird. 28:169(r)
- FOOD (see also Behav., feeding & Life Histories)
- acorns, value of to Eur. Jays 28:246(r)
- amount necessary for Golden Eagle 30:199(r)
- - - Goshawk 30:199(r)
- artificial nestling for study of 26:34(r)
- as subject for amateur research 29:67(r)
- asparagus as emergency winter food of Ring-necked Pheasant 23:116(r)
- attracting birds with 22:45(r)
- availability & survival, Titmouse 22:131(r)
- & timing of sex cycle 24:74(r)
- & yield, meas. of 27:45(r)
- Bream as, of Cormorants 25:169(r)
- bud-eating by finches 29:206(r)
- choice, factors in, Titmice 26:40(r), 125(r)
- comparative study, finches 29:206(r)
- competitors, winter, inner London 31:230(r)
- Cotoneaster berries as, of Bohemian Waxwing 23:41(r)
- countershading of caterpillars, adaptive 27:139(r)
- for hand-rearing Starling 22:132(r)

## FOOD (cont.)

- for keeping injured birds 26:86(r)  
 fruits, wild, of Thrushes 25:170(r)  
 hoarding by:  
 Falcon, Peregrine 28:109(r)  
 many spp. 30:198(r)  
 Nutcracker 28:50(r)  
 -, Thick-billed 23:177(r);  
 30:198(r)  
 Owl, Little, winter 30:250(r)  
 owls 24:79(r)  
 Tit, Siberian 25:170(r)  
 identification of pondweed seeds  
 in duck stomachs 23:116(r)  
 mushrooms eaten by Buzzard  
 29:206(r)  
 of:  
 Bee-eaters, nestling 25:66(r)  
 birds of Oak-Beech forest  
 30:128(r)  
 birds of prey 23:189(r);  
 29:206(r)  
 Blackbird, Eur. 28:182(r)  
 Buzzard 28:182(r)  
 Chaffinch 28:182(r)  
 Chicken, Prairie in winter  
 23:132(r)  
 Cormorant, Double-crested  
 25:128(r)  
 -, Eur. 25:169(r); 29:260(r)  
 Crossbill, Red 27:104(r)  
 Cuckoos, s. Afr. 23:122(r)  
 Dove, Mourning, in MO. 30:199(r)  
 -, Stock 26:86(r)  
 Ducks in IL., many spp. 31:55(r)  
 - in WA. 23:188(r)  
 - in winter, Gulf of Mex.  
 30:198(r)  
 -, surface-feeding, in ME.  
 27:44(r)  
 Eagle, Golden 24:113(r)  
 -, -, in Austria 25:79(r)  
 Egret, Little, in Fr. 28:101(r)  
 Falcon, Eleonora 31:58(r)  
 -, Peregrine 25:170(r); 28:  
 182(r)  
 -, Red-footed 27:38(r)  
 Flamingo, Greater 30:129(r)  
 forest birds, Ger. 28:182(r)  
 Flycatcher, Pied 26:126(r)  
 -, Scissor-tailed 23:34(r)  
 Goose, Canada 22:143(r)  
 -, -, in NC. 31:55(r)  
 Goshawk 22:37(r); 25:170(r);  
 27:99(r); 29:206(r)  
 Grosbeak, Pine 27:134(r)  
 Gull, Black-billed young  
 30:134(r)  
 -, Herring, pre-breeding  
 29:129(r)  
 -, -, & economic status in New  
 Brunswick 24:113(r)  
 Gyrfalcon 30:52(r)  
 - in Nor. 25:169(r)  
 Hawk, Eur. Sparrow 23:116(r);  
 25:170(r); 27:99(r); 29:206(r)  
 Hawfinch 29:206(r)  
 Hobby 24:158(r); 28:182(r)  
 Honeycreepers, Hawaiian 25:123(r)  
 Honeyguides 30:128(r)  
 -, in book on, 27:98(r)  
 Ibis, Hadada 23:123(r)  
 Jay, Eur. 23:86(r); 24:74(r)  
 -, -, nestling 28:183(r)  
 Kestrel, Eur. 25:68(r); 28:182(r)  
 -, -, change of, for nestlings  
 27:192(r)  
 Kingfisher, Belted 25:80(r)  
 Kite, Black 28:109(r)  
 Kites 28:109(r)  
 Kiwi 24:21(r); 31:58(r)  
 Lapwing chicks fed tadpoles  
 28:182(r)  
 Magpie nestlings 28:183(r)  
 Merlin 28:182(r)  
 Ovenbird (*Seiurus*) & terr. size  
 30:199(r)  
 Owl, Barn 28:109(r); 30:134(r)  
 -, Eagle 22:41(r); 25:79(r);  
 26:132(r); 27:93(r); 29:128(r)  
 -, Long-eared 25:80(r); 26:40(r);  
 30:127(r); 31:232(r)  
 -, -, in Ger. 24:74(r)  
 -, Pygmy 28:182(r); 29:195(r)  
 -, Screech 23:172(r)  
 -, Short-eared 26:40(r)  
 -, -, after vole plague 27:192(r)  
 -, Snowy 28:182(r)  
 -, Tawny 30:134(r)  
 Partridge, Chukar in WV.  
 23:90(r)  
 Pelican, White 22:37(r)  
 Pigeon, Wood 26:86(r)  
 Pochard, Red-crested 29:199(r)  
 Quail, Bobwhite, in FL. 27:201(r)  
 -, California, in HI. 23:35(r)  
 -, Mountain 24:159(r)  
 Rail, King, in AR. rice fields  
 28:54(r)  
 Rails 26:125(r)

- FOOD of (cont.)
- raptors 28:182(r)
  - Redstart, Black 31:107(r)
  - Rook nestlings, detn. by collar meth. 31:167(r)
  - Scaups 30:61(r)
  - Shrike, Grey, in two biotypes 28:103(r)
  - , Lesser Grey 25:169(r)
  - , Red-backed 27:104(r)
  - Starling 28:182(r)
  - nestlings fed cherries 28:245(r)
  - Stork, White 22:145(r);30:249(r)
  - Swallow, Barn, in book 27:152(r)
  - Swift, Black 28:168(r)
  - Takaha 23:116(r),122(r);24:33(r)
  - Tern, Arctic 28:58
  - , Gull-billed includes Field Mouse. 28:109(r)
  - Tit, Great 28:182(r)
  - , -, young 30:62(r)
  - Titmice 29:260(r)
  - Tui 24:21
  - Warbler, Grasshopper 27:192(r)
  - "waterbirds" 23:51(r)
  - waterfowl, cereal grains, in migr. 24:165(r)
  - wildlife, general, in book 22:194(r)
  - pellet formation & feather-eating of Great Crested Grebe 28:182(r)
  - , comparison of Owls' 25:129(r)
  - pest control by birds, efficacy of 26:39(r),40(r)
  - pine seeds, value of to Red Cross-bill 28:246(r)
  - plants, Am. Wildlife 23:51(r)
  - , Hawaiian Honeycreepers 22:191(r)
  - , waterfowl 22:184(r)
  - preferences, Bobwhite Quail 27:44(r)
  - prey vulnerability, differences of, to Belted Kingfisher 27:202(r)
  - requirements of captive Tits 29:125(r), 205(r)
  - - - Lesser Whitethroat 29:205(r)
  - related to breeding season, Afr. land birds 22:86(r)
  - - - in Eur. 22:87(r)
  - - - in Galapagos Is. 22:87(r)
  - - - of Starling 27:136(r)
  - - - Titmice 22:88(r)
  - - clutch size, Boreal Owl 28:180(r)
  - related to photoperiod 22:39(r)
  - - pop. cycles 22:92(r); 23:89(r); 25:161(r)
  - - terr. size, Am. Ovenbird 30:199(r)
  - - winter movements, White Stork 22:36(r)
  - rice, damage to by Am. Blackbirds 29:59(r)
  - scale insects as, of Long-tailed Tit 29:260(r)
  - starvation, effects on Mallards 25:28(r)
  - wax-eating by Honeyguides 27:202(r)
  - wool of sheep as, for Crows & Magpies 27:47(r)
  - Foote, L.E. & H.S.Peters (eds.). Methods of appraising abundance of Mourning Doves 24:80(r)
  - Ford, A. Bird biographies of Audubon 28:251(r)
  - Ford, E.B. Mendelism & evolution, 5th ed. 22:195(r)
  - Ford, E.R. Birds of Chicago 28:51(r)
  - Formicariidae (Antbirds) relation to Army Ants 26:168(r)
  - wts., Surinam 24:130(r)
  - Forster, G.H. Use of thermal air currents in bird flight. 27:42(r)
  - Forster, J. (see Harrison, C.J.O.)
  - FOSSILS (see Paleontology)
  - Fowl, Domestic (*Gallus gallus*)
  - , Mallee (*Leipoa ocellata*)
  - Fragiere, H. (see Spaepen, J.)
  - FRANCE (see Europe-)
  - Franck, D. Establishment of Black-headed Gulls in Hamburg. 28:179(r)
  - Franden, C.A. Artificial ponds and small lakes. 29:255(r)
  - Franz, J. Pop. cycles in birds & small mammals. 22:92(r)
  - Biological Control. 29:199(r)
  - Franzisket, L. Breeding of Reed Warblers. 27:137(r)
  - Fratricula arctica (Puffin) band. - see Banding Reports
  - egging 26:171(r)
  - pop. in Sweden 27:200(r)
  - Winter Wrens breeding on cliffs with, St. Kilda 30:133(r)
  - Frazier, A. & V. Nolan Jr. Communal roosting by Bluebird in winter 30:219
  - Fregata magnificens (Magnificent Frigatebird)

- Fregata magnificens (cont.)  
 in book, Japanese 28:248(r)
- Fregetta tropica (Black-bellied Storm Petrel)  
 band. - see Banding Reports
- Frenzel, L.D. (see Beer, J.R.)
- Friedmann, H. Birds of N. & Middle Am. 22:43(r)
- Victims of parasitic Cowbirds 23:36(r)
- Honeyguides. 27:98(r);30:128(r)
- African parasitic Cuckoos 28:168(r)
- , L. Griscom & R.T.Moore. Distr. checklist of birds of Mex. Part I. 22:97(r)
- , & J. Kern. Cerophagy of Wax-eating in Honeyguides. 27:202(r)
- Frieling, H. What flies there? 24:89(r)
- Frigatebird, Magnificent (Fregata magnificens)
- Fringilla coelebs (Chaffinch)  
 band. - see Banding Reports  
 banded young rejected by parents 25:61  
 behav. of, monogr. 29:133(r)  
 calls of, anal. 30:62(r)  
 courtship drives 25:26(r)  
 driven off by Yellow-rumped Warbler 26:169(r)  
 food of 28:182(r)  
 forest pop. 25:30(r)  
 life expectancy & site tenacity 29:190(r)  
 migr. 27:132(r),133(r); 28:166(r); 29:50(r); 30:189(r); 31:45(r)  
 - and wind 23:80(r),115(r),116(r); 27:132(r)  
 -, nocturnal 26:77(r)  
 - sampling, by trapping 27:107  
 mobbing behav. 26:34(r)  
 nest in tree with Mistle Thrush 23:172(r); 24:74(r)  
 orient. mechanisms 31:223(r)  
 -, by sun 27:131(r)  
 -, visual 27:132(r)  
 -, wind and 25:115(r)  
 parasitized by Blowflies 28:241(r)  
 pop. dynamics 25:21(r)  
 - estimate, Finl. 24:29(r)  
 sleep, depth of 23:82(r)  
 social hierarchy 27:141(r)  
 song, all day totals 23:87(r)  
 -, awakening, temp. effect 24:86(r)
- song (cont.)  
 - learning 26:41(r)  
 - - & instinct 23:187(r)  
 -, var. in 24:126(r)  
 visual acuity 24:31(r)  
 wt. changes 27:19
- montifringilla (Brambling)  
 band. - see Banding Reports  
 beech reforestation, as agent in 25:159(r)  
 energy & lipid metabolism 29:61(r)  
 invasion, Switz. 25:126(r)  
 migr. 27:133(r); 30:189(r)  
 movements 26:165(r)
- Fringillidae  
 book, L.H. of 26:78(r)  
 food study, comparative 29:206(r)  
 incub. & brooding temps. in arctic 28:53(r)  
 mass mort., TX. 28:231(r)  
 - -, GA. 29:116(r)  
 myology & serology 26:131(r)  
 nets vs. traps for capture 30:38  
 recordings of songs, N. Am. spp. 31:232(r)  
 skull of 26:132(r)  
 winter ecol. in GA. 28:203  
 wts. in Surinam 24:130(r)
- Frings, H. & M. Recorded calls of Eastern Crow as attractants & repellants. 29:67(r)
- , ---, B.Cox & L. Peissner. Recorded calls of Herring Gulls as repellants and attractants. 26:172(r)
- & Jumber, J. Use of specific sound to repel Starlings 26:172(r)
- Frisch, O. von. Breeding biol. & dev. of young in Curlew 28:169(r)
- A blind Short-eared Owl. 29:57(r)
- Faithfulness to terr. & mate in Curlews 29:117(r)
- Married to a Purple Heron. 29:120(r)
- Nesting associations of Redshanks & Lapwings 29:196(r)
- Meaning of parental warning cry for Curlews & other Limicoline chicks 30:130(r)
- Lapwings breeding in captivity & raising of Redshanks by a pair of Lapwings. 31:48(r)
- Dev. of the young. Breeding biol. & comparative ethology of waders. 31:101(r)

- Frith, H.J. Clutch size in the Gold-  
finch. 29:119(r)
- Control of temp. in mound of  
Mallee-fowl 29:192(r)
- Breeding & movement of ducks in  
inland New South Wales. 29:193(r)
- Ducks & the rice industry in New  
South Wales 29:199(r)
- Fritsch, R.H. A newly-formed colony  
of Herring Gulls. 23:124(r)
- Frye, O.E.Jr. (see Laessle, A.M.)
- Fulica americana* (Am. Coot)  
ageing & sexing 23:186(r); 31:54(r)  
capture by night driving 28:153  
flight, & light intensity 24:117(r)  
frontal shield of 23:118(r)  
mort. & migr. 31:54(r)  
nest study 27:39(r)  
netting 28:126  
productivity & water level  
26: 129(r)  
status, Mississippi flyway  
25:73(r)  
trapping 28:153
- *atra* (Eur. Coot)  
band. - see Banding Reports  
breeding behav. & nesting success  
31:162(r)  
censuses 25:126(r); 29:202(r);  
30:249(r)  
chief prey of Eagle Owl 27:93(r)  
feeding association with Little  
Grebe 28:182(r)  
following response 28:107(r)  
in book reviews 23:51(r); 30:137(r)  
in Jura Mts. 28:52(r)  
in N.Z. 30:133(r)  
longevity (see Age, maxima-)  
migr. in Engl. 27:189(r)  
palatability of eggs 24:76(r)
- Fulmars (Procellariidae)  
-, Antarctic (*Fulmarus glacialoides*)  
-, Giant (*Macronecta giganteus*)  
-, Northern (*Fulmarus glacialis*)  
*Fulmarus glacialis* (Northern Fulmar)  
band. - see Banding Reports  
book 24:31(r)  
counts in N. Pacific 23:41(r)  
fledging & incub. 26:168(r)  
in Newfoundland 23:46(r)  
mobbed by Arctic Terns 30:245(r)  
pop. changes 24:33(r); 27:101(r)
- *glacialoides* (Antarctic Fulmar)  
band. - see Banding Reports
- egg meas. 27:91(r)  
nest study 25:119(r)  
reproduction 25:119(r)
- Furnariidae (S. Am. Ovenbirds)  
in check-list, birds of world  
22:142(r)

- Gadwall (*Anas strepera*)
- Galbulidae (*Jacamars*)  
nesting with social insects  
31:98(r)
- Galerida cristata (Crested Lark)  
behav. at nets 27:42(r)  
distr. & climatic shifts 22:93(r)  
host of Common Cuckoo 29:56(r)
- Galliformes  
anat., intestinal 24:167(r)  
anting 29:120(r)  
band. in Finl. 22:83(r)  
biol. of, in book 22:145(r)  
distr. of Am. spp. 27:102(r)  
drinking & scratching 25:71(r)  
egg-rolling 25:71(r)  
heart wt. 27:45(r)  
of Grnl., book 22:192(r)  
syst. 22:190(r)
- Gallinago gallinago (Common, = Wilson Snipe)  
band. - see Banding Reports  
breeding study 29:59(r)  
distr., Canada 26:171(r)  
feeding behav. of young 31:101(r)  
nocturnal activity 26:171(r)  
pop. 23:183(r);24:119(r);26:171(r)  
pop. decrease, Neth. 22:43(r)  
pop. in winter 23:183(r);26:170(r);  
27:195(r); 29:59(r)  
U.S.F.&W. investigations of biol.  
26:170(r);27:194(r);29:59(r)
- Gallinula chloropus (Moorhen, = Florida Gallinule)  
following response 28:107(r)  
laying, incub. & hatching sequence  
28:103(r)  
nestling repairs nest 27:94(r)  
pop. changes 27:101(r)  
tameness of 23:86(r)
- Gallinule, Florida (*Gallinula chloropus*)  
-, Purple (*Porphyryla martinica*)
- Gallirallus australis (Weka)  
color banding of 30:123(r)
- Gallus gallus (Chicken, = Domestic Fowl)  
audiospectrographs 25:77(r)  
behav. 27:141(r); 28:172(r)  
- of normal toward frizzled  
23:124(r)  
-, review 27:141(r)  
-, social, dev. of 24:115(r)  
breeding, book on 24:34(r)
- broodiness reflex of just-hatched  
young & its importance to  
imprinting 31:230(r)  
-, var. in dev. of 24:162(r)  
color preference 29:255(r)  
- - of objects for imprinting  
31:100(r)  
dev., embry. compared to Redwinged  
Blackbird 29:66(r)  
dominance among 31:50(r)  
egg shapes 25:121(r)  
embryo mort. 23:34(r)  
hatching muscle 30:196(r)  
head-leg coordination in walking  
31:231(r)  
hematopoiesis, ontogeny of  
23:118(r)  
imprinting 31:100(r)  
-, critical age 31:166(r)  
indeterminate laying 27:39(r)  
innate food selection 26:33(r)  
- pattern changes in early life  
31:101(r)  
memory of 23:125(r)  
palatability of eggs 24:76(r)  
pecking instinct, improvement of  
23:176(r)  
visual ability 27:141(r)  
- properties of water 29:255(r)
- Game birds  
in bird guide 22:199(r)  
- book 23:51(r)  
- -, extinct & vanishing birds  
29:263(r)
- Ganier, A.F. Ruby-throated Humming-  
birds. 29:117(r)
- Gannet (*Sula bassana*)  
-, Australian (*S. serrator*)  
-, Cape (*S. capensis*)
- Garganey (*Anas querquedula*)
- Garrulus spp. (Jays)  
distr. & evol. 25:168(r)  
- glandarius (Eur. Jay)  
age criteria 22:41(r)  
anting 23:86(r)  
as stimulus for distraction dis-  
plays of nesting passerines  
25:26(r)  
attacked by Golden Oriole 31:49(r)  
band. - see Banding Reports  
beech reforestation, as agent in  
25:159(r)  
behav. 23:37(r), 86(r)  
- & voice 24:117(r)



- Garrulus glandarius (cont.)  
 collection & burial of acorns  
 24:74(r)  
 experiment with countershaded  
 caterpillars 27:139(r)  
 feed on young Chaffinches 29:190(r)  
 food of nestlings 28:183(r)  
 - value of acorns 28:246(r)  
 in book 28:248(r)  
 invasion, s. Sweden 31:46(r)  
 molts & plumages 22:41(r)  
 nests in or on buildings 29:196(r);  
 30:52(r)  
 pop. changes & hunting, Japan  
 30:57(r)  
 - lanceolatus (Lanceolated Jay)  
 breed in captivity 26:125(r)  
 voice & behav. 24:117(r)  
 Gauckler, K. Nightingale & Nutcracker  
 in Franconia. 25:32(r)  
 Gavia spp. (Loons)(see also Gaviidae)  
 adaptations to arctic cold & dark-  
 ness 30:132(r)  
 migr. & identification while in  
 flight, 4 spp., Sweden 31:228(r)  
 - adamsii (Yellow-billed Loon)  
 migr. & identification 31:228(r)  
 - arctica (Black-throated, = Arctic,  
 = Pacific Loon)  
 depth of dive 28:50(r)  
 migr. 27:132(r)  
 -, s. Sweden 29:50(r)  
 - & identification 31:228(r)  
 - immer (Common Loon = Great Northern  
 Diver)  
 L.H. 24:77(r)  
 migr. & Identification 31:228(r)  
 not paired in spring migr. 28:44(r)  
 - stellata (Red-throated Loon)  
 band. - see Banding Reports  
 depth of dive 28:50(r)  
 migr. & identification 31:228(r)  
 -, s. Sweden 29:50(r)  
 pop. decrease, Faeroe Is. 27:199(r)  
 Gaviidae (Loons)  
 band. - see Banding Reports  
 in book, Grnl. birds 22:42(r)  
 migr., s. Sweden 31:227(r)  
 oil & ice hazards 28:181(r)  
 sequence of laying, incub. &  
 hatching 28:103(r)  
 Gehrken, G.A. Shrub Lespedeza as a  
 Quail mgt. plant in s.e. VA.  
 28:175(r)
- Geibert, J. Swallow's nest on back of  
 mounted Sparrow Hawk 28:170(r)  
 Geis, A.D. (see Stewart,R.E.)  
 --- Annual & shooting mort. estimates  
 for Canvasback. 31:54(r)  
 Geis, M.B. Productivity of Canada  
 Geese in Flathead Valley, MT.  
 28:240(r)  
 Geissbuhler, W. Biol. of Chiff-Chaff  
 26:33(r)  
 Genelly, R.E. Annual cycle in Calif-  
 ornia Quail. 27:191(r)  
 Gelochilidon nilotica (Gull-billed  
 Tern)  
 roosting & feeding habits 28:109(r)  
 Geocichla spp.  
 syst.,(including subgen. Platycichla  
 & Psophocichla) 22:136(r)  
 Geococcyx californianus (Roadrunner)  
 attacks mouse in Bal-chatri trap  
 30:26  
 myology & osteology 24:167(r)  
 Geopelia cuneata (Diamond Dove)  
 behav., voice, flight of young at  
 11-12 days of age. 31:230(r)  
 - placida (Peaceful Dove)  
 nesting study 28:168(r)  
 George, J.L. The pesticide problem.  
 31:165(r)  
 Geospizidae (Darwin's Finches)  
 breeding times 22:87(r)  
 Geothlypis trichas (Common Yellow-  
 throat)  
 band. - see Banding Reports  
 band size 25:15; 29:93  
 descr., newly hatched 27:125  
 first record, Engl. 27:187(r)  
 mass mort., TX. 28:230(r)  
 natal down 29:235  
 sex, age & daily wt. 26:19  
 subspp. in GA. 23:96(r)  
 wt. 27:175  
 - & meas. 29:109  
 Geotrygon montana (Ruddy Quail-Dove)  
 band size 29:91  
 soft part colors 27:179  
 Gerber, R. Birds as destroyers of  
 plant lice. 26:40(r)  
 GERMANY (see Europe-)  
 Geroudet, P. Annual water bird  
 censuses in Fr. Switz. 29:202(r);  
 30:249(r)  
 --- Migr. of Titmice banded at Breto-  
 let Pass, 1957. 31:97(r)

- Geroudet, P. (cont.)  
 --- & P. Barruel., Birdlife in Jura Mts. 28:52(r)
- Gerygone (Warblers, Bush)  
 nest association with wasps  
 24:124(r)
- Giban, J. (see Jouanin, C.)  
 ---Acoustical research on Crows.  
 28:110(r)
- Giban, M.J. (see Bourdelle, M.E.)
- Gibb, J. Breeding biol. of Great & Blue Titmouse. 22:88(r)
- Feeding rates of Great Tits.  
 26:127(r)
- Food requirements & observations of captive Tits 29:125(r)
- & C. Waxwings in winter of 1949-1950. 23:41(r)
- & P.H.T.Hartley. Bird foods & feeding habits as subjects for amateur research 29:67(r)
- Gill, G. Discussion of Robin banding. 31:160(r)
- Gillham, E.H. Red-crested Pochard drakes bringing food to their mates 27:42(r)
- Voice of a fledgling Robin.  
 27:141(r)
- Notes on Tufted Duck in St. James Park, London. 28:173(r);30:191(r)
- Gillham, M.E. Feeding habits & seasonal movements of Mute Swans on s. Devon estuaries. 28:183(r)
- Givens, L.S. & T.Z.Atkeson. Use of cover crops in s.e. waterfowl mgt. 27:143(r)
- Glasgow, L.L. Night driving of Coots for banding on wintering ground. 28:153
- Glaucidium spp.  
 tail molt 26:38(r)
- gnoma (Am. Pygmy Owl)  
 folk names, Canadian 29:202(r)
- passerinum (Eur. Pygmy Owl)  
 calls & displays 31:102(r)  
 food 28:182(r)  
 observed in Jura Mts. 28:52(r)  
 phot. study & L.H. 29:195(r)  
 response of Bullfinches to  
 23:176(r)
- Glenny, F.H. Patterns in the aortic arch system of birds & their phylogenetic significance. 27:147(r)
- Glover, F.A. Nesting & production of Blue-winged Teal in n.w.IA. 27:138(r)
- Gnatcatcher, Blue-gray (Poliophtila caerulea)
- Goatsuckers (Caprimulgidae)
- Godel, M. Fall migr. in passes of Cou & Bretolet. 29:248(r)
- Godwit, Bar-tailed (Limosa lapponica)
- , Black-tailed (L. limosa)
- Goethe, F. Social hierarchy in hand-reared group of Herring Gulls. 25:72(r)
- Experimental ending of incub. & breeding behav. of Herring Gull. 26:32(r)
- Invasions of Leach's & Storm Petrels in central Eur. 26:39(r)
- Raising young Herring Gulls. 27:193(r)
- & R. Kuhk. Band. results with Ger. Peregrine Falcons & Hobbies. 24:71(r)
- - --- Vogelwarte cooperators. 25:16(r)
- Goin, O.B. World outside my door. 27:51(r)
- Goldcrest (Regulus regulus)
- Goldeneye, Am. (Bucephala clangula)
- , Barrow's (B. islandica)
- Goldfinch, Am. (Spinus tristis)
- , Eur. (Carduelis carduelis)
- , Lawrence's (Spinus lawrencei)
- , Lesser (S. psaltria)
- Goldman, E.A. Biol. investigations in Mex. 23:52(r)
- Goldschmidt, R.B. Understanding heredity. 23:190(r)
- Goller, T. Breeding of Black Redstart. 25:68(r)
- Gompertz, T. Observations on the feral pigeon in London. 28:244(r)
- Gooch, G. Modifications in mass goose trapping tech. 27:34(r)
- Good, I.J. Pop. frequencies of spp. & estimation of pop. parameters. 25:117(r)
- Goodacre, M.J. Origin of winter visitors to Br.Is. 31:91(r)
- & D. Lack. Early breeding in 1957. 30:243(r)
- Goodbody, I.M. Post-fledging dispersal of juv. Titmice. 24:25(r)

- Goodbody, I.M. (cont.)  
 --- Autumn migr. on Kintyre Peninsula  
 28:166(r)
- Goodman, L.A. Sequential sampling  
 tagging for pop. size problems.  
 24:158(r)
- Pop. growth of the sexes.  
 25:118(r)
- Goodpasture, K.A. Recovery of Chickadee pop. from 1951 ice storm.  
 27:90(r)
- Goodwin, D. Behav. of *Garrulus glandarius*. 23:37(r), 38(r)
- Notes & display of Magpie  
 23:188(r)
- Barbary-Doves kept at semi-liberty. 24:116(r)
- Voice & behav. in two Old World Jays. 24:117(r)
- Reactions of nesting passerines toward live & stuffed Jays.  
 25:26(r)
- Juv. Mistle Thrushes showing reproductive behav. patterns.  
 25:159(r)
- Lanceolated Jays breeding in captivity 26:125(r)
- Notes on feral pigeons. 26:126(r)
- "Anting" by birds. 26:127(r)
- Reproductive behav. of Rooks.  
 26:168(r)
- Voice & behav. of Red-legged Partridge. 27:40(r)
- Notes on Eur. wild pigeons.  
 27:42(r)
- Significance of some behav. patterns of pigeons. 27:193(r)
- Voice & display of certain pigeons  
 28:49(r)
- Pairing & submissive behav. of Red-legged Partridge. 30:55(r)
- Observations on Blue-breasted Waxbills. 31:164(r)
- Taxonomy of some Am. doves.  
 30:198(r)
- Observations on Diamond Dove.  
 31:230(r)
- Comparative ecol. of pigeons in inner London. 31:230(r)
- Goosander (*Mergus merganser*)
- Goose, Andean (*Chloephaga melanoptera*)
- , Barnacle (*Branta leucopsis*)
- , Bean (*Anser fabalis*)
- , Blue (= Snow
- , Brent, = Brant (*Branta bernicla*)
- , Canada (*B. canadensis*)
- , Cape Barren (*Cereopsis novaehollandiae*)
- , Emperor (*Anser canagicus*)
- , Grey Lag (*Anser anser*)
- , Hawaiian (= Nene)
- , Maned (*Chenonetta jubata*)
- , Nene (*Branta sandvicensis*)
- , Pied, = Magpie (*Anseranus semipalmatus*)
- , Pink-footed (= Bean)
- , Ross's (*Chen rossii*)
- , Snow (*Chen caerulescens*)
- , White-fronted (*Anser albifrons*)
- , -, Lesser (*A. erythropus*)
- Gorbman, A. Comparative Endocrinology. 31:59(r)
- Goshawk (*Accipiter gentilis*)
- Gouttenoire, G. List of Tunisian birds. 28:52(r)
- Graber, R.R. and Cochran, W.W. Audio tech. for study of nocturnal migr. 31:94(r)
- Grackle, Boat-tailed (= Great-tailed)
- , Common (*Quiscalus quiscula*)
- , Greater Antillean (*Q. niger*)
- , Great-tailed (*Cassidix mexicanus*)
- Graetz, K. (see Davison, V.E.)
- Grange, W.B. The way to game abundance: an explanation of game cycles. 22:138(r)
- Those of the forest. 25:85(r)
- Grant, C.H.B. (see Mackworth-Praed, C.)
- Grassquit, Black-faced (*Tiaris bicolor*)
- , Yellow-faced (*T. olivacea*)
- Grebes (*Podicipedidae*)
- , Black-necked (= Eared) (*Podiceps nigricollis*)
- , Great Crested (*P. cristatus*)
- , Least (*P. dominicus*)
- , Little (*P. ruficollis*)
- , Pied-billed (*Podilymbus podiceps*)
- , Red-necked (*Podiceps grisegena*)
- , Western (*Aechmophorus occidentalis*)
- Greeley, F. Sex & age studies in Fall-shot Woodcock. 24:167(r)
- Greenfinch (*Carduelis chloris*)
- GREENLAND (see also Banding Reports; Recoveries & Returns)
- birds of, books 22:42(r), 192(r)  
 23:94(r)
- cons. in 26:171(r)
- establishment of Fieldfare 23:94(r)

- Greenshank (*Tringa nebularia*)  
 Greenwalt, L.A. (see Sowls, L.K.)  
 Greenway, J.C.Jr. (see Mayr, E.)  
 --- Extinct & vanishing birds of the world. 29:262(r)  
 Gregg, A. Medical aspect of the pop. problem. 26:171(r)  
 Gregory, W.K. Evolution emerging. 22:140(r)  
 Gressores (see Ciconiiformes)  
 Greve, K. Mixed clutch of Oystercatcher & Ringed Plover. 30:244(r)  
 Grieb, J.R. & M.G.Sheldon. Radio-controlled firing device for cannon-net trap. 27:188(r)  
 Griffin, D.R. Acoustic orientation in Oil Bird. 25:78(r)  
 --- Listening in the dark. 30:63(r)  
 Griffith, R.E. (see Hanson, H.C.)  
 Grim, H. Biometric observations on Ger. pops of House Sparrow. 29:64(r)  
 Grimm, F.C. Recoveries of Evening Grosbeaks banded at Carlisle during 1951-'52 invasion. 25:9  
 Griscom, L. (see Friedmann, H.)  
 --- & D.E.Snyder. Birds of MA., a check-list 27:100(r)  
 ---, A. Sprunt & others. Warblers of America.  
 Groebbels, F. Morning beginning & evening ending of bird voices. 28:110(r)  
 --- Reaction of songbirds to elimination of possibility of further laying in the nest. 28:237(r)  
 --- Explanation of my nest-blocking experiments with songbirds. 28:137(r)  
 --- & F. Moebert. Relationships between sequence of laying, intervals between layings, start of incubation, sequence of hatching & intervals between hatchings. 28:103(r)  
 Grosbeak, Black-headed (*Pheucticus melanocephalus*)  
 -, Blue (*Guiraca caerulea*)  
 -, Evening (*Hesperiphona vespertina*)  
 -, Pine (*Pinicola enucleator*)  
 -, Rose-breasted (*Pheucticus ludovicianus*)  
 -, Scarlet (*Carpodacus erythrinus*)  
 Groskin, H. "Anting" by birds. 23:37(r)  
 --- Duck Hawks nesting on man-made structures. 24:114(r)
- Grosskopf, G. Mixed clutch of Oystercatcher & Common Tern. 28:236(r)  
 Ground-Tyrants (*Muscisaxicola* spp.)  
 Grouse, Black (*Lyrurus tetrix*)  
 -, Blue (*Dendragapus obscurus*)  
 -, Hazel (*Tetrastes bonasia*)  
 -, Pinnated (*Tympanuchus cupido*)  
 -, Red (*Lagopus lagopus*)  
 -, Ruffed (*Bonasa umbellus*)  
 -, Sage (*Centrocercus urophasianus*)  
 -, Sharp-tailed (*Pedioecetes phasianellus*)  
 -, Spruce (*Canachites canadensis*)  
 -, Willow (= Red Grouse = Willow Ptarmigan)  
 GROWTH (see Development)  
 Gruiformes (Cranes)  
 heart wt. 27:45(r)  
 Grundy, P.M. Expected frequencies in a sample of an animal pop. in which the abundance of spp. are log-normally distr. 23:78(r)  
 Grus sp.  
 hunting of, with Goshawk 30:60(r)  
 - americana (Whooping Crane)  
 arteries near heart 27:201(r)  
 in annotated list, Saskatchewan 31:109(r)  
 in book, vanishing birds 29:68(r)  
 recording includes calls 31:108(r)  
 - canadensis (Sandhill Crane)  
 L.H., 18 yr. study in MI. 23:35(r)  
 nesting study 29:264(r)  
 - grus (European Crane)  
 behav., change of guard at nest 28:171(r)  
 migr. 23:80(r); 28:165(r)  
 nest, descr. of 28:180(r)  
 roosts threatened, Neth. 30:249(r)  
 - vipio (White-naped Crane)  
 pop. increasing, Japan 27:197(r)  
 Gualtierotti, T., B.Schreiber, D. Mainardi & D. Passerini. Effect of acceleration & cerebellar potentials in birds: relation to sense of direction. 31:224(r)  
 Guano  
 biogeochemistry of 22:192(r)  
 enterprise in s.w.Afr. 24:164(r)  
 Guara alba (White Ibis)  
 in book, travels of Wm. Bartram 29:263(r)  
 status, Caribbean Is. 28:243(r)  
 vagrant in N.Z. 30:133(r)

- Gudmundson, F. (see Scott, P.)  
 Guichard, G. Occurrences in Fr. of  
   White-winged Tern. 28:53(r)  
 Guiler, E.R. Aerial survey of numbers  
   of Cape Barren Goose in Furneaux  
   Group, Bass Strait. 29:123(r)  
 Guillemot (*Uria aalge*)  
 -, Black (*Cepphus grylle*)  
 -, Brunnich's (=Brunnich's Murre)  
*Guiraca caerulea* (Blue Grosbeak)  
   band. - see Banding Reports  
   band size 29:93  
 Gulls (*Larinae*)  
   Black-backed, Great (*Larus*  
     *marinus*)  
   -, Lesser (*L. fuscus*)  
   Black-billed (*L. bulleri*)  
   Black-headed (*L. ridibundus*)  
   -, Mediterranean (*L. melanocephalus*)  
   -, Greater (*L. ichthyæetus*)  
   Bonaparte's (*L. philadelphia*)  
   California (*L. californicus*)  
   Common (*L. canus*)  
   Dolphin (*Leucophaeus scorbesbii*)  
   Dominican (*Larus dominicanus*)  
   Franklin's (*L. pipixcan*)  
   Glaucous (*L. hyperboreus*)  
   Glaucous-winged (*L. glaucescens*)  
   Herring (*L. argentatus*)  
   Iceland (*L. glaucoïdes*)  
   Ivory (*Pagophila eburnea*)  
   Little (*Larus minutes*)  
   Laughing (*L. atricilla*)  
   Red-billed (= Silver)  
   Ring-billed (*L. delawarensis*)  
   Ross's (*Rhodostethia rosea*)  
   Sabine's (*Larus sabini*)  
   Silver (*L. novaehollandiae*)  
   Slender-billed (*L. genei*)  
   Thayer's (*L. thayeri*)  
   Western (*L. occidentalis*)  
 Gullion, G.W. Frontal shield of the  
   Coot. 23:118(r)  
 --- Sex & age detn. in Coot. 23:186(r)  
 Gulotta, W. & L. Banding Mourning  
   Doves in e. NE. 22:181(r)  
 Gunn, W.W.H. (see Bagg, A.M.; Borrer,  
   D.J.)  
 --- & A.M. Crocker. Anal. of unusual  
   migr. in N. Am. during storm of  
   April 4-7, 1947. 24:71(r)  
 Gunvalson, V.E. (see Petraborg, W.H.)  
 Gurr, L. Food of chick of *Notornis*  
   *hochstetteri*. 23:116(r)
- Gwynn, A.M. (see Downes, M.C.)  
 --- Egg-laying & incub. periods of  
   Rockhopper, Macaroni & Gentoo  
   Penguins. 25:65(r)  
*Gymnogyps californianus* (California  
   Condor)  
   in book on cons. 23:50(r)  
   monogr. 24:172(r)  
*Gymnorhinus dorsalis* (Western  
   Magpie)  
   annual cycle 28:235(r)  
   band. - see Banding Reports  
   L.H. & cooperative behav.  
     28:235(r)  
*Gymnostonops* sp.  
   nestling period, in book 26:79(r)  
*Gyps coprotheres* (Cape Vulture)  
   band. - see Banding Reports  
 - *fulvus* (Griffon Vulture  
   at 8,000 ft. altitude 26:123(r)  
*Gyr Falcon* (*Falco rusticolus*)

- Haartman, L. von. The Pied Flycatcher feeding biol. 26:126(r)  
incub. rhythm in presence & absence of ♂. 30:54(r)  
reaction to its eggs 24:159(r)  
stimuli for feeding of young. 25:22(r)  
--- Influence of temp. on awakening song of Chaffinch 24:86(r)  
--- Influence of temp. on brooding rhythm. 28:235(r)  
--- Decrease of Corncrake. 31:105(r)
- Haas, G. Banding of Marsh Harrier. 27:86(r)  
--- Observations at roost of three spp. of Harriers. 31:51(r)
- HABITAT (see Ecology-)
- Hachisuka, M. Bibliography of Chinese birds. 24:125(r)
- Hachler, E.M. L.H. of Great Crested Grebe. 29:252(r)
- Hadada (Hagedashia hagedash)  
Haematopus ostralegus (Oystercatcher) age - see Age, maxima-attachment to mate 27:86(r)  
band. - see Banding Reports breeding inland 24:160(r)  
- pop., Finl. 23:129(r)  
clutch mixed with Common Tern 28:236(r)  
- - - Ringed Plover 30:244(r)  
counting flocks by phot. 29:67(r)  
displacement sleeping as response to predators 25:122(r)  
distraction of, by Kentish Plover 24:75(r)  
feeding behav. 30:193(r)  
- - of young 31:101(r)  
flocking behav. 24:163(r)  
food, amount eaten in captivity 29:260(r)  
migr., Engl. 29:188(r)  
pop. changes. Neth. 22:43(r)  
- - on Mellum Is. 27:86(r)  
- - on Rott Is. 22:135(r)  
site tenacity 25:153(r)
- Haftorn, S. Var. in winter wt. of Great Tits. 25:166(r)  
--- Storing of food by Siberian Tit. 25:170(r)  
--- Geogr. & pop. changes in Nor. avifauna during past 100 yrs. 30:249(r)
- Hagar, J.A. Proposal for more effective waterfowl mgt. in New Engl. & Long Island. 25:124(r)  
Hagedashia hagedash (Hadada Ibis) L.H. 23:123(r)
- Hagen, Y. & E.K.Barth. Gyrfalcons at Dovre, Nor. 25:169(r)
- Haines, T.P. (see Johnston, D.W.)
- Hakansson, G. Birdlife at Visby coast, winter, 1956 28:181(r)
- Halcyon pileata (Black-capped Kingfisher)  
response of Bullfinch to mounted specimen 23:176(r)
- Hale, J.B. (see Dorney, R.S.)  
--- & R.F.Wendt. Ruffed Grouse hatching dates in WI. 22:186(r)
- Haliaeetus albicilla (White-tailed, = Sea Eagle)  
band. - See Banding Reports hunting success 25:128(r)  
pop. estimate, Grnl. 23:94(r)  
- -, Sweden & Finl. 28:176(r)  
- leucocephalus (Bald Eagle) band - see Banding Reports band, locking type for 31:90  
book, Eagle Man. 25:82(r)  
nests in FL. 26:32(r)  
predation on ducks 24:165(r)
- Hall, M.F. (see Moynihan, M.)
- Halloran, P.O. Bibliography of diseases of wild mammals & birds. 27:103(r)
- Halobaena caerulea (Blue Petrel) in antarctic 29:13
- Hamerstrom, F.N.Jr. & F. Daily & seasonal movements of WI. Prairie Chickens. 22:36(r)  
--- --- Sharp-tails into the shadows? 24:24(r), 84(r)  
--- & O.E.Mattson. Guide to Prairie Chicken mgt. 29:253(r)
- Hamilton, M. Wt. of wild Bobwhites in central MO. 28:222
- Hamilton, T.H. Adaptive var. in genus Vireo. 31:58(r)
- Hammersley, J.M. Capture-recapture anal. 25:117(r)
- Hammond, M.C. Causes of duck nest predation. 28:175(r)  
--- & C.J.Henry. Success of Marsh Hawk nests in ND. 23:36(r)  
--- & G.E.Mann. Waterfowl nesting islands. 28:240(r)
- Hamparian, V. (see Worth, C.B.)
- Hann, H.W. Biol. of Birds. 24:173(r)

- Hansen, L. Diurnal & ann. rhythms of Tawny Owl. 25:157(r)
- Hansen, N. (see Beer, J.R.)
- Hanson, H.A. & R.H. Smith. Canada Geese of Mississippi Flyway with special reference to the IL. flock 22:143(r)
- Hanson, H.C. (see Levine, N.D.)
- Artificial propagation of Wood Duck. 22:186(r)
- Inter-family dominance in Canada Geese. 24:163(r)
- Apparatus for study of incubated bird eggs. 25:157(r)
- Criteria of age of incubated Mallard, Wood Duck & Bobwhite Quail eggs. 26:32(r)
- White spotting and other plumage variations in geese. 23:42(r)
- & R.E. Griffith. S. Atlantic Canada Goose pop. 23:1
- , N.D. Levine & S. Kantor. Filariae in wintering Canada Geese. 27:149(r)
- , P. Queneau & P. Scott. Geog. of birds & mammals of Perry River region. 27:198(r)
- Hanson, W.C. & R.L. Browning. Nesting studies of Canada Geese on Hanford Reservation. 31:53(r)
- Hansson, G. (see Lundin, A.)
- & G. Wallin. Invasion of Waxwings, 1956-'57. 30:124(r)
- Hanstrom, B. Family life of the Wryneck. 31:99(r)
- Hantge, E. Breeding biol. of Lesser Grey Shrike. 29:195(r)
- Hardy, J.W. Least Tern in Mississippi Valley. 28:250(r)
- Harper, F. Birds of Nueltin Lake expedition, Keewatin. 24:169(r)
- Travels of William Bartram. 29:263(r)
- Birds of Ungava Peninsula. 30:136(r)
- Harper, W.G. Detection of birds by centimetric radar, a cause of "radar angels". 31:41(r)
- Roosting movements & migr. departures from roosts as seen by radar. 31:43(r)
- Harrier, Hen (*Circus cyaneus*)
- , Marsh (=Marsh Hawk) (*C. aeruginosus*)
- Harrier (cont.)
- , Montagu's (*Circus pygargus*)
- , Pallid (*C. macrourus*)
- , Swamp (*C. approximans*)
- Harrington, H.J. Visit to Emperor Penguin rookery at Coulam Is., Ross Sea, Antarctica. 31:57(r)
- Harris, S.W. (see Yocom, C.F.)
- & M.A. Morse. Mist nets for capturing nesting Mourning Doves. 30:184(r)
- Harrison, C.J.O. & J. Forster. Wood Lark terr. 31:99(r)
- Harrison, J.C. Bird Portraits. 22:44(r)
- Harrison, J.M.D. Three robins feeding one brood. 24:78(r)
- Hartley, H.O., P.G. Homeyer & E.L. Kozicky. Use of log transformation in anal. Fall roadside pheasant counts. 27:143(r)
- Hartley, P.H.T. (see Gibb, J.)
- Experimental anal. of inter-specific recognition. 22:89(r)
- Wild fruits in diet of Engl. thrushes. 25:170(r)
- Hartman, F.A. Heart wt. in birds. 27:45(r)
- & R.P. Albertin. Preliminary study of avian adrenal. 24:79(r)
- Hartshorne, C. Monotony-threshold in singing birds. 28:54(r)
- Relation of bird song to music. 30:135(r)
- Hatching, sequence related to laying & start of incub. 28:103(r)
- Hatter, J. (see Cowan, I.M.)
- Haugen, A.O. (see Dahlen, J.H.)
- Trichomoniasis in Mourning Doves. 23:186(r)
- Age detn. in Bobwhite Quail. 29:60(r)
- Hauri, R. Biol. of the Raven. 28:48(r)
- Haverschmidt, F. Bird wts. from Surinam. 22:85(r); 24:130(r)
- Birds from Surinam. 23:36(r); 27:206(r)
- A tame Grey-winged Trumpeter. 24:78(r)
- L.H. of Blood-colored Woodpecker in Surinam. 24:163(r)
- Marsh Harrier clutch size & nesting success. 25:23(r)

- Haverschmidt, F. (cont.)  
 --- Breeding habits of *Panyptila cayennensis*. 30:55(r)  
 --- Bill color of summering immature Common Terns. 30:247(r)  
 --- Notes on Cattle Egret in Surinam 30:250(r)  
 HAWAII (see Oceanic Islands)  
 Hawfinch (*Coccothraustes coccothraustes*)  
 Hawk, Broad-winged (*Buteo platypterus*)  
 -, Cooper's (*Accipiter cooperii*)  
 -, Duck (= Falcon, Peregrine)  
 -, Galapagos (*Buteo galapagoensis*)  
 -, Gray (*B. nitidus*)  
 -, Harris' (*Parabuteo unicinctus*)  
 -, Marsh (= Harrier, Marsh)  
 -, Pigeon (= Merlin)  
 -, Red-shouldered (*Buteo lineatus*)  
 -, Red-tailed (*B. jamaicensis*)  
 -, Rough-legged (*B. lagopus*)  
 -, Sharp-shinned (*Accipiter striatus*)  
 -, Short-tailed (*Buteo brachyurus*)  
 -, Sparrow, Am. (= Kestrel, Am.)  
 -, -, Eur. (*Accipiter nisus*)  
 Hawksley, O. Ecol. of breeding Arctic Terns. 28:57  
 Hayman, R.W. Nestling Moorhen repairing nest. 27:94(r)  
 Hazelhoff, E.H. Structure & function of bird lung. 23:81(r)  
 HEARING  
 sense of, in birds 25:29(r)  
 Hediger, H. Wild Animals in captivity 22:45(r)  
 Hedymeles (= *Pheucticus*)  
 Heim, R. Pellets of Tawny Owl. 30:134(r)  
 Heinroth, O. & K. The Birds. 30:64(r)  
 Hellebrekers, W.P.J. Authenticity of two-egg sets of *Sterna sandvicensis* 28:234(r)  
 --- & A.W. Distr., adaptation of eggs & breeding biol. of *Cuculus canorus* 25:69(r)  
 Helm, L.G. Plastic collars for marking geese. 27:34(r)  
 Helminen, M. Occurrence of Red-flanked Bluetail in Finl. 30:60(r)  
 Helminthos vermivorus (Worm-eating Warbler)  
 band. - see Banding Reports  
 band size 29:92
- Helms, C.W. Song & Tree Sparrow wts. & fat before & after a night of migr. 31:95(r)  
 --- & W.H.Drury Jr. Winter & migr. wt. & fat of N. Am. Buntings. 31:1  
 Hemipodes (*Turnicidae*)  
 Hempel, C. Migr. of Wheatears 31:45(r)  
 --- & W. Reetz. Migr. of Redstart & Black Redstart as shown by band returns. 31:97(r)  
 Hen, Domestic (*Gallus gallus*)  
 -, Hazel (*Tetrastes bonasia*)  
 -, Heath (*Tympanuchus cupido*)  
 Hendrickson, G.O. (see Boldt, W.; Crooks, M.P.; Kozicky, E.L.; Tanner, W.D.)  
 Hendron, L.R. House Wren in TN 28:181(r)  
 Henry, C.J. (see Hammond, M.C.; Walkinshaw, L.H.)  
 Henry, R. (see Miller, A.W.)  
 Hensley, M.M. & J.B.Cope. Removal & repopulation of breeding birds in spruce-fir community. 24:84(r)  
 Henson, B.R. & J.D.Johnston. Nest boxes for Sand Martins. 26:167(r)  
 HERBICIDES (see Pesticides-)  
 Herman, C.M. (see Wehr, E.E.)  
 --- Recognition of *Trichomoniasis* in Doves. 24:11  
 --- & E.E.Wehr. Occurrence of gizzardworms in Canada Geese. 26:131(r)  
 Hermann, W. Brother-sister mating & care of brood by ♂ Mallard. 25:26(r)  
 Hermanson, W. Nest of Golden Oriole in s. Scania. 28:169(r)  
 Hermit, Little (*Phaethornis longuemareus*)  
 Herons (*Ardeidae*)  
 -, Black-crowned Night (*Nycticorax nycticorax*)  
 -, Great Blue (includes Great White) (*Ardea herodias*)  
 -, Green (*Butorides virescens*)  
 -, Grey, = Common (*Ardea cinerea*)  
 -, Purple (*A. purpurea*)  
 -, Squacco (*Ardeola ralloides*)  
 Herroelen, P. Breeding biol. of Barn Swallow. 31:99(r)  
 Hesperiphona vespertina (Evening Grosbeak)  
 age criteria 22:23  
 band. - see Banding Reports



- Hesperiphona vespertina (cont.)  
 band colors for regional study  
 22:32  
 band size 22:32; 23:75  
 behav. & molt 25:95  
 breeding in MA. 30:266  
 - - NY. 24:135  
 courtship behav. 29:28  
 handling safely 22:34  
 hippoboscids from 24:138  
 incursions in n.e.U.S. 29:128(r);  
 31:140  
 migr. sampling by trapping 27:107  
 -, westward 28:98  
 mort. 31:150  
 netting 28:124  
 plumage, juv. 29:31  
 sex detn. 22:23  
 summer occurrences 25:87; 27:157,  
 166; 31:106(r)  
 survey, winter 23:139, 144; 31:  
 167(r)  
 tech., baits for trapping 22:32  
 -, for marking 22:32  
 Hess, E.H. (see Rheingold, H.L.;  
 Schaeffer, H.H.)  
 --- Comparative psychology 24:114(r)  
 --- Imprinting 29:251(r); 31:100(r),  
 166(r)  
 --- Preferences of ducklings & chicks  
 for objects of different colors.  
 29:255(r)  
 Hewitt, O.H. Cycles in pops. 25:160(r)  
 Heyder, R. Nesting of Penduline Tit.  
 22:88(r)  
 HIBERNATION  
 of captive Goatsuckers 27:41(r)  
 of Poor-will 22:85(r)  
 Hickey, J.J. Mort. records as indices  
 of migr. in Mallard. 23:81(r)  
 --- Mallard hunting mort. 23:128(r)  
 --- Survival studies of banded birds.  
 24:26(r)  
 --- Guide to bird watching. 24:174(r)  
 --- Mean intervals in indices of  
 wildlife pops. 25:164(r)  
 --- Autumnal migr. of ducks banded  
 in e. WI. 29:47(r)  
 Hickling, R.A.O. Social behav. of  
 wintering gulls. 29:121(r)  
 Hicks, E.A. Check-list & bibliography  
 on occurrence of insects in birds'  
 nests 31:61(r)  
 Hieraeetus pennatus (Booted Eagle)  
 nesting in Fr. 27:138(r)  
 Hight, G.L. (see Odum, E.P.)  
 Hill, W.P. Birds between the Monad-  
 nocks. 27:207(r)  
 Hillstar, Andean (Oreotrochilus  
 estella)  
 Hilprecht, A. Banding of Starlings  
 in Saxony. 27:136(r)  
 Himantopus himantopus (Black-  
 necked Stilt)  
 in s.e.Brazil 30:65(r)  
 trans-gulf migrant 29:45(r)  
 Himantione sanguinea (Apapane)  
 ann. cycle, environment & evol.  
 25:123(r)  
 in book on honeycreepers.  
 22:191(r)  
 Hinde, R.A. Behav. of Great Tit &  
 other related spp. 23:191(r)  
 --- Explanation of paper-tearing  
 behav. 24:118(r)  
 --- Conflict between drives in  
 Chaffinch courtship & copulation  
 25:26(r)  
 --- Appetitive behav., consumatory  
 act & hierarchical organization of  
 behav., special reference to  
 Great Tit. 25:72(r)  
 --- Factors governing changes in  
 strength of inborn response as  
 shown by mobbing behav. of  
 Chaffinch. 26:34(r)  
 ---, W.H.Thorpe & M.A.Vince. Follow-  
 ing response of young Coots &  
 Moorhens. 28:107(r)  
 Hindwood, K.A. Moth larvae in birds'  
 nests 24:124(r)  
 --- Bird/wasp nesting associations  
 28:49(r)  
 --- Arctic Tern in Australia.  
 30:249(r)  
 --- Nesting of birds in nests of  
 social insects. 31:98(r)  
 Hirundinidae (Swallows)  
 migr. in Alps 25:17(r)  
 nets vs. traps for capture 30:38  
 trans-gulf migr. routes 29:45(r)  
 Hirundo dimidiata (Pearl-breasted  
 Swallow)  
 subspp. & migr. 22:84(r)  
 - rupestris (Crag Martin)  
 nesting study 29:194(r)  
 - rustica (Barn Swallow)  
 band. - see Banding Reports  
 band size 29:92

- Hirundo rustica* (cont.)  
 behav. 27:94(r)  
 - of normal to albino 23:124(r)  
 - bigamous mating 28:168(r);  
 29:194(r)  
 book 27:152(r)  
 breeding biol., Belgium 31:99(r)  
 census 25:23(r)  
 cons. 26:36(r)  
 determinate laying 27:39(r)  
 dispersal 22:130(r)  
 feeding following tractor 23:39(r)  
 growth curve 25:107  
 instincts, of flight & pecking  
 improved by maturation & learning  
 23:176(r)  
 L.H. 24:91  
 lousefly kills brood 31:56(r)  
 meas. & wt. 25:78(r)  
 migr. 25:116(r); 27:132(r), 133(r);  
 30:174  
 -, early in Sweden 31:46(r)  
 molt 29:116(r)  
 natal down 29:234  
 nest, artificial, for 25:157(r)  
 - on back of mounted Eur. Sparrow  
 Hawk 28:170(r)  
 - construction & var. 31:47(r)  
 - record anal., B.T.O. cards  
 28:235(r)  
 nesting data 26:32(r)  
 -, weather effects on 23:173(r);  
 24:75(r)  
 newly hatched, descr. of 27:123  
 notes, on wintering grounds  
 29:116(r)  
 recorded in Spitzbergen 30:248(r)  
 return to birthplace 25:62(r)  
 roost of one million 27:139(r)  
 spring arrival, Frischborn  
 25:116(r)  
 weather effects on breeding in  
 Jerusalem 26:59  
 - *savignii* (= *H. rustica*)  
 HISTORICAL ORNITHOLOGY (see also  
 Biography & Bibliography)  
 Abbot, John, collections ca. 1810.  
 24:167(r)  
 Aristotle to present 23:91(r)  
 Amer., before Audubon 23:93(r)  
 - birds, book 27:205(r)  
 Bartram, Wm., travels of 26:175(r)  
 Bird banding in Am. 23:59  
 Burroughs, John, writings of  
 23:53(r)
- Capt. Cook's last expedition, birds  
 of 23:43(r)  
 folklore, book 30:199(r)  
 Hudson, W.H., letters of 22:196(r)  
 incub. periods 26:167(r)  
 Miller, Loye, autobiography.  
 22:101(r)  
 of:  
 Caspian lowlands 31:109(r)  
 Cleveland, OH. region 22:145(r)  
 Great Salt Lake, UT. colonies  
 22:37(r); 30:201(r)  
 penguin banding 28:2  
 Shetland 27:101(r)  
 Swan-keeping, Engl. 29:208(r)  
 Sweden, Stora Karlso Is.  
 25:128(r)  
 Univ. MI. Biol. Sta. 27:207(r)  
 review of banding 23:31(r)
- Histrionicus* sp.  
 cytogenetics & syst. 24:127(r)  
 Hitchcock, W.B. & R. Carrick. Banded  
 birds migr. between Aust. & other  
 parts of world. 30:50(r)  
 --- Fourth Ann. Report of Aust.  
 bird-band. scheme. 30:235(r)  
 Hobby (*Falco subbuteo*)  
 Hochbaum, H.A. Travels & traditions  
 of waterfowl. 27:153(r)  
 Hock, R. (see Scholander, P.F.)  
 Hoesch, W. Breeding biol. of s. Afr.  
 Button Quail. 31:48(r)  
 Hoffmann, K. Internal time-sense &  
 orient. 26:164(r)  
 --- Bird orient. 30:186(r)  
 --- Influence of different factors on  
 performance of homing pigeons.  
 31:93(r)  
 Hoffmann, L. Banding & recaptures.  
 30:48(r)  
 Hofmann, H. Lapwings on radar screen  
 28:165(r)  
 Hofslund, P.B. Fall migr. of Herring  
 Gulls from Knife Is., MN. 30:104  
 Hofstetter, F. A pop. of Collared  
 Turtle Dove. 29:65(r)  
 Hoglund, N. & K. Borg. Pop. fluctua-  
 tions in Capercaillie. 28:176(r)  
 Hohlt, H. Nesting of Fieldfare with  
 Great Grey Shrike & Kestrel.  
 29:195(r); 31:49(r)  
 Hohn, E.O. Display & mating behav. of  
 Black Grouse. 25:71(r)  
 Hojgaard, M. Experiments on tame  
 Blue Tit. 29:252(r)

- Holgersen, H. Bird banding activities of Stavanger Museum. 22:127(r); 25:113(r),152(r)
- Bird pops. on Rott 22:135(r)
- Bird-banding in Nor. 23:75(r); 25:113(r); 26:74(r); 27:129(r); 28:100(r),162(r); 30:48(r),234(r); 31:92(r)
- Banding shorebirds in s. Nor. 24:147
- Migr. of Nor. Alcidae 25:153(r)
- Ornith. observation from Utsira 26:30(r)
- Abnormal winter flight of Common Gull. 26:76(r)
- Migr. of Nor. Thrushes & Black-birds. 26:76(r)
- Iceland Merlin added to Nor. fauna. 27:145(r)
- Collared Turtle Dove in Nor. 27:145(r)
- Expansion of Revtangen Ornith. Station. 28:100(r)
- Late winter movements of Pink-footed geese. 29:48(r)
- Ornith. of "Brategg" Expedition 29:132(r)
- Hollis, F.D. Status of wild Turkey in LA. 23:47(r)
- Hollister, N. (see Kumlien, L.)
- Hollom, P.A.D. (see Nicholson, E.M.)
- Trapping meth. for bird ringers. 22:35(r)
- Holmer, M. Goosander in River Indal. 27:140(r)
- Homberg, L. Fishing Crows. 29:119(r)
- Home, W.M.L. "Anting" by Blackbird. 26:80(r)
- Homes, R.C. and others. Birds of the London area since 1900. 28:248(r)
- Homeyer, P.G. (see Hartley, H.O.; Kozicky, E.L.)
- HOMING (see Orientation-)
- Honeycreepers, Hawaiian (Drepaniidae)
- , Puerto Rican, = S. Am. (see Bananaquits)
- Honeyguides (Indicatoridae)
- , Greater (Indicator indicator)
- , Lesser (I. minor)
- , Scaly-throated (I. variegatus)
- Hoogerheide, J. & C. Eider Duck pop. of Vlieland. 30:57(r)
- Hoogstraal, H. & M.N. Kaiser. Parasitism of migr. birds by immature *Hyalomma rufipes* 31:55(r)
- Hooke, W.D. (see Redman, P.S.)
- Hoopoe (Upupa epops)
- Hope, C.E. (see Fallis, A.M.)
- Hopkins, M.N. & E.P. Odum. Pop. ecol. of Mourning Doves in GA. 24:165(r)
- Hornberger, F. Sexual maturity & establishment of breeding ground in White Stork. 27:135(r)
- Hornbill, Crowned (*Lophoceros suahelicus*)
- Horstadius, S. (ed.) Proc. 10th Internat. Ornith. Congr. 24:32(r)
- Horvath, L. Red-footed Falcons in Ohat-Woods near Hortobagy. 27:38(r)
- Bird-banding by Hungarian Nat. Hist. Mus. 29:246(r)
- Avifauna & ecol. of peat bog region between the Danube & Tisza. 29:253(r)
- L.H. of Lesser Grey Shrike in Hungary. 31:228(r)
- Hosking, E. (see Edwards, G.)
- Houston, C.S. & M.G. Street. Birds of Saskatchewan River. 31:109(r)
- Howard, L. Birds as individuals. 24:175(r)
- Howard, P.F. (see Downes, M.C.)
- Banding Black-browed Albatross at Heard & Macquarie Is. 26:73(r)
- Howell, J.C. Hist. of Bald Eagle nest sites in e-central FL. 26:32(r)
- , A.R. Laskey & J.T. Turner. Bird mort. at airport ceillometers. 26:122(r)
- Howell, T.R. Racial & sexual differences in migr. in *Sphyrapicus varius*. 24:156(r)
- & W.R. Dawson. Nest temp. & attentiveness in Anna Hummingbird 26:124(r)
- Hoyt, S.F. Behav. & molt of captive Evening Grosbeak. 25:95
- Huber, J. Advance of Ring Dove into n.w. and s. Eur. 25:31(r)
- Depth to which waterbirds dive. 28:50(r)
- Hubert, A.A. (see Bell, J.F.)
- Hubl, H. Behav. of young Barn, Little & Tawny Owls in captivity. 24:79(r)
- Hutchker, R. & J. Schwartzkopf. Social behav. in hearing & deaf Bullfinches 30:129(r)
- Hudde, H. Loss of bird broods. 31:100(r)

- Hudson, G.E. & P.J.Lanzillotti. Wing muscles in Corvidae. 26:173(r)
- Hudson, W.H. (see Dewar, D.R.)
- Hulme, D.C. Buildings as song-posts. 26:169(r)
- Hultberg, G. Birds of Gavle region. 28:180(r)
- Hummingbirds (Trochilidae)  
(see also Hermit; Hillstar)
- , Allen (Selasphorus sasin)
- , Anna (Calypte anna)
- , Blue-throated (Lampornis clemenciae)
- , Estella (= Hillstar, Andean)
- , Jamaican Mango (Anthracothorax mango)
- , Little Hermit (Phaethornis longuemareus)
- , Ruby-throated (Archilochus colubris)
- , Streamer-tailed (Trochilus polytmus)
- Humphrey, P.S. Classification & syst. position of Eiders. 29:259(r); 30:134(r)
- & K.C.Parkes. Study of molt & plumages. 30:247(r)
- HUNGARY (see Europe-)
- Hunt, G.S. & K.J.Dahlka. Live trapping diving ducks. 24:156(r)
- Hunt, L.B. Songbird breeding pop. in DDT-sprayed Dutch Elm disease communities. 31:230(r)
- HUNTING (see also Management-)  
and restocking Pheasants in N.Z. 29:123(r)
- effects on Bobwhite Quail pop. 25:28(r)
- in Japan, of Jays & Bulbuls 30:57(r)
- kills of Canvasback & pop. size 30:194(r); 31:54(r)
- laws, & sex ratios of Blackgame & Capercaillie 23:182(r)
- of raptors in AR., in book 22:198(r)
- pressure measured by lead shot in live geese. 27:95(r)
- on Mourning Dove in SC. 29:122(r)
- waterfowl in n. Eur. 23:181(r)
- Huntington, C.E. Hybridization in Purple Grackle. 24:168(r)
- Hurrell, H.G. (see Brooks-King, M.)
- Raven roost in Devon. 27:139(r)
- Hustich, I. Consequences of recent climatic fluctuations in Finl. 24:34(r)
- Hutchison, G.E. Biogeochemistry of vertebrate excretion. 22:192(r)
- Theoretical notes on oscillatory pops. 25:164(r)
- Hutson, H.P.W. Ornithologists' guide, overseas. 28:184(r)
- Huuskonen, H. (see Valikangas, I.)
- Huxley, J.S. & P.E.Brown. Song of the Woodpigeon. 25:129(r)
- Hyatt, J.H. & C.K.Mylne. Ornith. observations from Lista. 26:30(r)
- HYBRIDS
- Fieldfare x Eur. Blackbird 28:169(r)
- Geese, in book 31:169(r)
- Goldfinch x Canary 24:161(r)
- Grackles 24:168(r)
- Quail, Bobwhite x Scaled 26:32(r)
- Titmice, crested 27:197(r)
- Towhees 22:142(r)
- in Mex. 29:259(r)
- Hyde, R.K. FL. waterfowl band recoveries, 1920-1957. 30:235(r)
- Hydrobatas pelagicus (Storm-Petrel) distr.- NOT breeding in Gmrl. 23:94(r)
- invasion in central Eur. 26:39(r)
- nesting study 29:54(r)
- Hydrobatidae (Storm-Petrels)  
bandings 22:53
- sexual behav., in book 22:190(r)
- syst. & phylogeny 30:61(r)
- Hydroprogne caspia (Caspian Tern)  
band. - see Banding Reports
- behav. & biol. 25:158(r)
- of hand-raised young 28:170(r)
- breeding biol., Belgium 31:99(r)
- migr. routes & winter home 28:231(r)
- mort. rates 24:27(r)
- Hydroprogne tschegrava (=H. caspia)
- Hylatomus pileatus (= Dryocopus pileatus)
- Hylochelidon ariel (Fairy Martin)  
nest fauna & parasites 29:124(r)
- Hylocichla (= Catharus)
- Hypochera chalybeata (Steel-green Widow-Finch = Senegal Combassou)  
breeding in captivity 29:55(r)
- parasitizing Rosy Fire-finch 27:138(r)
- Hyphantornis (= Ploceus)
- Hypsipetes sp. (Bulbul)  
pop. decline, Japan 30:57(r)

- Ibis, Glossy (*Plegadis falcinellus*)  
 -, Hadada (*Hagedashia hagedash*)  
 -, White (*Guara alba*)  
 ICELAND  
 Pink-footed Geese of, book 25:171(r)  
*Icteria virens* (Yellow-breasted Chat)  
 band. - see Banding Reports  
 band size 29:93  
 breeding ecol. 29:169  
 descr., newly hatched 27:126  
 natal down 29:235  
 respiratory rate 29:39  
 wt. & meas. 29:109  
*Icteridae* (Am. Blackbirds)  
 band. - see Banding Reports  
 book, L.H. of 26:78(r)  
 mass mort., TX. 28:231(r)  
*Icterus* spp (Am. Orioles)  
 band. - see Banding Reports  
 effects of DDT 22:189(r)  
 illustrations, in book 28:247(r)  
 - galbula (Baltimore Oriole)  
 band. - see Banding Reports  
 band size 25:13  
 mort. from DDT 28:108(r)  
 natal down 29:235  
 nest construction & var. 31:47(r)  
 respiratory rate 29:39  
 trapping 22:33  
 - leucopteryx (Jamaican Oriole)  
 band size 29:93  
 scaly-leg 28:158  
 soft part colors 27:180  
 - spurius (Orchard Oriole)  
 anting by captive 29:119(r)  
 band - see Banding Reports  
 nest construction & var. 31:47(r)  
 Iiwi (*Vestiaria coccinea*)  
 Igalffy, K. Banding birds by Ornith.  
 Institute of Zagreb 22:35(r)  
 --- Migr. of Starling in Croatia.  
 25:20(r)  
 Ijzendoorn, A.L.J.van. Breeding birds  
 of Neth. 22:43(r)  
 --- Breeding birds of Wieringermar  
 Polder. 22:134(r)  
 Imhoff, T.A. Effect of weather on  
 spring bird migr. in AL. 26:29(r)  
 INCUBATION (see also Development,  
 Eggs, Life Histories, Nesting,  
 Parasitism by birds, Temperature)  
 - behavior:  
 attentiveness & nest temp., Anna  
 Hummingbird 26:124(r)  
 attentiveness & nest temp., Mallee  
 Fowl 29:192(r)  
 - temp. of air, Eur. Wren 25:69(r)  
 - - - - Pied Flycatcher 28:235(r)  
 - weather, Blue-winged Teal  
 27:139(r)  
 - of Tufted Titmouse 28:140  
 - dev. of, in young Bearded Tits  
 23:38(r)  
 - descriptions of, in:  
 Cuckoos, Black, Black & White,  
 Great Spotted, & Red-chested  
 23:122(r)  
 Fulmar 26:168(r)  
 Gannet, Cape 23:122(r)  
 Hermit, Little 23:122(r)  
 Ibis, Hadada 23:123(r)  
 Jackdaw 23:119(r)  
 Nutcracker, Thick-billed 29:117(r)  
 Owl, Snowy 26:125(r)  
 Penguin, Adelie 23:120(r)  
 -, Yellow-eyed 22:190(r)  
 Shrike, Fiscal 23:84(r)  
 Sparrow, Chipping 23:101  
 -, Eur. Tree 23:84(r)  
 Stonechat 23:83(r)  
 Swift (Eur) 23:83(r)  
 Tit, Great 22:131(r)  
 Waxwing, Cedar 22:186(r)  
 Wren, Carolina 22:87(r)  
 - of:  
 Albatrosses 24:131(r)  
 Bee-eaters 25:158(r)  
 Blackbird, Brewer 23:172(r)  
 -, Eur. 30:52(r)  
 Crane, Eur., change of guard  
 28:171(r)  
 Finch, Zebra 26:81(r)  
 Flycatcher, Pied, two clutches  
 in one nest 29:118(r)  
 Gull, Herring, experimental  
 26:32(r)  
 Kite & Black Kite, sexes involved  
 28:109(r)  
 Lark, Horned 26:1  
 Mallard, continues after partial  
 destruction by Gull. 25:68(r)  
 Nighthawk, Common 30:54(r)  
 Penguin, Emperor 25:119(r);  
 30:243(r)  
 Pheasant, Ring-necked, male  
 27:191(r)  
 Pigeon, photoperiod effect on  
 changing of guard 30:125(r)

## INCUBATION (cont.)

## - behavior (cont.)

- of:
  - Pigeon, Wood, covers eggs when disturbed 25:121(r)
  - Rail, Clapper, sexes involved 23:35(r)
  - Ruff 25:156(r)
  - Starling 25:156(r)
  - Tit, Bearded, sexes involved 23:38(r)
  - Whitethroat 27:38(r)
- patch, histol. during formation in Bank Swallow 28:233(r)
- patterns, review of 29:193(r)
- period, definition of 22:37(r)
  - , historical 26:167(r)
- , of:
  - Albatross, Yellow-nosed 23:122(r)
  - Barbet, Black-collared 23:83(r)
  - Bee-eaters 23:121(r)
  - Bluethroat 22:38(r)
  - Crane, Sandhill 23:35(r)
  - Curler 28:169(r)
  - Eagle, Short-toed 25:24(r)
  - Flycatcher, Scissor-tailed 23:34(r)
  - Gulls, prolongation of 23:46(r)
  - Hawk, Marsh 23:36(r)
  - in book 24:87(r)
  - misconceptions, birds of prey 25:24(r)
  - , the 10-day period 25:65(r)
  - Nighthawk 22:84(r)
  - Nutcracker 22:38(r)
  - Penguins, Gentoo, Macaroni & Rockhopper 25:65(r)
  - Phalarope, Northern 22:38(r)
  - Pheasant, Ring-necked 29:250(r)
  - Rail, Clapper 23:35(r)
  - Robin, Am. 27:93(r)
  - Sandpiper, Spotted 23:36(r)
  - Shearwater, Little 30:128(r)
  - Starling, Redwing 23:36(r)
  - Swallow, Barn, in Engl. 28:235(r)
  - , Tree 25:45
  - Takahe 30:48(r)
  - Tanager, Scarlet-rumped 22:134(r)
  - Tern, Arctic 28:76
  - Titmice 22:88(r)
  - White-eye, Cape 27:38(r)
  - Wren, House 22:38(r)

- related to laying & hatching sequences 28:103(r)
- stage of, detn. in field 26:32(r)
- temp., Titmice 22:88(r)
  - , Yellow-eyed Penguin 30:195(r)
  - , in Arctic 28:53(r)
- Indicator indicator (Greater Honeyguide)
  - guiding a genet 30:128(r)
  - push Barbets from nest 27:98(r)
- minor (Lesser Honeyguide)
  - biting Barbet 27:98(r)
  - cerophagy 27:202(r)
  - L.H. 23:83(r)
  - parasitizes Black-collared Barbet 23:83(r)
- variegatus (Scaly-throated Honeyguide)
  - guiding a Ratel 27:98(r)
- Indicatoridae (Honeyguides)
  - book 27:98(r)
- Ingles, L.G. Nesting birds of Willow-Cottonwood community in CA. 23:41(r)
- INJURIES AND ACCIDENTS (see also Pollution)
  - aircraft strikes, Midway Is. 29:254(r); 31:51(r)
  - alighting on sea, passerines 27:88(r)
  - electrocution of Baltimore Oriole 24:109
  - esophageal fistula, Mourning Dove 22:126
  - foot lost in steel trap, White Stork 31:100(r)
  - hallux nail hooked around tarsus, Grackle 24:110
  - hung by nest material, Eur. Tree Sparrow 28:237(r)
  - Jamaican birds, many spp. 28:157
  - spider web tangles Ruby-throated Hummingbird 31:91
  - thorn in Am. Robin's throat 22:126
  - treatments for sick & injured birds 26:86(r); 30:59(r)
  - TV tower kills 28:230(r); 29:105, 116(r), 188(r)
- INSECTICIDES (see Pesticides)
- INVASIONS (see Population-)
- IRAN (see Asia-)
- Iridoprocne bicolor (Tree Swallow)
  - age - see Age, maxima
  - ants in nests 26:61
  - band. - see Banding Reports
  - band size 25:14; 27:77

- Iridoprocne bicolor* (cont.)  
  behav., unusual flock 23:74  
  migr., RI. 30:174  
  natal down 29:233  
  nest exchanges 23:30  
  nesting study 25:35,102,138;  
    26:45  
  *Protocalliphora* flies in nests  
    26:60  
  raccoon depredations 26:63  
  respiratory rate 29:39  
  survival, relation to brood size,  
    pre-fledging survival & wt.  
    25:35,102,138  
  weather effects on breeding 26:56
- Irving, L. (see Scholander, P.F.)  
--- Nocturnal decline in temp. of  
  birds in cold weather 29:125(r)  
--- & J. Krog. Temps. during dev. of  
  birds in Arctic nests. 28:53(r)
- Iselin, H. A Golden Eagle's nest  
  28:48(r)
- Ivor, H.R. Enigma of bird anting.  
  28:50(r)
- Ixobrychus minutus* (Little Bittern)  
  recovery in Belgian Congo 25:115(r)
- Ixoreus naevius* (Varied Thrush)  
  in Alberta, Can. 24:30(r)

- Jacamars (Galbulidae)
- Jackdaw (*Corvus monedula*)
- Jackson, R.D. Terr. & pair formation in Blackbird. 25:159(r)
- Jaeger, E.C. Hibernation of Poor-will 22:85(r)
- Jaegers (Stercorariidae)
- , Long-tailed (*Stercorarius longicaudus*)
- , Parasitic (*S. parasiticus*)
- , Pomatorhine (*S. pomarinus*)
- Jahn, T.L. (see Prosser, C.L.)
- Jahnke, W. Flight-reaction & bird trapping. 27:42(r)
- Experimental blocking of birds' nests. 28:237(r)
- Jakobs, B. Bank Swallows nesting in walls along the Mosel. 28:170(r)
- James, P. Destruction of warblers on Padre Is., TX., May, 1951. 28:230(r)
- Jameson, W. The Wandering Albatross. 31:168(r)
- JAPAN
- birds of, book 25:82(r)
- -, picture book 30:135(r)
- Jays
- in book, AR. birds 22:198(r)
- damage mist nets 28:117
- , *Aphelocoma* spp.
- ecol. & speciation
- , Blue (*Cyanocitta cristata*)
- , Eur. (*Garrulus glandarius*)
- , Lanceolated (*G. lanceolatus*)
- , Mexican (*Aphelocoma ultramarina*)
- , Scrub (*A. coerulescens*)
- , Siberian (*Perisoreus infaustus*)
- , Unicolored (*Aphelocoma unicolor*)
- Jehl, J.R.Jr. Identification of immature Cuckoos. 31:166(r)
- Jenkins, A.R. Diseases of wild birds. 27:203(r)
- Jenkins, D. Migr. in late Sept. & early Oct., 1951. 24:157(r)
- Causes of death in Partridges. 27:203(r)
- Breeding of Red-legged Partridge. 28:236(r)
- & I.C.T.Nisbet. Bird migr. at Blavandshur. 27:37(r)
- Jenning, W. Activities of the Ornith. Station at Ottenby, 1952-'55. 25:114(r), 152(r); 27:130(r); 28:100(r), 161(r)
- Polygamy in Wheatears. 26:82(r)
- Jennings, A.R. & E.J.L.Soulsby. Diseases of wild birds. 29:124(r)
- --- Disease of a colony of Black-headed Gulls. 30:131(r)
- Jensen, L.L. (see Pedersen, E.T.)
- Jensen, O.F. (see Bartleson, F.D.Jr.)
- Jesperperson, P. Mute Swan as a breeding species in Den. 23:132(r)
- Jessen, R.J. (see Kozicky, E.L.)
- Jewett, J.G., W.P.Taylor, W.T.Shaw & J.W.Aldrich. Birds of WA. State. 25:129(r)
- Johansen, H. Avifauna of w. Siberia 25:168(r)
- Revision & origin of Arctic avifauna 30:131(r)
- Races & pop. of Capercaillie. 30:132(r)
- & A. Bjerring. Pop. of Stork in Den. 27:46(r)
- Johansson, A. Buzzards "nest-decorating" around a nestling on the ground. 30:191(r)
- Johnsgard, P.A. & I.O.Buss. Waterfowl sex ratios during spring in WA. State. 28:240(r)
- Johnson, F. (see Scholander, P.F.)
- Johnston, D.W. Annual reproductive cycle of California Gull. 28:178(r)
- Bird mort. in GA., 1957. 29:116(r)
- Sex & age characters & salivary glands of Chimney Swift. 29:256(r)
- & T.P.Haines. Mass bird mort., Oct., 1954. 30:51(r)
- Johnston, J.D. (see Henson, B.R.)
- Johnston, R.F. Pop. structure in salt marsh Song Sparrows. 27:191(r); 29:118(r)
- Jollie, M. Phylogeny & skull of Passeriformes. 30:59(r)
- Jolly, G.F. (see Wayre, P.)
- Jones, N.G.B. Census of breeding Canada Geese. 28:179(r)
- Jonsell, B. Birdlife of Kallskar-Vattungar archipelago: var. in breeding pop., 1890-1950. 31:57(r)
- Jonsson, S. Changing of guard at nest by a pair of Cranes 28:171(r)
- Jordan, J.S. Consumption of cereal grains by migr. waterfowl. 24:165(r)
- Effects of starvation on wild Mallards. 25:28(r)
- Jordans, A. Von (see Clancey, P.A.)
- Jouanin, C., M.H.Julien & J. Giban. Bulletin of Fr. band. stations. 27:188(r)



- Julien, M.H. (see Jouanin, C)  
 --- Banding birds on Ushant Island.  
 26:122(r)
- Jull, M.A. Poultry breeding. 24:34(r)
- Jumber, J. (see Frings, H.)
- Junco hyemalis (Dark-eyed, = Slate-colored, Junco)  
 alarm calls 30:232  
 band. - see Banding Reports  
 band size 25:13  
 descr., newly-hatched 27:127  
 food & water relations to weather  
 & energy resources. 22:39(r)  
 migr. sampling by trapping 27:107  
 nesting study, TN. 31:50(r)  
 pop. in sprayed orchards 23:180(r)  
 pox virus in 28:54(r)  
 reproductive system of 23:161  
 respiratory rate 29:39  
 trap preferences 22:110  
 wt., changes 27:16  
 -, sex, age & daily 26:19  
 -, winter & migr., & fat 31:1
- oregonus (Oregon Junco)  
 radiothyroidectomy 25:30(r)  
 winter society 27:40(r)
- Junge, G.C.A. & J. Taapren. Results  
 of ringing, Roy. Mus. of Nat. Hist.  
 Leiden. 22:128(r); 23:77(r);  
 25:62(r),152(r); 26:75(r),121(r);  
 27:186(r); 28:42(r),230(r)
- Jungfer, W. Attachment to mate and  
 nesting place, and the age of  
 Oystercatcher on Mellum. 27:86(r)
- Jynx torquilla (Wryneck)  
 anting 26:80(r)  
 band. - see Banding Reports  
 breeding behav. 31:99(r)  
 evol. 27:150(r)  
 indeterminate laying 27:39(r)  
 nest boxes to increase pop.  
 28:104(r)

- Kabat, C. (see Buss, I.O.)
- Kadlec, O. Ringing activity of Czech. Ornith. Soc. 29:44(r); 30:47(r)
- Kahmann, H. Composition studies of owl pellets. 25:129(r)
- Kaiser, M.N. (see Hoogstraal, H.)
- Kakapo (*Strigops habroptilus*)
- Kalela, O. Secular rhythm in distr. dynamics of Eur. birds & mammals & its relation to winter conditions 22:92(r)
- Range expansion of Lapwing in Finl. 27:89(r), 199(r)
- Kalmbach, E.R. (see VanRiper, W.)
- Kantor, S. (see Hanson, H.C.)
- Karplus, M. Bird activity in continuous daylight of arctic summer. 24:21(r)
- Karvik, N. Thrush Nightingale in Dalsland. 26:39(r)
- Kaszab, Z. (see Vertse, A.)
- Kay, L. (see Low, J.B.)
- Keast, A. Influence of ecol. on var. in Mistletoe-bird. 30:193(r)
- Intraspecific var. in Aust. finches. 30:198(r)
- Seasonal movements & geogr. var. in Aust Wood-swallows. 30:198(r)
- Keays, J.E. Check-list of N.Am. birds & synopsis of N.Am. mammals. 23:193(r)
- Keeler, F.L. & C.E. Pigment var. & their correlates in birds. 24:79(r)
- & F. Winston. Mourning Dove trapping in s.e.U.S. 22:174
- Keil, W. (see Pfeifer, S.)
- Which birds nest in artificial pockets? 29:196(r)
- Keith, K. & N. (see Carrick, R.)
- Kellogg, P.P. (see Allen, A.A.)
- & A.A.Allen. Am. bird songs. 23:125(r); 27:47(r)
- - --- FL. bird songs. 23:188(r)
- - --- An evening in Sapsucker Woods. 29:262(r)
- - --- & R.T.Peterson. Field guide to bird songs of e. & central N. Am. 31:107(r)
- Kellsall, J.P. Effects of orchard sprays on bird pop., Nova Scotia. 23:180(r)
- Kemper, C.A. Destruction at TV tower. 29:247(r)
- Kendeigh, S.C. Effect of temp. & season on energy resources of House Sparrow. 22:38(r)
- Parental care & its evol. in birds. 24:86(r)
- Kenyon, K.W., D.W.Rice, C.S.Robbins & J.W.Aldrich. Birds & aircraft on Midway Is. 1956/57. 29:254(r)
- Kern, J. (see Friedmann, H.)
- Kessell, B. Criteria for sexing and ageing European Starlings. 22:16
- Distr. & migr. of Eur. Starling in N. Am. 25:20(r)
- Second broods of Eur. Starling in N. Am. 25:120(r)
- Breeding biol. of Eur. Starling in N. Am. 29:191(r)
- & T.J.Cade. Birds of Colville River, n. AK. 30:132(r)
- Kestrel, Am. (*Falco sparverius*)
- , Eur. (*F. tinnunculus*)
- , Lesser (*F. naumanni*)
- , Red-footed (*F. vespertinus*)
- Keve, A. Ten years of Waxwing invasions in Hungary & Carpathian Basin. 22:36(r)
- Records of birds ringed abroad & found in Hungary. 29:246(r)
- Kiel, W.H.Jr. Status of Coot in the Mississippi flyway. 25:73(r)
- Nesting studies of the Coot in s.w.Manitoba. 27:39(r)
- Kilham, L. Repeated attacks by Sharp-shinned Hawk on Pileated Woodpecker. 29:260(r)
- Pair formation, mutual tapping & nest hole selections of Red-bellied Woodpeckers. 30:193(r)
- Killdeer (*Charadrius vociferus*)
- Killpack, M.L. & D.N.Crittenden. Starlings as winter residents in UT. 24:125(r)
- King, B. (see Sage, B.L.)
- King, J.M.B. Orient. of migrants over sea in fog. 30:236(r)
- Kingbird, Arkansas (=Western)
- , Eastern (*Tyrannus tyrannus*)
- , Gray (*T. dominicensis*)
- , Tropical (*T. melancholicus*)
- , Western (*T. verticalis*)
- Kingfishers (*Alcedinidae*)
- , Black-capped (*Halcyon pileata*)
- , Belted (*Megaceryle alcyon*)
- , European (*Alcedo atthis*)
- Kinglet, Golden-crowned (*Regulus satrapa*)
- , Ruby-crowned (*R. calendula*)

- Kinsky, F.C. Annual reports of ornith Soc. N.Z. ringing committee. 29:113(r); 30:123(r)
- Kipp, F.A. Evol. of Wryneck 27:150(r)
- Coturnix, an invasion bird group 28:165(r)
- Kipps, C. Sold for a farthing. 27:154(r)
- Kirkpatrick, C.M. (see Baldini, J.F.)
- Photoperiodism of Bobwhite Quail. 27:148(r)
- Bobwhite wt. gains on different light-dark cycles. 29:125(r)
- & H.E.Moses. Effects of Streptomycin against spontaneous Quail disease in Bobwhites. 24:166(r)
- Kirsher, W.K. Nestlings do return. 27:86(r)
- Kite (*Milvus milvus*)
- , Black (*M. migrans*)
- , Black-winged (*Elanus caeruleus*)
- , Everglade (*Rostrhamus sociabilis*)
- , Letter-winged (*Elanus scriptus*)
- , Red (*Milvus milvus*)
- , Swallow-tailed (*Elanoides forficatus*)
- Kittiwake (*Rissa tridactyla*)
- Kiwi, North Island (*Apteryx australis*)
- Klaas, C. Food habits of Hobby. 24:158(r)
- Kleinschmidt, O. Song birds of Ger. 9th ed. 23:50(r)
- Kliefoth-Rehren, I. Observations on a captive Swallow. 27:94(r)
- Klima, M. Morphology of bursa fabricii of birds. 29:256(r)
- Klomp, H. Decrease in Lapwing pop. of Neth.: laying mechanism & egg production ability.
- Klonglan, E.D. Factors influencing fall roadside Pheasant census in IA. 27:44(r)
- , I.A.Coleman & E.L.Kozicky. Pheasant nest activity recording instrument. 27:195(r)
- Klopfer, P. (see MacArthur, R.)
- Experiment on emphatic learning in ducks. 31:166(r)
- Klots, A.B. Field guide to butterflies. 23:52(r)
- Kluyver, H.N. Daily routine of Great Tit. 22:131(r)
- Pop. ecol. of Great Tit. 23:130(r)
- Kluyver, H.N. (cont.)
- Body wt. & time of breeding in Great Tit. 25:166(r)
- Nest building & terr. defense of Great Reed Warbler. 27:194(r)
- & L. Tinbergen. Territory & regulation of density in Titmice. 25:160(r)
- Kluz, Z. Reproductive biol. of the Swift. 23:83(r)
- Knecht, S. Song forms of the Black-cap. 27:47(r)
- Knigh, H. (see Woodbury, A.M.)
- Knoblauch, Dr. First arrivals of the Swift. 30:126(r)
- Knot, Red (*Calidris canutus*)
- Koch, L. Memoirs of a bird man. 27:203(r)
- Kochler, O. Bird song as a preliminary stage of music & speech. 23:87(r)
- Koenig, L. Action system of a Bee-eater. 23:121(r)
- Comparisons of Blue-cheeked & Eur. Bee-eaters. 25:158(r)
- Koenig, O. Behavior & action system of Bearded Tit. 23:38(r), 124(r)
- Koford, C.B. California Condor. 24:172(r)
- Kohler, H.M. (see Richardson, R.E.)
- Konig, D. Avifauna of newly created polders. 28:53(r)
- Observations on Gull-billed Tern during post-breeding season. 28:109(r)
- Koreke (*Coturnix novaehollandiae*)
- Koridon, J.A.F. Bird-trapping in Zwarte Meer reserve. 29:246(r)
- Korodi, G.J. Bird pop. of a fruit orchard. 30:62(r)
- Korora oliveri  
n. gen et. sp. Tertiary fossil penguin from N.Z.
- Korschgen, L.J. Food habits of Mourning Dove in MO. 30:199(r)
- Kortlandt, A. Pop. study of Eur. Cormorant in Holland. 25:22(r)
- Koskimies, J. (see Siivonen; Valekangas, I.)
- Life of *Micropus apus* in relation to weather. 22:39(r)
- Results of marking game animals in Finl. 22:83(r)

- Koskimies, J. (cont.)
- Tag recoveries show home range of Blackgame & Capercaillie. 23:170(r)
  - Dev. of mobility in young Common & Lesser Black-backed Gulls. 24:76(r)
  - Characteristics & hist. of nesting divergencies in Swift in n. Europe. 28:235(r)
  - Terns & gulls as features of habitat recognition for birds nesting in their colonies. 28:239(r)
  - Var. in size & shape of eggs of Velvet Scoter. 29:194(r)
  - Polymorphic var. in clutch size & laying date of Velvet Scoter. 29:195(r)
  - Flocking behav. of Capercaillie & Blackgame. 29:197(r)
  - Behav. & ecol. of young Velvet Scoters & their mothers. 29:251(r)
  - Seasonal, geogr. & yearly trends in wt. of Capercaillie & Blackgame in Finl. 30:57(r)
  - Homing to nest site & mort. in a marine pop. of Velvet Scoter. 31:46(r)
  - & E. Routamo. Nesting ecol. of Velvet Scoter. 25:67(r)
- Kozicky, E.L. (see Hartley, H.O.; Klonglan, E.D.)
- Var. in indices of ♂ Ring-necked Pheasant pop. 24:120(r)
  - & T.A. Bancroft & P.G. Homeyer. Anal. of Woodcock singing ground counts. 25:165(r)
  - , G.O. Hendrickson, P.G. Homeyer & R. Nomsen. Weather & fall Pheasant pop. in IA. 26:130(r)
  - , R.J. Jessen, G.O. Hendrickson & E.B. Speaker. Estimation of fall Quail pop. in IA. 27:195(r)
  - & F.V. Schmidt. Nesting habits of Clapper Rail in NJ. 23:35(r)
- Krambrick, A. A city on the Rhine & its Tawny Owl pop. 24:157(r)
- Kramer, G. (see Dinnendahl, L.)
- Nest building by Red-backed Shrike. 22:88(r)
  - Oriented migr. activity of caged song birds. 22:182(r), 183(r)
  - Parallel flight & overshooting goal in Carrier Pigeons 25:25(r)
  - Experiment to influence orienting of Carrier Pigeons by seasonal change of sun altitude. 26:164(r)
  - Influence of temp. & experience homing ability of homing pigeons. 29:64(r)
  - Interpretation of experiments on bird orient. 29:187(r)
  - , J.G. Pratt & U. von St. Paul. Directional effects in pigeon homing. 30:237(r), 238(r)
  - & U. von St. Paul. Innate & learned enemy recognition by Bullfinch. 23:176(r)
  - - --- Homing ability of caged Carrier Pigeons. 26:29(r)
- Kramer, V. Food habits of Eur. Sparrow Hawk in s. Oberlausitz. 23:116(r)
- Food habits of Goshawk, Sparrow Hawk & Peregrine. 25:170(r)
  - Goshawk & Sparrow Hawk. 27:98(r)
- Kridler, E. Banding White Pelicans at Anaho Nat. Wild. Refuge 31:159(r)
- Krieg, H. A zoologist in steppes & forest of Patagonia. 24:174(r)
- Krog, J. (see Irving, L.)
- Kroneisl-Rucner, R. Bird banding by Ornith. Inst. of Zagreb. 25:17(r) 26:74(r); 28:163(r); 30:124(r), 235(r)
- Recoveries of birds ringed by foreign institutions, 1940-1952. 26:74(r)
- Kuhlemann, P. Duck catastrophe at Hohwacht. 25:77(r)
- Kuhlhorn, F. Lousefly infestation kills Swallow brood. 31:56(r)
- Kuhk, R. (see Goethe, F.)
- Buzzards of 19 and nearly 24 years. 24:83(r)
  - Annual cycles of calls of Tengmalm's Owl. 25:158(r)
- Kumari, E. Visible migr. in e. Baltic area. 30:186(r)
- Kumerloeve, H. (see Bub, H.)
- Birds obviously born wingless or with one wing. 28:237(r)
  - Boundaries of distr. of Serin in n.w. Eur. 29:65(r)
  - Buzzard consumes mushroom. 29:206(r)
  - Observations in "Zubring" area of Bosphorus migr. route. 29:248(r)

- Kumerlove, H. (cont.)  
--- & H. Remmert. Diet of Long-eared  
Owl on Amrum. 24:74(r);25:80(r);  
26:40(r)  
Kumlien, L. & N. Hollister. Birds of  
WI. 22:196(r)  
Kunkel, P. Behav. of Estrildine  
finches. 31:50(r)  
Kuroda, N. (see Takahashi, H.)  
--- Review of bird band. in Japan.  
26:163(r)  
--- Woodpecker damage to timber &  
electric poles. 27:196(r)  
--- Anting by *Sturnus cineraceus*.  
29:120(r)  
--- Pelagic migr. of *Tubinares*.  
30:50(r)  
--- Egg-size var. in *Sturnus*  
*cineraceus* 30:52(r)

- Labisky, R.F. Night lighting tech.  
for cap. birds & mammals. 31:40(r)
- Labitte, A. Biol. & reproduction of  
Mistlethrush. 23:175(r);24:75(r)
- Winter song & reproduction of  
Cirl Bunting in Eure-et-Loire  
province. 27:93(r)
- Nesting of Booted Eagle in Haute-  
Marne region. 27:138(r)
- Lack, D. (see Goodacre, M.J.; Tedd,  
J.G.; Thomson, A.L., ed.; Weitnauer,  
E.)
- Breeding seasons in the Galapagos  
22:87(r)
- Visible migr. in s.e. Engl.  
25:117(r)
- Stability of Heron pop. 25:155(r)
- Cyclic mort. 25:161(r)
- Engl. Tits in nesting boxes.  
27:192(r)
- Chaffinch migr. in North Devon.  
28:166(r)
- Nesting Nightjars. 29:54(r)
- Color of Turdine eggs. 30:53(r)
- Weather movements of Swifts.  
30:125(r)
- Watching migr. by radar. 30:185(r)  
31:97(r)
- Migr. drift plotted by radar.  
31:42(r)
- Height of migr. 31:161(r)
- & H. Arm. Average lifespan of  
Alpine Swift 25:117(r)
- & E. Lack. Visible migr. at Lands  
End. 23:116(r)
- - --- Breeding behav. of Swift.  
23:175(r)
- - --- Nesting of Long-tailed Tit  
29:196(r)
- & K. Williamson. Bird-migr. terms  
31:40(r)
- Lack, E. (see Lack, D.)
- Laessle, A.M. & O.E. Frye Jr. Food  
study of FL. Bobwhite. 27:201(r)
- Laferrere, M. (see Boudoint, Y)
- Great Spotted Cuckoo in pine  
stands of Esterel & hills of Var.  
28:243(r)
- Lagonosticta senegala (Rosy Fire-  
Finch = Little Ruddy Waxbill)  
parasitized by Steel-green Widow-  
Finch in captivity. 29:55(r)
- Lagopus sp. (Ptarmigan)  
egging 26:171(r)
- lagopus (Willow Ptarmigan = Red  
Grouse)  
age detn. 28:168(r)  
band. - see Banding Reports  
mort., cyclic 25:161(r)  
nesting events, back-dating of 28:  
168(r)  
painting of 22:45(r)  
pop. cycles 22:96(r)  
prey of Gyrfalcon 25:169(r)  
- mutus (Rock Ptarmigan)  
in Pyrenees at 2560 meters. 28:52(r)  
pop. cycles. 22:96(r), 192(r)  
range changes & climate 29:259(r)  
subsp. in Grnl. 22:192(r)  
wt. 29:259(r)  
- scoticus (= L. mutus)
- Lake, F.B. Treatment of sick & wound-  
ed birds. 30:59(r)
- Lampornis clemenciae (Blue-throated  
Hummingbird)  
ecol. stimuli initiating nest-  
building 31:47(r)
- Lampronetta (= Somateria)
- Lange, H. Do two-year-old White  
Storks breed & are there old non-  
breeders? 27:135(r)
- Langelott, N. Communal life of Black  
Kite. 28:50(r)
- Pop. density of Black Woodpecker.  
28:108(r)
- Langer, R. (see Ruppert, K.)
- & W. Tilgner. Flea pop. in  
artificial nest boxes, Frankfurt.  
31:56(r)
- Lanius (Shrikes)  
in banding traps 28:126  
interspecific terr. 29:195(r)
- borealis (= L. excubitor)
- collaris (Red-backed Shrike)  
attack stuffed Jay. 25:26(r)  
band. - see Banding Reports  
biol. in Ethiopia & Kenya 23:83(r)  
climate effects on breeding  
success. 23:129(r)  
eat own young 31:51(r)  
flight behav. 23:39(r)  
L.H. 27:104(r)  
♂ begs food from ♀ 24:77(r)  
migr. 23:79(r)  
nest-building 22:88(r)  
reaction to Eur. Jays 25:26(r)
- excubitor (Great Gray Shrike, =  
Northern Shrike)  
band size 29:92  
behav., differences in two biotypes  
28:103(r)

- Lanius excubitor (cont.)  
 decrease in Neth., in book 22:43(r)  
 first subsp. record in Engl. 28:220  
 killing birds in traps 22:121  
 L.H. & phot. study 29:67(r)  
 nest association with Fieldfare  
 29:195(r); 31:49(r)  
 record in Scandinavia 27:147(r)  
 tech. of mouse capture 28:239(r)  
 winter terr. & homing 28:165(r)  
 - ludovicianus (Migrant, = Loggerhead  
 Shrike)  
 band size 29:92  
 kills birds in traps 22:121; 24:67  
 natal down 29:235  
 - minor (Lesser Grey Shrike)  
 breeding biol. 29:195(r)  
 food, insects 25:169 (r)  
 L.H. in Hungary 31:228(r)  
 migr. orientation, experiment,  
 s.w.Afr. 31:223(r)  
 - senator (Woodchat Shrike)  
 decrease in Neth., in book 22:43(r)  
 Lanyon, W.E. Comparative biol. of  
 Meadowlarks in WI. 28:249(r)  
 Lanzillotti, P.J. (see Hudson, G.E.)  
 Lanz-Walchli, H. Brambling in e. part  
 of Bern highlands 25:126(r)  
 Lapwing (Vanellus vanellus)  
 -, Crowned (Stephanibyx coronatus)  
 Laridae (Gulls & Terns)  
 behav., social, in winter 29:121(r)  
 color band. study, w. N. Am.  
 23:31(r)  
 displays, comparative study  
 31:163(r)  
 egg-rolling 25:71(r)  
 feeding meth. 25:122(r); 30:193(r)  
 hazards from ice & oil 28:181(r)  
 illustrations 22:193(r)  
 importance of, as stimulus for  
 associated nesting spp. 28:239(r)  
 31:48(r)  
 increase in Neth., in book 22:43(r)  
 nesting relations with Tufted Duck  
 24:160(r)  
 pops., breeding, in Finl. 23:129(r)  
 predation on, by Eur. Hedgehog  
 28:51(r)  
 predation on Pink-footed Geese  
 24:161(r)  
 - - Ravens & Guillemots 25:127(r)  
 ticks & fleas of 24:123(r)  
 Lark, Crested (Galerida cristata)
- Larks  
 mass mort., Helgoland 30:126(r)  
 -, Horned (Eremophila alpestris)  
 -, Sky (Alauda arvensis)  
 -, Wood (Lullula arborea)  
 Larsen, S. Charadrii in arctic &  
 boreal areas during Tertiary &  
 Pleistocene. Zoogeography of  
 29:204(r)  
 Larus spp.  
 nesting comparison with Rissa  
 29:194(r)  
 - argentatus (Herring Gull)  
 age - see Age, maxima  
 angle of cerebral axis 30:246(r)  
 association with terns 28:65  
 band. - see Banding Reports  
 behav.,  
 begging response, releasers of  
 22:91(r)  
 breeding 26:32(r)  
 dev. of 27:193(r)  
 in new colony 23:124(r)  
 learning to feed after mine  
 explosions 23:98(r)  
 parental care 25:120(r)  
 pre-breeding 24:78(r)  
 social 25:81(r)  
 -, book 25:84(r)  
 - hierarchy 25:72(r)  
 bill length 31:166(r)  
 breeding biol., monogr. 23:45(r)  
 - - on Bylot Is. (Thayer's)  
 competition with terns 27:198(r)  
 control of by egg sterilization  
 25:128(r)  
 - - by recordings 26:172(r)  
 death by swallowing live mole  
 28:241(r)  
 eggs, clutch size & predation  
 25:48  
 -, palatability of 24:76(r)  
 food 29:129(r)  
 - & economic status, New Brunswick  
 24:113(r)  
 - specialization, Finl. 23:129(r)  
 migr., fall 30:114  
 - routes, from MN. 30:104  
 mort rates 24:27(r); 30:97,104  
 movements of 30:69  
 pop. changes 22:134(r), 135(r);  
 28:52(r); 29:203(r)  
 predator on Brant 28:46(r)  
 - - Ring-billed gull 28:233(r)

- Larus argentatus* (cont.)  
 predator on Scops Owl 29:203(r)  
 prey of Eagles 30:98  
 range extension, Spitzbergen  
 30:248(r)  
 site tenacity 25:153(r)  
 wt. 31:166(r)
- *atricilla* (Laughing Gull)  
 association with terns 28:65
  - *bulleri* (Black-billed Gull)  
 band. - see Banding Reports  
 food of young 30:134(r)
  - *californicus* (California Gull)  
 annual cycle, age detn. & histol.  
 of ♀ reproductive system  
 28:178(r)  
 band. - see Banding Reports  
 in book, L.H., ecol. & pop.  
 30:201(r)  
 incub. patch, anat. & physiol.  
 24:129(r)  
 movements, w. N. Am. 23:31(r)
  - *canus* (Common Gull)  
 age at leaving nest 24:76(r)  
 band. - see Banding Reports  
 behav. during solar eclipse  
 27:194(r)  
 -, innate patterns 28:172(r)  
 crowberries as food, Finl. 23:129(r)  
 egg volume calculation 25:23(r)  
 homing 25:63(r)  
 migr. 23:78(r)  
 parental care 25:120(r)  
 pop. changes in Neth. 22:135(r)  
 predator on duck nests 25:68(r)  
 site tenacity 25:153(r)  
 winter flight 26:76(r)
  - *delawarensis* (Ring-billed Gull)  
 juv. mort. 28:233(r)  
 ontogeny of hostile & display  
 behav. 31:101(r)
  - *dominicanus* (Dominican Gull)  
 band. - see Banding Reports
  - *fuscus* (Lesser Black-backed Gull)  
 age at leaving nest 24:76(r)  
 band. - see Banding Reports  
 breeding biol., monogr. 23:45(r)  
 human refuse as food 23:129(r)  
 longevity - see Age, maxima-  
 palatability of eggs 24:76(r)  
 pop. changes in Neth. 22:135(r)  
 replaces sterilized Herring Gulls  
 25:128(r)  
 wt. & bill length 31:166(r)
  - *genei* (Slender-billed Gull)  
 band. - see Banding Reports  
 breeding & wintering grounds &  
 migr. 30:241(r)
  - *glaucescens* (Glaucous-winged Gull)  
 band. - see Banding Reports  
 body temp. at night in arctic  
 29:125(r)  
 movements, w. N. Am. 23:31(r)
  - *glaucoides* (Iceland Gull)  
 band. - see Banding Reports  
 races in Grnl. 22:192(r)
  - *hyperboreus* (Glaucous Gull)  
 body temp. at night in arctic  
 29:125(r)  
 nesting in Spitzbergen 30:248(r)  
 predation on Arctic Terns 30:245(r)  
 robs nest of Pink-footed & Barnacle  
 Goose 28:180(r)
  - *ichthyaetus* (Great Black-headed  
 Gull)  
 first record, Sweden 29:128(r)
  - *leucopterus* (= *L. glaucoides*)
  - *marinus* (Great Black-backed Gull)  
 band. - see Banding Reports  
 breeding distr., Engl. & Wales  
 30:244(r)  
 competitor of Terns 27:198(r)  
 feeding ecol., Finl. 23:129(r)  
 palatability of eggs 24:76(r)  
 range extension in Spitzbergen  
 30:248(r)  
 wt. & bill length 31:166(r)
  - *melanocephalus* (Mediterranean  
 Black-headed Gull)  
 band. - see Banding Reports
  - *minutus* (Little Gull)  
 breeding, new record, Sweden  
 29:204(r)
  - *novaehollandiae* (Red-billed Gull)  
 band. - see Banding Reports  
 seasonal dispersal & mort.  
 29:188(r)
  - *occidentalis* (Western Gull)  
 band. - see Banding Reports  
 movements, w. N. Am. 23:31(r)  
 temp. regulation 26:169(r)
  - *pipixcan* (Franklin's Gull)  
 bill color as stimulus to chick  
 feeding 29:58(r)  
 ontogeny of hostile display &  
 behav. 31:101(r)
  - *ridibundus* (Black-headed Gull)  
 age - see Age, maxima-  
 band. - see Banding Reports  
 behav., care of young, deficiency in  
 25:120(r)



- Larus ridibundus* (cont.)  
 behavior (cont.)  
 displacement 24:162(r); 25:72(r)  
 head-flagging 23:125(r)  
 redirection 25:72(r)  
 social, winter inland 29:120(r)  
 census, Switz. 25:126(r);29:202(r)  
 30:249(r)  
 colony establishment sequence  
 28:179(r)  
 Common Tern eggs in nest of  
 25:68(r)  
 compete with pigeons for food,  
 winter, in London 31:230(r)  
 environmental maladaptation  
 25:120(r)  
 death, rare cause by stones &  
 mussels 28:241(r)  
 feeding, winter behav. 25:122(r)  
 habitat selection & breeding biol.  
 29:249(r)  
 homing experiments 25:63(r)  
 measures to increase pop. 29:253(r)  
 nest, mixed 25:68(r)  
 nesting study 29:55(r)  
 parasites & diseases 30:131(r)  
 pop. changes in Meth. 22:134(r)  
 predation by Tawny Owl 29:249(r)  
 record, first in Lapland 28:180(r)  
 - *sabini* (Sabine's Gull)  
 adaptations to cold & dark of arctic  
 30:132(r)  
 association with terns 28:65  
 in book, arctic birds of Can.  
 28:247(r)  
 - *thayeri* (Thayer's Gull - included  
 in *L. argentatus*)  
 syst., as subsp. of *L. glaucooides*  
 22:192(r)  
 Laskey, A.R. (see Howell, J.C.)  
 --- Cowbird behav. 22:187(r)  
 --- Bluebird pop. in Warner Parks  
 24:82(r)  
 --- Movements of robins banded in TN.  
 24:156(r)  
 --- Tufted Titmouse L.H. 28:135  
 --- Recoveries of banded Red-tailed  
 Hawks. 29:114(r)  
 --- TV tower casualties 29:188(r)  
 --- Blue Jays in Nashville, TN.:  
 movements, nesting, age. 29:211  
 --- Bluebirds suffer from severe  
 Feb. weather. 31:162(r)  
 Lauden, M.S. Terr. range of AL.  
 Towhee 26:79(r)
- Law, J.T. (see Cartwright, B.W.)  
 Lawrence, L. de K. Nesting life  
 & behav. of Red-eyed Vireo. 25:24(r)  
 --- Irrepressible Nuthatch 26:82(r)  
 --- Regional movements & body wt. of  
 Black-capped Chickadees in winter  
 30:196(r)  
 Leach, E.P. (see Thomson, A.L.)  
 --- British-bred Swallow summering in  
 North. 22:130(r)  
 --- British recoveries of birds ringed  
 abroad. 22:35(r);28:162(r);29:186(r)  
 30:184(r);31:159(r)  
 Legg, K. A sea-cave nest of the Black  
 Swift. 28:168(r)  
 leGrelle, G (see Verheyen, R.)  
 Lehmann, W. Pop. density studies on  
 coniferous forests 26:30(r)  
*Leipoa ocellata* (Mallee Fowl)  
 temp. control in mound 29:192(r)  
 Lemieux, L. (see Tuck, L.M.)  
 --- Breeding biol. of Greater Snow  
 Goose on Bylot Is., Can. 30:243(r)  
 Lennerstedt, I. Invasion of Sandwich  
 Terns on Swedish west coast 29:248  
 (r)  
 --- Autumn migr. at Falsterbo, 1954.  
 30:189(r)  
 --- & S. Ulfstrand. Occurrence in  
 Sweden of Redpolls, Siskins &  
 Yellowhammer 31:105(r)  
 Leopold, A.S. Intestinal morphology  
 of gallinaceous birds in relation  
 to food habits. 24:167(r)  
 --- Game birds & mammals of Mex.  
 31:167(r)  
*Leptasthenura andicola* (streaked, =  
 Andean Tit- Spinetail)  
 nests in caves. 24:119(r)  
*Leptotila jamaicensis* (White-bellied  
 Dove)  
 band size 29:91  
 soft part colors 27:179  
 Leslie, P.H. Estimation of pop.  
 parameters from capture-recapture  
 data: total numbers 24:158(r)  
 --- & D. Chitty. Ditto, maximum  
 likelihood equations for death-  
 rate. 23:77(r)  
 --- - --- & H. Chitty. Ditto:  
 practical applications of the  
 method. 25:21(r)  
*Leucophaeus scorbesbii* (Dolphin Gull)  
 band. in Falkland Is. 29:22  
*Leucophoyx thula* (=Egretta thula)

- Leucopoliuss (= Charadrius)  
 Leucosticte tephrocotis (Gray-crowned  
 Rosy Finch)  
 band. - see Banding Reports  
 in Alberta, Can., extralimital  
 24:30(r)  
 wt. & roosting flock composition  
 24:141  
 Levine, N.D. (see Hanson, H.C.)  
 --- & H.C.Hanson. Blood parasites of  
 Canada Goose. 24:165(r)  
 Lewis, J.B. Bobwhite mortality in  
 central MO. 26:35(r)  
 Lewis, T. 99.9 & 0.1 percent points  
 of  $x^2$  distr. 25:118(r)  
 Libbert, W. Where do different age  
 classes of White Storks spend breed-  
 ing seasons? 27:135(r)  
 Lierath, W. Food biol. of Lesser  
 Grey Shrike 25:169(r)  
 LIFE HISTORIES (see also Age,Behavior,  
 Development, Ecology, Management,  
 Molts & Plumages, Mortality, Pair  
 Formation, Polygamy, Territory)  
 African birds 22:86(r)  
 Albatross, Steller's 27:196(r)  
 -, Yellow-nosed 23:122(r)  
 Albatrosses 24:35(r)  
 Barbet, Black-collared 23:83(r)  
 Blackbird, Redwinged 28:238(r)  
 Blackbirds (Icterids) in AR. rice  
 fields 29:59(r)  
 central Am. birds, book 26:78(r)  
 Condor, California 24:172(r)  
 Crane, Sandhill 23:35(r)  
 Crossbill, Red, in Den. 29:191(r)  
 Cuckoos, s. Afr. 23:122(r);24:23(r)  
 Dove, Collared Turtle 29:65(r)  
 -, Mourning 22:149(r); 24:159(r)  
 Duck, Ring-necked, book 30:62(r)  
 Eagle, Booted 26:134(r)  
 -, Short-toed 25:24(r)  
 European birds 22:87(r)  
 Falcon, Eleonora, notes on, 31:58(r)  
 Flycatcher, Pied 27:142(r)  
 -, Scissor-tailed 23:34(r)  
 -, Semi-collared 31:50(r)  
 -, Spotted 23:173(r)  
 Galapagos birds 22:87(r)  
 Goldfinch (Am.) 22:186(r)  
 -, Lawrence & Lesser 29:53(r)  
 Goshawk 27:98(r); 30:60(r)  
 Grebe, Great Crested 29:252(r)  
 Grouse, Hazel 23:178(r); 27:92(r)  
 -, Ruffed hatching dates in WI.  
 22:186(r)  
 Gull, Black-headed 29:55(r),249(r)  
 -, Herring 23:45(r)  
 -, Lesser Black-backed 23:45(r)  
 Hawk, Eur. Sparrow 27:98(r)  
 Hermit, Little 23:122(r)  
 Heron, Purple, in Switz. 29:249(r)  
 Honeycreepers, Hawaiian 25:122(r)  
 Honeyguide, Lesser 23:83(r)  
 Honeyguides, book 27:98(r)  
 Hornbill, Crowned 23:121(r);  
 24:26(r)  
 Indonesian birds 22:87(r)  
 Jackdaw 23:119(r)  
 Jay, Blue 29:211  
 Kestrel, Eur. in Den. 27:192(r)  
 Kingbird, Tropical 26:168(r)  
 Kingfisher, Belted 25:80(r)  
 Longspur, Lapland 28:235(r)  
 Loon, Common 24:77(r)  
 Magpie, Western 28:235(r)  
 Martin, Purple 23:179(r)  
 Nuthatch, Brown-headed & Pygmy  
 30:133(r)  
 -, Eur. 29:207(r)  
 Owl, Eagle 29:128(r)  
 -, Pygmy 29:195(r)  
 Partridge, Hungarian, in UT.  
 26:129(r)  
 Penguin, Adelie 25:66(r)  
 -, King 29:56(r)  
 Penguins 29:264(r)  
 Pigeon, Passenger, in book  
 26:133(r)  
 Plover, Kentish 24:75(r)  
 -, Little Ringed 25:121(r)  
 Quail, California, in Hawaii  
 23:35(r)  
 -, - in N.Z. 24:121(r)  
 Rail, Sora 26:125(r)  
 -, Virginia 26:125(r)  
 -, Water, in Finl. 23:42(r)  
 Redstart, Eur., book 25:172(r)  
 Ruff 23:178(r)  
 Scoter, White-winged 25:67(r)  
 Shearwater, Little 30:128(r)  
 Shrike, Fiscal 23:83(r)  
 -, Grey 29:67(r)  
 -, Lesser Grey, in Hungary  
 31:228(r)  
 Soft-wing, White-whiskered  
 30:54(r)  
 Sparrow, Field 24:115(r)  
 -, Gambel's 22:98(r)  
 -, Seaside 29:52(r)  
 -, Sharp-tailed 29:52(r)  
 -, Song, in salt marshes 29:118(r)

- LIFE HISTORY (cont.)
- Starling, Redwing 27:142(r)  
 Stonechat 23:83(r)  
 Stork, White 22:145(r)  
 Study of, outline for, 22:134(r)  
 Swallow, Bank 28:233(r)  
 -, Barn 24:91; 27:152(r)  
 -, Rough-winged, notes on 24:107  
 -, Tree 25:35, 102, 136  
 Swift, Alpine 31:49(r)  
 -, Eur. 22:132(r); 23:175(r)  
 -, - in relation to weather  
 22:39(r)  
 Tanager, Scarlet-rumped 22:134(r)  
 Tern, Hawaiian 23:41(r)  
 -, Least, in Mississippi River  
 valley 28:250(r)  
 -, Noddy, in Hawaii 23:41(r)  
 -, Sooty, difference on two  
 Hawaiian Islands 23:41(r)  
 Thrasher, Brown 23:135(r)  
 Thrush, Mistle 24:75(r)  
 Tinamou, Highland 29:56(r)  
 Tit, Great 22:131(r); 23:130(r)  
 Titmice 22:88(r)  
 Titmouse, Tufted 28:135(r)  
 Vireo, Red-eyed 25:24(r)  
 Wagtail, Yellow, book 26:42(r)  
 Warbler, Bonelli's 25:120(r)  
 -, Eversmann's 25:121(r)  
 -, Greater Reed 29:258(r)  
 -, Southern Greater Reed 29:258(r)  
 Warblers, Wood, book 25:69(r)  
 Waxwing, Cedar 22:186(r)  
 Weaver, Pink-billed 28:46(r)  
 Wildfowl, N. Am. 23:95(r)  
 Woodpecker, Blood-colored  
 24:163(r)  
 -, Cardinal 24:76(r)  
 Wren, St.Kilda 25:25(r)  
 -, Winter, book 27:99(r)  
 Ligda, M.G.H. Radar observations of  
 Blackbird flights. 31:227(r)  
 LIGHT (see Photoperiod)  
 Limnodromus sp. (Dowitcher)  
 geogr. var. & speciation, monogr.  
 22:96(r)  
 - griseus (Short-billed Dowitcher)  
 angle of cerebral axis 30:246(r)  
 band. & leg size 30:121  
 in monogr. 22:96(r)  
 migr. & increase in NJ. 23:40(r)  
 netting, using decoys 31:89  
 - scolopaceus (Long-billed  
 Dowitcher)  
 in monogr. 22:96(r)  
 Limnethlypis swainsonii (Swainson's  
 Warbler)  
 band size 29:92  
 Limosa lapponica (Bar-tailed Godwit)  
 age - see Age, maxima-  
 band. - see Banding Reports  
 - limosa (Black-tailed Godwit)  
 detn. of clutch size 28:46(r)  
 pop. changes in Neth. 22:43(r),  
 134(r)  
 Lincoln, F.C. (see Bullis, H.R.Jr.)  
 --- Migr. of Birds 22:142(r);  
 23:135(r)  
 Lind, E.A. Ethology & ecol. of House  
 Martin. 31:228(r)  
 Lind, H. Behav. of Blackbird 27:43(r)  
 --- Movements of Geese at W. Jutland  
 27:190(r)  
 --- Terr. behav. of Lapwing in autumn  
 28:239(r)  
 --- Movements of Sheld-duck 29:49(r)  
 --- Courtship of Red-crested  
 Pochard 30:56(r)  
 --- Observations of Pink-footed  
 Geese at W. Jutland 30:126(r)  
 Lindemann, W. Courtship & breeding  
 biol. of Ruff. 23:178(r)  
 Lindner, E. Blowflies of birds.  
 31:56(r)  
 Linnet (Acanthis cannabina)  
 Linnman, N. Swans in Sweden. 26:31(r)  
 Linsdale, J.M. Survival in birds  
 banded at Hastings Reservation.  
 23:30(r)  
 --- Goldfinches on Hastings Nat.  
 Hist. Reservation. 29:53(r)  
 Lippens, L. Migr. of Starling at  
 mouth of Scheldt & on coast of  
 Belgium. 23:80(r)  
 --- Banding & observations on  
 water birds in Zoute region.  
 24:70(r)  
 Liscinsky, S.A. (see Richter, W.C.)  
 --- & W.J.Bailey, Jr. Modified shore-  
 bird trap for Woodcock & Grouse.  
 27:86(r)  
 Lister, M.D. Secondary song: a tent-  
 ative classification 24:170(r)  
 --- The bird watcher's reference  
 book. 28:110(r)  
 LISTS  
 annotated, of:  
 Barro Colorado Is. 23:132(r)

## LISTS (annotated,(cont.))

- Canada, Elk Is. Nat. Park, Alberta  
24:30(r)  
-, James & Hudson Bays 25:31(r)  
-, Perry River region 27:198(r)  
-, Prince Albert Nat. Park,  
Saskatchewan 24:20(r)  
Cape Verde Is. 27:137(r)  
Caribbean Is. 27:198(r)  
Caspian Sea lowlands 31:109(r)  
Den., w. coast 27:199(r)  
Europe, s.w. 29:203(r)  
France 25:78(r)  
Hungary, peat bogs, by habitat  
29:253(r), 258(r)  
Israel, n., breeding birds  
29:258(r)  
Jura Mts. 28:52(r)  
Lapland, Abisko 28:180(r)  
-, Swedish 30:248(r)  
-, Torne region 29:66(r)  
Mex., Vera Cruz 23:98(r)  
Micronesia 23:97(r)  
Montecristo Is. 26:39(r)  
Morocco, e. 28:243(r)  
New Brunswick 24:124(r)  
NH. 27:207(r)  
NJ. 27:205(r)  
NY., Albany 24:124(r)  
PA., State College 24:84(r)  
Pyrenees, central 28:52(r)  
Sardinia & Sicily 28:108(r)  
Spain, Coto Donana 29:128(r)  
Spitzbergen 28:180(r)  
Surinam 27:206(r)  
Sweden, Gavle 28:180(r)  
-, Jamtland, 65-yr records  
28:180(r)  
-, Krankesjon Lake region 31:106(r)  
-, Stora Karlso Is. 25:127(r);  
29:65(r)  
Tristan da Cunha 29:257(r)  
Tunisia 28:52(r)  
Venezuela, Ciconiiforms of  
27:146(r)
- Check-lists:  
Central Am. 27:103(r)  
insects in birds' nests 31:61(r)  
Japan 30:136(r)  
MA. 27:100(r)  
MI., distributional 31:57(r)  
N. Am. birds & mammals 23:193(r)  
- -, A.O.U., 5th ed. 29:129(r)  
- -, ranges 26:38(r)  
Neth. 30:59(r)
- N.Z. 25:32(r)  
S. Afr. 24:131(r)  
world 22:142(r); 31:233(r)  
Lobipes lobatus (=Phalaropus lobatus)  
Lockie, J.D. Breeding habits & food  
of Short-eared Owls after a vole  
plague. 27:192(r)  
--- Winter fighting in feeding  
flocks of Rooks, Jackdaws & Carrion  
Crows. 28:174(r)  
--- Food of nestling Rooks near  
Oxford. 31:167(r)  
Lockley, R.M. Movements of Manx  
Shearwater at sea during breeding  
season 25:117(r)  
--- & R. Russell. Bird-ringing/ art  
of bird study by individual mark-  
ing. 25:80(r); 28:185(r)  
LOCOMOTION (see also, Flight)  
depth of diving by Loons, Grebes  
& Scoter 28:50(r)  
head-leg coordination in walking,  
chickens 31:231(r)  
swimming movements of diving ducks  
26:34(r)  
Locustella naevia (Grasshopper  
Warbler)  
aggressive behav. toward weasel  
31:102(r)  
breeding in central Sweden 28:170(r)  
nesting 27:192(r)  
Lofberg, L. Bird revival & food.  
26:86(r)  
Lofts, B. & A.J. Marshall. Inter-  
stitial & spermatogenetic tissue  
of autumn migrants in Engl. 29:249(r)  
Logan Home, W.M. Paper-tearing by  
birds. 24:118(r)  
Lohrl, H. (see Schuz, E.)  
--- Courtship & pair formation of  
Collared Flycatcher 23:85(r)  
--- Artificial Swallow nests 25:157(r)  
--- Bird protection as a natural pest  
control measure in fruit orchards.  
26:39(r)  
--- Feather markings in a pop. of  
Collared Flycatchers. 26:86(r)  
--- Sleeping habits of Tree Creepers  
& other small birds in cold winter  
nights. 27:139(r); 28:174(r)  
--- Starling as competitor for nest  
holes. 28:103(r)  
--- Cherries as food for nestling  
Starlings. 28:245(r)

- Lohrl, H. (cont.)  
 --- Pop. ecol. of Collared Flycatcher 29:121(r)  
 --- The Nuthatch. 29:207(r)  
 --- Behav. of Eur. Nuthatch 30:56(r)  
*Lonchura punctulata* (Spice Finch)  
 social behav. 26:126(r)  
 LONGEVITY (see Age-)  
 Longspur, Lapland (*Calcarius lapponicus*)  
 Loons (Gaviidae)  
 -, Arctic, =Black-throated (*Gavia arctica*)  
 -, Common, = Great Northern Diver (*G. immer*)  
 -, Red-throated (*G. stellata*)  
 -, Yellow-billed (*G. adamsii*)  
*Lophoceras suahelicus* (Crowned Hornbill)  
 L.H. 23:121(r)  
*Lophortyx californica* (California Quail)  
 annual cycle 27:191(r)  
 body temp. 30:59(r)  
 L.H. in Hawaii 23:35(r)  
 mgt., in book 22:195(r)  
 traps & trapping tech. 27:1;22:109  
 - *gambelii* (Gambel's Quail)  
 body temp. 30:59(r)  
 L.H. in N.Z. 24:121(r); 30:203  
 malaria in 26:36(r)  
 pesticide effects on 23:127(r)  
 sex ratio change with age 28:145  
 traps for 27:188(r)  
 Lorenz, K.Z. Comparative meth. in studying innate behav. patterns. 22:89(r)  
 --- King Solomon's Ring. 23:192(r)  
 Lories (Psittacidae)  
 Lovesy, F.T. (see Woodford, J.)  
 Low, J.B. Game farm pheasant returns to hunter's bag, UT. 26:35(r)  
 ---, K. Lee & D.I. Rasmussen. White Pelican on Great Salt Lake, UT. 22:37(r)  
 Low, S.H. Cooperative participation for the 1950 bird banding year. 22:64  
 --- Banding with mist nets. 28:115  
 --- Waterfowl banding in Canadian Prairie Provinces. 29:58(r)  
 Lowe, J.I. Breeding density & productivity of Mourning Doves in GA. 28:241(r)  
 Lowe, V.T. Way of a Dove 28:168(r)  
 Lowery, G.H. Jr. Quantitative study of nocturnal migr. 23:43(r)  
 --- Louisiana Birds. 28:184(r)  
 --- & W.W. Dalquist. Birds from Vera Cruz, Mex. 23:98(r)  
*Loxia* sp. (Crossbills)  
 band. - see Banding Reports  
 - curvirostra (Red Crossbill)  
 band. - see Banding Reports  
 band size 25:15  
 breed on Isl. in Baltic 29:65(r)  
 breeding, early winter, Den. 29:191(r), 192(r)  
 evol. significance of migr. 26:96(r)  
 food & feeding 27:104(r)  
 food value of pine seeds 28:246(r)  
 invasion, in Eur. 27:46(r), 90(r)  
 -, in Engl. 30:198(r)  
 nest, descr. 28:180(r)  
 - leucoptera (White-winged Crossbill)  
 band size 25:15  
 invasion, Scandinavia 31:105(r)  
 origins of West Indian pop. 22:93(r)  
 - *pytyopsittacus* (Parrot Crossbill)  
 breeding behav. 31:229(r)  
*Loxigilla violacea* (Greater Antillean Bullfinch)  
 band size 29:93  
 injuries 28:158  
 soft part colors 27:181  
*Loxipasser anoxanthus* (Yellow-backed Finch)  
 band size 29:93  
 color of soft parts 27:181  
 scaly-leg on 28:158  
*Loxops virens* (Amakihi)  
 ann. cycle, environment & evol. 25:123(r)  
 behav., ecol. & anat., in monogr. 22:191(r)  
 Lucar (= *Dumetella*)  
*Lullula arborea* (Woodlark)  
 distraction displays 25:26(r)  
 migr., s. Sweden 31:46(r)  
 reaction to Eur. Jays 25:26(r)  
 terr. 31:99(r)  
 Lund, H. M-K. Food habits of Goshawk in Nor. 22:37(r)  
 --- House Sparrow in n. Nor. 27:199(r)  
*Lunda cirrhata* (Tufted Puffin)  
 counts at sea 23:41(r)  
 Lundberg, S (see Markgren, G.)

- Lundberg, S. (cont.)
- Slender-billed Nutcracker breeding in Sweden. 27:146(r)
  - Black Kite & Great Grey Owl breeding in Norrbotten. 27:146(r)
  - Little Owl, Little Gull & Black Kite in n. Sweden 29:204(r)
- Lundevall, C. Eastern birds which have extended their ranges into Scandinavia during last 100 yrs. 25:168(r)
- Lundin, A. Food of Long-eared Owl. 31:232(r)
- & J. Hansson. Census of Mute Swans in Uppland, 1955. 27:200(r)
- Luscinia (Nightingales)
- syst. 22:136(r)
  - luscinia (Thrush Nightingale) range extension 26:39(r)
  - megarhynchos (Nightingale) distr. 25:32(r)
  - learns Blackcap song 23:87(r)
  - new subspp. 23:43(r)
  - range reduction 25:32(r)
  - svecica (Bluethroat)
  - band. - see Banding Reports
  - breeding behav. & migr. 29:47(r)
  - incub. period 22:38(r)
  - migr., e. Sweden 30:240(r)
  - nesting study 28:48(r)
  - netted at Fair Isle 28:220
- Lybius torquatus (Black-collared Barbet)
- L.H. & parasitized by Lesser Honeyguide 23:83(r)
- Lyon, L.J. Pheasant winter roosting cover preference in north-central CO. 25:165(r)
- Lyrurus tetrix (Black Grouse, = Blackgame)
- band. - see Banding Reports
  - behav. display & mating 25:71(r)
  - flocking behav. 29:197(r)
  - home range 23:170(r)
  - lime to protect pine buds against 31:103(r)
  - pop. & lunar cycles 27:89(r)
  - cycles 22:96(r)
  - sex ratio & hunting laws. 23:182(r)
  - wt. var. 30:57(r)

- Mac (see also Mc-)
- MacArthur, R.H. Breeding distr. pattern of N. Am. migrant birds. 31:104(r)
- & Klopfer, P. N. Am. birds staying on board ship during Atlantic crossing. 30:126(r)
- MacKenzie, J.M.D. Nestling mort. among Tits on Tentsmuir. 22:130(r)
- Redstarts reared in Tits' nests. 27:94(r)
- Treecreepers roosting in Wellingtonias 28:240(r)
- MacKworth-Praed, C.W. & C.H.B.Grant. Migr. movements of s. race of Violet-backed Starling. 22:84(r)
- MacMullan, R.A. & L.L.Eberhardt. Tolerance of incub. pheasant eggs to exposure 25:28(r)
- MacNair, V.J. Behav. of a Blackbird. 22:134(r)
- MacQueen, P.M. Terr. & song in Least Flycatcher 22:187(r)
- Macronectes giganteus (Giant Fulmar) band. - see Banding Reports egg meas. 27:91(r)
- - & incub. 25:156(r)
- observations of on Campbell Is. 23:191(r)
- prey on Emperor Penguin 25:157(r)
- Madsen, H. & K.Storgaard. Birds fallen at a light vessel in North Sea. 27:189(r)
- Magnusson, M. Eagle Owl back in Kilsbergen, Sweden 29:60(r)
- Magpie (Pica) eating wool 27:47(r)
- , Western (Gymnorhinus dorsalis)
- Maguire, B.A., E.S.Pearson & A.H.A. Wynn. Time intervals between industrial accidents. 24:158(r); 25:22(r)
- Mainardi, D. (see Gualtierotti, T.)
- Major, J.C. (see Odum, E.P.)
- Makatsch, W. White Stork in Oberlausitz 25:79(r)
- An Eleonora's Falcon eyrie. 31:58(r)
- Malacoptila panamensis (White-whiskered Puffbird) L.H. 30:54(r)
- Maljchevskij, A.S. Breeding life of passerine birds. 30:251(r)
- Mallard (Anas platyrhynchos)
- Mallee-fowl (Leipoa ocellata)
- Malurus sp. (Australian Wrens) band. - see Banding Reports - cyaneus (Colour-ringed Blue Wren) breeding behav. & plumage 30:245(r)
- Mamo (drepanis sp.)
- Manacus manacus (White-bearded Manakin) displays 30:55(r)
- MANAGEMENT
- book, Wildlife Legacy 26:41(r)
- food plant production for water-fowl 22:184(r)
- forest insect control by increasing bird pops. 28:104(r),175(r) ; 29:254(r) ; 30:130(r)
- history of, NH. game & furbearers 30:136(r)
- hunter bag study, Canada Goose 23:1
- introductions of game birds -in GA. 29:198(r) -in TN. 29:199(r)
- of:
- Chicken, Prairie 29:253(r)
- , - in WI. 22:36(r)
- Coot, Am. 25:73(r)
- Dove, Mourning, 26:130(r)
- in FL. 26:84(r)
- in KY. 27:43(r)
- in NC. 26:83(r)
- Duck, Black 25:123(r), 124(r) game spp., Aland Archipelago 23:181(r)
- -, Mex., book 31:167(r)
- Grouse, Hazel 27:92(r)
- Mallard 26:129(r)
- , distr. of hunting mort. 23:128(r)
- Nene 30:245(r)
- Partridge, Chukar, in NV.23:90(r)
- , Hungarian 26:129(r)
- Pheasant, Ring-necked 26:35(r), 130(r)
- - in refuges 23:89(r)
- - in N.Z. 29:123(r)
- - winter roost cover 25:165(r)
- Quail, Bobwhite 26:35(r)
- , - shrub Lespedeza for 28:175(r)
- Rails 26:170(r); 27:194(r); 29:59(r)
- Snipe 26:170(r); 27:194(r); 29:59(r)
- Teal, Blue-winged 27:138(r)
- Turkey, in WV. 23:128(r)

- MANAGEMENT (cont.)  
 of: (cont.)  
 waterfowl 26:129(r); 27:143(r)  
 -, artificial islands for  
 28:240(r)  
 -, cover crops for 27:143(r)  
 -, importance of Beaver in  
 25:74(r)  
 Woodcock 26:170(r); 27:194(r);  
 29:59(r)  
 practices of, book 22:194(r)  
 productivity &, of  
 Dove, Mourning, in orchards  
 31:165(r)  
 Goose, Canada 28:240(r)  
 Grouse, Blue, in MT. 31:166(r)  
 Pheasant in N.Z. 29:254(r)  
 Teal, Blue-winged 27:138(r)  
 renesting, value of 29:199(r)  
 restocking, for pheasants 23:126(r)  
 sex ratios & pheasant 23:182(r)  
 shot, effects on reproductive  
 success of Bobwhite Quail  
 23:128(r)  
 Mann, G.E. (see Hammond, M.C.)  
 Mannikin, Bronze (Spermestes  
 cucullata)  
 Manning, T.H. Birds of w. James Bay  
 & s. Hudson Bay. 25:31(r)  
 Man-o-War Bird (*Fregata magnificens*)  
 Mansfield, K. Is destruction of pota-  
 to beetles by birds insignificant?  
 26:40(r)  
 --- Recognition of bird damage to  
 cultivated plants. 29:206(r)  
 Manson-Bahr, P. Communal spirit in  
 Jackdaws. 25:121(r)  
 Manuel, F. Reexamination of Purple  
 Heron of Switz. 29:249(r)  
 Manville, R.H. Effects of unusual  
 spring weather on Scarlet Tanagers.  
 29:198(r)  
 Mareca (= Anas)  
 Margeson, J.M.R. & K Towsey. Myrtle  
 Warblers crossing Atlantic on ship.  
 31:57(r)  
 Markgren, G. Invasion of Pine Gros-  
 beaks. 27:134(r)  
 --- & S. Lundberg. Pine Grosbeak &  
 White-winged Crossbill in Sweden  
 during invasion of 1956-1957.  
 31:105(r)  
 Marle, J.C.van (see Voorhis, K.H.)  
 Marler, P. Var. in song of Chaffinch  
 24:126(r)  
 Marler, P. (cont.)  
 --- Fighting in Chaffinches related  
 to social hierarchy. 27:141(r)  
 --- Behav. of Chaffinch. 29:133(r)  
 Marples, B.J. (see Falla, R.A.)  
 --- Early Tertiary Penguins of N.Z.  
 25:30(r)  
 Marsden, H.M. & T.S. Baskett. Ann.  
 mort. in banded Bobwhite pop.  
 30:190(r)  
 Marshall, A.J. (see Lofts, B.;  
 Serventy, D.L.)  
 --- Interstitial cycle in relation to  
 autumn & winter sexual behav. in  
 birds. 24:22(r)  
 --- Bearing on breeding & migr. of  
 refractory period of testis  
 rhythm. 24:23(r)  
 --- Display & sexual cycle of Spotted  
 Bowerbird. 24:25(r)  
 --- Leaf-display & sexual cycle of  
 Tooth-billed Bowerbird. 24:25(r)  
 --- Food availability as a timing  
 factor in sexual cycle of birds.  
 24:74(r)  
 --- Function of vocal mimicry in birds  
 24:85(r)  
 Marshall, H.A. & D.L. Serventy. Inter-  
 nal rhythm of reproduction in Xer-  
 ophilous birds under conditions of  
 illumination & darkness. 31:98(r)  
 Marshall, J.T. Jr. Hibernation in  
 captive Goatsuckers. 27:41(r)  
 Marshall, W.H. (see Olson, S.T.;  
 Pospichal, L.B.)  
 --- Ruffed Grouse & Snowshoe Hare  
 pop. on Cloquet Experimental  
 forest, MI. 25:164(r)  
 Martin, A.C. (see Nelson, A.L.)  
 --- Identifying pondweed seeds eaten  
 by ducks. 23:116(r)  
 ---, H.S. Zim & A.L. Nelson. Am. wild-  
 life & plants 23:51(r)  
 Martin, Crag (*Hirundo rupestris*)  
 -, Fairy (*Hylochelidon ariel*)  
 -, House (*Delichon urbica*)  
 -, Purple (*Progne subis*)  
 -, Sand, = Bank Swallow (*Riparia*  
*riparia*)  
 Martin-Lof, P. Size differences  
 between early & late autumn migr-  
 ant Dunlin at Ottenby. 30:196(r)  
 Martin, N.D. (see James, R.F.)  
 --- Color phases of Screech Owl in  
 Ontario 23:186(r)



- Martini, E. "Oil-plague"- Spiekerroog Island 25:76(r)
- Martinsen, M. & A Wildhagen. Bandings in Nor., 1953-'54. 27:129(r)
- Marz, R. Food habits of Eagle Owl. 26:132(r)
- & I. Weglaw. Raptor food habits near Darfeld, Westfalen. 29:206(r)
- Mason, E.A. Barn Swallow L.H. data based on band. records. 24:91.
- & M.S.Shaub. Final report of Connecticut Valley Evening Grosbeak survey, winters of 1948-49 & 1949-50. 23:139
- Mathiasson, S. Autumn migr. at Falsterbo, 1952. 29:50(r)
- Birds of s.w.Eur. 29:203(r)
- Matousek, B. Biol. of the bee-eater, *Microps apiaster*, in Slovakia 25:66(r)
- Matthews, G.V.T. Sensory basis of bird navigation. 23:33(r)
- Bird Navigation. 27:48(r)
- Mattison, H.M. (see Buss, I.O.; Dorney, R.S.)
- Mattson, O.E. (see Hamerstrom, F.N.Jr.)
- Matvejev, S.D. Avifauna of Serbia. 22:43(r)
- Maxse, V.C. (see Acland, C.M.)
- Mayaud, N. Molt & plumages of Eur. Jay. 22:41(r)
- Migr. & reproduction of Mistle Thrush 23:171(r)
- Migr. & reproduction of *Turdus viscivorus* 24:74(r)
- List of birds of Fr. 25:78(r)
- Migr. & wintering of *Larus melanocephalus*. 26:164(r)
- Recoveries in Fr. of Buzzards. 27:133(r)
- New data on Mediterranean Gull. 28:44(r)
- Migr. & the wintering grounds of eurasian Caspian Terns. 28:231(r)
- Migr. of Pink-footed Goose & winter presence in Fr. 28:231(r)
- Mayer, W. Mating song of Eastern Kingbird. 24:126(r)
- Mayfield, H. Census of Kirtland's Warbler. 24:169(r)
- Mayhew, W.W. Spring rainfall in relation to Mallard production. 26:129(r)
- Mayr, E. & D. Amadon. Classification of recent birds. 22:190(r)
- & J.C.Greenway, Jr. Check-list of birds of world. 31:233(r).
- & M. Mayr. Tail molt of small owls. 26:38(r)
- Mazzeo, R. Homing of Manx Shearwater. 24:156(r)
- Mc (see also Mac-)
- McAllister, N.M. Courtship, hostile behav., nest-establishment & egg-laying in Eared Grebe. 30:191(r)
- McAtel, W.L. Folk-names of Canadian birds. 29:201(r)
- McCabe, R.A. Hybridization between Bob-white & Scaled Quail. 26:32(r)
- & Deutsch. Relationships of birds indicated by egg-white proteins. 24:129(r)
- McCall, J.D. Portable live trap for ducks, with improved gathering box. 26:28(r)
- McCann, C. Food plants of Tui. 24:21(r)
- McClure, H.E. Meth. of bird netting in Japan applicable to wildlife mgt. problems. 27:67.
- Sex & age ratios of some Japanese birds. 28:233(r)
- Dispersal of Egrets on Kanto Plain, Japan. 31:105(r)
- & R. Cedeno. Tech. for taking blood samples from living birds. 27:148(r)
- & M. Yoskii. Arrival of continental migrants in w. Japan. 29:48(r)
- McElroy, T.P.Jr. Handbook of attracting birds. 22:45(r)
- McGowan, T.A. Call-count as census meth. for breeding Mourning Doves in GA. 25:74(r)
- McGregor, R.L. (see Fitch, H.S.)
- McLeod, J.A. & G.F.Bondar. Double-crested Cormorant on Lake Winnipegosis. 25:128(r)
- McNally, J. Feeding habits of Cormorants in Victoria. 29:260(r)
- & Falconer. Trapping & banding operations, Lara Lake. 25:17(r)
- Meanley, B. (see Neff, J.A.)
- Banding Blackbirds in a rice field reservoir roost. 27:170
- Food habits of King Rail in AR. 28:54(r)
- Food habits & courtship behav. of King Rail in AR. 30:57(r)

- Meanley, B. (cont.)  
 --- & A.G. Growth & dev. of King Rail  
 30:197(r)
- Meadowlark, Eastern (*Sturnella magna*)  
 -, Western, *S. neglecta*
- MEASUREMENTS (see also Band sizes;  
 Egg-; Techniques; Weight)  
 geogr. var., game animals 22:136(r)  
 leg sizes, many spp. 25:11; 27:76;  
 29:90; 30:121; 31:158
- of:
- Blackbird, Eur. 27:45(r)
  - Cardinal, wing 30:233
  - Chickadee, Black-capped, wing  
 27:32
  - Ducks 26:37(r)
  - Dunlins, migr. in S. Sweden  
 30:196(r)
  - Finch, Purple, wing 25:97; 28:32
  - Flycatcher, Collared, wing  
 26:86(r)
  - Grackles 24:168(r)
  - Gulls, Herring, Lesser, & Great  
 Black-backed, bill & body wt.  
 31:166(r)
  - Hummingbird, Streamer-tailed,  
 wing & tail 27:181
  - Hungarian birds 27:148(r)
  - Pipit, Water 29:52(r)
  - Plover, Little Ringed 28:105(r)
  - Sparrow, House 29:64(r)
  - Starling, external & internal  
 str. 26:37(r)
  - , wt. & length in sex detn.  
 22:17
  - Swallow, Barn 25:78(r)
  - Tern, Arctic & Common, bill, egg  
 & nest 31:103(r)
  - Towhee, Red-eyed 29:259(r)
  - Warbler, Kirtland's in migr.  
 30:234
  - Warblers, Wood, many spp. 29:109
  - Wheatear 30:49(r)
- Mebis, T. Eagle Owl in Franconian Jura  
 25:79(r)
- Peregrine caches prey 28:109(r)  
 --- Raptors as incubators & foster  
 parents. 29:198(r)
- Megaceryle alcyon (Belted Kingfisher)  
 behav. 22:193(r)  
 food & L.H. 25:80(r)  
 natal down 29:233  
 prey vulnerability 27:202(r)
- Megadyptes antipodes (Yellow-eyed  
 Penguin)
- Megadyptes antipodes (cont.)  
 age effects on egg-laying  
 22:185(r)
- band. - see Banding Reports  
 band. tech. 22:47  
 longevity - see Age, maxima-  
 pair bond 26:68  
 pop. study 29:264(r)  
 sexual behav., monogr. 22:190(r)  
 temps., body & incub. 30:195(r)
- Meinertzhagen, R. Effects of model  
 scorpion & lizard on bird-table.  
 27:142(r)
- Meise, W. Propagation, sexual  
 maturity & migr. in Quail.  
 27:134(r)
- Melanerpes erythrocephalus (Red-  
 headed Woodpecker)  
 band. - see Banding Reports  
 drumming of 24:18  
 mort from DDT 28:108(r)
- Melanitta (Scoters)  
 cytogenetics & syst. 24:127(r)  
 - fusca (White-winged, = Velvet  
 Scoter)  
 breeding behav. & ecol. 29:251(r)  
 depth of dive 28:50(r)  
 nesting ecol. 25:67(r)  
 pop. fluctuations, Sweden 31:57(r)  
 predation on, by Black-headed  
 Gulls 23:129(r)  
 site tenacity & mort. rate 31:46(r)  
 var. in clutch size & laying dates  
 29:195(r)  
 - - egg size & shape 29:194(r)  
 - nigra (Black, = Common, Scoter)  
 oil victims in North Sea 25:76(r)  
 pop. changes 27:101(r)
- Meleagris gallopavo (Turkey)  
 albinism 27:148(r)  
 beard, anat. & histol. of 30:59(r)  
 distr. & abundance, WV. 23:128(r)  
 in Wm. Bartram's writings 29:264(r)  
 innate food selection 26:33(r)  
 release of gobbling 26:168(r)  
 status in LA. 23:47(r)
- Melin, P. (see Morbeck, J.)
- Melopelia sp.  
 syst., merge with Zenaida 30:198(r)
- Melospittacus undulatus (Budgerygah)  
 reproductive rhythm 31:98(r)
- Melospiza georgiana (Swamp Sparrow)  
 band. - see Banding Reports  
 band size 27:79; 29:93  
 cloacal protruberance 23:160

- Melospiza georgiana (cont.)  
 natal down 29:263  
 respiratory rate 29:39  
 sex, age & daily wt. 26:19
- Melospiza lincolni (Lincoln's Sparrow)  
 band. - see Banding Reports  
 band size 27:79  
 nest attentiveness, by thermistor 30:242(r)  
 sex, age & daily wt. 26:19
- melodia (Song Sparrow)  
 ages of many individuals, 2-6 yrs. 27:75  
 band. - see Banding Reports  
 band size 25:15, 59; 27:79;29:93  
 banded young rejected by parent 25:61  
 behav., displacement 25:72(r)  
 cowbird parasitism 22:81  
 DDT effects on 22:189(r)  
 descr., newly hatched 27:127  
 egg laying 25:37  
 migr. status, MD. 24:68  
 molt, flight feathers 22:82  
 nesting 22:81  
 new subspp., descr. 29:66(r)  
 pop. dynamics in salt marshes 27:191(r); 29:118(r)  
 - in sprayed orchards 23:180(r)  
 remating percent 30:123  
 respiratory rate 29:39  
 terr. size on small Is. 28:234(r)  
 wt., before & after a night of migr. 31:95(r)  
 - changes 27:17  
 -, sex, age & daily 26:19
- Menaboni, A. & S. Menaboni's birds. 22:44(r)
- Mendall, H.L. Ring-necked Duck in the Northeast 30:62(r)
- Menuræ (see *Atrichornis*)
- Meredith, R.L. Automatic bow trap. 25:115(r)
- Merganetta armata (Bolivian, or S.Am. Torrent Duck)  
 behav. 26:72(r)
- Merganser, Red-breasted (Mergus serrator)  
 -, Am. (*M. merganser*)  
 Mergus spp. (Mergansers)  
 syst. 24:127(r)  
 - merganser (Goosander, = Am.Merganser)  
 habits & behav. 27:140(r)
- Mergus merganser (cont.)  
 sex ratios 29:203  
 uniting broods with Red-breasted Merganser 28:107(r)
- serrator (Red-breasted Merganser)  
 broods united with Goosander 28:107(r)  
 -, includes a Scaup 24:161(r)  
 eggs in nest of Scoter 25:67(r)  
 - - - - Teal & Mallard 25:68(r)  
 evol. significance of migr. 27:97(r)  
 migr., s. Sweden 30:189(r)  
 nesting study 28:102(r)  
 - success 25:68(r)
- Merikallio, C. Numbers of land birds in Finl. 24:29(r)
- Merkel, F.W. Daily & ann. periodic activity in caged migr. birds. 28:239(r)
- Merkel, M. Wire nest of Turtle Dove. 29:119(r)
- Merlin ( *Falco columbarius*)
- Meropidae (Bee-eaters)  
 biol. of, in book 22:145(r)  
 Russian bandings 29:111
- Merops apiaster (Bee-eater)  
 behav. 25:158(r)  
 hole excavation 29:54(r)  
 House Sparrow nesting among 29:203(r)  
 L.H. in captivity 23:121(r)  
 nest excavation 29:54(r)  
 nestling period & feeding 25:66(r)
- Messenburg, H. (see Banke, P.)
- Messmer, E. & I. Dev. of vocal expressions & behav. in Blackbird 29:56(r)
- Mest, H. Little Ringed Plover in Westfalen. 28:105(r)
- Mester, H. & W. Prunte. Flight copulation of *Micropus apus*. 29:197(r)
- Metzler, D.W. (see Coburn, D.R.)
- Mewaldt, L.R. (see Farner, D.S.)
- Returns & recoveries of Brewer Blackbirds at San Jose, CA. 31:93(r)
- & D.S.Farner. Roosting flock of Gray-crowned Rosy Finches.24:141
- & R.G.Rose. Orient. of migr. restlessness in White-crowned Sparrow 31:160(r)
- & E.B.Woon. Winter habitat of White-crowned Sparrows 31:106(r)

## MEXICO

- biol. investigations in, book  
   23:52(r)  
 birds of, book 24:171(r)  
   - - Vera Cruz 23:98(r)  
 Meyer, F. Diving reaction as a flight  
 characteristic of Common Sandpiper  
 27:42(r)  
 Meyer, R.K. (see Buss, I.O.)  
 Meyer-Lohmann, J. (see Aschoff, J.)  
 Meyerriecks, A.J. Syst. status of  
 Great White Heron. 30:61(r)  
 --- Comparative breeding behav. of  
 four N. Am. Herons. 31:234(r)  
 Michael, V.C. & S.L. Beckwith. Quail  
 preference for seed of farm crops.  
 27:44(r)  
 Michener, J.R. Terr. behav. & age  
 composition in Mockingbirds at  
 feeding station. 23:88(r)  
 --- & H. Band. records & plumages of  
 Black-headed Grosbeak. 23:30(r)
- MICRONESIA
- avifauna of 23:97(r)  
 Microscelis (= Hypsipetes)  
 Middleton, R.J. 30 yrs. of banding at  
 Norristown, PA. 23:22  
 --- Banding at Norristown, PA.:  
   Song Sparrows 27:73  
   Catbirds 29:229  
   Robins 31:136  
 Miers (see Williams, G.R.)
- MIGRATION (see also Banding Reports,  
 Home Range, Homing, Invasions,  
 Life Histories, Movements, Orient-  
 ation, Photoperiod, Recoveries &  
 Returns)
- abnormal, of Common Gull, due to  
 weather 26:76(r)  
   - - Firecrest in Engl. 26:76(r)  
 across North Sea, radar study  
 31:43(r)  
 altitude of, by aircraft observa-  
 tions 26:123(r)  
   - - 23:80(r), 115(r)  
 annual stimulus for 25:77(r)  
   - - -, a review 22:85(r)  
 as adaptive 27:129(r)  
 Bergmann's Rule & overseas 30:49(r)  
 books & monogr. 23:43(r), 49(r),  
   50(r) ; 24:130(r) ; 25:131(r) ;  
   28:55(r) ; 29:207(r)  
   -, Am. birds 22:142(r); 23:135(r)  
   -, AR. birds 22:198(r)  
   -, Eur. 23:54(r)
- Ontario birds 22:193(r)  
 - review of research before 1949  
   23:171(r)  
 - Sweden 22:94(r)  
 concepts, review of 23:32(r)  
 counts by different observers com-  
 pared 31:95(r)  
 definition, terminal vs. trans-  
 migrant 30:233  
 diurnal 23:116(r)  
 -, Alps, spring 27:87(r)  
 -, -, Swiss 26:28(r)  
 -, Baltic, e., in fall 30:186(r)  
 -, - Sea 27:133(r)  
 -, Engl. 23:116(r)  
 -, -, current investigations  
   31:45(r)  
 -, -, s.e. 25:117(r)  
 -, Eur. 30:186(r)  
 -, many articles 25:17(r)  
 -, Nor. 26:77(r)  
 -, Portugal, s.w. in fall 30:187(r)  
 -, RI. in fall 30:171  
 -, Scandinavia 27:133(r)  
 -, Spain, n.w. in fall 27:132(r)  
 -, -, s. 30:187(r)  
 -, Sweden 26:30(r)  
 -, -, in fall 29:50(r), 186(r)  
   30:189(r)  
 -, -, s. 31:46(r)  
 drift 24:72(r); 31:42(r)  
 -, during nocturnal 26:30(r), 123(r)  
 -, w. Eur. 31:161(r)  
 energy required for 28:163(r)  
 experiments, bases for control of  
 29:187(r)  
 flight speed during 23:80(r)  
 height of 23:80(r), 115(r); 29:  
   248(r); 30:186(r); 31:45(r), 161(r)  
 in:  
   Alps, Bretolet Pass 29:248(r)  
   Aust., to & from other areas  
     30:50(r)  
   Belgium 24:70(r)  
   Bosphorus, fall 29:248(r)  
   -, routes 30:125(r)  
   Chicago area, 17-yr. summary  
     22:183(r)  
   -, fall 24:112(r)  
   Chile, of N. Am. birds 22:37(r)  
   CT., 40-yr. summary of spring  
     31:95(r)  
   Den. 27:37(r)  
   Engl., from n.w. 25:116(r)  
   Eur., w. 24:157(r)

## MIGRATION (cont.)

## in: (cont.)

- Faeroe Is. 23:78(r)  
 Fr., s.w. 25:154(r)  
 Gulf of Mex. & coastal hiatus  
   22:182(r)  
 Japan, fall 29:48(r)  
 Nor., fall 26:77(r)  
 Portugal, s.w., fall 29:248(r)  
 Sardinia & Sicily, fall 28:108(r)  
 Scandinavia 27:35(r)  
 Sicily, spring 26:29(r)  
 Spain & Portugal, based on  
   recoveries 27:189(r)  
 Sweden, fall 29:50(r)  
 -, Falsterbo 28:164(r)  
 -, Ottenby 28:164(r)  
 -, s. 31:227(r)  
 -, s.e. 25:114(r)  
 U.S., directions in e. 29:151  
 late, in Engl., fall 28:44(r)  
 -, of thrushes & warblers, Sweden,  
   1955. 28:161(r)  
 nocturnal, lunar observations, Engl.  
   28:166(r)  
 -, of Swans 30:124(r)  
 -, of thrushes, Ireland 25:116(r)  
 -, - -, & weather 26:77(r)  
 -, quantitative study by lunar  
   tech. 23:43(r)  
 - waves at Helgoland 27:132(r)
- of:
- Alcids, Nor. 25:153(r)  
 Blackbird (Eur.) 26:76(r);  
   31:91(r)  
 Blackbirds, Am. & crop damage  
   23:154  
 -, Redwinged 29:143  
 Bluethroat, White-spotted 29:47(r)  
 Brambling 26:165(r)  
 Brant, Black, in Yukon 27:36(r)  
 Bunting, Ortolan 24:73(r)  
 -, Snow 30:235(r)  
 Buntings, Am., wt. & fat changes  
   30:1  
 Buzzard 27:133(r)  
 -, Honey, ann. fluctuations, s.  
   Sweden 30:49(r)  
 Chaffinch 23:115(r); 28:166(r);  
   29:48(r)  
 Chats, British 27:189(r)  
 Coot, Am. in MI. river valley  
   31:54(r)  
 -, Eur. 27:189(r)  
 Crane, Eur. in Ger. 28:165(r)
- Crane, Sandhill 23:35(r)  
 Cuckoo, Eur. 23:79(r)  
 Dove, Mourning 24:112(r);  
   29:257(r)  
 -, -, in MA. 22:149  
 -, Stock, partial, in Belgium  
   26:124(r)  
 Dowitchers 22:96(r)  
 Duck, Redhead, hand-reared  
   31:165(r)  
 -, Wood 29:47(r)  
 Dunlin, n. Eur. 26:165(r)  
 Gannets in N.Z. 30:241(r)  
 Grebe, Great Crested, 25-yr.  
   dates, s. Moravia 29:252(r)  
 Grebes, by swimming 26:76(r)  
 Greenfinch, Belgium 27:87(r)  
 Gull, Black-headed, from Finl.  
   & Nor. 31:231(r)  
 -, Common 23:78(r)  
 -, Mediterranean Black-headed  
   26:164(r)  
 Gulls, Pacific coast, U.S.  
   23:31(r)  
 Harrier, Australasian 26:165(r)  
 -, Marsh, in Ger. 27:86(r)  
 Hawk, Sharp-shinned 29:152 ;  
   30:38, 180  
 -, Sparrow (Eur.) 27:133(r);  
   28:161(r), 165(r); 29:247(r);  
   30:125(r)  
 Hawks & Falcons, British spp.  
   29:247(r)  
 Heron, Grey 28:100(r)  
 Hobby 23:79(r)  
 Jay, Blue 29:43, 215  
 Lapwing, followed by radar  
   28:165(r)  
 Linnet 27:132(r)  
 -, in Belgium 26:166(r)  
 Merlin, Iceland 26:123(r)  
 Mockingbird 27:128  
 Nighthawks 22:84(r)  
 Osprey 23:115(r)  
 Owl, Snowy 22:183(r)  
 Oystercatcher, Engl. 29:188(r)  
 passerines, dawn departure, Engl.  
   28:166(r)  
 -, s. Sweden 29:187(r)  
 Pigeon, Passenger, in book  
   26:133(r)  
 Pipit, Tree 25:64(r)  
 Quail, Eurasian 27:134(r)  
 raptors, species associating  
   28:165(r)

## MIGRATION (cont.)

- of: (cont.)
- Redpoll 29:49(r)
  - Redshank 23:78(r)
  - Redwing, Eur. 30:188(r)
  - Robin, Am. 27:188(r)
  - , -, in MD. 30:122(r)
  - Sanderling, n. Eur. 25:19(r)
  - Sapsucker 24:156(r)
  - Shelduck, molt migr. 22:83(r)
  - Shorebirds 29:48(r)
  - Shrike, Red-backed 23:79(r)
  - Sparrow, Song, status in MD. 24:68
  - , White-throated, arrival & departure dates, MD. 30:121
  - , -, & fat deposition 29:105
  - Starling 23:80(r); 29:48(r)
  - in e. U.S. 31:216
  - in Saxony 27:136(r)
  - , wind direction effect on 28:166(r)
  - , Violet-backed 22:84(r)
  - Stork, White 22:83(r), 145(r)
  - Swallow, Barn, in Ger. 25:116(r)
  - , Pearl-breasted 22:84(r)
  - Swift, Eur., arrival dates 1896-1957. 30:126(r)
  - , -, weather & 30:49(r)
  - Tern, Black, in Engl. 26:165(r)
  - , Common 22:11; 24:39
  - Thrush, Mistle 23:171(r); 24:74(r)
  - Thrushes, Nor. 26:76(r)
  - , temporal pattern in nocturnal 31:160(r)
  - Titmice 31:97(r)
  - Tubenosed swimmers & ocean winds 30:50(r)
  - Waders, N. Am. & transatlantic vagrancy 31:45(r)
  - Wagtail, White, spring arrival dates, Ger. 28:232(r)
  - , Yellow, Caspian Sea 29:47(r)
  - Warbler, Wood 26:166(r)
  - , Yellow 23:32(r)
  - Warblers, British 25:116(r)
  - , Old World 29:47(r)
  - partial, of Stock Dove in Belgium. 26:124(r)
  - radar studies 29:114(r), 115(r); 30:185(r); 31:40-43(r), 97(r), 225(r)
  - rate during passage, estimation of 24:7
  - of Red-backed Shrike 23:79(r)
  - recent studies 24:32(r), 33(r)
  - related to:
    - barometric pressure 22:182(r)
    - energy resources, Buntings 27:99(r)
    - -, House Sparrow 22:38(r)
    - fat & wt., White-throated Sparrow 26:122(r)
    - food of Redpoll & cone crop 29:49(r)
    - hormones 22:46(r)
    - lipid metabolism 23:117(r)
    - metabolism & temp., Buntings 24:113(r)
    - ocean wind currents, procellariiforms 30:50(r)
    - physiology 22:39(r)
    - , Hummingbirds 23:33(r)
    - , factors in central Afr. 25:19(r)
    - race & sex differences, Sapsucker 24:156(r)
    - rainfall, Storks & 22:84(r)
    - refractory period 24:23(r)
    - social behav., ducks, in fall 27:36(r)
    - temp., in Sweden 26:30(r)
    - testis cycle in Gambel's Sparrow 22:98(r)
    - unusual storms 24:71(r)
    - weather 22:37(r), 94(r), 183(r); 23:80(r); 24:157(r); 25:17(r), 19(r); 26:122(r), 123(r), 165(r); 27:37(r), 132(r), 133(r)
    - & arrival dates 22:183(r)
    - & Barn Swallow in Ger. 25:116(r)
    - & delays in fall, Engl. 28:44(r)
    - & duck, 27:36(r)
    - & nocturnal 28:43(r)
    - & spring movements 26:29(r), 30(r); 27:34(r)
    - & Sweden, s. 29:187(r); 30:189(r), 240(r)
    - & Swift, Eur. 30:125(r)
    - & Tern invasions, w. Sweden 29:248(r)
    - & U.S., e. 29:155
    - weight of White-throated Sparrow 22:85(r)
    - wind direction 23:80(r), 115(r), 116(r); 28:163(r), 166(r); 30:239(r)
  - reversed, 28:161(r)
  - , in e. U.S. 29:155; 31:222(r)
  - , in n. Sweden 29:128(r)

- MIGRATION (cont.)  
 reversed (cont.)  
 -, spring in Sweden 27:190(r)  
 rhythms, ann. & daily 28:166(r)  
 routes (see also migr. of-)  
 - & guiding lines 30:178  
 - across Gulf of Mex. 24:111(r);  
 25:64(r),154(r); 26:29(r); 27:  
 34(r); 29:45(r)  
 - - Irish Sea 26:122(r)  
 - - Tasman Sea, of young White-  
 fronted Terns 28:231(r)  
 -, detn. of by band. data, water-  
 fowl 26:121(r)  
 -, diurnal, on Nantucket Is.,MA.  
 27:88(r)  
 -, e.-w. of Evening Grosbeak 28:98  
 - in e. Kurdistan 26:166(r)  
 - in w. Ger. 25:153(r)  
 -, inheritance of 22:181(r)  
 - of:  
 Brant in Nor. 29:61  
 Cormorant, Double-crested, in n.e.  
 U.S. 31:162(r)  
 Curlew, from Belgium 30:127(r)  
 Ducks, hand-reared vs. wild-  
 trapped 25:74(r)  
 Fieldfare 22:129(r)  
 Goose, Blue 28:230(r)  
 -, Canada 23:1  
 -, Pink-footed 28:231(r);30:126(r)  
 Grebe, Western 30:230  
 Gull, Herring, from MI. 30:69  
 -, -, from MN. 30:104  
 -, Mediterranean Black-headed  
 26:164(r); 28:44(r)  
 -, Slender-billed 30:241(r)  
 Gulls of w. N. Am. 23:31(r)  
 Hawk, Cooper's, in RI. 30:180  
 Loon, Arctic, Siberian pops.  
 27:132(r)  
 Owl, Snowy 22:183(r)  
 raptors, n. Ger. & Den. 28:165(r)  
 Redstarts, Eur. 31:97(r)  
 Shrike, Red-backed 23:79(r)  
 Starling, Rose-colored 26:166(r)  
 Stork, White 22:36(r),83(r);  
 25:64(r); 28:44  
 Tern, Arctic 29:247(r)  
 -, Caspian, in Eurasia 28:231(r)  
 -, White-fronted, young, trans-  
 Tasman 28:231(r)  
 Woodcock (Am.) 29:59(r)  
 studies, review of British  
 30:240(r)
- terminology for 31:40(r)  
 visible (see diurnal)  
 Mildenerger, H. Height & speed of  
 migr. birds 23:80(r)  
 --- Ecol. & reproductive biol. of  
 Stonechat. 23:83(r)  
 --- Density of birds in agricultural  
 areas. 23:130(r)  
 --- Reproductive biol. of Ruff.  
 25:156(r)  
 Miller, A.H. Concepts of hybridiza-  
 tion & integration in wild birds  
 23:42(r)  
 --- Distr. of birds in CA. 23:44(r)  
 --- Occurrence & maintainence of  
 refractory period in Crowded  
 Sparrows. 25:167(r)  
 --- Reproductive periods in birds  
 near equator. 30:129(r)  
 --- & R.Henry. Mechanical aids for  
 bird banding. 23:115(r)  
 Miller, D.S. (see Bagg, A.M.)  
 Miller, J.R. & J.T. Nesting of Spot-  
 ted Sandpiper at Detroit,MI.  
 23:36(r)  
 Miller, L. Lifelong boyhood. 22:101(r)  
 Miller, R.C. Morning & evening song  
 of Robins in different latitudes.  
 29:262(r)  
 Milne, L.& M. Paths across earth.  
 29:207(r)  
 Milon, P. Census of Rouzic Is. birds,  
 April, 1955. 28:52(r)  
 Milvago chimachima (Yellow-headed  
 Caracara)  
 in book, Caribbean 28:243(r)  
 Milvus migrans (Black Kite)  
 age - see Age, maxima  
 band. - see Banding Reports  
 breeding in Sweden 27:146(r)  
 communal nesting & roosting  
 28:50(r)  
 feeding of young 23:38(r)  
 fish-catching tech. 29:55(r)  
 food 28:109(r)  
 incub., sex? 28:109(r)  
 migr. counts, Ger. & Den. 28:165(r)  
 nesting in old nest of Buzzard  
 27:146(r)  
 - on cliffs 29:55(r)  
 - success 25:154(r)  
 old nest of used by Booted Eagle  
 27:138(r)  
 - milvus (Kite)  
 age - see Age, maxima-

- Milvus milvus (cont.)  
 as foster parent of duck 29:198(r)  
 food 28:109(r); 29:206(r)  
 hatches duck egg 29:198(r)  
 incub., sex ? 28:109(r)  
 migr. counts, Ger. & Den. 28:165(r)  
 nesting success 25:154(r)
- Mimidae  
 mass mort. in TX. 28:231(r)
- Mimus polyglottos (Mockingbird)  
 band. - see Banding Reports  
 band size 29:92  
 frequency in roadside census 29:171  
 natal down 29:234  
 recording of vocalizations 27:47(r)  
 remating percent 30:123  
 soft part colors 27:180  
 swollen toes 28:157  
 terr. behav. & age composition at  
 a feeder 23:88(r)  
 wt. 27:175
- Miskimen, M. Sound production in  
 passerine birds 24:85(r)  
 --- Meteorological & social factors  
 in autumn migr. of ducks. 27:36(r)
- Misonne, X. Great wintering ground of  
 s.e. Caspian Sea. 25:76(r)  
 --- Autumn migr. in e. Kurdistan.  
 26:166(r)
- Mitchell, K.D.G. Aircraft observa-  
 tions of birds in flight. 26:123(r)
- Mitchell, M.H. Birds of s.e. Brazil  
 30:65(r)
- Mitchell, R.T., H.P. Blagbrough &  
 R.C. van Otten. Effects of DDT on  
 survival & growth of nestling  
 songbirds. 24:164(r)
- Mistle-toe Bird (Dicaeum  
 hirundinaceum)
- Mittelstaedt, L. Dev. of Starling  
 raised by hand. 22:132(r)
- Mniotilta varia (Black-and-white  
 Warbler)  
 band. - see Banding Reports  
 band size 25:14; 27:78  
 descr., newly hatched 27:125  
 migr., map of 22:143(r)  
 natal down 29:235  
 respiration rate 29:39  
 tip of maxilla missing 28:158  
 wt. 27:175  
 - & meas. 29:109
- Mockingbird (Mimus polyglottos)
- Moebert, F. (see Groebbels, F.)
- Mohler, L.L. Fall & winter habits of  
 Prairie Chickens in s.w. NE.  
 23:123(r)  
 Mohr, H. Polygamy in Barn Swallow  
 29:194(r)  
 Mollymawk, Buller's (Diomedea bulleri)  
 Molnar, B. The Cuckoo in the Hungarian  
 Plain. 23:36(r)  
 Molothrus aeneus (= Tangavius aeneus)  
 - ater (Brown-headed Cowbird)  
 band. - see Banding Reports  
 band of found in gizzard of Merlin  
 24:110  
 band size 25:15; 27:79  
 banded young removed by Veery  
 27:184  
 descr., newly hatched 27:126  
 frequency in roadside census  
 29:171  
 homing 24:26(r); 31:92(r), 221  
 - of a ♀ 30:228  
 hosts of 23:36(r)  
 Bluebird 25:157(r)  
 Sparrow, Field 24:115(r)  
 -, House 25:112  
 -, Song 22:81; 23:120(r)  
 Vireo, Red-eyed 30:127(r)  
 in traps 22:179  
 incub. period 25:65(r)  
 mating behav. 22:187(r)  
 migr., RI. 30:177  
 monogamy 22:188(r)  
 natal down 29:236  
 nestling period 26:79(r)  
 postjuv. molt 29:224  
 range extension, s.e. U.S. 31:83  
 respiratory rate 29:39  
 role in rice field economics  
 29:59(r)  
 sex, age & daily wts. 26:19  
 transient on Cape Cod, MA. 22:156  
 -bonariensis (Shiny Cowbird)  
 hosts of 23:36(r)  
 Rufous-collared Sparrow as host of  
 30:190(r)
- MOLTS (see also Plumage-)  
 & temp. & energy resources 22:38(r)  
 & testis cycle 22:98(r)  
 induced by diet & photoperiod,  
 White-throated Sparrow 28:177(r)  
 migration, of Shelduck 22:83(r)  
 new terminology proposed 30:247(r)  
 of:  
 Belgian birds 24:145(r)  
 Chat, Yellow-breasted 29:179  
 Cowbird, Brown-headed ♂ 29:224



- MOLTS (cont.)  
of: (cont.)  
  Finch, Purple 26:113; 28:38  
  Honeycreepers, Hawaiian 22:191(r)  
  Gannet, Cape 23:122(r)  
  Geese, white-spotting in 23:42(r)  
  Goldfinch, Am. 22:188(r)  
  Grosbeak, Black-headed 23:30(r)  
  -, Evening 24:135  
  Grouse, Blue 29:127(r)  
  Harrier, Pallid 27:149(r)  
  Hummingbird, Anna 28:178(r)  
  Jay, Eur. 22:41(r)  
  Kestrel, Am. 28:242(r)  
  Nene 23:128(r)  
  Owls, small, tail 26:38(r)  
  Partridge, Hungarian 29:257(r)  
  Penguin, Yellow-eyed 22:190(r)  
  Pheasant, Ring-necked 29:257(r)  
  -, - in N.Z. 27:46(r)  
  Pochard, Red-crested 29:199(r)  
  Quail, California 27:191(r)  
  -, - in N.Z. 30:203  
  -, Eurasian 29:257(r)  
  -, Scaled 27:201(r)  
  Sparrow, White-throated 25:60  
  Starling 22:17  
  Stork, White 22:36(r)  
  Swallow, Barn 27:152(r);29:116(r)  
  Swan, Mute 30:245(r)  
  Swift, Alpine 31:49(r)  
  -, Chimney 29:256(r)  
  Takahe 23:122(r)  
  Thrush, Wood, postnuptial 29:245  
  Twite 28:130  
  Wheatear, postnuptial 28:129  
  Woodcock, Am. 27:195(r)  
  Moltoni, E. Birds of prey ringed in Ger. & taken in Italy & notes on longevity. 24:112(r)  
  Monk, J.F. (see Moreau, R.E.)  
  Monroe, M.B. Immature Bluebirds help care for second brood. 29:117(r)  
  Montgomery, A.E. Bird mort. in Elmhurst. 28:108(r)  
  Monticola saxatilis (Rock Thrush) breeding biol. & behav. 28:102(r) in Jura Mts. 28:52(r)  
  Montifringilla nivalis (Snow-finch) wing length 25:99  
  Mook, J.H. (see Perdeck, A.C.)  
  Moore, J.C., L.A.Stimson & W.B. Robertson. Observations of the Short-tailed Hawk in FL. 25:127(r)  
  Moore, N.C. Balance for weighing Tits without capture. 24:156(r)  
  Moore, N.W. Status of Buzzard in British Isles. 28:244(r)  
  Moore, R.T. (see Friedmann, H.)  
  Moorhen (Gallinula chloropus)  
  Moran, P.A.P. Mathematical theory of animal trapping. 23:78(r)  
  --- Estimation of death rates from capture-recapture sampling 24:158(r)  
  --- Mathematical theory of animal pop. 25:163(r)  
  Morbeck, J. & P. Melin. Birds at Gotska Sandon. 27:133(r)  
  Moreau, R.E. (see Snow, O.W.; Thomson, A.L.,ed.)  
  --- Breeding seasons of Afr. birds. 22:86(r)  
  --- Iberian peninsula & migr. 27:189(r)  
  --- & J.F.Monk. Autumn migr. in s.w. Portugal. 29:248(r)  
  Morel, G. & F. Bouliere. Reproduction of Pink-billed Weaver in Senegal. 28:46(r)  
  --- & M.Y. Steel-green Widow Finch parasitizing Little Ruddy Waxbill 27:138(r)  
  Morike, K.D. The leier-song of the Black-cap. 26:41(r)  
  Morely, A. Biol. of Marsh Tit. 25:70(r)  
  MORPHOLOGY (see Anatomy)  
  Morris, D. (see Bastock, M.)  
  Snail-eating behav. of Thrushes & Blackbirds. 25:128(r)  
  --- Pseudofemale behav. & displacement activities of Zebra Finch. 26:81(r)  
  --- Courtship behav. of Cutthroat Finch. 26:82(r)  
  --- Feather postures on birds & origin of social signals. 28:106(r)  
  Morrison, K.D. & J.D.Herz. Where to find birds in MN. 22:145(r)  
  Morse, M.A.(see Harris, S.W.)  
  MORTALITY (see also Diseases, Extinction, Injuries & accidents, Nesting Success, Parasites, Parasitism, Pathology, Pesticides, & Predation)  
  as index of migr., Mallard 23:81(r)  
  causes of, in agricultural areas, Ger., 23:130(r)

## MORTALITY (cont.)

- ceilometers & TV towers. 22:183(r);  
 26:122(r); 28:203(r); 29:116(r),  
 188(r),247(r); 30:51(r),126(r),  
 188(r); 31:97(r)  
 cycles 25:161(r)  
 lead poisoning in ducks 22:185(r)  
 lighthouse kills, s. Sweden  
 29:50(r)  
 of:  
 Blackbird, Eur., rate 30:51(r)  
 Bluebird, late winter storm  
 31:162(r)  
 Buzzard, rate 30:241(r)  
 Capercaillie, chicks, by disease  
 & weather 28:176(r)  
 Chickadee, Black-capped, by ice  
 storm 27:90(r)  
 Coot, Am. rate 31:54(r)  
 Coot, Eur. 31:162(r)  
 Dipper, Engl. 28:167(r)  
 Dove, Mourning 22:165  
 -, Stock 26:124(r)  
 Duck, Canvasback, rate 31:54(r)  
 -, Common Eider, of eggs  
 23:119(r)  
 -, Redhead, hand-reared & releas-  
 ed 31:165(r)  
 -, Tufted 30:191(r)  
 -, Wood 24:160(r)  
 Ducks, from hail storm 27:91(r)  
 -, hand-reared vs. wild-trapped  
 25:74(r)  
 -, rate 22:130(r)  
 Flycatcher, Pied, rate 24:28(r)  
 Goose, Canada 28:240(r)  
 -, - factors in 22:143(r)  
 -, Pink-footed, adults vs. young  
 24:157(r)  
 -, White-fronted 28:232(r);  
 29:249(r)  
 Grosbeak, Evening 31:150  
 Gull, Black-headed, rate 24:81(r)  
 -, chicks, by drowning 25:120(r)  
 -, Herring 30:97, 104  
 -, -, rate 23:46(r); 30:241(r)  
 -, Lesser Black-backed, rate  
 23:46(r)  
 -, Ring-billed, juv. 28:233(r)  
 -, Silver 29:188(r)  
 Heron, Common, rate 24:81(r)  
 -, Grey 30:241(r)  
 Ibis, Hadada, young 23:123(r)  
 Jackdaw, nestling 23:119(r)  
 Lapwing, rate 24:81(r)
- many spp., Ger., broods of  
 31:100(r)  
 Martin, House, Engl. 30:243(r)  
 Merganser, Red-breasted, juv. 28:  
 102(r)  
 Owl, Barn 29:51(r)  
 -, Short-eared 27:192(r)  
 -, Tawny 29:51(r)  
 -, -, winter, central Sweden  
 30:190(r)  
 Partridge, Hungarian 29:60(r)  
 -, -, by farming practices, UT.  
 26:129(r)  
 passerines, drinking sea water  
 in migr. 27:189(r)  
 Penguin, Adelie, rate 23:120(r)  
 Penguins, N.Z. 29:264(r)  
 Petrel, Leach's, a "wreck" of  
 26:39(r)  
 Pheasant, Ring-necked, by flood-  
 ing 23:90(r)  
 -, -, in N.Z. 29:254(r)  
 Pigeon, Wood 30:244(r)  
 Pipit, Meadow & altitude 28:44(r);  
 29:134  
 Quail, Bobwhite, rate 30:190(r)  
 -, California, in HI. 23:35(r)  
 -, -, in N.Z. 30:203  
 Robin, Am., rate 27:93(r)  
 Scoter, White-winged 31:46(r)  
 sea birds, from ice & oil,Sweden  
 28:181(r)  
 Shag, rate 29:51(r)  
 Sparrow, Eur. Tree 23:84(r)  
 -, House 28:167(r); 30:51(r)  
 -, Song, in salt marshes 29:118(r)  
 -, White-crowned, rate 23:30(r)  
 -, White-throated, rate 23:30(r)  
 Starling, rate in N. Am. 29:191(r)  
 -, smog-caused, Engl. 31:56(r)  
 Swallow, Tree 26:51  
 -, -, prefledging 25:35,102,136  
 Swift, Alpine 31:49(r)  
 Teal, Blue-winged, nesting  
 27:138(r)  
 -, Eurasian, rate 29:188(r)  
 Tern, Arctic, chicks 28:57  
 -, -, rate 29:126(r)  
 -, Common, rate 27:59  
 -, Crested 29:188(r)  
 Thrushes, Eur., rate 24:81(r)  
 Tit, Blue, in different parts of  
 range 28:45(r)  
 -, Long-tailed 31:102(r)  
 -, -, from raptors 31:102(r)

## MORTALITY (cont.)

- of: (cont.)  
 Titmice 29:252(r)  
 -, nestling rate 22:130(r)  
 Titmouse, Plain 28:167(r)  
 -, Tufted, in trapping 26:70  
 Waterfowl, from lead poisoning  
 31:55(r)  
 Waxwing, Cedar 22:180  
 Woodcock, ♂, ann. 28:241(r)  
 Wren-tits, rate 23:30(r)  
 radioactivity as cause questioned,  
 Japan. 26:78(r)  
 rain &, Bank Swallows 22:58  
 rare causes among Gulls 28:241(r)  
 rate & pop. estimates 24:26(r)  
 -, calculation of 22:92(r);  
 24:158(r)  
 -, - -, game birds 26:35(r)  
 Salmonella &, in Wood Duck  
 22:186(r)  
 shooting, of Cooper's Hawk  
 22:198(r)  
 trapping, Mourning Dove 22:178  
 TV tower kills 28:203(r);29:116(r),  
 188(r),247(r); 30:51(r),126(r),  
 188(r); 31:97(r)  
 weather-caused, in passerines  
 23:173(r)  
 Morus (= Sula)  
 Moses, H.E. (see Kirkpatrick, C.M.)  
 Motacilla alba (Pied Wagtail)  
 arrival dates in spring, Ger.  
 28:232(r)  
 band. - see Banding Reports  
 cromism suspected 31:51(r)  
 driven off by Yellow-rumped  
 Warbler 26:169(r)  
 migr. 23:76(r); 27:132(r),133(r)  
 nest on travelling truck 23:237(r)  
 nesting relations with Laridae  
 24:160(r)  
 pop. increase 25:152(r)  
 recoveries, Lebanon 25:152(r)  
 swimming 27:94(r)  
 - aguimp (= M. alba)  
 - capensis (Cape Wagtail)  
 parasitized by Didric 24:23(r)  
 - cinerea (Grey Wagtail)  
 band. - see Banding Reports  
 behav. at nests 27:42(r)  
 range changes & climate 22:93(r)  
 - flava (Yellow, = Blue-headed,  
 Wagtail)  
 in book 26:42(r)  
 migr. 25:20(r); 29:47(r)  
 pop. changes in Neth. 22:134(r)  
 pre-migr. gonad dev. 25:20(r)  
 subspp., syst. 28:178(r);29:47(r)  
 Motacillidae (Wagtails)  
 migr. 25:18(r)  
 pop. not change during hunting  
 season near Tokyo 30:57(r)  
 Mountfort, G. Nest-hole excavation by  
 Bee-eater 29:54(r)  
 MOVEMENTS(see also Home Range, Homing,  
 Invasions, Life Histories, Orienta-  
 tion, Recoveries & Returns)  
 cross Atlantic on ships, Yellow-  
 rumped Warbler 31:57(r)  
 - - - -, White-throated Sparrow  
 30:126(r)  
 daily, of Titmice 29:252(r);  
 31:102(r)  
 dispersal:  
 from banding sites, Starling &  
 Am. Robin 28:150  
 - place of birth:  
 Blackbird, Eur. 30:53(r)  
 Egrets, Japanese 31:105(r)  
 Gulls, Black-headed, breeding  
 in Finl. & Nor. 31:231(r)  
 Martin, Purple 22:130(r)  
 Owl, Barn 27:131(r)  
 Robin, Am. 22:130(r)  
 Swallow, Barn 22:130(r)  
 Titmice 24:25(r)  
 migration of Buzzard, Herring  
 Gull, Grey Heron & Tawny Owl  
 30:241(r)  
 of Barn Owl 24:28(r)  
 seasonal, of Silver Gull 29:188(r)  
 -, - Crested Tern 29:188(r)  
 effects of hurricane on Purple  
 Finch 26:119  
 fall, of Yellow-breasted Chat  
 of:  
 Chickadee, Black-capped 30:196(r)  
 Chicken, Prairie, in WI. 22:36(r)  
 Dipper pops. 25:154(r)  
 Dove, Mourning, on Cape Cod, MA.  
 22:156  
 -, - in FL. 26:84(r)  
 Duck, Wood 30:57(r)  
 -, - local, in OH. 30:57(r)  
 Ducks, inland in Aust. 29:193(r)  
 Falkland Is. breeding birds 29:1  
 Gull, Herring in MI. 30:69  
 -, - in MN. 30:104  
 Gulls, w. N. Am. 23:31(r)

## MOVEMENTS (cont.)

## of: (cont.)

- Heron, Grey 28:100(r)  
 Jackdaw, post-nesting 23:119(r)  
 Jay, Blue in TN 29:211  
 Kittiwake, in Switz. after storms  
 28:179(r)  
 Owl, Eagle 22:41(r)  
 Petrel, Giant, post-breeding  
 26:73(r)  
 Pheasant, Ring-necked, after  
 release 23:126(r)  
 Quail, Bobwhite in MO. 24:121(r);  
 26:35(r)  
 -, Eurasian 28:165(r)  
 Robin, Am. 24:156(r); 30:122  
 -, - in ND. 23:168  
 Shearwater, Manx, during breed-  
 ing 25:117(r)  
 Shelduck 29:49(r)  
 shorebirds in CA. 23:32(r)  
 Siskin, Eur. in Belgium 29:47(r)  
 Sparrow, Eur. Tree 29:116(r)  
 -, House 28:166(r)  
 Starling in N. Am. 25:20(r)  
 - in Saxony 27:136(r)  
 Stork, White, young 27:135(r)  
 Swallow, Tree 26:52  
 Waterfowl broods 28:176(r)  
 return home in Switz. 6 yrs. after  
 displaced to e. Afr., Alpine  
 Swift 28:101(r)  
 seasonal, of geese, Jutland, Den.  
 27:190(r)  
 -, of Mute Swan 28:183(r)  
 summer, of Black Swift 26:123(r)  
 -, of Scandinavian birds 27:35(r)  
 vagrants from N. Am. on Fair Isle  
 25:115(r)  
 wandering, of:  
 Grosbeak, Evening 28:98  
 Ibis, Glossy 28:98  
 Raven, sub-adult 29:58(r)  
 winter, daily, Alpine Chough  
 30:133(r)  
 -, of:  
 Goose, Pink-footed, late 29:48(r)  
 Grosbeak, Evening 31:167(r)  
 Grouse, Blue 31:166(r)  
 Siskin, Pine 22:71  
 Sparrow, Tree 30:27  
 Takaha 23:122(r)  
 within colony, Bank Swallow 22:59  
 - -, Common Tern 22:7
- Moynihan, M. (see Bastock, M.;  
 Tinbergen, N.)  
 --- Displacement activities of Black-  
 headed Gull. 24:162(r)  
 --- Behav. of Flying Steamer Duck,  
 notes on 30:57(r)  
 --- Ontogeny of hostile behav. &  
 display patterns of N. Am. Gulls.  
 31:101(r)  
 --- & M.F.Hall. Hostile, sexual &  
 other social behav. patterns of the  
 Spice Finch in captivity. 26:126(r)  
 Mueller, H.C. (see Berger, D.D.)  
 Muhl, K. Crows & Magpies eating  
 sheep wool. 27:47(r)  
 --- Winter utilization of sheep flocks  
 by Starlings, 31:51(r)  
 Muhlethalen, F. Brambling roost near  
 Thun. 25:126(r)  
 Muller-Using, D. Observations &  
 determinations of Ptarmigan.  
 29:259(r)  
 Munch, H. Black Kite in Switz., obser-  
 vations on 29:55(r)  
 --- Nest building of House Sparrow  
 in palms. 29:55(r)  
 Munk, H. Migr. of Common Gull.  
 23:78(r)  
 Murphy, D.A. & T.S.Baskett. Bobwhite  
 mobility in central MO. 24:121(r)  
 Murphy, R.C. Bird-netting as a tech.  
 for banding shorebirds. 26:159  
 --- John James Audubon: evaluation of  
 the man & his works. 28:251(r)  
 Murres (Uria spp.)  
 -, Brunnich's, = Thick-billed (Uria  
 lomvia)  
 -, Common, = Atlantic (U. aalge)  
 Murrelet, Kittlitz's (Brachyramphus  
 brevirostris)  
 Murry, M.D. (see Carrick, R.)  
 Murton, R.K. Passerines alighting on  
 sea 27:88(r)  
 --- Breeding of Wood Pigeon 30:244(r)  
 Musacchia, X.J. Lipids in arctic migr.  
 birds. 25:167(r)  
 Muscicapa (see also Ficedula)  
 competition & habitat 23:40(r)  
 - striata (Spotted Flycatcher)  
 band. - see Banding Reports  
 feeding nestling Blackbirds  
 24:77(r)  
 L.H. 23:173(r)  
 nest box preference 28:104(r)

- Muscicapa striata* (cont.)  
pop. in Finl. 24:29(r)  
weather effect on nesting 23:173(r)
- Muscisaxicola alpina* (Plain-capped Ground Tyrant)  
roosting in caves, Peru 24:119(r)  
- *cinerea* (= *M. alpina*)  
- *frontalis* (Black-fronted Ground Tyrant)  
roosting in caves, Peru 24:119(r)  
- *rufivertex* (Rufous-naped Ground Tyrant)  
roosting in caves, Peru 24:119(r)
- Muscivora forficata* (Scissor-tailed Flycatcher)  
L.H. & ecol. 23:34(r)
- Mussehl, T.W. Blue Grouse production, movements & pop. in MT. 31:166(r)
- Musophagidae (Turacos)  
syst. 22:190(r)
- Myadestes genibarbis* (Rufous-throated Solitaire)  
band size. 29:92  
soft part colors 27:180  
- *townsendi* (Townsend's Solitaire)  
in Alberta & Saskatchewan, Can. 24:30(r)
- Myiarchus barbirostris* (Sad Flycatcher)  
soft part colors 27:179  
- *crinitus* (Crested Flycatcher)  
band. - see Banding Reports  
band size 25:14; 29:91  
DDT effects on 22:189(r)  
in Alberta, Can. 24:30(r)  
natal down 29:233  
- *tuberculifer* (Dusky-capped Flycatcher)  
band size 29:91  
- *validus* (Rufous-tailed Flycatcher)  
band size 29:91  
soft part colors 27:179
- Myiochanes virens* (= *Contopus virens*)
- Myiopagis cotta* (Jamaican Yellow-crowned Flycatcher)  
band size 29:92  
soft part colors 27:180
- Mylne, C.K. (see Hyatt, J.H.)  
Myres, M.T. (see Thomson, A.L., ed.)

- Naka, F.R. (see Richardson, R.E.)  
 Narusawa, T. Migr. emergency by radioactivity. 26:78(r)  
 NAVIGATION (see Orientation)  
 Nebel, S. Young eagle attacks fox. 28:109(r)  
 Nectarinia afer (Double-collared Sunbird)  
   parasitized by Klaas' Cuckoo 24:23(r)  
 Neely, W.W. (see Davison, V.E.)  
 Nef, L. Protecting pine buds against attacks of Blackgame. 31:103(r)  
 Neff, J.A. Outbreak of aspergillosis in Mallards. 27:96(r)  
 --- & B. Meanley. Blackbirds & the AR. rice crop. 29:59(r)  
 --- - ---. Banding blackbirds in e. AR. 23:154  
 Nelson, A.L. (see Martin, A.C.)  
 --- & A.C. Martin. Gamebird weights. 24:167(r)  
 Nelson, L.K. Pheasant neck tag. 27:87(r)  
 Nelson, T. Hist. of ornith. at Univ. MI. Biol. Sta. 27:207(r)  
 Nene, = Hawaiian Goose (*Branta sandvicensis*)  
 Neognathae  
   combined with Paleognathae 23:91(r)  
 Nero, R.W. Pattern & rate of cranial ossification in House Sparrow. 23:34(r)  
 --- Plumage aberrations of Redwinged Blackbird. 26:37(r)  
 --- Behav. study of Red-winged Blackbird. 28:238(r)  
 --- & J.T. Emlen Jr. Terr. behav. in breeding Red-winged Blackbirds. 23:38(r)  
 Nesopelia (= Zenaida)  
   syst., merge with Zenaida 30:198(r)  
**NEST**  
   adaptation to human habitation, Eur. Swift 28:235(r)  
   - to newly exposed lake shore, Plovers & Lapwing. 28:244(r)  
   appropriation of other species' 28:48(r)  
   artificial (see Techniques-)  
   box designs for birds 23:174(r)  
   - - - Goldeneye ducks 23:175(r)  
   - - - protection from Pine Marten 28:236(r)  
   box occupied for 50 yrs. by Eur. Swift. 28:180(r)  
   boxes (see Attracting birds)  
   building, ecol. releasers for initiation of 31:47(r)  
   - & var., many N. Am. spp. 31:47(r)  
   - by:  
     Albatross, Yellow-nosed 23:122(r)  
     Bee-eater 29:54(r)  
     Blackbird, Brewer 23:172(r)  
     -, Redwinged 31:47(r)  
     Buzzard, around fallen young 30:191(r)  
     Dove, Collared Turtle 28:169(r)  
     -, Turtle, of wire. 29:119(r)  
     Gull, Black-headed 29:55(r)  
     Hummingbird, Little Hermit 23:122(r)  
     Jackdaw 23:119(r)  
     Jay, Eur., sexes involved 23:37(r)  
     Martin, House 31:228(r)  
     Rook 22:133(r)  
     Ruff 25:156(r)  
     Shrike, Red-backed 22:88(r)  
     Swift, Chimney 30:127(r)  
     Tit, Bearded, sexes involved 23:38(r)  
     Weaverbird, Black-headed 31:229(r)  
     Woodpecker, Green 23:173(r)  
     Wren, Carolina 22:87(r)  
   competition for holes, Starling, Woodpeckers & Nuthatch 28:103  
   cup moulding by Meadowlarks, Song Sparrows & young Red-backed Shrikes 22:89(r)  
   descr. of:  
     Jay, Siberian 28:180(r)  
     Owl, Eagle 27:93(r)  
     Robin, Am. 27:93(r)  
     Shrike, Red-backed 27:104(r)  
     Warbler, Grasshopper 27:192(r)  
   excavation, by Bee-eaters 29:54(r)  
   exchanges among Tree Swallows 23:30  
   field guide to, Engl. 26:174(r)  
   finding & study of, book 25:83(r)  
   height, Grey Shrike, suburban vs. on moors 28:103(r)  
   location, change in sites, Spine-tailed Swift 23:87(r)  
   - in & on buildings, many spp. 30:52(r)  
   - in Willow-Cottonwood community 23:41(r)

- NEST (cont.)
- location (cont.)
- of:
- Chaffinch, in same tree with  
Mistle Thrush 23:172(r)
- Crane, Eur. 28:180(r)
- Crossbill, Red 28:180(r)
- Goldfinch, Am. 22:188(r)
- Jay, Siberian 28:180(r)
- Kite, Black, on cliffs 29:55(r)
- Sandpiper, Green, in old squirrel  
nest 28:180(r)
- Tit, Bearded 23:38(r)
- , Long-tailed 29:196(r)
- , Penduline 28:105(r)
- , unusual, of:
- Dove, Mourning, on ground 30:  
194(r)
- Duck, Mallard, in old Magpie nest  
25:68(r)
- Falcon, Peregrine, on buildings  
24:114(r); 25:67(r)
- Fieldfare, on cliff 28:180(r)
- Grosbeak, Pine, in juniper n. of  
tree limit in Lapland 28:180(r)
- Gull, Herring, in Balsam Fir  
30:105
- Hummingbirds, in caves, high  
Andes 24:119(r)
- Jay, Eur., in barn 29:196(r)
- Kestrel, Eur., on buildings  
25:68(r)
- Nuthatch, Eur. in wall of  
granary 29:196(r)
- Sparrow, House, in Bee-eater  
colony 29:203(r)
- Swallow, Bank, in stone walls  
28:170(r)
- , Barn, on back of mounted Eur.  
Sparrow Hawk 28:170(r)
- Swift, Black, in sea cave  
28:168(r)
- Wagtail, White, on travelling  
truck 28:237(r)
- Wheatear, under tile roof.  
29:196(r)
- nine years in use, Mourning Dove  
22:126
- occupancy rate, Bald Eagle 26:32(r)
- relief ceremony, Sandhill Crane  
23:35(r)
- repair by nestling Moorhen 27:94(r)
- re-use by Mourning Dove 24:16
- sanitation by Grasshopper Warbler  
27:192(r)
- sanitation by Green Woodpecker  
27:140(r)
- , removal of banded young Cowbirds  
by Red-eyed Vireo 25:61
- , - - - - - Veery 27:184
- , - - - - - damaged eggs by Lapwing  
27:94(r)
- , - - - - - Plovers  
28:236(r)
- site selection, House Sparrow  
30:54(r)
- - Red-bellied Woodpecker  
30:193(r)
- - Stock Dove 27:40(r)
- temp. regulation, Mallee Fowl  
29:192(r)
- ten in one tree 27:141(r)
- use of Goldfinch, as winter  
roost of House Wren 24:75(r)
- NESTING (see also, Behavior-)
- abnormal winter, Eur. passerines  
26:167(r)
- associates of Aust. birds 24:124(r)
- - Egret, Little, in Fr. 28:101(r)
- - Stork, White 24:122(r)
- - Tern, Arctic 28:65; 30:245(r)
- association between Fieldfare-Grey  
Shrike & Fieldfare-Kestrel 29:  
195(r); 31:49(r)
- - Tufted Duck-Gulls-Terns  
24:160(r)
- - - - & Gulls, necessity of  
gull presence 31:48(r)
- with wasps 28:49(r)
- attempts after volcano in Mex.  
31:47(r)
- attentiveness, Lincoln's Sparrow  
30:242(r)
- back-dating of events of, Willow  
Ptarmigan 28:168(r)
- colonial, House Sparrow 29:55(r)
- cooperative, of Chimney Swifts  
24:115(r)
- , - Western Magpie 28:235(r)
- exchanges, Tree Swallow 23:30
- habits of:
- African birds 22:86(r)
- Barbet, Black-collared 23:83(r)
- birds symbiotic with social  
insects 31:98(r)
- Blackbird, Eur. 30:53(r)
- , Redwinged 22:187(r)
- Bluethroat, Red-spotted 28:48(r)
- Brant, Hudson Bay, Can. 28:45(r)
- Bunting, Cirl 27:93(r)

## NESTING (cont.)

## habits of (cont.)

Bunting, Painted 30:1  
 Chiffchaff 26:33(r)  
 Combassou, Senegal, in captivity  
 29:55(r)  
 Coot, Am., s.w.Manitoba, Can.  
 27:39(r)  
 -, Eur. 31:162(r)  
 Crane, Sandhill 24:160(r)  
 Crossbill, Red 29:191(r), 192(r)  
 Curlew, Bristle-thighed, first  
 discovery of nests. 23:35(r)  
 Dove, Mourning 22:161, 197(r);  
 24:159(r), 165(r)  
 -, Peaceful 28:168(r)  
 Dowitchers 22:96(r)  
 Duck, Wood 24:160(r); 27:139(r)  
 31:54(r)  
 Eagle, Booted, e.-central Fr.  
 27:138(r)  
 -, Golden, observations in Switz.  
 28:48(r)  
 Egret, Little, in Fr. 28:101(r)  
 Eur. birds 22:87(r)  
 Falcon, Peregrine 26:147  
 -, Red-footed 27:38(r)  
 Flamingo, Greater 30:129(r)  
 Flycatcher, Hammond's 26:32(r)  
 -, Pied 24:159(r)  
 -, Scissor-tailed 22:34(r)  
 -, Yellow-bellied 29:53(r)  
 Fulmar, Antarctic 25:119(r)  
 Galapagos birds 22:87(r)  
 Gannet, Aust. 30:244(r)  
 -, Cape 23:122(r)  
 Goldfinch, Am. 22:188(r); 24:75(r)  
 Goose, Canada 31:53(r)  
 -, -, renesting 30:194(r)  
 -, Pink-footed 24:161(r)  
 Heron, Great Blue 29:252(r)  
 Honeycreepers, Hawaiian 22:191(r)  
 -, Puerto Rican 27:37(r)  
 Indonesian birds 22:87(r)  
 Jaeger, Pomatorhine 27:190(r)  
 Jay, Blue 29:211  
 Junco, Dark-eyed, in Smoky Mts.,  
 TN. 31:50(r)  
 Kestrel, Eur. 25:68(r)  
 Kittiwake 30:53(r)  
 -, differences in behav. & str.  
 in cliff- & ground-nesting  
 29:194(r)  
 Lark, Horned 26:1

Mallee-fowl, nest temp. regula-  
 tion 29:192(r)  
 Martin, Crag 29:194(r)  
 Nighthawk 22:84(r); 27:9  
 Nightjar, Eur. 29:54(r)  
 Oriole, Golden 28:169(r);  
 31:49(r)  
 Owl, Long-eared 30:127(r)  
 -, Short-eared 27:190(r)  
 -, Snowy 26:125(r); 27:190(r)  
 -, Tawny 28:47(r)  
 Partridge, Chukar 23:90(r)  
 Penguin, Emperor 25:119(r)  
 Petrel, Storm 29:54(r)  
 Petrels of Adelle Land 25:157(r)  
 Pigeon, feral 28:245(r)  
 -, Wood 30:244(r)  
 Plover, Semipalmated 26:137  
 Plovers, on reclaimed land, Neth.  
 26:124(r)  
 Quail, California, in HI. 23:35(r)  
 Quelea, Red-billed 30:54(r)  
 Rail, Clapper 23:35(r)  
 -, Sora 26:125(r)  
 -, Virginia 26:125(r)  
 Redpoll, Hoary, in Lapland  
 22:180(r)  
 Rook 26:168(r)  
 Ruff 25:156(r)  
 Sandpiper, Spotted 23:36(r)  
 -, Upland 23:178(r)  
 Scoter, White-winged 25:67(r)  
 Scrub-birds 24:83(r)  
 Shrike, Fiscal 23:83(r)  
 -, Lesser Grey 29:195(r)  
 -, Red-backed 22:88(r)  
 Sparrow, Eur. Tree 23:84(r)  
 -, Gambel's 22:98(r)  
 -, Hedge 29:118(r)  
 -, Song 22:81; 23:119(r)  
 -, -, in salt marshes 29:118(r)  
 Starling 29:53(r)  
 -, in Ger. 25:156(r)  
 -, two broods in N. Am. 25:120(r)  
 -, Red-winged 23:36(r)  
 Stonechat 23:83(r)  
 Sugarbird, Cape 31:228(r)  
 Swallow, Bank 22:55  
 -, Tree 25:35, 102, 136; 26:45  
 Swift 22:132(r); 23:83(r); 26:167(r)  
 Takahē 23:120(r)  
 Tanager, Scarlet-rumped 22:134(r)  
 -, Summer 27:39(r)  
 Teal, Blue-winged 27:138(r)



NESTING (cont.)

- habits of: (cont.)
    - Tern, Common 22:1
    - Thrush, Mistle 23:171(r)
    - , Rock 28:102(r)
    - Tit, Blue 23:173(r)
    - , Great 26:128(r)
    - , Long-tailed 29:196(r)
    - , Penduline 28:105(r)
    - Titmouse, Tufted 28:135
    - Vireo, Red-eyed 30:127(r)
    - Warbler, Arctic 30:248(r)
    - , Bonelli's 25:120(r)
    - , Grasshopper 27:192(r)
    - , Great Reed 27:194(r);29:258(r)
    - , Reed 27:137(r)
    - Waxwing, Bohemian, n. Sweden 28:180(r)
    - , Cedar 22:186(r)
    - Wren, Carolina 22:87(r)
  - interspecific, communal 24:162(r); 29:195(r)
  - , Great & Blue Tits 29:196(r)
  - , Tits & Pied Flycatcher 29:118(r)
  - , Redstart in Coal Tit nest 27:94(r)
  - renesting (see Behavior-)
- NESTING SUCCESS
- factors affecting:
    - DDT 22:189(r)
    - Duck, Tufted, need to associate with gulls 31:48(r)
    - ducks, aided by Redwinged Blackbirds 30:62(r)
    - Lemming pops., for Jaegers & Owls 27:190(r)
    - Swallow, Tree 25:35, 102
    - weather & Barn Swallow 24:75(r) (see also Ecology, -weather)
  - of:
    - altricial birds 29:53(r)
    - Blackbird, Redwinged 22:187(r)
    - Dove, Mourning 22:161,197(r); 23:55
    - , - , in ID orchards 31:165(r)
    - , Stock 26:124(r)
    - Goldfinch, Am. 22:188(r)
    - Goshawk 25:154(r)
    - Goose, Canada 28:240(r)
    - Grouse, Ruffed 22:186(r)
    - Harrier, Marsh 25:23(r)
    - Hawk, Marsh 23:36(r)
    - Hawks in Ger. 25:154(r)
    - Jaegers 26:169(r)
    - Lark, Horned 26:16
    - Merganser, Red-breasted 25:68(r)

- Owl, Barn 29:51(r)
  - , Eagle 25:79(r)
  - , Snowy 26:169(r)
  - , Tawny 29:51(r)
  - Pheasant, Ring-necked 24:120(r)
  - Pigeon, Wood 30:244(r)
  - Rail, Clapper, in NC. 30:193(r)
  - Sandpiper, Spotted 23:36(r)
  - Sparrow, Chipping 23:107
  - Stork, White 27:89(r)
  - , - , in Ger. 25:79(r)
  - Storks, Fr. 24:115(r)
  - Swallow, Barn, in Engl. 25:23(r) 26:32(r)
  - , - , & weather 24:75(r)
  - , Tree 25:35, 102
  - Swift 22:132(r)
  - Tern, Common 22:14
  - Tit, Long-tailed 29:196(r)
  - Titmice 22:88(r),130(r)
  - Titmouse, Plain 28:167(r)
  - Waxwing, Cedar 22:186(r)
- NESTLING
- descr. of newly-hatched passerines, N. Am., many spp.27:121
  - period of Bee-eater 25:66(r)
  - - Blackbird, Redwinged 26:79(r)
  - - Swift 22:40(r)
  - - Tree Swallow 25:53
- NETHERLANDS (see Europe-)
- NETS (see Techniques -)
- Netta rufina (Red-crested Pochard) courtship 30:56(r)
- drake feeds mate 27:42(r)
- general biol. 29:199(r)
- Nettion crecca (=Anas crecca)
- NEW BRUNSWICK (see Canada-)
- NEWFOUNDLAND (see Canada-)
- NEW ZEALAND (see also Banding Reports; Recoveries & Returns)
- Aust. birds in 30:133(r)
  - birds of, book 27:151(r)
  - checklist 25:32(r)
  - early Tertiary Penguins of 25:30(r)
- Nice, M.M. (see Allen, R.W.; Clark, C.T.)
- Incub. periods of birds of prey 25:24(r)
  - Question of 10-day incub. periods. 25:65(r)
  - Incub. periods throughout the ages. 26:167(r)
  - Nesting success in altricial birds. 29:53(r)

- Nice, M.M. (cont.)  
 --- & R.H.Thomas. Nesting of Carolina Wren. 22:87(r)  
 Nichols, J.T. (see Bagg, A.M.)  
 --- Return of summer resident birds. 23:60  
 --- Dispersal from a banding station, Starlings & Robins. 28:150  
 Nicholson, E.M., I.F.Ferguson-Lees & P.A.D.Hollom. Camargue & Coto Donana. 29:203(r)  
 Nickell, W.P. Habitats, terr. & nests of Goldfinch. 24:75(r)  
 --- Engineering features of nests in relation to nest sites & nesting materials. 31:47(r)  
 Nicod, L. Increase in Chimney Swallows. 24:75(r)  
 Nicolai, J. Biol. & ethology of Bullfinch 28:172(r)  
 --- Family tradition in song dev. of Bullfinch. 31:107(r)  
 Niebuhr, O. Avifauna of mesophytic Oak-Hornbeam Forest. 22:188(r)  
 Niedrach, R.J. (see Bailey, A.M.)  
 Nielsen, B.P. (see Rosenberg, N.T.)  
 Niethammer, G. (see Dathe, H.)  
 Niethammer, G. Avifauna of Sierra Nevada, s. Spain. 29:258(r)  
 --- & W. Przygodda. Food habits of Wood Pigeon & Stock Dove near Bonn. 26:86(r)  
 Nighthawk, Common (*Chordeiles minor*)  
 -, Lesser, = Trilling, (*C.acutipennis*)  
 Nightingale (*Luscinia megarhynchos*)  
 -, Thrush (*L. luscinia*)  
 Nightjar (*Caprimulgus europaeus*)  
 Nilsson, N. Birdlife in central Jamtland. 28:180(r)  
 Ninox spp.  
 tail molt 26:38(r)  
 Nisbet, I.C.T. (see Baird, J; Jenkins, D.)  
 --- Wader migr. at Cambridge sewage farm. 29:48(r)  
 --- Passerine migr. in s. Scandinavia 29:187(r)  
 --- Phot. studies of Goshawk. 30:60(r)  
 --- Wader migr. in N. Am. & its relation to transatlantic crossings. 31:45(r)  
 --- Migr. at Ithaca, NY., spring, 1958. 31:95(r)  
 --- Calculation of flight directions of birds observed crossing face of moon. 31:96(r)  
 --- & Baird, J. Autumn migr. of Double-crested Cormorant through New England. 31:162(r)  
 --- & T.C.Smout. Autumn on Bosphorus & Dardanelles. 29:248(r)  
 Noddy, Brown (*Anous stolidus*)  
 -, White-capped, = Black, (*A. minutus*)  
 Nolan, V. Jr. (see Frazier, A.)  
 --- Anticipatory food-bringing in Prairie Warbler  
 Noll, H. Food of Barn Owl. 28:109(r)  
 --- Bird life throughout the year. 30:200(r)  
 NOMENCLATURE (see Systematics)  
 Nomsen, R. (see Kozicky, E.L.)  
 Nordberg, S. Bird fauna of marine zone in Aland archipelago. 23:129(r)  
 --- Game & game mgt. in Aland archipelago 23:181(r)  
 Nordstrom, G. (see Valikangas, I.)  
 --- Birds ringed in Finl., 1913-1957. 26:120(r); 29:246(r)  
 --- Bird band. in Finl., 1955-'57 29:113(r); 30:124(r), 235(r)  
 Norehn, N. Hoopoe with Fledglings on Gotland 28:172(r)  
 Norrevang, A. Migr. of Dunlin in n. Eur. 26:165(r)  
 --- Changes in bird life of Faeroes in relation to climatic changes in North Atlantic area. 27:199(r)  
 --- Breeding biol. of Guillemot 29:251(r)  
 Norris, R.A. Distr. & pop. of summer birds in s.w.GA. 23:95(r)  
 --- Introduction of exotic game birds in GA. 29:198(r)  
 --- Comparative biosystematics & L.H. of Sitta pygmaea & *S. pusilla* 30:133(r)  
 --- Effects of x-irradiation on breeding biol. of Eastern Bluebird. 30:191(r)  
 --- Density, racial composition, sociality & selective predation in non-breeding pop. of Savannah Sparrows. 31:173  
 Norstrom, S. Two nests of Grasshopper Warbler in central Sweden. 27:192(r); 28:170(r)  
 NORTH AMERICA (see also Canada, Mexico, U.S.A.)

- North America (cont.)  
 birds of, book 22:43(r)  
 checklist 23:193(r)
- NORWAY (see Europe-)
- Nothocercus bonapartei* (Highland Tinamou)  
 breeding biol. 29:56(r)
- Notornis mantelli* (Takahe)  
 band. - see Banding Reports  
 food of chicks 23:116(r)  
 molt, food, terr., pop., & breeding success in 1951. 24:23(r)  
 nesting of 23:120(r)  
 pop. dynamics 29:190(r)  
 winter behav. & movements 23:122(r)
- Nucifraga caryocatactes* (Nutcracker)  
 breeding in Sweden 27:146(r)  
 food storage, terr., & song 23:177(r)  
 hoarding behav. 28:50(r); 30:198(r)  
 incub. 22:38(r); 29:117(r)  
 range expansion 25:32(r)
- *columbiana* (Clark's Nutcracker)  
 incubation patch 24:130(r)
- Numenius arquata* (Common Curlew)  
 band. - see Banding Reports  
 behav., warning cries 29:130(r)  
 breeding biol. 28:169(r)  
 dev. of young 28:169(r)  
 imprinting relationships 22:91(r)  
 migr. from Belgium 30:127(r)  
 site & mate tenacity 29:117(r)
- *borealis* (Eskimo Curlew)  
 in book, extinct & vanishing birds of world 29:262(r)  
 in annotated list, Saskatchewan, Can. 31:109(r)
- *phaeopus* (Whimbrel)  
 comparison of young with Bristle-thighed Curlew 23:35(r)  
 Iceland race in Grnl. 22:192(r)  
 migr. & increase in N.J. 23:40(r)
- *tahitiensis* (Bristle-thighed Curlew)  
 discovery of nest 23:35(r)
- Nutcracker (*Nucifraga caryocatactes*)  
 -, Clark's (*N. columbiana*)
- Nuthatches (*Sitta* spp.)  
 -, Brown-headed (*S. pusilla*)  
 -, Chestnut-bellied (*S. castanea*)  
 -, Corsican (*S. whitheadi*)  
 -, European (*S. europa*)  
 -, Pygmy (*S. pygmaea*)  
 -, Red-breasted (*S. canadensis*)  
 -, White-breasted (*S. carolinensis*)
- Nuttallornis borealis* (Olive-sided Flycatcher)  
 band size 29:92,  
 in checklist, Andover, MA. 29:201(r)
- Nyctea scandiaca* (Snowy Owl)  
 arctic adaptations 30:132(r)  
 body temp. at night in arctic 29:125(r)  
 breeding behav. 27:190(r); 29:250(r)  
 cycles, in book 22:139(r)  
 food 26:169(r); 28:182(r); 29:250(r)  
 -, dependence on Lemmings 27:190(r)  
 migr. of 1946-'47 22:183(r)  
 not breed when Lemmings scarce in Lapland 29:66(r)  
 photograph 26:125(r)
- Nycticorax nycticorax* (Black-crowned Night Heron)  
 age - see Age, maxima-  
 band. - see Banding Reports  
 decrease in Neth. 22:43(r)  
 mort. rates 24:27(r)
- Nyroca* (= *Aythya*)

- Oakeson, B.B. Liver & spleen wt. cycles in migratory White-crowned Sparrows. 24:113(r)
- Liver & spleen wt. cycles in non-migratory White-crowned Sparrows. 27:201(r)
- Oberg, G. Scarlet Grosbeaks in n. Sweden. 28:181(r)
- Oceanic birds  
as guano producers 22:193(r)
- OCEANIC ISLANDS
- Bahamas - 35 new records 24:170 (r)
- Cape Verde - annotated list 27:137(r)
- Caribbean-annotated list 27:198(r)
- Faeroes - introduction of Rock Ptarmigan 22:192(r)
- Galapagos - breeding seasons 22:87(r)
- Hawaii - Birds of Moku Manu & Manana Is. 23:41(r)
- California Quail in 23:35(r)
- , Honeycreepers of, monogr. 22:191(r)
- Indonesia - breeding seasons 22:87(r)
- Philippines - syst. & distr. 24:169(r)
- Seychelles - conservation of birds 30:58(r)
- Tristan da Cunha - annotated list 29:257(r)
- West Indies - birds of 22:196(r); 27:198(r)
- -, origins of avifauna 22:93(r)
- Oceanites oceanicus (Wilson's Petrel) band. - see Banding Reports
- Oceanodroma spp. (Storm Petrels) syst & nomenclature 24:129(r)
- beltingi, monorhis & willetti all = leucorhoa
- tristrami = markhami ?
- leucorhoa (Leach's Petrel) band size 27:77
- in books 22:42(r); 29:202(r)
- invasion in central Eur. 26:39(r)
- syst. 24:129(r)
- "wreck" of 26:39(r)
- tethys (Wedge-rumped Petrel) in check-list, Mex. 22:98(r)
- tristrami (Tristram's Petrel) predation by dogs & cats 27:196(r)
- syst. 24:129(r)
- Odom, E.P. (see Hopkins, M.N.)
- Wt. var. in wintering White-throated Sparrows in relation to temp. & migr. 22:85(r)
- Fat deposition in White-throated Sparrows compared to that in long-range migrants. 29:105
- & G.L.Hight. Use of mist nets in pop. studies of winter Fringillids on AEC Savannah River area. 28:203
- & J.C.Major. Effect of diet on photoperiod-induced lipid deposition in White-throated Sparrows. 28:177(r)
- & J.D. Perkinson, Jr. Seasonal var. in body lipids of migr. White-throated Sparrow. 23:117(r)
- Odum, H.T. Bird navigation controversy. 23:32(r)
- Oenanthe oenanthe (Wheatear) band. - See Banding Reports
- Bergmann's Rule & long migr. 30:49(r)
- capturing 28:221
- color in arctic 30:248(r)
- longevity 29:52(r)
- migr. 30:189(r), 240(r); 31:45(r)
- molt, postnuptial 28:129
- nest under tile roof 29:196(r)
- polygamy 26:82(r)
- subsp. syst., in Pyrenees. 29:258(r)
- wt. 28:130
- of nestlings 28:109(r)
- Ogilvie, C.M. Building of a rookery. 22:133(r)
- Oidemia (= Melanitta)
- OIL POLLUTION
- care of birds after 31:164(r)
- effect on shorebirds 28:108(r)
- in Baltic Sea 25:77(r); 29:65(r)
- North Sea 25:76(r)
- oceans 25:27(r); 31:164(r)
- Oilbird (Steatornis caripensis)
- Oldsquaw (Clangula hyemalis)
- Oliver, W.R.B. N.Z. birds 27:151(r)
- Olivier, G. Peregrine Falcons nesting on buildings. 25:67(r)
- Olor buccinator (= Cygnus buccinator)
- Olson, S.T. & W.H.Marshall. Common Loon in MN. 24:77(r)
- Olsson, V. Greenish Warbler & Hedge Sparrow new for region of Valdemarsvik 27:200(r)
- Wheatear, Jay & Nuthatch nesting in or on houses. 29:196(r)
- Bird banding. 30:47(r)

- Olsson, V. (cont.)
- Dispersal migr., longevity & death causes of *Strix aluco*, *Buteo buteo*, *Ardea cinerea* & *Larus argentatus*. 30:241(r)
  - A nest of the Parrot Crossbill. 31:229(r)
  - Olstad, O. Bird band. in 1938-'43. 25:113(r)
  - Band. Willow Ptarmigan in Oyer. 25:125(r)
  - O'Meara, D. (see Clark, G.M.)
  - Blood parasites of Maine waterfowl. 27:203(r)
  - Ono, Y. Status of birds on Toroshima, particularly of Steller's Albatross 27:196(r)
  - Onychognathus morio* (Redwinged Starling)
    - breeding biol. 27:142(r)
    - nesting & feeding of young 23:36(r)
  - Oporornis agilis* (Connecticut Warbler band. - see Banding Reports
    - band size 25:15
    - distinction from Mourning Warbler 27:185
  - *formosus* (Kentucky Warbler) band. - see Banding Reports
    - band size 29:93
  - *philadelphia* (Mourning Warbler) band. - see Banding Reports
    - band size 29:93
    - distinction from Connecticut Warbler 27:185
    - migr., circum-gulf route 29:45(r)
    - wt. & meas. 29:109
  - *tolmiei* (MacGillivray's Warbler)
    - similarity to Mourning Warbler 27:185
  - Orangequit (*Euneornis campestris*)
  - Oreortyx pictus* (Mountain Quail)
    - food, detn. by stomach anal. 24:159(r)
  - Oreoscoptes montanus* (Sage Thrasher) band. - see Banding Reports
  - Oreotrochilus estella* (Andean Hillstar, = Estella Hummingbird)
    - nest in caves 24:119(r)
  - ORIENTATION
    - book 27:48(r)
    - experiments with:
      - Gulls, Black-headed & Common 25:63(r)
      - Martin, Purple 31:44(r)
      - Meadowlark, Western, training to compass direction 28:43(r)
      - Pigeon, effect of acceleration on cerebellar potentials 31:244(r)
      - reviews of 24:20(r); 29:187(r)
      - Shrike, Lesser Grey, transported to Afr. 31:223(r)
      - Starling, displacement 29:48(r)
      - Warblers, Old World, transported to s.w.Afr. 31:223(r)
    - flight directions, calculation of from lunar observation 31:96(r)
    - homing ability of:
      - Cowbird, Brown-headed 24:26(r)
      - , -, ♀ 30:228 ; 31:221
      - Duck, Wood 24:160(r)
      - Finch, Purple, injured 25:151
      - Gull, Herring, released inland 27:134(r)
      - Pigeons, caged 26:29(r)
      - , factors affecting 30:237(r), 238(r); 31:93(r), 224(r)
      - , Italian vs. German 22:184(r)
      - test for E.S.P. factors 30:237(r)
      - Prion, Dove 29:15
      - Shearwater, Manx 24:156(r)
      - , -, released at Boston, MA. 23:193
      - Shrike, Grey, in winter 28:165(r)
      - Sparrow, Eur. Tree 23:84(r)
      - , Tree, in winter 30:27
    - homing, sources of error in band. studies of 30:229
    - in book. 23:54(r)
    - internal clock & 26:164(r)
    - of:
      - Blackcap 22:182(r)
      - Chaffinch, mechanisms for 31:223(r)
      - Chough, Alpine 25:114(r)
      - Gannet 30:118
      - Oilbird, acoustic 25:78(r)
      - Pigeon, homing 25:25(r); 28:231(r); 30:125(r), 126(r)
      - song birds, caged 22:182(r), 183(r)
      - Starling 22:183(r)
      - , mechanisms for 31:223(r)
      - Stork, White, juv. 23:31(r)
      - Swift, visual 24:73(r)
      - , Alpine 25:114(r)
      - Warblers, Old World, celestial 29:49(r); 30:236(r)
      - Whitethroat 22:182(r)

## ORIENTATION (cont.)

- over sea, in fog 30:236(r)  
 random search in 24:20(r)  
 sensory basis 23:33(r)  
 - -, acoustic, Bats, book 30:63(r)  
 - -, -, Oilbird 25:78(r)  
 - -, celestial, Old World Warblers  
 29:49(r); 30:236(r); 31:226(r)  
 - -, -, White-crowned Sparrow  
 31:160(r)  
 - -, magnets on wing not hinder,  
 Pigeons 23:179(r)  
 - -, sun 24:33(r) ; 27:132(r)  
 - -, - not a factor in homing of  
 Pigeons 26:164(r); 30:186(r)  
 - -, --compass, of Starling  
 26:163(r)  
 - -, visual 27:132(r)  
 - -, - of Swifts 24:73(r)  
 theories of, review 23:32(r)  
 wind & 27:132(r)  
 - -, Chaffinch 25:115(r)  
 - -, Thrushes, nocturnal 26:77(r)
- Orioles, Am. (*Icterus* spp.)  
 -, Eur. (*Oriolus* spp.)  
 -, Baltimore (*Icterus galbula*)  
 -, Golden (*Oriolus oriolus*)  
 -, Jamaican (*Icterus leucopteryx*)  
 -, Orchard (*I. spurius*)  
*Oriolus oriolus* (Golden Oriole)  
 clutch size 30:251(r)  
 nesting study 28:169(r); 31:49(r)
- Oropendola*, Chestnut-headed  
 (*Zarhynchus wagleri*)
- Orr, R. (see Webster, J.D.)
- Ortalis vetula* (Chachalaca)  
 introduced in GA. 29:198(r)
- Oscines  
 band sizes 29:97  
 DDT effects on 24:164(r)
- Osprey* (*Pandion haliaetus*)
- Osterlof*, S. Migr. of Swedish  
 Ospreys. 23:115(r)
- Ostrich* (*Struthio camelus*)
- Otis tarda* (Great Bustard)  
 distr., past, in Ger. 29:128(r)  
 hunting of, with Goshawk 30:60(r)
- Otterlind, G. Recent immigration &  
 dispersal of Scandinavian avifauna.  
 27:35(r)
- Observations of Red-breasted  
 Flycatcher & Scarlet Grosbeak.  
 30:248(r)
- Ottow, J. (see Sick, H.)
- Otus* spp. -tail molt 26:38(r)
- Otus asio* (Screech Owl)  
 bird remains in pellets of,  
 24:19, 110  
 color phases 23:186(r)  
 food of 23:172(r)  
 - *bakkamoena* (Collared Scops Owl)  
 new subspp. of 23:43(r)  
 - *scops* (Scops Owl)  
 predation on 29:203(r)  
*Ousel*, Ring (*Turdus torquatus*)  
*Ovenbird* (*Seiurus aurocapillus*)  
*Ovenbirds* (*Furnariidae*)  
 Owen, D.F. (see Snow, D.W.)  
 --- *Protocalliphora* in bird nests.  
 26:36(r); 26:171(r)  
 --- Food of nestling Jays & Magpies.  
 28:183(r)  
 --- & J.F.Burton. Migr. in s.w. Fr.  
 25:154(r)
- Owen, D.L. Migr. at Kentish Knock  
 lightship. 25:116(r)
- Owen, J. Autumn migr. in s.w.  
 Portugal, 1957. 30:187(r)
- Owen, J.H. Flights of Red-backed  
 Shrike. 23:39(r)
- Owls (*Strigiformes*)  
 -, Barn (*Tyto alba*)  
 -, Barred (*Strix varia*)  
 -, Boreal (*Aegolius funereus*)  
 -, Burrowing (*Speotyto cunicularia*)  
 -, Collared Scops (*Otus bakkamoena*)  
 -, Eagle (*Bubo bubo*)  
 -, Great Grey (*Strix nebulosa*)  
 -, Great Horned (*Bubo virginianus*)  
 -, Little (*Athene noctua*)  
 -, Long-eared (*Asio otus*)  
 -, Pygmy (*Glaucidium gnoma* & *G.*  
*passerinum*)  
 -, Richardson's (= Boreal)  
 -, Saw-whet (*Aegolius acadicus*)  
 -, Screech (*Otus asio*)  
 -, Short-eared (*Asio flammeus*)  
 -, Snowy (*Nyctea scandiaca*)  
 -, Tawny (*Strix aluco*)  
 -, Tengmalm's (= Boreal)  
 -, Ural (*Strix uralensis*)
- Oxyura jamaicensis* (Ruddy Duck)  
 flight & light intensity 24:117(r)  
 productivity & water level 26:129(r)
- Oystercatcher* (*Haematopus ostralegus*)

- Pachyptila* sp. (Prions)  
 sexual behav., compared with  
 Penguins 22:190(r)
- *belcheri* (Slender-billed Prion)  
 band. in Falkland Is. 29:22
- *desolata* (Dove Prion)  
 band. - see Banding Reports)
- Packard, F.M. Birds of Rocky Mt. Nat.  
 Park. 23:54(r)
- Padda oryzivora* (Java Sparrow)  
 feather posture in social behav.  
 28:106(r)
- Pagodroma nivea* (Snow Petrel)  
 band. - see Banding Reports  
 ecol. 25:156(r)  
 egg meas. 27:91(r)
- Pagophila eburnea* (Ivory Gull)  
 arctic adaptations 30:132(r)  
 breeding biol., Spitzbergen  
 30:243(r)  
 skeleton found on ice fields,  
 Spitzbergen 30:148(r)
- PAINTINGS & PHOTOGRAPHS (see also,  
 Books Reviewed, Field Identifica-  
 tion; L.H.)
- AR. birds, in book 22:198(r)  
 British birds 22:44(r); 23:98(r)  
 German birds 24:35(r)  
 Menaboni's birds 22:44(r)  
 Neth. birds 22:43(r)  
 Ontario birds 22:193(r)  
 Photography for bird banders 23:63  
 Swedish birds 23:192(r)  
 U.S. birds, Am. Wildlife 23:99(r)
- of:
- Cuckoo, phot. series showing  
 removal of host egg. 31:49(r)
- Curllew, Bristle-thighed, first  
 known nest 23:35(r)
- Dowitchers 22:96(r)
- Goshawk, phot. & L.H. study  
 30:60(r)
- Grouse, Ruffed 22:44(r),45(r)  
 Honeycreepers, Hawaiian 22:191(r)  
 Hornbill, Crowned 23:121(r)  
 Osprey 28:182(r)
- Owl, Eagle, phot. & L.H. study  
 29:128(r)
- , Pygmy, phot. & L.H. study  
 29:195(r)
- , Snowy, phot. & L.H. study  
 26:125(r)
- Pigeon, Passenger, in book on,  
 26:133(r)
- Ruff, phot. & L.H. study 31:101(r)
- Shrike, Grey, phot. & L.H.  
 study 29:67(r)
- , Red-backed, nest-building  
 22:88(r)
- Shearwater, Little, phot. &  
 L.H. study 30:128(r)
- Stork, White 22:145(r)
- Swift, Alpine, phot. & L.H.  
 study 31:49(r)
- Paleognathae  
 combined with Neognathae 23:91(r)
- PALEONTOLOGY
- Am. Indian sites, bird remains in  
 30:60(r)
- Jays, *Aphelocoma* 23:47(r)
- Nuthatch, Eur., glaciation & distr.  
 25:168(r); 27:146(r)
- Penguins, early Tertiary, of N.Z.  
 25:30(r)
- Recent, from Sweden 25:128(r)  
 recent studies 24:32(r)
- Palm, B. Arrival times in reference  
 to migr. routes. 25:153(r)
- Palm, V. Past distr. of Great Bustard  
 in Ger. 29:128(r)
- Palm-chats (*Dulinea*)
- Palmer, R.S. Guide to mammals of N.  
 Am. n. of Mex. 26:87(r)
- Palmer, T.S. (ed.). Biographies of  
 members of A.O.U. 26:87(r)
- Palmer, W.L. Unusual Ruffed Grouse  
 density in Benzie County, MI.  
 26:128(r)
- Sexing live-trapped juv. Ruffed  
 Grouse. 30:196(r)
- Palmgren, P. Short-term fluctuations  
 in numbers of n. birds & mammals.  
 23:42(r)
- Paludan, K. Breeding biol. of *Larus*  
*argentatus* & *L. fuscus*. 23:45(r)
- *Perdix perdix* ringed during 1950-  
 1954. 29:60(r)
- Pandion haliaetus* (Osprey)  
 abandoned nest used by Canada Goose  
 24:120(r)
- age - see Age, maxima-  
 band. - see Banding Reports  
 in book, N. & Middle Am. 22:43(r)  
 migr. counts, Ger. & Den.  
 28:165(r)
- in Sweden 23:115(r)  
 phot. study & L.H. 28:182(r)  
 syst., in book 22:43(r)
- Panurus biarmicus* (Bearded Tit)  
 behav. 23:38(r),124(r)

- Panurus biarmicus* (cont.)  
 pop. changes in Neth. 22:134(r)  
*Panyptila cayennensis* (Scissor-tailed Swift)  
 nesting on stone wall of house.  
 30:55(r)  
*Papua papua* (= *Pygoscelis papua*)  
*Parabuteo unicinctus* (Harris' Hawk)  
 trapping with Bal-Chatrri trap  
 30:19, 24.  
 Parakeets (*Psittacidae*; *Psittacinae*)  
 Parakeet, Carolina (*Conuropsis carolinensis*)  
 PARASITES & DISEASES  
 & human diseases 29:34  
 aspergillosis in Mallard 27:96(r)  
 bibliog., wild birds & mammals  
 27:103(r)  
 blowfly parasitism 31:56(r)  
 Botulism, conditions for dev.,  
 27:96(r)  
 coccidiosis, in various groups,  
 29:200(r)  
 ectoparasites, Croatian birds  
 28:176(r)  
 - from Fair Is. birds 23:172(r)  
 - tech. for collecting 24:123(r);  
 26:36(r)  
 enteritis, control by streptomycin  
 in Quail 24:166(r)  
 filariae 27:149(r)  
 fly larvae & nestlings 26:36(r);  
 28:241(r)  
 - - in birds' nests 26:171(r)  
 general, 29:124(r)  
 Gizzardworm in Canada Goose 26:  
 131(r)  
 Hippoboscids from netted birds  
 24:138; 29:146; 30:168  
 host records, new. 27:203(r)  
 28:176(r)  
 malaria in waterfowl 24:165(r); 26:  
 36(r); 27:203(r)  
 mites, book on, 24:35(r)  
 -, on birds' eggs 25:29(r)  
 of:  
   Capercaillie, toxoplasmosis in,  
   28:176(r)  
   Chaffinch, by Blowflies 28:241(r)  
   Cormorant, Eur. 25:169(r)  
   Dove, Mourning, trichomoniasis  
   23:186(r); 24:165(r)  
   -, -, recognition of 24:11  
   Duck, Eider, *Acanthocephala* in  
   30:195(r)  
   Duck, Mallard, aspergillosis  
   outbreak 27:96(r)  
   -, -, lead poisoning effect on  
   fertility 26:36(r)  
   Ducks, lead poisoning 22:185(r);  
   31:55(r)  
   Goose, Canada, filariae in  
   27:149(r)  
   -, -, Gizzardworms in 26:131(r)  
   -, -, *Haemoproteus* in 24:165(r)  
   -, -, *Leucocytozoon* in 24:165(r)  
   Grosbeak, Evening, hippoboscids  
   from 24:138  
   Grouse, Ruffed, ornithosis in  
   29:35  
   Honeycreepers, Hawaiian, in  
   monogr. 22:191(r)  
   Jamaican birds 28:157  
   Junco, Dark-eyed, pox virus  
   in, 28:54(r)  
   Linnet, maggots fatal to nest-  
   lings 28:241(r)  
   Martin, Fairy 29:124(r)  
   Partridge, in Engl. 27:203(r)  
   passerines, foot pox in 23:169  
   -, slugs & mort. of young  
   25:77(r)  
   Quail, Gambel's, no effect from  
   Malaria 26:36(r)  
   Rail, Sora 26:125(r)  
   -, Virginia 26:125(r)  
   Sea birds, fleas & ticks of 24:  
   123(r)  
   Swallow, Barn, Lousefly kills  
   brood 31:56(r)  
   Swallow, Tree, fly larvae &  
   nestlings 26:60  
   Teal, Blue-winged, new host of  
   Bird Malaria 27:203(r)  
   Tern, Arctic 28:71  
   Waterfowl, blood 27:203(r)  
   wild birds, Engl. 27:203(r)  
   Woodcock 27:195(r)  
 ornithosis 29:35  
 -, incidence in bird banders 28:92  
 related to age, Canada Goose  
 25:166(r)  
 - - bill color, Starling 22:21  
 - - pop. cycles 22:92(r)  
 Salmonella & rearing of Wood  
 Ducks 22:186(r)  
 ticks from netted birds 30:168  
 -, spread from Egypt by migrants  
 31:55(r)



- PARASITES & DISEASES (cont.)  
 toxoplasmosis in Capercaillie  
 28:176(r)  
 treatment for sick or injured birds  
 30:59(r)  
 trichomoniasis, recognition of, in  
 Mourning Dove 24:11  
 -; possible mechanism of spread to  
 raptors from doves 31:220
- PARASITISM BY BIRDS  
 book, 24:36(r)  
 by:  
 Combassou, Senegal, of Fire Finch  
 in captivity 29:55(r)  
 Cowbirds 23:36(r)  
 -, Brown-headed, on:  
 Bluebird 25:157(r)  
 Bunting, Painted 30:1  
 Sparrow, Field 24:115(r)  
 -, Song 22:81; 23:120(r)  
 Veery, banded Cowbird young  
 removed by 27:184  
 Vireo, Red-eyed 30:127(r)  
 -, -, banded Cowbird young  
 removed by 25:61  
 Cuckoo, Eur. in Neth. 25:69(r)  
 -, -, on Crested Lark 29:56(r)  
 -, -, on Reed Warbler 27:137(r)  
 -, Great Spotted, on Magpie  
 28:243(r)  
 -, Lark, in Surinam 27:138(r)  
 -, Red-chested, on Cape Robin  
 23:175(r)  
 -, Shiny, on Rufous-collared  
 Sparrow 30:190(r)  
 Cuckoos of Afr. 23:122(r);  
 28:168(r)  
 - - - on Great Reed Warbler  
 23:36(r)  
 Honeyguides, book on 27:98(r)  
 -, new host records 30:128(r)  
 -, Lesser, on Black-collared  
 Barbet 23:83(r)  
 Widow-Finch, Steel-Green, on  
 Ruddy Waxbill 27:138(r)  
 in book on parental care 24:86(r)
- Paridae (Titmice)  
 balance to weigh without capture  
 24:156(r)  
 Dieldrin & E-605 effects on  
 28:241(r)  
 DDT effects on 22:189(r)  
 nest boxes to increase pop. 28:  
 104(r), 236(r)  
 palatability of eggs 24:76(r)  
 paper-tearing by 24:118(r)  
 sleep of 23:82(r); 28:174(r)  
 Parkes, K.C. (see Humphrey, P.S.)  
 --- Molts & plumages of Sparrow  
 Hawk 28:242(r)  
 --- Specific relationships in genus  
 Elanus 29:260(r)  
 Parks, G.H. Plumage color & age of  
 Evening Grosbeaks 22:23  
 --- Evening Grosbeak notes from CT.  
 23:144  
 --- Story of Herring Gulls banded  
 in ME. 31:92(r)  
 Parmelee, D.F. (see Sutton, G.M.)  
 --- Breeding behav. of Painted  
 Bunting. 30:1  
 Parmelee, P.W. Effect of hunting  
 pressure on Bobwhite Quail pop.  
 in e-central TX. 25:28(r)  
 --- Rare & extinct birds from IL.  
 Indian sites 30:60(r)  
 Parotia sefilata (Six-wired Bird-of-  
 Paradise)  
 displays 29:121(r)  
 Parrots (Psittacidae)  
 -, Amazon (Amazona spp.)  
 -, Grey (Psittacus erithacus)  
 Parson bird, = Tui, (Prothemadera  
 novaeseelandiae)  
 Partridge, Chukar (Alectoris chukar)  
 -, Common, = Hungarian (Perdix  
 perdix)  
 -, Red-legged (Alectoris rufa)  
 Parula americana (Northern Parula  
 Warbler)  
 band. - see Banding Reports  
 band size 27:78; 29:92  
 DDT effects on 22:189(r)  
 migr., circum-gulf (of Mex.)  
 route 29:45  
 part of leg lost 28:158  
 wt. 27:175  
 Parulidae (New World Warblers, = Wood  
 Warblers)  
 band. - see Banding Reports  
 band sizes 29:95  
 books 24:171(r); 25:69(r); 26:78(r);  
 29:129(r)  
 DDT effects on 22:189(r)  
 editorial 23:57  
 food-bringing behav. 30:193(r)  
 lipids in migrants 29:105  
 migr., drift 24:72(r)  
 -, fall 24:112(r)  
 -, unusual & spring storm 24:71(r)

- Parulidae (cont.)  
 mist nets for 28:115  
 mort, mass, in TX. 28:203(r),231(r)  
 -, -, in GA. 29:116(r)  
 on ship crossing Atlantic 30:126(r)  
 Operation Recovery 29:142; 30:157  
 relations to Drepaniidae  
 respiration rates 29:38  
 songs, recordings of 29:261(r)  
 trap comparisons 22:110  
 trapping & netting 23:22; 30:38,44  
 wts. & meas. 29:109
- Parus sp. (Chickadees & Tits)  
 blowflies in nests 31:56(r)  
 body temp. 27:201(r)  
 competition & habitat selection  
 23:40(r)  
 DDT effects on 22:189(r)  
 field identification 27:104(r)  
 food, & clutch size 25:140  
 - selection, factors in 26:40(r)  
 - storage 25:170(r)  
 - study by use of artificial  
 nestling 28:49(r)  
 prey of Pygmy Owl 29:195(r)  
 wt., seasonal var. 31:4
- ater (Coal Tit)  
 band. - see Banding Reports  
 breeding ecol. 27:192(r)  
 eat seed-destroying insects  
 29:260(r)  
 energy requirements, captive  
 29:125(r)  
 food storage & recovery 30:198(r)  
 invasion, s. Sweden 29:186(r)  
 nestling mort. 22:131(r)  
 pop. invasion, Engl. 31:227(r)  
 problem solving 30:195(r)  
 rears Redstart young 27:94(r)  
 terr. & density 25:160(r)
- atricapillus (Black-capped Chickadee)  
 association of individuals 22:119  
 band. - see Banding Reports  
 band size 25:14  
 calculation of year classes 27:171  
 ecol. isolation 24:125(r)  
 intermittent trapping 23:74  
 killed in trap by Shrike 22:123  
 movements 30:196(r)  
 natal down 29:234  
 pop. changes 23:165  
 range expansions & climate 22:93(r)  
 respiratory rate 29:39  
 trap for 22:114
- trap preferences 22:110  
 wing length 27:32  
 wt. 30:196(r)  
 -, sex, age & daily 26:19
- Parus bicolor (Tufted Titmouse)  
 alarm call 30:47  
 band. - see Banding Reports  
 band size 29:92  
 fighting in traps 26:70  
 home range 22:41(r)  
 L.H. 28:135  
 longevity - see Age, maxima-  
 remains in Screech Owl pellet  
 24:19  
 syst. 27:197(r)
- caeruleus (Blue Tit)  
 anting, first record in family  
 31:164(r)  
 band. - see Banding Reports  
 behav. of captive 29:252(r)  
 breeding biol. 22:88(r);27:192(r)  
 daily activity patterns 29:252(r);  
 31:102(r)  
 distr., Sweden 25:160(r)  
 driven off by Yellow-rumped Warbler  
 26:169(r)  
 eats seed-destroying insects  
 29:260(r)  
 energy requirements, captive 29:  
 125(r)  
 feather dev. 22:88(r)  
 feeds young Brown Creeper 31:100(r)  
 flea pop. in nest boxes 31:56(r)  
 habituation of fear response  
 24:25(r)  
 juv. dispersal 24:25(r)  
 migr. 27:132(r)  
 mixed broods 28:106(r);29:196(r)  
 mort. in different regions  
 28:45(r)  
 nesting of a pair descr. 23:173(r)  
 nestling mort. 22:131(r)  
 paper tearing by 24:118(r)  
 pop. invasion, Engl. 31:227(r)  
 problem solving 30:195(r)  
 range expansion & climate 22:93(r)  
 taming of 24:175(r)  
 terr. & density 25:160(r)  
 weather effects on nesting 23:173(r)
- carolinensis (Carolina Chickadee)  
 band. - see Banding Reports  
 band size 29:92  
 ecol. isolation 24:125(r)  
 natal down 29:234  
 pop. recovery from ice storm.27:90(r)

- Parus carolinensis* (cont.)  
 subsp. in GA. 23:96(r)  
 - *cinctus* (Siberian Tit)  
 food storing 25:170(r)  
 winter body temp. 27:201(r)  
 - *cristatus* (Crested Tit)  
 daily movements 29:252(r)  
 range expansions & climate 22:93(r)  
 - *hudsonicus* (Boreal Chickadee)  
 band size 27:77  
 - *inornatus* (Plain Titmouse)  
 terr. & survival 28:167(r)  
 - *major* (Great Tit)  
 band. - see Banding Reports  
 behav. 23:191(r); 25:72(r); 26:128(r)  
 blowflies in nests 31:56(r)  
 breeding biol. 22:88(r); 27:192(r)  
 clutch size in USSR 30:251(r)  
 daily routine 22:131(r); 29:252(r)  
 31:102(r)  
 driven off by Yellow-rumped Warbler  
 26:169(r)  
 effect of E-605 forte on 27:149(r)  
 energy requirements of captive  
 29:125(r)  
 feeding rates 26:127(r)  
 flea pop in nest boxes 31:56(r)  
 food consumption, anal. of  
 28:182(r); 29:205(r)  
 -, finding cues 26:125(r)  
 - of young 30:62(r)  
 migr. 27:132(r)  
 mixed broods 28:106(r)  
 nest activities, automatic record-  
 ing of 31:99(r)  
 - usurped by Wryneck 31:99(r)  
 nestling mort. 22:130(r)  
 pesticide effects, experimental  
 28:241(r)  
 pop. ecol. 23:130(r)  
 - invasion, Engl. 31:227(r)  
 problem solving 30:195(r)  
 range expansions & climate 22:93(r)  
 rears Redstart young 27:94(r)  
 remating during incub. 31:48(r)  
 roosting in roof of gas lamp  
 28:240(r)  
 sleeping posture in boxes 29:120(r)  
 taming of 24:175(r)  
 terr. & density 25:160(r)  
 tool-using 30:130(r)  
 weather effects on nesting 23:173(r)  
 wing length 25:99  
 wt. var. 25:166(r)  
 young fed by Long-tailed Tit  
 28:105(r)  
 young fed by Winter Wren 31:49(r)  
 - *montanus* (Willow Tit)  
 food 29:260(r)  
 pop. in Finl. 24:29(r)  
 range expansions & climate  
 22:93(r)  
 - *palustris* (Marsh Tit)  
 breeding biol. 25:70(r)  
 eats seed-destroying insects  
 29:260(r)  
 flea pop. in nest boxes 31:56(r)  
 food storage & recovery 30:198(r)  
 problem solving 30:195(r)  
*Passer domesticus* (House Sparrow)  
 adaptation to man 28:166(r)  
 anting 28:49(r)  
 as bait for hawk traps 30:21  
 attack own young 31:51(r)  
 band. - see Banding Reports  
 band size 25:15; 27:78  
 behav., colonial 26:80(r)  
 - during solar eclipse 27:194(r)  
 -, roosting, stereotyped  
 22:133(r)  
 -, soaks bread to soften 31:58(r)  
 bill color & testis dev. 29:52(r)  
 book on, 27:154(r)  
 breeding, abnormal 26:167(r)  
 compete with Pigeons for food,  
 winter, London 31:230(r)  
 cycles, ann. gonad & thyroid  
 26:173(r)  
 descr., newly-hatched 27:126  
 dispersal 23:61; 31:104(r)  
 displaces House Martins 30:243(r)  
 egg-laying, indeterminate 27:39(r)  
 eggs, palatability of 24:76(r)  
 energetics 29:61(r)  
 energy resources, temp. & seasonal  
 effects 22:38(r)  
 eye color 24:16  
 food, response to colored grain  
 30:250(r)  
 - & water relations to photoperiod  
 22:39(r)  
 form, for drying study skin 28:157  
 hist., tax. & distr. in Aust.  
 29:204(r)  
 increase in Neth. 22:135(r)  
 killed in trap by Shrike 22:122  
 longevity - see Age, maxima-  
 mist net, taken in 30:42  
 mort. 28:167(r); 30:51(r)  
 - by DDT 28:108(r)

- Passer domesticus* (cont.)  
 movements of 28:166(r)  
 nest, building of 29:55(r)  
 - in Bee-eater colony 29:203(r)  
 - in colonies 29:55(r)  
 - in nests of social insects 31:98(r)  
 - site selection 30:54(r)  
 ornithosis &- 29:35  
 ossification, cranial 23:34(r)  
 ousted from nest by Starling 28:105(r)  
 pair formation 30:54(r)  
 parasitized by Cowbird 25:112  
 pest, in bird sanctuary, Ger. 29:124(r)  
 photoperiod & reproductive cycle 23:45(r)  
 predation on Tree Swallow 25:53  
 prey of *Asio* spp. 24:74(r); 25:80(r); 26:41(r)  
 - - other owls 24:110  
 range expansion & climate 22:93(r)  
 - - in Nor. 27:199(r)  
 - - in S. Am., Aust. & Mex. 29:204(r); 31:104(r)  
 respiratory rate 29:39  
 roost, large, in Egypt 28:166(r)  
 - with Starlings 24:126(r)  
 sex, precocious dev. 25:29(r)  
 sex ratios 29:52(r); 30:51(r)  
 terr. 30:54(r)  
 trap for 23:22  
 traps, nuisance in 22:179  
 trapping 22:33  
 wt. changes 27:18  
 - & meas. 29:64(r)  
 -, sex, age & daily 26:19  
 - *hispaniolensis* (Spanish Sparrow) band. - see Banding Reports  
 - *montanus* (Eur. Tree Sparrow) band. - see Banding Reports  
 flea pop. in nests 31:56(r)  
 hung by nest material 28:237(r)  
 in winter food cache of Little Owl 30:250(r)  
 movements, seasonal 29:116(r)  
 nest boxes to increase pop. 28:104(r)  
 - in nest of White Stork 24:122(r)  
 pop. changes 27:101(r)  
 reproductive biol. 23:84(r)  
 weather effects on nesting 23:173(r)
- Passerculus princeps* (= *P. sandwichensis*)  
 - *sandwichensis* (Savannah Sparrow) band. - see Banding Reports  
 behav. & syst., notes on 29:241  
 experimental study, pop. density, social behav. & predation 31:173  
 leg & band sizes 30:121  
 pop. in sprayed orchard 23:180(r)  
 winter ecol. in GA. 28:203  
*Passerella iliaca* (Fox Sparrow) band. - see Banding Reports  
 band size 25:15, 59; 27:79  
 migr. & distr. 27:35(r)  
 -, rate of 24:8  
 sex, age & daily wt. 26:19  
*Passerherbulus caudacutus* (= *Ammospiza leconteii*)  
 - *henslowii* (= *Ammodramus henslowii*)  
*Passeriformes* (see also "Song Birds" & *Oscines*)  
 age & sex ratios, Japan 28:233(r)  
 adaptation to new feeding meth. 28:173(r)  
 alarm calls, convergence of 30:232  
 anat. & function of syrinx 24:85(r)  
 anting, review of 29:119(r)  
 band. - see Banding Reports  
 breeding distr. of spp. migrant to neotropics. 31:104(r)  
 check-list, partial, of world 22:142(r)  
 coccidiosis in 29:200(r)  
 DDT effects from elm spraying 31:230(r)  
 foot pox in 23:169  
 gaping of young 25:26(r)  
 heart weights 27:45(r)  
 in food of Eur. Sparrow Hawk 23:116(r)  
 longevity 29:52(r)  
 migr., dawn departures, Engl. 28:166(r)  
 mort. at ceilometer 22:183(r)  
 neossoptiles of 28:54(r); 29:126(r)  
 of Grnl., in book  
 owl characters releasing mobbing 22:89(r)  
 palatability of eggs 24:76(r)  
 phylogeny of skull 30:59(r)  
 pop., SC. 23:40(r)  
 sexing by cloacal protruberance 23:159  
 sleep of 23:82(r)  
 syst. 22:190(r)

- Passeriformes (cont.)  
   winter singing of migrants in Afr.  
     25:32(r)  
 Passerina ciris (Painted Bunting)  
   band size 29:93  
   breeding behav. 30:1  
 - cyanea (Indigo Bunting)  
   band. - see Banding Reports  
   band size 29:93  
   descr., newly hatched 27:126  
   frequency in roadside census 29:171  
   migr., trans-gulf (of Mex.) 27:34(r)  
 Passerini, D. (see Gualtierotti, T.)  
 Pastor roseus (Rose-colored Starling)  
   e-w. migr. 26:166(r)  
 PATAGONIA (see S. Am.)  
 PATHOLOGY (see Parasites & Diseases;  
   Teratology)  
 Patkai, I. Bird-banding in Hungary  
   27:186(r)  
 Paulussen, W. Number of clutches of  
   Wood Pigeon & Stock Dove. 25:69(r)  
 Paynter, R.A. Jr. Clutch size & egg  
   mort. of Kent Is. Eiders. 23:119(r)  
 --- Autumnal migrants on Campeche  
   Bank. 25:64(r)  
 --- Clutch size, brood size, pre-  
   fledging survival & wt. in Kent Is.  
   Tree Swallows. 25:35, 102, 136  
 Peakall, D.B. (see Acland, C.M.)  
 --- Migr. at Smith's Knoll light-  
   vessel, autumn, 1953. 28:166(r)  
 Peakall, S.B. Notes on Red-spotted  
   Bluethroat. 28:48(r)  
 Pearson, E.S. (see Maguire, B.A.)  
 Pearson, O.P. Metabolism of Humming-  
   birds 23:33(r)  
 --- Use of caves by Hummingbirds &  
   other spp. at high altitudes in  
   Peru. 24:119(r)  
 --- Daily energy requirements of a  
   wild Anna Hummingbird. 26:172(r)  
 Pederson, E.T. Recoveries of birds  
   ringed in W. Jutland. 26:73(r)  
 --- Crossbills breeding in frost &  
   snowstorm. 29:191(r)  
 --- Tringa glareola as a breeding  
   bird in Den. 31:106(r)  
 --- & L.L. Jensen. Birds of Nissum  
   Fjord. 27:199(r)  
 Pediocetes phasianellus (Sharp-tailed  
   Grouse)  
   band. - see Banding Reports  
   cons. 24:24(r), 84(r)  
   increase in Alberta 24:30(r)  
   interspecific conflicts with  
   Pheasant & Prairie Chicken  
     29:61(r)  
   mort., cyclic 25:162(r)  
   pesticide effects on 23:127(r)  
   trapping tech. 27:144(r)  
 Peet, W.M. Starlings affected by  
   smog. 31:56(r)  
 Peiponen, V. Does Redpoll change  
   breeding area during summer?  
   28:244(r)  
 Peissner, L. (see Frings, H.)  
 Peitzmeier, J. Two types of spread  
   in Fieldfare. 28:179(r)  
 --- Complex causes of urbanization of  
   birds. 28:240(r)  
 Pelagodroma marina (White-faced  
   Storm Petrel)  
   band. - see Banding Reports  
 Pelecaniformes  
   band. - see Banding Reports  
   guano, as producers of 22:192(r)  
   interrenal cells of, are largest  
     among vertebrates. 24:79(r)  
 Pelecanoides urinatrix (Diving  
   Petrel)  
   as guano producer 22:193(r)  
 Pelecanus erythrorhynchus (White  
   Pelican)  
   band. - see Banding Reports  
   food of 22:37(r)  
   in annotated list, Saskatchewan,  
     Can. 31:109(r)  
   in book, birds of Great Salt Lake,  
     UT. 30:201(r)  
   pop. in UT. 22:37(r)  
 Pelecanus occidentalis (Brown  
   Pelican)  
   salt gland function 30:195(r)  
   temp. regulation 26:169(r)  
 Pelicans (Pelecanus spp)  
 Pelidna alpina (= Calidris alpina)  
 Penguins (Spheniscidae)  
 -, Adalie (Pygoscelis adeliae)  
 -, Black-footed (Spheniscus demersus)  
 -, Chinstrap (Pygoscelis antarctica)  
 -, Emperor (Aptenodytes forsteri)  
 -, Erect-crested (Eudyptes sclateri)  
 -, Gentoo (Pygoscelis papua)  
 -, Humboldt (Spheniscus humboldti)  
 -, King (Aptenodytes patagonica)  
 -, Little Blue (Eudyptes minor)  
 -, Macaroni (Eudyptes chrysolophus)  
 -, Magellanic (Spheniscus  
   magellanicus)

- Penguins (cont.)  
 -, Rockhopper (*Eudyptes crestatu*s)  
 -, Yellow-eyed (*Megadyptes antipodes*)  
 Pennie, I.D. & D.G.Andrew. Bird notes from Spitzbergen 28:180(r)  
 Penny, R.L. (see Sladen, W.L.)  
 Pennyquick, C.J. & D.Webbe. Fulmar in Spitzbergen 31:163(r)  
 Penthestes (= Parus)  
 Percy, R. (see Ridley, M.W.)  
 Perdeck, A.C. (see Tinbergen,N.)  
 --- Two types of orient. in migr. of Starlings & Chaffinches as revealed by displacement experiments. 31:223(r)  
 --- & others. Ann. reports of Foundation "Vogeltrekstation Texe". 29:48(r) ; 30:48(r)  
 Perdix perdix (Common, = Hungarian, Partridge)  
 band. - see Banding Reports  
 causes of death 27:203(r)  
 food 27:202(r)  
 growth & molt 29:57(r)  
 incub., maximum clutch 25:141  
 leather harness marker 28:163(r)  
 life expectancy 29:60(r)  
 nest destruction on farms 29:199(r)  
 pesticide effects on 23:127(r)  
 pop. 26:129(r)  
 - cycles 22:96(r) ; 23:88(r)  
 25:162(r) ; 29:253(r)  
 prey of Eagle Owl 25:79(r);27:93(r)  
 range expansions & climate 22:93(r)  
 renesting, value of 29:199(r)  
 Perisoreus infaustus (Siberian Jay)  
 descr. of nest 28:180(r)  
 Perkinson, J.D. (see Odum,E.P.)  
 Pernis apivorus (Honey Buzzard)  
 migr. in Bosphorus 30:125(r)  
 - counts 28:165(r) ; 29:186(r)  
 30:49(r)  
 nesting success 25:154(r)  
 scratching 25:71(r)  
 weather effects on nesting 28:180(r)  
 PESTICIDES ( see also, Mortality)  
 aldrin baits, effect on bird pops. 24:24(r)  
 - toxicity to Pheasants 24:121(r)  
 chlordane baits, effect on bird pops. 23:127(r)  
 - -, - game birds 24:24(r)  
 DDT effects:  
 of elm spraying on passerines 31:230(r)  
 - - - wildlife 22:188(r)  
 of 5-yr. application on breeding birds 22:189(r)  
 on birds, a review 27:149(r)  
 - Blackbird, Redwinged 24:24(r)  
 - nesting birds 28:108(r)  
 - Robin, Am. 31:165  
 - songbirds 24:164(r)  
 - Swallow, Bank 25:59  
 to control Swift nest parasites 22:132(r)  
 symptoms 28:177(r)  
 Dieldrin 29:125(r)  
 effects on wildlife 28:241(r); 31:164(r)  
 E- 605 forte effects on passerines 27:149(r)  
 - - - - wild birds 28:241(r)  
 orchard sprays not affect passerines 23:180(r) ; 26:39(r)  
 phosphorus, yellow 29:125(r)  
 rodenticides & raptor mort. 25:75(r)  
 toxaphene effects on game birds 23:127(r)  
 - toxicity to Bobwhite Quail & Mourning Dove 26:128(r)  
 Peterle, T.J. Trapping tech. & band. returns for MI Sharp-tailed Grouse 27:144(r)  
 Peters, H.S. (see Foote, L.E.)  
 --- & T.D.Burleigh. Birds of Newfoundland 23:46(r)  
 Peters, J.L. Check-list, birds of world, vol. VII 22:142(r)  
 --- Check-list, birds of world, vol. IX 31:233(r)  
 Petersen, C.M. Breeding biol. of Kestrel in Copenhagen 27:192(r)  
 Petersen, E. Homing experiments with Black-headed & Common Gulls in winter quarters. 25:63(r)  
 Petersen, K.W. (see Fog, J.)  
 Peterson, R.T. (see Kellogg,P.P.)  
 --- Wildlife in color 23:99(r)  
 --- Bird watcher's anthology. 29:265(r)  
 Petersson, I. *Acrocephalus agricola* - a new eastern visitor at Ottenby. 27:146(r)  
 Petonke, W. Unusual feeding behavior of Common Heron & Greenshank. 28:245(r)  
 Petraborg,W.H.,E.G.Wellein & V.E. Gunvalson. Roadside drumming counts,

- Petraborg et. al. (cont.)  
 a spring census meth. for Ruffed  
 Grouse. 25:27(r)
- Petrels (Hydrobatidae; Procellariidae)  
 Antarctic (Thalassoica antarctica)  
 Black-bellied Storm (Fregetta  
 tropica)  
 Blue (Halobaena caerulea)  
 Diving (Pelecanoides spp.)  
 Giant (Macronectes giganteus)  
 Leach's Storm (Oceanodroma  
 leucorhoa)  
 Madeiran Storm (O. castro)  
 Snowy (Pagodroma nivea)  
 Sooty Storm (Oceanodroma markhami)  
 Storm (Hydrobatas pelagicus)  
 Swinhoe's (= Leach's)  
 Tristram's Storm (Oceanodroma  
 tristrami)  
 Wedge-rumped (O. tethys)  
 White-faced Storm (Pelagodroma  
 marina)  
 White-rumped (= Leach's)  
 Wilson's Storm (Oceanites oceanicus)
- Petrides, G.A. (see Carney, S.M.)  
 --- Sex & age detn. in Woodcock &  
 Mourning Dove. 23:34(r)  
 --- Estimating percentage kill in  
 Ring-necked Pheasants & other game  
 species. 26:35(r)
- Petrochelidon albifrons (=P.  
 pyrrhonota)  
 - pyrrhonota (Cliff Swallow)  
 band. - see Banding Reports  
 migr., map of 22:143(r)  
 natal down 29:234  
 nesting attempts after volcano in  
 Mex. 31:47(r)  
 social behav. in nesting 24:22(r)  
 - spilodera (Afr. Cliff Swallow)  
 band. - see Banding Reports
- Petronia superciliaris (Yellow-  
 throated Sparrow)  
 Cardinal Woodpecker defends nest  
 against 24:76(r)
- Pettingill, O.S. Guides to bird-  
 finding east (23:53(r)) & west  
 (25:83(r)) of Mississippi River  
 --- Laboratory & Field manual of  
 ornith. 27:154(r)
- Pettet, A. (see Cramp, S.)
- Pettitt, R.G. Comparative aggressive-  
 ness of first-yr. & adult Black-  
 Headed Gull. 24:26(r)
- Pewee, Lesser Antillean (Contopus  
 caribaeus)  
 -, Eastern Wood (C. virens)  
 -, Tropical Wood (C. cinereus)  
 -, Western Wood (C. richardsoni)
- Pfeffer-Hulsemann, K. von. Instinct-  
 ive behav. patterns of Common Gull  
 28:172(r)
- Pfeifer, S. & W. Keil. Increasing pop.  
 density of hole- & free-nesting  
 birds & nutrition of songbird  
 nestlings in an area infested with  
 Oak Leaf Roller east of Frankfurt  
 am Main. 30:128(r)
- Pflugbeil, A. Breeding of Red-breast-  
 ed Merganser on Schleimunde.  
 28:102(r)
- Phaethornis longuemareus (Little  
 Hermit)  
 L.H. 23:122(r)
- Phalacrocoracidae (Cormorants)  
 as guano producers 22:193(r)  
 egging 26:171(r)  
 function of spread wing posture  
 29:120(r)  
 in books 22:42(r); 28:181(r)  
 oil & ice hazards 28:181(r)  
 pop. increase in Neth. 22:43(r)
- Phalacrocorax aristotelis (Shag)  
 mort. rates 29:51(r)  
 pop. increase, Rouzic Is. 28:52(r)  
 -, Nor. 22:135(r)  
 - atriceps (Blue-eyed Cormorant)  
 band. - see Banding Reports  
 - auritus (Double-crested Cormorant)  
 food & nesting, Manitoba 25:128(r)  
 in book, L.H., ecol. & pops. in  
 Great Salt Lake, UT. 30:201(r)  
 migr. routes, n.e.U.S. 31:162(r)  
 - capensis (Cape Cormorant)  
 as guano producer 24:164(r)  
 band. - see Banding Reports  
 - carbo (Eur., = Great, Cormorant)  
 age - see Age, maxima -  
 as guano producer 24:164(r)  
 band. - see Banding Reports  
 food 25:169(r); 29:260(r)  
 observations on colony, Sweden  
 29:258(r)  
 oil killed, Baltic Sea 29:65(r)  
 pop. study, Neth. 25:22(r)  
 - coronatus (Crowned Cormorant)  
 of minor importance as guano  
 producer 24:164(r)

- Phalacrocorax magellanicus* (Rock Cormorant)  
 band. in Falkland Is. 29:22
- Phalaenoptilus nuttallii* (Poor-Will)  
 hibernation 22:85(r);27:41(r)  
 responses to light & temp. 24:79(r)
- Phalaropes* (*Phalaropus* spp.)  
 -, Northern, = Red-necked, (*P. lobatus*)  
 -, Red, = Gray, (*P. fulicarius*)  
*Phalaropus* spp. (*Phalaropus*)  
 nest with Arctic Terns, Spitzbergen 30:245(r)  
 parental care 24:86(r)  
 - *fulicarius* (Red Phalarope)  
 band. in AK 22:181  
 food of Peregrine Falcon 26:149  
 influx in Engl. 31:96(r)  
 lipids of 25:167(r)  
 - *lobatus* (Northern Phalarope)  
 incub. period 22:38(r)  
 influx in Engl. 31:96(r)
- Phasianus colchicus* (Ring-necked Pheasant)  
 aldrin toxicity 24:121(r)  
 band. - see Banding Reports  
 behav., breeding 22:91(r);23:181(r)  
 -, incub. by ♂ 27:191(r)  
 -, social dominance 23:87(r); 29:61(r)  
 -, -, in N.Z. 30:56(r)  
 capture by night-lighting 31:40(r)  
 censuses, anal. of 27:143(r)  
 -, factors influencing 22:194(r); 27:44(r)  
 -, methods, comparison of two 24:120(r)  
 -, var. among participants in 30:194(r)  
 conflicts, interspecific, with Prairie Chickens 29:61(r)  
 courtship 22:91(r)  
 cover, winter 25:165(r)  
 Dieldrin effects on 31:164(r)  
 eggs, tolerance to exposure 25:28(r)  
 food, asparagus as emergency 23:116(r)  
 growth & molt 29:257(r)  
 hatching curves 25:75(r)  
 incub. period 29:250(r)  
 mgt. 26:35(r)  
 -, refuges in, 23:89(r)  
 migr., tax., distr., & habitat in N.Z. 29:123(r)  
 molts 27:46(r)
- nest activity recorder 27:195(r)  
 nesting success 24:120(r)  
 ornithosis &, 29:35  
 pesticide effects on 23:127(r)  
 pop. changes in Neth. 22:134(r)  
 -, weather effects on 26:130(r); 27:37(r)  
 productivity in N.Z. 29:254(r)  
 reneesting, value of 29:199(r)  
 repellent tests, unsuccessful 30:250(r)  
 reproduction, calcium in 27:91(r)  
 -eggs, temp. effect on 25:28(r)  
 -hatching curves 25:75(r)  
 -in WI. 22:184(r)  
 -study of 22:184(r)  
 restocking study 23:126(r)  
 sex ratios & mgt. 23:182(r)  
 status in MO. 23:90(r)  
 techniques, auditory stimuli for flushing 27:144(r)  
 -, estimates of % kill 26:35(r)  
 -, mist netting 28:117  
 -, neck tag for 27:87(r)  
 -, nest activity recorder 27:195(r)  
 -, night-lighting for capture 31:40(r)  
 -, pop. estimates, meth. 22:104 terr. 22:91(r)
- Pheasant*, Common, = Ring-necked, = Mongolian (*Phasianus colchicus*)  
 -, Golden (*Chrysolophus pictus*)  
*Pheucticus ludovicianus* (Rose-breasted Grosbeak)  
 band. - see Banding Reports  
 band size 25:15; 27:79  
 descr., newly hatched 27:127  
 natal down 29:236  
 respiratory rate 29:39  
 trapping tech. 22:81  
 - *melanocephalus* (Black-headed Grosbeak)  
 age criteria, sex ratios 23:30(r)  
 band. - see Banding Reports  
 longevity - see Age, maximum molts & plumages 23:30(r)
- Philacte canagica* (= *Anser canagicus*)  
 PHILIPPINES (see Oceanic Islands-)  
 Phillips, A.R. Complexities of migr.; a review 23:32(r)  
 --- & R.W.Kickerman. Song Sparrows of Mex. plateau. 29:66(r)
- Philohela minor* (Am. Woodcock)  
 angle of cerebral axis 30:246(r)  
 ann. survival 28:241(r)



- Philohela minor* (cont.)  
 band. - see Banding Reports  
 band. with dogs 23:183(r)  
 breeding 23:183(r); 26:170(r)  
 censuses 23:183(r); 24:119(r);  
 25:165(r); 26:170(r); 27:194(r),  
 195(r); 29:59(r)  
 chicks reared in captivity 25:149  
 cover requirements 27:195(r)  
 egg tooth & hatching 30:119  
 identification at night 27:144(r)  
 netting tech., summer 31:130  
 plastic neckties for 27:188(r)  
 plumage, juv., 27:195(r)  
 sex & age detn. 23:34(r); 24:167(r)  
 trapping on breeding areas 26:121(r)  
 traps for 27:86(r)
- Philomachus pugnax* (Ruff)  
 band. - see Banding Reports  
 breeding, possible, in Tunisia  
 28:52(r)  
 decreases in Neth., in book 22:43(r)  
 displays 26:34(r)  
 L.H. & photo. study 31:101(r)  
 occurrences in N. Am. 31:161(r)  
 reproductive biol. 25:156(r)
- Phoebe*, Eastern (*Sayornis phoebe*)  
 -, Say's (*S. saya*)
- Phoebastria fusca* (Sooty Albatross)  
 colored anodized bands for 24:71(r)  
 courtship display, in monogr. on  
 pre-egg behav. 22:40(r)
- Phoenicopteridae (Flamingoes)  
 syst. 22:190(r)
- Phoenicopus ruber* (Flamingo)  
 breeding biol. 30:129(r)  
 displays 29:203(r)  
 in book 29:68(r)  
 social behav., & survival 24:116(r)
- Phoenicurus ochruros* (Black Redstart)  
 band.- see Banding Reports  
 behav. at nets 27:42(r)  
 breeding 25:68(r)  
 food study 31:107(r)  
 migr. routes 31:97(r)
- *phoenicurus* (Redstart)  
 band. - see Banding Reports  
 book 25:172(r)  
 cooperative feeding 31:100(r)  
 flea pop. in nest boxes 31:56(r)  
 ♂ feeding young in two nests  
 31:100(r)  
 migr. routes 25:153(r)  
 reared in nest of Tits 27:94(r)  
 return to birthplace 25:62(r)
- songs, all-day totals 23:87(r)  
 weather effects on nesting 23:173(r)  
 wing length 25:99
- PHOTOGRAPHS (see Paintings & - )  
 PHOTOPERIOD (see Physiology - )
- Phrygilus gayi* (Gray-hooded Sierra  
 Finch)  
 roosting in caves 24:119(r)
- Phylloscopus* spp.  
 brood size 26:127(r)  
 migr., e. Sweden 30:240(r)  
 mob stuffed Jay 25:26(r)  
 reactions to Eur. Jay 25:26(r)  
 song, comparative study 28:183(r)
- *bonelli* (Bonelli's Warbler)  
 nest study 25:120(r)
- *borealis* (Arctic Warbler)  
 distr., migr & nest study  
 25:121(r)  
 song & nesting behav. 30:248(r)
- *collybita* (Chiffchaff)  
 biol. of 26:33(r)  
 migr. in Engl. 26:76(r)  
 - sampling by trapping 27:107
- *proregulus* (Pallas' Warbler)  
 new record for w. Sweden 30:198(r)
- *sibilatrix* (Wood Warbler)  
 band. - see Banding Reports  
 fall records 25:116(r)  
 habitat requirements, central  
 Sweden 31:167(r)  
 migr. 25:116(r); 26:166(r)  
 song innate 23:188(r)
- *trochiloides* (Greenish Warbler,  
 = Willow Wren)  
 new to central Sweden 27:200(r)  
 range extension 23:42(r); 24:34(r)  
 terr. conflict with *P. trochilus*  
 27:200(r)
- *trochilus* (Willow Warbler)  
 band. - see Banding Reports  
 behav. in solar eclipse 27:194(r)  
 migr. 25:116(r)  
 - & distr. 27:35(r)  
 - sampling by trapping 27:107  
 reaction to Cuckoos & Hawks  
 22:90(r)  
 songs, all-day totals 23:87(r)  
 temp. & spring migr. 26:30(r)  
 terr. conflict with *P. trochiloides*  
 27:200(r)
- PHYSIOLOGY  
 Adrenalin, action in thrushes  
 22:130(r)  
 ann. cycles, factors in 24:33(r)

## PHYSIOLOGY (cont.)

- auditory 25:29(r)  
 bases for behav. 28:106(r)  
 blood glucose, elevation during  
   nest-building, Bank Swallow  
   28:234(r)  
 blood sugar, Thrushes 22:130(r)  
 body temp. (see also Temp.-)  
   decline, nocturnal, in arctic  
   birds 29:125(r)  
   in birds 25:167(r)  
   in Kiwi 28:177(r)  
   in Quail, California & Gambel's  
   30:59(r)  
   in Penguin, Emperor 30:246(r)  
   in Titmice in winter 27:201(r)  
 book, avian 25:173(r)  
 brood patch, hormone control of dev.  
   22:38(r)  
 cloacal protruberance, passerines,  
   & sex detn. 23:159  
 comparative, book on 22:46(r)  
 endocrinology, general, book  
   31:59(r)  
 energy requirements, captive Tits  
   29:125(r)  
 - resources 22:38(r),39(r)  
 - - of Anna Hummingbird 26:172(r)  
 - - related to distr., Carpodacus  
   Finches 24:121(r)  
 - - - - & migr., Buntings  
   24:113(r); 27:99(r)  
 - - - - reproduction 22:38(r)  
 excretion, comparative vertebrate,  
   book 22:192(r)  
 fasting\* & wt. loss, Swift 22:39(r)  
 fat deposition in relation to  
   energy 22:38(r)  
 - - - - migr., review 22:85(r)  
 - - - - -, White-throated  
   Sparrow 26:122(r)  
 - - Gambel's Sparrow 22:98(r)  
 gonad cycle, ann., House Sparrow  
   26:173(r)  
 - dev., Great Tit 25:166(r)  
 guano, biogeochemistry of, book  
   22:192(r)  
 hibernating, of Goatsuckers  
   27:41(r)  
 homeothermy, dev. of in Anna  
   Hummingbird 26:124(r)  
 hormones and:  
   behav., review 22:84(r)  
   frontal shield dev., Am. Coot  
   23:118(r)  
   metabolism, pre-migr.29:61(r)  
   migr. 22:46(r)  
   molt 30:246(r)  
   sex cycles 23:96(r)  
   testis cycle, Gambel's Sparrow  
   22:98(r)  
   sex, & Leydig cells 22:98(r)  
   lipid, & migr. 28:105  
 - deposition, diet, & photoperiod,  
   White-throated Sparrow 28:177(r)  
 - metabolism & migr. 23:117(r)  
   lipids of arctic migrants 25:167(r)  
   metabolism of Brambling 29:61(r)  
   - - Anna Hummingbird 26:172(r)  
   - - Hummingbirds 23:33(r)  
   - - House Sparrow 29:61(r)  
   - related to air temp. 22:38(r)  
   - - - body temp. in Swifts 22:39(r)  
   - - - - in Thrushes 22:130(r)  
   migratory 22:85(r)  
   -, of Thrushes 22:130(r)  
   of lead poisoning in ducks  
   22:185(r)  
   - oil gland 26:37(r)  
   - - - & water repellency 30:197(r)  
   - - -, start of functioning, Tufted  
   Duck 25:78(r)  
   photoperiod, & migr. 22:85(r)  
   - & reproductive cycle, House  
   Sparrow 23:45(r)  
   - - - -, vertebrates 23:96(r)  
   - & testis cycle, Gambel's Sparrow  
   22:98(r)  
   - effects on energy resources,  
   House Sparrow 22:38(r),39(r)  
   - - - food & water intake 22:39(r)  
   - - - Xerophilous birds, Aust.  
   31:98(r)  
   -, experimental studies, review  
   22:185(r)  
   - in Bobwhite Quail 23:121(r)  
   -, mechanism of, Bobwhite Quail  
   27:148(r)  
   -, relation to activity, Greenfinch  
   27:141(r)  
   -, - - breeding, Great Tit 23:130(r)  
   -, - - gonad & fat responses of  
   White-throated Sparrow 25:77(r)  
   -, - - incubation relief rates,  
   Pigeon 30:125(r)  
   -, - - migr. & breeding 25:77(r)  
   -, - - refractory period, Crowned  
   Sparrows 25:167(r)  
   pituitary function in migr. 22:85(r)  
   refractory period 22:85(r), 185(r)

- PHYSIOLOGY (cont.)  
 refractory period (cont.)  
   of Crowned Sparrows 25:167(r)  
   28:53(r)  
   prolactin relation to 23:33(r)  
 reproductive, in book 24:34(r)  
 - cloacal protruberance of passerines 23:159  
 - of:  
   Mallard, fertility during & after coitus 26:128(r)  
   Pheasant, role of calcium in 27:91(r)  
   Sparrow, Gambel's 22:98(r)  
   xerophilous birds 31:98(r)  
 -, seasonal, review of experiments 22:185(r)  
 - success, effects of shot wounds on 23:128(r)  
 -, tech. for study of ovulated follicles 22:184(r)  
 respiratory 23:81(r)  
 - rates, many spp. 29:38  
 salt excretion, Brown Pelican 30:195(r)  
 - -, Humboldt Penguin 30:131(r)  
 temp. regulation 23:116(r),117(r),120(r)  
 - -, Capercaillie chicks 28:176(r)  
 - -, Chipping & Field Sparrows 29:125(r)  
 testis, histochemistry of color changes 28:177(r)  
 -, - of fall migrants 29:249(r)  
 testosterone, effects on song & behav., Eur. Blackbird 31:232(r)  
 thyroid & feather growth 22:41(r)  
 - cycle, ann., House Sparrow 26:173(r)  
 -, radiosurgery of 25:30(r)  
 torpidity of Hummingbirds 23:33(r)  
 - - & breeding biol. 27:139(r)  
 - - Nightjars 28:242(r)  
 variation, geogr., in game spp. 22:136(r)  
 wt. & fat changes, Am. Buntings 30:1  
*Pica pica* (Magpie)  
 attacked by Golden Oriole 31:49(r)  
 body temp., night, in arctic 29:125(r)  
 calls & displays 23:188(r)  
 cronism suspected 31:51(r)  
 descr., newly hatched 27:123  
 determinate layer 27:39(r)  
 eggs of Mallard in old nest of 25:68(r)  
 food of nestlings 28:183(r)  
 monogr. on 22:94(r)  
 parasitized by Great Spotted Cuckoo 28:243(r)  
 pop. increase 28:248(r)  
 predator on Collared Turtle Dove 28:169(r)  
 resting on backs of large mammals 29:198(r)  
*Picidae* (Woodpeckers)  
 anting, review 29:120(r)  
 field identification, Fr. 27:105(r)  
 incub. periods 25:65(r)  
 nesting in nests of social insects 31:98(r)  
*Picoides arcticus* (Arctic Three-toed, = Black-backed Woodpecker)  
 band. - see Banding Reports  
*Picus* spp.  
 competition & habitat selection 23:40(r)  
 - canus (Grey-headed Woodpecker)  
 band. - see Banding Reports  
 Starling competition for nest holes 28:103(r)  
 vocalizations 28:183(r)  
 - viridis (Green Woodpecker)  
 aggressive behav. to decoys 29:198(r)  
 feeding of young 23:173(r)  
 head movement patterns 28:107(r)  
 nest excavation 23:173(r)  
 - sanitation & fledging 27:140(r)  
 vocalizations 28:183(r)  
*Piechocki, R.* Breeding biol. of Kestrel. 25:68(r)  
 --- Behav., molt & coloration of a caged Pallid Harrier 27:149(r)  
 --- Statistical data on 20,000 House Sparrows. 29:52(r)  
*Pigeons* (= Doves, = Columbidae)  
 -, Band-tailed (*Columba fasciata*)  
 -, Cape (Daption capense)  
 -, Domestic, = Feral, = Carrier, = Homing, (*Columba livia*)  
 -, Passenger (*Ectopistes migratorius*)  
 -, White-crowned (*Columba leucocephala*)  
 -, Wood (*C. palumbus*)  
 PIGMENTATION (see also, Plumages -)  
 aberrations & structural & behav. correlates 24:79(r)  
 - in Blackbird, Redwinged 26:37(r)

- PIGMENTATION (cont.)
- aberrations (cont.)
    - in Grackle, iris color 29:184
    - Robin, partial, 9-yr old 31:137
    - Sparrow, Golden-crowned & White-throated 29:260(r)
  - age changes, Collared Flycatcher 26:86(r)
  - albinism in Eur. Blackbird, relation to age 28:54(r)
  - Wild Turkey 27:148(r)
  - & structural colors, distr. among birds 29:256(r)
  - book on concealing & warning colors 25:33(r)
  - camouflage, heron neck & feeding behav. 28:102(r)
  - color of:
    - bill, & testis dev., House Sparrow 29:52(r)
    - , as age & sex criterion, Starling 22:16
    - , changes in Bearded Tit 23:38(r)
    - , Common Tern 30:247(r)
    - spot as begging releaser in Herring Gull 22:91(r)
    - crown, ♂ Ruby-crowned Kinglet 30:183
    - desert spp. 24:32(r)
    - eggs of Cuckoos & host acceptance 25:69(r)
    - - Turdine thrushes, significance of 30:53(r)
    - eye, as sex criterion, Starling 22:16
    - of Starling 26:118
    - - Thrasher, Brown, var. in 24:17
    - - Towhee, Rufous-sided, var. in 24:16
    - feet & tarsi, Kittiwake 29:127(r)
    - gape, Purple Finch 25:133
    - , Zebra Finch, as feeding target 26:81(r)
    - legs, White-breasted Nuthatch 26:82(r)
    - mouth lining, Blue Jay 26:27
    - -, Widow Finch, resembles host 27:138(r)
    - soft parts, Jamaican birds, many spp. 27:178
    - -, newly hatched passerines 27:121
    - testis, cause of changes 28:177(r)
    - color phases, Northern Fulmar 31:163(r)
    - -, Screech Owl 23:186(r)
    - countershading of caterpillars as adaptive 27:139(r)
    - cryptic, Tern chicks & background 27:150(r)
    - differences between imm. Black- & Yellow-billed Cuckoos 31:166(r)
    - Gloger's Rule, Jays conform to 23:47(r)
    - loss, Am. Robin 23:114
    - protective, of antarctic birds 30:115
    - var., geogr., in game spp. 22:136(r)
  - Pike, O.G. An historic series of Cuckoo photos. 31:49(r)
  - Pilcher, P.M. (see Thorpe, W.H.)
  - Pimlott, D.H. Economic status of Herring Gulls of Grand Manan, New Brunswick 24:113(r)
  - Pinguinus impennis (Great Auk) past breeding in Grnl. 23:94(r)
  - Pinicola enucleator (Pine Grosbeak)
    - depth of sleep 23:82(r)
    - food 27:134(r)
    - invasions, Scandinavia 27:134(r); 31:105(r)
    - nest in juniper n. of tree limit 28:180(r)
    - song of ♀ 28:184(r)
  - Pintail (Anas acuta)
  - Pipilo erythrophthalmus (Towhee, Red-eyed, = Rufous-sided, = Spotted)
    - band. - see Banding Reports
    - band size 25:15,59 ; 27:79
    - wear 22:179
    - collapsible traps for 22:109
    - descr., newly hatched 27:126
    - eye color 24:16
    - geogr. var. 24:127(r)
    - hybridization with Collared Towhee 29:259(r)
    - migr. rate 24:8
    - remating percent 30:123
    - respiratory rate 29:39
    - sex bias in trapping 22:117
    - species formation 22:142(r)
    - subsp. in GA. 23:96(r)
    - terr. 26:79(r)
    - trap preferences 22:110
  - fuscus (Brown Towhee)
    - band size 29:93
    - collapsible trap for 22:107
    - mobbing predator models 29:251(r)

- Pipilo maculatus* (= *P. erythrophthalmus*)  
 - *ocai* (Collared Towhee)  
 hybridization with Rufous-sided Towhee 29:259(r)
- Pipit*, Indian Tree (*Anthus hodgsoni*)  
 - Meadow (*A. pratensis*)  
 - Red-throated (*A. cervinus*)  
 - Rock (= Water)  
 - Tawny (*A. campestris*)  
 - Tree (*A. trivialis*)  
 - Water (*A. spinoletta*)
- Piranga* spp.  
 evol. significance of migr. 27:98(r)  
 - *ludoviciana* (Western Tanager)  
 band. - see Banding Reports  
 - *olivacea* (Scarlet Tanager)  
 age - see Age, *maxima* -  
 band. - see Banding Reports  
 band size 25:15; 27:79  
 natal down 29:236  
 sex, age & daily wt. 26:19  
 weather effect on spring migr. 29:198(r)  
 - *rubra* (Summer Tanager)  
 band. - see Banding Reports  
 band size 29:93  
 L.H. 27:39(r)
- Pisobia* (= *Calidris*)
- Pitelka*, F.A. Geogr. var. & the species problem in *Limnodromus*. 22:96(r)  
 --- Speciation & ecol. distr. in Am. Jays of genus *Aphelocoma*. 23:47(r)  
 ---, P.Q. Tomich & G.W. Treichel. Ecol. relations of Jaegers & Owls as lemming predators near Barrow, AK. 26:169(r)  
 ---, ---, ---. Breeding behav. of Jaegers & Owls near Barrow, AK. 27:190(r)
- Platalea leucorodia* (Spoonbill)  
 band. - see Banding Reports  
 flock in Kyushu, Japan 27:197(r)  
 increase in Neth., in book 22:43(r)  
 longevity -(see Age, *maxima* -)  
 picture 22:45(r)
- Platycichla* (= *Geocichla*)
- Platydyptes amiesi*  
 n. gen et. sp fossil penguin from Tertiary, N.Z. 25:30(r)
- Plautus alle* (= *Alle alle*)
- Plectrophenax nivalis* (Snow Bunting)  
 adapt to cold & dark 30:132(r)
- band. - see Banding Reports  
 killed in trap by Shrike 22:122  
 pop. decrease in Faeroes 27:199(r)
- Plegadis falcinellus* (Glossy Ibis)  
 breeding record, VA. 28:98  
 range extension northward 30:231
- Ploceidae (Weavers)  
 parental feeding 28:191
- Ploceus capensis* (Cape Weaver)  
 parasitized by Cuckoos 24:23(r)
- Plovers (Charadriidae)  
 -, Asiatic Golden (*Pluvialis dominicus*)  
 -, Black-bellied (*P. squatarola*)  
 -, Common, = Ringed (*Charadrius hiaticula*)  
 -, Crowned (*Stephanibyx coronatus*)  
 -, Greater Sand, = Geoffrey's (*Charadrius leschenaulti*)  
 -, Golden (*P. apricaria*)  
 -, Grey (= Black-bellied)  
 -, Kentish (*Charadrius alexandrinus*)  
 -, Kittlitz's (*C. pecuarius*)  
 -, Little Ringed (*C. dubius*)  
 -, Piping (*C. melodus*)  
 -, Semipalmated (*C. semipalmatus*)  
 -, Snowy (= Kentish)  
 -, Upland (= Upland Sandpiper)
- Plowright, R.C. (see Bateson, P.P.G.)
- PLUMAGE (see also Life Histories, Molts, Pigmentation)  
 characters for age & sex detn. in Evening Grosbeak 22:23  
 Mourning Dove 23:34(r)  
 Starling 22:17  
 dev. of in young Sora & Virginia Rails 26:125(r)  
 new terminology proposed 30:247(r)  
 of:  
 birds banded at Fair Isle 23:172(r)  
 Cormorant, spread-wing posture not for drying 29:120(r)  
 Crossbill, Red 27:104(r)  
 Cuckoo, Black- & Yellow-billed imm. compared 31:166(r)  
 Duck, Canvasback, juv. 31:54(r)  
 Ducks, juv. 26:37(r)  
 Finch, Purple, ♀ 28:26, 29  
 -, -, var. in 26:89  
 Grosbeak, Evening 25:95  
 -, -, juv. 29:31  
 Grouse, Blue 29:127(r)  
 Guillemot, proportion of bridled type 29:127(r)

## PLUMAGE(cont.)

- of: (cont.)
- Gull, California 28:178(r)
  - Harrier, Pallid 27:149(r)
  - Hummingbird, Anna 28:178(r)
  - , Streamer-tailed 27:181
  - Kestrel, Am. 28:242(r)
  - Owls, patterns of releasing mobbing 22:89(r)
  - Pheasant, Ring-necked, in N.Z. 27:46(r)
  - Quail, Scaled 27:20(r)
  - Rail, King, juv. 30:197(r)
  - Sparrow, White-throated 25:148
  - , -, still dull in 7th yr. 28:160
  - Starling, juv. 29:191(r)
  - Takahe 24:23(r)
  - Tern, Arctic 29:126(r)
  - Wheatear, in Spitzbergen 30:248(r)
  - Woodcock, juv. 27:195(r)
  - Wren, Blue 30:245(r)
  - Wryneck 27:150(r)
  - pterylosis, natal, of:
    - Flicker, Common, absence of 29:232
    - Hummingbird, Ruby-throated 29:232
    - Kingfisher, Belted, absence of 29:232
    - passerines 27:121; 28:54(r); 29:126(r), 232.
    - Rail, Water 29:252(r)
    - Woodcock 25:149
    - Woodpecker, Downy, absence of 29:232
    - of Cape Sugarbird 31:228(r)
    - - Tufted Duck 25:78(r)
    - water repellency of 30:197(r)
  - Pluvialis apricaria (Golden Plover)
    - association with Dunlin 24:161(r)
    - band. - see Banding Reports
    - breeding, no record in Grnl. 22:192(r)
    - dominica (Asiatic Golden Plover)
      - band. - see Banding Reports
      - lipids of 25:167(r)
    - squatarola (Black-bellied Plover)
      - baiting with shrimp 25:113
      - band. - see Banding Reports
      - migr. & increase in NJ. 23:40(r)
  - Pochard, Common (Aythya ferina)
    - , Red-crested (Netta rufina)
  - Podicipedidae (Grebes)
    - band. - see Banding Reports
    - egg-rolling 25:71(r)
  - Podiceps caspicus (= P. nigricollis)
    - cristatus (Great Crested Grebe)
      - breeding behav. 28:106(r)
      - census, Switz. 29:202(r); 30:249(r)
      - depth of dive 28:50(r)
      - feather eating, function of 28:182(r)
      - L.H. notes 29:252(r)
      - migr. by swimming 26:76(r)
    - dominicus (Least Grebe)
      - breeding behav. 28:106(r)
    - grisegena (Red-necked Grebe)
      - migr. by swimming 26:76(r)
    - ruficollis (Little Grebe)
      - feeding association with Coot 28:182(r)
    - nigricollis (Black-necked, = Eared, Grebe)
      - breeding behav. 30:191(r)
      - increase in Neth., in book 22:43(r)
  - Podilymbus podiceps (Pied-billed Grebe)
    - accidental trapping 24:69
    - flight & light intensity 24:117(r)
    - mort. at ceilometer 22:183(r)
    - productivity & water level 26:129(r)
  - Poephila castenotis (Zebra Finch)
    - breeding rhythm, effect of photoperiod & rains on 31:98(r)
    - reproductive behav. 26:81(r)
  - Polioptila caerulea (Blue-gray Gnatcatcher)
    - band size 29:92
    - natal down 29:235
    - nest construction & var. 31:47(r)
  - Polyborus lutosus (= Caracara lutosus)
  - POLYGAMY (see Behavior -)
  - Polysticta stelleri (Steller's Eider)
    - syst. 29:259(r); 30:134(r)
  - Poocetes gramineus (Vesper Sparrow)
    - band. - see Banding Reports
    - descr., newly hatched 27:126
    - night-lighting for capture 31:40(r)
    - winter ecol. in GA. 28:203
  - Poor-will (Phalaenoptilus nuttallii)
  - POPULATION (see also, Censuses, Conservation, Ecology, Invasions, Management, Movements, Pesticides, Techniques, Territory)
    - changes (see also, -decreases & -increases)

## POPULATION (cont.)

- changes (cont.)  
 & lunar cycles 27:89(r)  
 anal. of 25:162(r),163(r),164(r)  
 in Faeroes, climate related  
 27:199(r)  
 - Neth. 22:43(r),134(r)  
 - Nor., 100 yrs. 30:249(r)  
 - Rott Is. 22:135(r)  
 - Rouzic Is. 28:52(r)  
 - Scandinavia, recent 27:35(r)  
 - Stora Karlso Is. 25:127(r)  
 - Sweden, breeding birds 31:57(r)  
 - WI. 27:101(r)
- of:  
 Capercaillie, causes 28:176(r)  
 Chickadee, Black-capped 23:165  
 Ducks, Iceland 24:161(r)  
 Fulmar 24:33(r)  
 Gannet 24:33(r)  
 Goldcrest & weather 29:253(r)  
 Grosbeak, Evening 23:139, 144  
 Gulls 23:31(r)  
 -, breeding, of w. N. Am.  
 23:31(r)  
 Hawk, Eur. Sparrow 27:101(r)  
 Partridge & Hare, Finl.  
 29:253(r)  
 Stork, White 27:135(r)  
 -, -, in Den. 27:46(r)  
 -, -, in Ger. 23:131(r);26:77(r)  
 Swallow, Bank 22:58  
 Tit, Great 23:131(r)
- related to drainage & flooding of  
 Polders (see also ecol.-Habitat)  
 22:134(r)
- seasonal, at Patuxent Research  
 Refuge, MD. 23:185(r)
- successional, in conifer plan-  
 tations 29:253(r)
- counts(see also-cycles,-density,  
 -indices)  
 colonial birds, Newfoundland  
 23:46(r)  
 Eagle, White-tailed, in Grnl.  
 23:94(r)  
 land birds, Finl. 24:29(r)  
 pelagic birds, n. Pacific  
 23:41(r)  
 Sandpiper, Common, in Engl.  
 23:185(r)
- cycles 26:161(r)  
 & cons. problems 23:89(r)  
 of birds & mammals 22:92(r),95(r),  
 138(r)
- of Bullfinch, n. Sweden 28:180(r)  
 - Grouse, Ruffed 23:180(r)  
 - Ptarmigan, Rock 22:192(r)  
 - Redpoll, Scotland 27:189(r)  
 - Robin, Am. 22:92(r)  
 - Waxwing, Bohemian, central  
 Eur., 22:36(r)  
 random oscillations as producing  
 23:88(r)  
 related to environmental factors  
 23:88(r)  
 - - nutrition 23:89(r)  
 short-term 22:95(r); 23:42(r)  
 symposium on 25:160(r)
- decreases of:  
 Alcids, in Nor. 22:135(r)  
 birds on Toroshima Is. 27:196(r)  
 Brant, in Nor. 29:61(r)  
 Condor, California 24:172(r)  
 Coot, Am. 25:73(r)  
 Cormorant, in Eur. 31:105(r)  
 Eagle, Golden, in Finl. 27:197(r)  
 Falcon, Eleonora 31:58(r)  
 -, Peregrine 27:40(r)  
 -, -, in Sweden 31:46(r)  
 Lapwing in Neth. 23:120(r)  
 Owl, Eagle, in Ger. 27:93(r)  
 Pigeon, Passenger, in book 26:  
 133(r)  
 Sandpiper, Wood, in Den. 31:106(r)  
 shorebirds, in NJ. 23:40(r)  
 Shrike, Red-backed 23:129(r)  
 Skylark, in n. Sweden 28:180(r)  
 Stork, White, in Neth. 27:46(r);  
 30:249(r)  
 Terns, in Finl. 27:197(r)  
 -, Sooty & Noddy in Seychelles  
 30:58(r)  
 Yellowhammer, in Sweden 31:105(r)
- densities (see also below, pops. of-)  
 & crop damage by Am. Blackbirds  
 23:154  
 experiment with Savannah Sparrow  
 31:173  
 in agricultural areas, Ger.  
 23:130(r)  
 in coniferous forests 22:189(r)  
 - - -, Eur. 26:30(r);29:189(r)  
 in Oak-Hornbeam forest 22:188(r)  
 related to differential sex  
 survival 25:118(r)  
 - - diseases 27:203(r)  
 - - lemming & vole pops.,  
 Lapland raptors 29:66(r)

- POPULATION (cont.)
- densities (cont.)
    - related to: (cont.)
    - size, shape & density of small forests 29:189(r)
    - soil fertility, Ring-necked Pheasant 23:90(r)
    - terr., Titmice 25:160(r)
    - seasonal var., Afr. 26:31(r)
    - unusual, of Ruffed Grouse in MI. 26:128(r)
  - dynamics, based on banding 24:26(r) 123(r)
  - of:
    - Blackbird, Eur. 30:51(r)
    - Egret, Cattle, in FL. 28:51(r)
    - Flycatcher, Collared 29:121(r)
    - , Pied 24:28(r)
    - Goose, White-fronted 28:232(r)
    - Plover, Kentish 29:52(r)
    - Quail, California, in N.Z. 30:203
    - Sparrow, Song, in salt marshes 29:118(r)
    - Sparrows, winter, in GA. 28:203
    - Stork, White 27:136(r)
    - Takahe 29:190(r)
    - Tern, Common, in MA. 27:55
  - ecology, anal. of in primeval forest 25:159(r)
  - of Great Tit 23:130(r)
  - - Titmice in Engl. 27:192(r)
  - estimation of, 22:92(r), 103(r); 23:184(r); 24:80(r); 25:21(r), 22(r), 117(r), 118(r); 31:115
  - evol. of, genetic basis 22:136(r)
  - -, in the wild, book 22:195(r)
  - general, estimation of 23:184(r); 24:80(r); 25:21(r), 22(r)
  - , of birds & mammals, winter, Eur. 22:92(r)
  - , breeding birds of Aland Archipelago 23:129(r)
  - , of s.w.GA. 23:95(r)
  - , of Mediterranean Is. 31:158(r)
  - , reproduction after removal experiments 24:83(r)
  - increases (see also tech for-)
    - in Japan 27:196(r), 197(r)
    - in reclaimed land, Neth. 25:80(r); 26:124(r); 28:53(r)
    - nest boxes for, in wooded areas 28:104(r), 175(r); 29:254(r) 30:130(r)
  - of:
    - Albatross, Short-tailed 31:53(r)
    - Dove, Stock, Belgium 26:123(r)
    - Duck, Goldeneye, by use of nest boxes 23:175(r)
    - Eagle, Golden, Austria 25:79(r)
    - Egret, Cattle, s. Afr. 24:170(r)
    - , -, Aust. 29:204(r)
    - , Little, Fr. 28:101(r)
    - Gannet, Aust. 24:82(r)
    - Grouse, Sharp-tailed, Alberta, Can. 24:30(r)
    - Gull, Herring, s.w.Eur. 29:203(r)
    - Jackdaw, s.w.Eur. 29:203(r)
    - Jays, Sweden, 1955. 28:161(r)
    - Lapwing, Hilnoto Is. 27:137(r)
    - Owl, Eagle, after re-introduction in Sweden 29:60(r)
    - , Tawny, s.w. Eur. 29:203(r)
    - Plovers on reclaimed land, Neth. 26:124(r)
    - Raven, Switz. 28:48(r)
    - Redpoll, Sweden 31:105(r)
    - Shelduck, Den. 31:99(r)
    - shorebirds, NJ. 23:40(r)
    - Siskin, Eur., Sweden 31:105(r)
    - Swallow, Barn, Switz. 24:75(r)
    - Swan, Mute, Engl. 28:179(r)
    - , -, Den. 23:132(r)
    - Thrush, Mistle, n.w.Eur. 25:79(r)
    - Titmice, by use of nestboxes 22:88(r)
    - Warbler, Reed, Neth. 22:134(r)
    - , Sedge, Neth. 22:134(r)
  - indices:
    - Christmas Counts, value of 26:131(r)
    - Lincoln Index, confidence limits of 22:189(r)
    - mean intervals in wildlife 25:164(r)
  - of:
    - Heron, Eur. 24:157(r)
    - , Grey 25:155(r)
    - Rail, Clapper 23:35(r)
    - Woodcock, Snipe & Rails, U.S. 26:170(r)
  - invasions, factors affecting 29:49(r)
  - of:
    - Brambling, Switz. 25:126(r)
    - Crossbill, Red, Engl. 30:198(r)
    - , -, Eur. 27:46(r), 90(r)
    - , White-winged, Scandinavia 31:105(r)
    - Grosbeak, Evening, n.e.U.S. 29:128(r); 31:140



## POPULATION (cont.)

- invasions of: (cont.)  
 Grosbeak, Pine, Sweden 27:134(r)  
 Jay, Eur., Sweden 31:46(r)  
 Longspur, Lapland, in Engl.  
 27:133(r)  
 Petrels, Leach's & Storm, central  
 Eur. 26:39(r)  
 Phalaropes, Engl. 31:96(r)  
 Quail, Eurasian 28:165(r)  
 Redpoll, Greenland, in Scotland  
 27:189(r)  
 Tern, Sandwich, w. Sweden  
 29:248(r)  
 Titmice, Engl. 31:227(r)  
 Waxwing, Bohemian, Ger. 27:36(r)  
 -, -, in Scandinavia 30:124(r)  
 of:  
 Albatrosses on Midway Is.  
 29:254(r); 31:51(r)  
 Blackbird, Redwinged, in GA.  
 23:96(r)  
 Blackbirds, in Britain 31:91(r)  
 Buzzard, breeding 25:20(r)  
 Chat, Yellow-breasted, in VA.  
 29:170  
 Chickadee, Black-capped, recovery  
 after ice storm. 27:90(r)  
 Cormorant, Double-crested, Can.  
 25:128(r)  
 -, European, in Neth. 25:22(r)  
 Dipper, Engl., density 28:167(r)  
 Dove, Mourning, breeding in GA.  
 28:241(r)  
 -, -, densities 23:184(r);  
 24:80(r), 156(r)  
 -, -, in MA. 22:153  
 Ducks 22:130(r)  
 -, Black 22:130(r)  
 -, Canvasback 30:194(r)  
 -, Eider, n.e.Neth. 30:242(r)  
 -, Mallard 22:130(r)  
 -, -, in Neth. 30:242(r)  
 -, Teal, Blue-winged 22:130(r)  
 -, Wood 31:54(r)  
 Flycatcher, Collared, dynamics  
 29:121(r)  
 Gannet, Cape, nesting 23:122(r)  
 Goose, Canada 22:143(r), 144(r);  
 23:1  
 Grouse, Hazel, in Finl. 27:92(r)  
 -, Ruffed in MN. 25:164(r)  
 Hawks 25:20(r)  
 -, densities, Ger. 25:154(r)  
 Jackdaw, postglacial 22:135(r)  
 Nene 30:245(r)  
 Owl, Eagle, in Sweden 22:41(r)  
 -, Tawny, breeding, in Ger.  
 24:157(r)  
 Oystercatcher, in Ger. 27:86(r)  
 Partridge, Hungarian, in UT.  
 26:129(r)  
 Pelican, White, in UT. 22:37(r)  
 Penguin, Emperor, in newly discov-  
 ered colony 31:57(r)  
 Penguins 22:190(r); 29:264(r)  
 Pheasant, Ring-necked  
 Quail, California, density in  
 HI. 23:35(r)  
 Rails, U.S. 27:194(r)  
 -, winter, in U.S. 23:183(r);  
 24:119(r)  
 Robin, Am. 22:92(r)  
 Rook, N.Z. 29:127(r)  
 Sandpiper, Spotted, density  
 23:36(r)  
 -, Wood, breeding in Den.  
 31:106(r)  
 shorebirds, NJ. 23:40(r)  
 Siskin, Pine, winter in MA.  
 22:75  
 Snipe, U.S. 27:194(r)  
 -, winter, in U.S. 23:183(r);  
 24:119(r)  
 Sparrow, Eur. Tree, breeding  
 23:84(r)  
 -, Golden-crowned 23:30(r)  
 -, Song, breeding, in salt  
 marshes 29:118(r)  
 -, -, in salt marshes 27:191(r)  
 -, White-throated 23:30(r)  
 Starling at Rossiten 25:154(r)  
 Stonechat, breeding 23:83(r)  
 Stork, White, in migr. 22:36(r)  
 -, -, in Ger. 25:154(r)  
 Swallow, Barn, density, in book  
 on L.H. 27:152(r)  
 Takaha in 1951. 24:23(r)  
 Tern, Common, breeding in MA. 22:1  
 Tit, Coal, s. Sweden 29:186(r)  
 -, Great 23:130(r)  
 -, -, density 23:131(r)  
 Turkey in WV. 23:128(r)  
 Warbler, Kirtland's, breeding  
 census 24:169(r)  
 Woodcock, U.S. 27:194(r)  
 -, winter, U.S. 23:183(r);  
 24:119(r)  
 Woodpecker, Black, density  
 28:108(r)

- Porphyryla martinica (Purple Gallinule)  
 wt. 27:175  
 Porter, R.D. Hungarian Partridge in UT. 26:129(r)  
 Porzana carolina (Sora Rail)  
 band. - see Banding Reports  
 field studies, in Alberta 26:171(r)  
 - - - CO. 26:170(r)  
 - - - MN. 26:125(r)  
 illustration, in book 22:193(r)  
 mort. at ceilometer 22:183(r)  
 night-lighting for capture 31:40(r)  
 Pospichal, L.B. & W.H.Marshall. Field study of Sora & Virginia Rails in central MN. 26:125(r)  
 Possert, A. Long-tailed Tit helps rear brood of Great Tits. 28:105(r)  
 Post, G. Effects of aldrin on birds. 24:121(r)  
 Post, J. Effects of toxaphene & chlordane on game birds. 23:127(r)  
 Pough, R.H. Audubon guides: water birds 22:199(r)  
 western birds 28:247(r)  
 Pouliding, R.H. Use of extruded plastic for color marking. 23:31(r)  
 Poulsen, C.M. Inland breeding of Shelduck in Den. 31:99(r)  
 Poulsen, H. Maturation & learning in improvement of instinctive activities. 23:176(r)  
 --- Is begging reaction released by lessened illumination? 23:176(r)  
 --- Inheritance & learning in song of Chaffinch. 23:187(r)  
 --- Incub. responses & other behav. patterns in birds. 25:71(r)  
 --- Song of Linnet. 28:55(r)  
 --- Anting behav. in birds. 28:238(r)  
 --- Maggot infestation of nestling Linnets & Chaffinches 28:241(r)  
 --- Breeding of Senegal Combassou in captivity. 29:55(r)  
 --- Calls of Chaffinch in Den. 30:62(r)  
 --- Song learning in Canary.31:56(r)  
 Poultry breeding, book 24:34(r)  
 Pratt, J.G. (see Kramer, G.)  
 --- Testing for ESP factor in pigeon homing: requirements, efforts, & difficulties. 30:237(r)  
 --- & H.G.Wallraff. Two direction experiments with Homing Pigeons:long distance flights to n. & s. in w. Ger. 30:126(r)  
 PREDATION (see also Food, L.H.,Mort.)  
 abnormal behav. of prey leads to, 25:128(r)  
 anal. of, in experimental pop. study, Savannah Sparrow 31:173  
 and pop. cycles 25:161(r)  
 causes of, waterfowl nests, 28:175(r)  
 by:  
 Crow, Am., on Short-eared Owl 27:192(r)  
 -, Carrion, on Gull & Tern colonies 28:51(r)  
 -, Hooded, on eggs in Finl. 23:129(r)  
 Eagle, Bald, on ducks 24:165(r)  
 -, Golden, on Marmot in Austria 25:79(r)  
 Fulmar, Giant, on Emperor Penguin 25:157(r)  
 Goshawk on Eur. Jay 23:86(r)  
 - - Red-footed Falcon young 27:38(r)  
 Gull, Common, on ducks 25:68(r)  
 -, Glaucous, on Barnacle & Pink-footed Geese 28:180(r)  
 -, Herring, intraspecific, in new vs. old colonies 23:124(r)  
 -, -, on Brant 28:46(r)  
 -, -, on Ring-billed Gull 28:233(r)  
 -, -, on Scops Owl 29:203(r)  
 Gulls, on Guillemots 25:127(r)  
 -, on Pink-footed Goose 24:161(r)  
 -, on Ravens 25:127(r)  
 Hawk, Cooper's, on Mourning Dove in trap 22:179  
 -, Sharp-shinned, on Evening Grosbeak 29:30  
 -, -, on Pileated Woodpecker 29:260(r)  
 -, -, on Veery 24:103  
 Hawks, on Titmice 31:102(r)  
 Jackdaw, on Collared Turtle Dove 25:31(r)  
 - on Scops Owl 29:203(r)  
 - on Stock Dove 25:69(r)  
 Jaegers on Lemmings 26:169(r)  
 Jay, Blue, on Purple Finch 29:244  
 Magpie, on Collared Turtle Dove 28:169(r)  
 Mammals, on Gull & Tern colonies 28:51(r)  
 -, on Nene 23:128(r); 30:245(r)

## PREDATION (cont.)

- by: (cont.)
- Mammals, on Pink-footed Goose  
24:161(r)
- , on Short-eared Owl 27:192(r)
- , on Tree Swallow 25:53; 26:63
- Owl, Eagle, on Carrion Crow  
25:79(r)
- , -, on Hedgehog 25:79(r)
- Eol, -, on Hooded Crow 22:41(r);  
29:128(r)
- , -, on Long-eared & Tawny Owls  
25:79(r)
- Owl, Long-eared, on House Sparrow  
25:80(r)
- Owl, Pygmy, on Tits 29:195(r)
- Owl, Tawny, on Black-headed  
Gulls 29:249(r)
- , -, on Scops Owl 29:249(r)
- Owls on Lemming 26:169(r)
- raptors, book on 23:51(r);  
29:69(r)
- , on Brambling 25:126(r)
- , on sick dove as possible mech-  
anism of spread of trichomon-  
iasis to raptors 31:220
- , on Long-tailed Tit 31:102(r)
- Shrikes, on birds in traps  
22:121
- Skuas, on Yellow-nosed  
Albatrosses 23:122(r)
- snakes, on Painted Bunting 30:1
- Sparrow, House, on Tree Swallow  
25:53
- various enemies, on Peaceful  
Dove 28:168(r)
- -, on Arctic Tern 28:67;  
30:245(r)
- -, on Nene 23:128(r)
- -, on Takahe 24:23(r)
- identification of duck nest preda-  
tors 23:127(r)
- Predators (see also Predation)  
recognition of, 29:251(r)
- passerine alarm calls 30:232
- Prehlt, H.F.R. Physiol. of inborn  
releasing mechanism: quantitative  
studies of gaping in young passer-  
ines. 25:26(r)
- Preston, E.J. (see Wilson, N.E.)  
--- Graphic meth. for anal. of  
statistical distr. in two normal  
components. 25:118(r)
- Preston, F.W. (see Wilson, N.E.)  
--Migrant Loons, w.PA. 28:44(r)
- Preston, T.W. Shapes of birds' eggs.  
25:23(r)
- Prestwich, A.A. Records of parrot-  
like birds bred in U.S. 22:101(r)
- Prevost, J. (see Etchecopar, R.D.)  
--- Reproduction of Antarctic  
Fulmar 25:119(r)
- Pair formation, egg laying &  
incub. in Emperor Penguin.  
25:119(r); 30:243(r)
- Ecol. of Petrels of Adelie Land.  
25:156(r)
- & F. Bourliere. Social life &  
thermoregulation in Emperor Penguin  
30:246(r)
- Preywisch, K. Noteworthy Titmouse roost  
28:240(r)
- How does Great Tit sleep in boxes?  
29:120(r)
- Priocella antarctica (= Thalassoica  
antarctica)
- Prions (= Pachyptila)
- , Dove (*P. desolata*)
- , Slender-billed (*P. belcheri*)
- Procellaria puffinus (= Puffinus  
puffinus)
- Procellariidae (Fulmars, Petrels,  
Shearwaters)
- band. - see Banding Reports
- bands, monel for 28:161(r)
- breeding season, Galapagos Is.  
22:87(r)
- in book, Grnl. birds 22:42(r)
- ornithosis in 28:92
- sexual behav., in book 22:190(r)
- syst. & phylogeny 30:61(r)
- Procellariiformes (Tube-nosed  
Swimmers)
- band. - see Banding Reports
- fleas & ticks of 24:123(r)
- migr. & ocean winds 30:50(r)
- Progne subis (Purple Martin)  
attempt to attract 25:67(r)
- dispersal 22:130(r)
- homing experiments 31:44(r)
- L.H. 23:179(r)
- Promerops cafer (Cape Sugarbird)  
breeding biol., dev. of young,  
pterylosis & wt. 31:228(r)
- Prosser, C.L., D.W.Bishop, F.A.Brown,  
T.L.Jahn, & V.J.Wulff. Comparative  
animal physiol. 22:46(r)
- Prothemadera novaeseelandiae (Tui, =  
Parson-bird)  
food plants of 24:21(r)

- Protonotaria citrea* (Prothonotary Warbler)  
 band. -see Banding Reports  
*Prunella collaris* (Alpine Accentor)  
 in mts., s. Spain 29:258(r)  
 - *modularis* (Dunnock, = Hedge Sparrow)  
 driven off by Yellow-rumped Warbler  
 26:169(r)  
 effect of E-605 forte on 27:149(r)  
 flight altitude increases over sea  
 29:50(r)  
 nest study 29:118(r)  
 new to coastal Sweden 27:200(r)  
 response to prevention of continued  
 laying 28:237(r)  
 use of artificial nests 29:196(r)  
 wt. changes 27:19  
 Prunte, W. (see Mester, H.)  
 Przygodna, W. (see Niethammer, G;  
 Scholtzseck, E)  
 --- Plant protective materials in  
 relation to birds with reference to  
 other animals. 27:149(r)  
 --- Influence of E-605 forte on our  
 avifauna. 27:149(r)  
 --- Effects of use of dieldrin for  
 beetle control on pop. of birds &  
 of E-605 forte on nestlings. 28:  
 241(r)  
*Psittacidae* (Parrots, Parakeets, Lory,  
 etc.)  
 anting, review 29:120(r)  
 egg tooth & shell rupture 30:119  
 embryonic ptilosis 28:54(r)  
 moth larvae as obligate nest  
 associate 24:124(r)  
 nesting in termitaria 31:98(r)  
 ornithosis &, 28:97; 29:36  
 propagation, records of in U.S.  
 22:101(r)  
 vocalizations, learned 23:87(r)  
*Psittacus erithacus* (Grey Parrot)  
 number sense 24:80(r)  
*Psophia crepitans* (Gray-winged  
 Trumpeter)  
 behav., imprint to man 24:78(r)  
*Psophiidae* (Trumpeters)  
 in textbook 31:59(r)  
*Psophocichla* (= *Geocichla*)  
*Ptarmigan*, Rock (*Lagopus mutus*)  
 -, Willow (*L. lagopus*)  
*Pterodroma brevipes* (White-throated  
 Petrel)  
 syst. 24:129(r)  
 - *leucoptera* (White-winged Petrel)  
 syst. 24:129(r)  
*Ptilogenys* spp. (Silky Flycatchers)  
 phylogeny 23:97(r)  
*Ptilonorhynchidae* (Bowerbirds)  
 bowers & displays 25:72(r)  
*Ptyanoprogne rupestris* (= *Hirundo*  
*rupestris*)  
*Pucheranphus adeliae* (= *Pygoscelis*  
*adeliae*)  
 Puffbirds (*Bucconidae*)  
 -, White-whiskered (*Malacoptila*  
*panamensis*)  
 Puffin (*Fratercula arctica*)  
 -, Tufted (*Lunda cirrhata*)  
 Puffinus spp. (Shearwaters)  
 counts in N. Pacific 23:41(r)  
 - *assimilis* (Little Shearwater)  
 L.H. & photo. study 30:128(r)  
 - *gravis* (Greater Shearwater)  
 in annotated list, Tristan da  
 Cunha 29:258(r)  
 - *griseus* (Sooty Shearwater)  
 band size 29:91  
 - *tenuirostris* (Short-tailed  
 Shearwater)  
 age at maturity 29:193(r)  
 band. - see Banding Reports  
 counts, N. Pacific 23:41(r)  
 sexing, in field 28:177(r)  
 Purser, G.L. House Sparrows soaking  
 hard bread to soften it. 31:58(r)  
 Putnam, L.S. L.H. of Cedar Waxwing.  
 22:186(r)  
*Pycnonotus barbatus* (Bulbul)  
 winter breeding 27:137(r)  
*Pygoscelis adeliae* (Adelie Penguin)  
 band. - see Banding Reports  
 behav. 25:66(r)  
 -, during banding 28:1  
 displays 23:179(r)  
 egg temp. by telemetry 30:242(r)  
 flipper band for 31:81  
 growth 24:166(r)  
 incub. & chick dev. 23:120(r)  
 L.H. 25:66(r)  
 monogr. 30:251(r)  
 mort. 23:120(r)  
 pop. estimate 30:115  
 - *antarctica* (Chinstrap Penguin)  
 band. - see Banding Reports  
 flipper band for 31:81  
 - *papua* (Gentoo Penguin)  
 band. - see Banding Reports  
 egg laying & incub. 25:65(r)

- Pynnönen, A. On the Natural History of the Hazel Grouse. 23:178(r); 27:92(r)
- Pyrrhocorax graculus (Alpine Chough)  
band. - see Banding Reports  
orient. 25:114(r)  
winter movements 30:133(r)
- pyrrhocorax (Chough)  
feeding behav. & food storage  
31:167(r)
- Pyrrhula spp. (Eurasian Bullfinches)  
distr. & evol. 22:93(r);25:168(r)
- pyrrhula (Bullfinch)  
attack own young 31:51(r)  
breeding biol. & behav. 28:172(r)  
cyclic fluctuations, n. Sweden  
28:180(r)  
depth of sleep 23:83(r)  
driven off by Yellow-rumped Warbler  
26:169(r)  
effect of deafness on social &  
breeding behav. 30:129(r)  
enemy recognition 23:176(r)  
song learning 31:107(r)
- Pyrrhuphonia jamaica (Jamaican Euphonia)  
band size 29:93  
soft part colors 27:180  
wt. 27:175

- Quail  
 in book, game abundance 22:139(r)  
 use of shrub Lespedeza in mgt.  
 28:175(r)
- , Bobwhite (*Colinus virginianus*)
  - , Button (*Turnix sylvatica*)
  - , California (*Lophortyx californica*)
  - , Eurasian (*Coturnix coturnix*)
  - , Gambel's (*Lophortyx gambelii*)
  - , Mountain (*Oreortyx pictus*)
  - , Scaled (*Callipepla squamata*)
  - , Valley (= California)
- Quail-dove, Ruddy (*Geotrygon montana*)
- Quay, T.L. (see Adams, D.A. ;  
 Yelverton, C.S.)
- Mourning Dove pop. in NC.  
 22:197(r); 26:83(r)
- Quelea quelea (Red-billed Quelea, or  
 Weaver)  
 economic importance 30:54(r)  
 L.H. 28:46(r); 30:54(r)  
 social behav. 31:229(r)
- Queneau, P. (see Hanson, H.C.)
- Querquedula (= *Anas*)
- Quiscalus niger (Greater Antillean  
 Grackle)  
 band size 29:93
- quiscalus (Common Grackle)  
 age- see Age, maxima-  
 band. - see Banding Reports  
 band size 25:15; 27:79  
 Dieldrin effects on 31:164(r)  
 hallux nail hooked around tarsus  
 24:110  
 iris color 29:184  
 migr. 29:152  
 role in rice field economics  
 29:59(r)  
 syst. 24:168(r)  
 -, subspp in GA. 23:96(r)  
 wt, sex & age, daily 26:19

- Rabor, D.S. Impact of deforestation on birds of Cebu, Philippines, with new records 30:250(r)
- Radford, M.C. Winter roosting & behavior of a pair of Nuthatches. 26:34(r)
- Radtke, G.A. Winter territorialism of Great Grey Shrike. 28:165(r)
- Rails (Rallidae)
- , Clapper (Rallus longirostris)
  - , King (R. elegans)
  - , Sora (Porzana carolina)
  - , Virginia (Rallus limicola)
  - , Water (R. aquaticus)
- Raitasuo, K. Distr. & breeding biol. of Water Rail in Finl. 23:42(r)
- Relations between Tufted Ducks & Laridae in mixed colonies. 24:160(r)
- Rake, G. (see Worth, C.B.)
- Rallidae (Rails)
- egg-rolling 25:71(r)
  - in book, Eur. birds 23:51(r)
  - in mist nets 28:126
  - U.S.F.&W. investigations 26:170(r)
- Rallus aquaticus (Water Rail)
- chicks brooded by 2-week-old Avocet 31:101(r)
  - distr. & breeding ecol. 23:42(r)
  - postembry. dev. 29:252(r)
  - elegans (King Rail)
  - courtship 30:57(r)
  - food in AR. rice fields 28:54(r)
  - growth & dev. 30:197(r)
  - limicola (Virginia Rail)
  - breeding & wintering pops. 23:183(r)
  - ecol. in LA. 26:125(r)
  - field study, MN. 26:125(r)
  - hatching process 30:120
  - night-lighting for capture 31:40(r)
  - longirostris (Clapper Rail)
  - band. - see Banding reports
  - band size 29:91
  - band study, migr. 25:1
  - ecol. in NC. 30:193(r)
  - nesting study 23:35(r)
  - pops. 23:183(r); 29:59(r)
  - U.S.F.&W. investigations 26:170(r); 27:194(r); 29:59(r)
- Ramphocelus spp.
- nestling period 26:79(r)
  - passerinii (Scarlet-rumped Tanager) L.H. 22:134(r)
- Ramsay, A.O. Familial recognition in domestic birds. 24:80(r)
- Var. in dev. of broodiness in fowl. 24:162(r)
- Rand, A.L. Feeding rates of Anis. 24:163(r)
- Social feeding behav. of birds. 25:159(r)
  - Stray feathers from a bird man's desk 26:135(r)
  - & M.A.Traylor. Amount of overlap allowable for subspp. 23:43(r)
- Rand, R.W. Bird banding on Marion Is. 24:71(r)
- Guano enterprise in s.w.Afr. 24:164(r)
- Randall, R.N. Mourning Dove production in s.-central ND. 26:130(r)
- RANGE (see also, Behav.--, Migr.- Movements, Pop., Recoveries & Returns, Status, Zoogeography)
- breeding, of Canada Goose 23:1
  - changes related to climate, Rock Ptarmigan 29:259(r)
  - difficulties in detn. for checklist of N. Am. birds 26:38(r)
  - extensions of:
    - birds to Scandinavia 25:168(r)
    - - Spitzbergen 30:248(r)
    - Blue-tail, Red-flanked, to Finl. 30:60(r)
    - Cowbird, Brown-headed, s.e.U.S. 31:83
    - Dove, Collared Turtle, Eur. 25:31(r)
    - , - , Nor. 27:145(r)
    - , Indian Ring to Sweden 26:39(r)
    - Duck, Eider, Engl. 31:105(r)
    - , -, southward breeding 28:108(r)
    - Egret, Cattle 27:90(r); 28:51(r)
    - , -, in Aust. 29:204(r)
    - Fieldfare 23:94(r); 24:34(r)
    - , two types of 28:179(r)
    - Flycatcher, Red-breasted, Sweden 30:248(r)
    - Grosbeak, Evening, breeding in MA. 30:226
    - , Scarlet 23:132(r)
    - , -, to s. Sweden 28:181(r); 30:248(r)
    - Ibis, Glossy, n. in U.S. 30:231
    - Kite, Black, breeding in Sweden 27:146(r)
    - Lapwing, to Finl. 27:89(r), 199(r)
    - Nightingale, Thrush, e. Sweden 26:39(r)
    - Nutcracker 25:32(r)
    - Owl, Great Gray, breeding in Sweden 27:146(r)

## RANGE (cont.)

- extensions of: (cont.)  
 Rail, Water 23:42(r)  
 Redwing, s. in Eur. 28:181(r)  
 Ruff, possible breeding in  
 Tunisia 28:52(r)  
 Shelduck, breeding in Tunisia  
 28:52(r)  
 Sparrow, Hedge, to central Sweden  
 27:200(r)  
 -, House 28:166(r)  
 - - in Aust. 29:204(r)  
 - - in Mex. 31:104(r)  
 - - in n. Nor. 27:199(r)  
 - - in S. Am. 29:204(r)  
 Starling in N. Am. 25:20(r)  
 Swallow, Barn, historical  
 27:152(r)  
 vagrants, importance of, to  
 30:133(r)  
 Warbler, Greenish 23:42(r)  
 -, - to central Sweden 27:200(r)  
 -, Reed, to s. Sweden 28:181(r)  
 -, Wood, to s. Sweden 28:181(r)  
 Wren, House, s.w. in U.S.  
 28:181(r)
- home, of:  
 Blackbird, Eur., in N.Z. 25:62(r)  
 Blackgame & Capercaillie 23:170(r)  
 Chicken, Prairie 22:36(r);  
 23:123(r)  
 Tit, Great 23:130(r)  
 Titmouse, Tufted 22:41(r)
- of Grackles 24:168(r)  
 - Eurasian Quail 28:165(r)
- reduction of (see also pop.  
 decreases)  
 Black Stork, s. Sweden 28:181(r)  
 Greylag Goose, s. Sweden  
 28:181(r)  
 Nightingale 25:32(r)  
 Roller, s. Sweden 28:181(r)
- winter, of:  
 Cuckoo, Eur. 23:79(r)  
 Goose, Canada 23:1  
 Hobby 23:79(r)  
 Pipit, Meadow 23:80(r)  
 Redshank 23:78(r)  
 Starling, in Eur. 23:80(r)  
 -, in UT. 24:125(r)
- Ranger, G. Life of Crowned Hornbill.  
 23:121(r); 24:26(r)  
 Rankin, N. Longevity of a White-  
 fronted Goose 28:233(r)  
 Raptors (see also Accipitridae,
- Falconidae, Pandionidae,  
 Strigidae, Tytonidae)  
 Bal-chatri trap for 30:19  
 band. in Finl. 29:246(r)  
 breeding season, Afr. 22:86(r)  
 - -, Galapagos 22:87(r)  
 Coccidiosis in 29:200(r)  
 in book 24:88(r)  
 migr. route, Bosphorus 30:125(r)  
 - - Mediterranean 29:248(r)  
 nesting in AK. 30:132(r)
- Rasmussen, D.I. (see Low, J.B.)  
 Ratcliffe, D.A. Broken eggs in  
 Peregrine eyries. 29:195(r)  
 Rautenberg, W. Comparison of energy  
 economy of Bramblings & House  
 Sparrows. 29:61(r)  
 Raven (*Corvus corax*)  
 Rawson, K.S. Sun compass orient. &  
 endogenous activity rhythms of  
 Starling. 26:163(r)
- & A.M. Orient. of Homing Pigeons  
 in relation to change in sun  
 declination. 26:164(r)
- Raynor, G.S. Meteorological variables  
 & northward movement of nocturnal  
 land bird migrants. 28:43(r)
- Meteorological anal. of 1958  
 Island Beach netting data. 31:162(r)
- Razorbill (*Alca torda*)  
 Reardon, J.D. Identification of  
 waterfowl nest predators. 23:127(r)
- RECOVERIES & RETURNS  
 (I) ABROAD, FROM BIRDS BANDED IN:  
 Belgium: 24:70(r); 25:114(r);  
 26:163(r); 29:45(r)  
 Britain: 23:170(r); 24:20(r), 70(r)  
 25:62(r); 26:28(r); 27:129(r);  
 28:162(r); 29:112(r); 30:184(r)  
 31:91(r), 159(r)  
 Canada: 22:144(r); 23:1; 31:93(r)  
 Czechoslovakia: 29:44(r)  
 Denmark: 24:71(r); 25:114(r);  
 30:235(r)  
 Finland: 22:127(r), 128(r);  
 25:151(r); 26:75(r), 120(r);  
 27:130(r); 29:113(r), 246(r)  
 France 26:122(r); 27:188(r)  
 Greenland: 22:83(r); 24:110(r),  
 111(r); 27:33(r); 28:229(r)  
 Hungary: 27:185(r), 186(r);  
 29:246(r)  
 Netherlands: 22:129(r); 23:77(r);  
 25:62(r), 152(r); 26:75(r);  
 28:42(r); 29:45(r), 113(r), 246(r)



## RECOVERIES &amp; RETURNS (cont.)

(I) ABROAD, FROM BIRDS BANDED IN:  
(cont.)

New Zealand: 23:77(r);28:42(r)  
 Norway: 22:127(r),129(r);23:76(r);  
 25:113(r),152(r); 27:129(r);  
 30:234(r); 31:92(r)  
 Spain & Portugal: 27:189(r)  
 Sweden: 22:128(r); 23:76(r);  
 24:69(r); 25:114(r),152(r);  
 27:130(r),187(r); 28:100(r);  
 31:159(r)  
 Switzerland: 23:76(r);24:155(r);  
 28:42(r); 29:186(r)  
 United States: 22:80; 28:229(r);  
 31:92(r), 159(r)  
 Yugoslavia: 22:35(r); 28:163(r);  
 30:124(r), 235(r)

## (II) GENERAL, OF BIRDS BANDED IN:

Africa 23:77(r); 24:20(r)  
 Antarctica: 28:1  
 Australia: 29:184(r),185(r);  
 30:235(r)  
 Belgium 23:77(r); 27:85(r);  
 29:113(r); 30:124(r);31:92(r)  
 Britain: 23:98(r); 28:230(r)  
 31:159(r)  
 Canada: 31:160(r)  
 Czechoslovakia 30:47(r)  
 Denmark 26:73(r); 27:33(r)  
 Falkland Is.: 12-yr summary, 29:1  
 Finland: 22:83(r); 30:124(r),  
 235(r)  
 France: 22:35(r); 29:184(r);  
 30:48(r)  
 Germany: 28:163(r)  
 Greenland: 28:42(r)  
 Japan:26:163(r)  
 Netherlands: 30:48(r)  
 New Zealand: 25:62(r);29:113(r);  
 30:123(r)  
 Norway: 26:74(r); 28:100(r),162(r);  
 30:48(r),234(r)  
 Sweden: 28:161(r),162(r);  
 29:185(r)  
 Switzerland: 28:42(r);29:186(r)  
 USSR: 29:111  
 Yugoslavia: 25:17(r); 30:235(r)

(III) OF FOREIGN-BANDED BIRDS IN:  
 Britain: 22:35(r); 28:162(r);  
 29:186(r); 30:184(r);  
 31:91(r),159(r)  
 Denmark: 30:183(r)  
 France: 26:122(r); 27:188(r)

Hungary: 26:28(r),74(r);  
 27:186(r); 29:246(r)  
 Italy: 24:112(r)  
 Mediterranean Is. 31:158(r)  
 Netherlands: 22:129(r); 25:153(r)  
 New Zealand: 23:77(r)  
 Norway: 22:127(r),129(r)  
 Sweden: 24:70(r); 26:75(r);  
 27:187(r); 29:185(r)  
 Switzerland: 28:42(r);29:186(r)  
 Yugoslavia 28:163(r); 30:124(r)

## (IV) WITHIN COUNTRY OF BANDING

Belgium: 24:70(r); 29:45(r)  
 Britain: 24:20(r); 26:28(r)  
 27:129(r); 29:112(r)  
 Finland: 22:127(r),128(r);  
 26:120(r); 27:130(r);  
 29:113(r)  
 Hungary: 26:74(r); 27:185(r)  
 Netherlands 22:128(r); 23:77(r)  
 29:45(r),113(r)  
 New Zealand: 24:20(r)  
 Norway: 22:127(r),129(r);  
 23:76(r);25:113(r);27:129(r)  
 Sweden: 22:35(r),128(r);23:76(r)  
 24:69(r); 27:130(r),187(r);  
 28:100(r); 31:159(r)  
 Switzerland 23:76(r)  
 United States: 22:30(r),54,149;  
 23:22,60,73; 24:1, 14, 17;  
 31:159(r),160(r)

Reward vs. standard bands for water-  
 fowl recoveries 26:120(r)  
 returns, probability of, to trapping  
 station 22:114

Recurvirostra americana (Am. Avocet)  
 seasonal abundance, CA. 23:32(r)  
 - avosetta (Eur. Avocet)  
 behav. of young. 31:101(r)  
 brood behav. 31:101(r)  
 displacement sleeping 25:122(r)  
 in book, Neth. 22:43(r)  
 pop. decrease, Neth. 22:134(r)  
 response to Redshank Chicks 31:48(r)

Recurvirostridae  
 Tertiary hist. & evol. 29:204(r)

Redhead (Aythya americana)  
 Redman, P.S. & W.D.Hooke. Firecrests  
 in Engl. 26:76(r)

Redpoll, Common (Acanthis flammea)  
 -, Hoary (A. hornemanni)  
 Redshank(Tringa totanus)  
 -, Spotted (T. erythropus)  
 Redstart (eur.)(Phoenicurus  
 phoenicurus)

- Redstart (cont.)  
 - Am. (Setophaga ruticilla)  
 -, Black (Phoenicurus ochruros)  
 Redwing (Turdus musicus)  
 Reed, P.C. Danger of leg mutilation from use of color bands. 24:65  
 Reed, R.A. A cuckoo in the nest 23:175(r)  
 Reetz, W. (see Hempel, C.)  
 Reeves, M.C. Mechanical aids useful in studying Bobwhite Quail. 24:21(r)  
 Regnell, S. Bird cliff Bleiksoya in n. Nor. 29:127(r)  
 Regulus calendula (Ruby-crowned Kinglet)  
 band. - see Banding Reports  
 band size 27:78  
 crown patch color of ♂ 30:183  
 - ignicapillus (Firecrest)  
 migr. in Engl. 26:76(r)  
 - regulus (Goldcrest)  
 type locality 24:168(r)  
 winter sleeping habits 28:174(r)  
 - weather & pop. fluctuations 29:253(r)  
 - satrapa (Golden-crowned Kinglet)  
 band. - see Banding Reports  
 band size 27:78  
 Reilly, E.M. Jr. Bird records & AOU check-list ranges. 26:38(r)  
 Reinert, J. Ability of a Jackdaw to discriminate different speeds of metronome beats. 31:231(r)  
 Reinsch, A. Nest of Golden Oriole. 31:49(r)  
 Reinsch, H.H. Observations from Fahrinsel. 25:68(r)  
 Remiz pendulinus (Penduline Tit)  
 nesting habits 28:105(r)  
 Remmert, H. (see Kumerloewe, H.)  
 Rensch, B. Effectiveness of anesthetic factors with vertebrates. 30:195(r)  
 RETURNS (see Recoveries &-)  
 Reuterwal, O.F. Collared Turtle Dove breeding in Varberg. 28:169(r)  
 Rhabdornis inornatus (Plain-headed Creeper)  
 syst. 24:169(r)  
 - longirostris (= R. inornatus)  
 Rheingold, H.L. & E.H. Hess. Chick's "preference" for some visual properties of water. 29:255(r)  
 Rhinocryptidae (Tapaculos)  
 in check-list, birds of world 22:142(r)  
 Rhodostethia rosea (Ross' Gull)  
 cold adaptations 30:132(r)  
 Rice, D.W. (see Kenyon, K.W.)  
 --- Dynamics of range expansion of Cattle Egrets in FL. 28:51(r)  
 --- Birds & aircraft on Midway Is. 31:51(r)  
 Richard, T.J. Concealment & recovery of foods by birds, with relevant observations on squirrels. 30:198(r)  
 Richardson, F. (see Alsorn, J.R.)  
 --- & H.I. Fisher. Birds of Moku Manu & Manana Is., HI. 23:41(r)  
 Richardson, R.A. Bigamy in Swallow. 28:168(r)  
 ---, M.J. Seago & A.C. Church. Collared Doves in Norfolk, new to British Isles. 29:65(r)  
 Richardson, R.E., J.M. Stacey, H.M. Kohler & F.R. Naka. Radar observations of birds. 31:42(r)  
 Richdale, L.E. Pre-egg stage in Albatross family. 22:40(r)  
 --- Banding & marking Penguins. 22:47  
 --- Effect of age on laying dates, size of eggs, & clutch in Yellow-eyed Penguin. 22:185(r)  
 --- Sexual behav. in Penguins. 22:190(r)  
 --- Post-egg period in Albatrosses 24:131(r)  
 --- Starvation theory in Albatrosses 26:39(r)  
 --- Pop. study of Penguins. 29:264(r)  
 Richmond, S.M. Attraction of Purple Martins to an urban location in w. OR. 25:67(r)  
 Richmondia cardinalis (= Cardinalis cardinalis)  
 Richter, H. Pop. movements of Dipper. 25:154(r)  
 --- Crane migr. at Muritz. 28:165(r)  
 Richter, W.C. & S.A. Liscinsky. Tech. for identification of Woodcock at night. 27:144(r)  
 Ricker, W.E. Effects of compensatory mort. on pop. abundance. 25:162(r)  
 Ridley, M.W. & R. Percy. Exploitation of sea birds in Seychelles. 30:58(r)  
 Ridpath, M.G. (see Drinnan, R.E.)  
 Riesz, R.P. Vertical distr. of birds. 31:161(r)  
 Riney, T. (see Farner, D.S.)

- Ringleben, H. Eider as a visitor & breeder along Ger. coast. 28:108(r)
- Birds nesting in or on structures 30:52(r)
- Riparia riparia (Bank Swallow = Sand Martin)
- band. - see Banding Reports
- band size 27:77
- DDT effects on 22:59
- effects of cold rain 22:58
- feeding following tractor 23:39(r)
- L.H. 28:233(r)
- natal plumages, var. in 29:126(r), 233
- nest boxes for 26:167(r)
- nesting in stone walls 28:170(r)
- parasitism by blowflies 31:56(r)
- pop. changes 22:58
- site tenacity 22:59
- Ripley, S.D. A paddling of ducks. 29:131(r)
- Rissa tridactyla (Kittiwake)
- adaptation to cliff nesting 29:194(r)
- age, effect of breeding 30:53(r)
- band. - see Banding Reports
- color of feet & tarsi 29:127(r)
- mobbed by Arctic Tern 30:245(r)
- nesting in Spitzbergen 30:248(r)
- study 30:53(r)
- occurrence in Switz. after coastal storms 28:179(r)
- palatability of eggs 24:76(r)
- pop. increase, Rouzic Is. 28:52(r)
- transatlantic recovery 23:170(r)
- Rittenghaus, H. Adoption experiments with Ringed & Kentish Plovers. 24:119(r)
- Indirect distr. of the "oilpest" in sea bird sanctuaries. 28:108(r)
- Does begging by young release sexual behav. in adults? 28:173(r)
- Kentish Plover on Is. Oldeog. 29:52(r)
- Determination of flight elevation with optical rangefinder. 30:186(r); 31:45(r)
- Roadrunner (*Geococcyx californianus*)
- Robbins, C.S. (see Baird, J.; Kenyon, K.W.; Stamm, D.D.; Stewart, R.E.)
- , P.F. Springer & C.G. Webster. Effects of five year DDT application on breeding bird pops. 22:189(r)
- Roberts, A. Birds of S.Afr. 23:52(r)
- Roberts, N.L. Habit of nest-appropriation. 28:48(r)
- Roberts, R.E. (see Baldini, J.F.)
- Robertson, W.H. (see Moore, J.C.)
- Robin, Am. (*Turdus migratorius*)
- , Cape (*Cossypha caffra*)
- , Eur. (*Erithacus rubecula*)
- Robinson, A. Ann. reproductory cycle of *Gymnorhina dorsalis* in S.W. Aust. 28:235(r)
- Robson, R.W. Breeding of Dipper in n. Westmorland. 28:167(r)
- Roby, E.F. Two-yr. study of pheasant restocking in Gallatin Valley, MT. 23:126(r)
- Roller, Eur. (*Coracias garrulus*)
- Rollin, N. Amount a bird sings. 23:87(r)
- Dawn chorus, April 13th. 24:170(r)
- Song output of unstimulated Skylark. 28:55(r)
- Late season singing of Yellowhammer. 30:62(r)
- Romanoff, A.L. Critical periods & causes of death in avian embryonic dev. 23:34(r)
- Roof, L. (see Davison, V.E.)
- Rook (*Corvus frugilegus*)
- ROOSTING
- communal, winter, of Am. Blackbirds 29:59(r)
- , -, of Bluebird 30:219
- , -, of small birds 28:174(r)
- effects of solar eclipse on 27:194(r)
- flock composition, Gray-crowned Rosy Finch 24:141
- in caves, high Andes 24:119(r)
- in cavity in ground, Long-tailed Tit. 28:171(r)
- movements, of Redwinged Blackbirds seen on radar 31:227(r)
- seen by radar, Engl. 31:43(r)
- of:
- Chicken, Prairie 23:123(r)
- Crane, Eur., roosts threatened in Neth. 30:249(r)
- Creeper, Brown, in Giant Sequoia bark 28:240(r)
- Harriers 31:51(r)
- Ibis, Hadada 23:123(r)
- Kite, Black 28:50(r)
- Pigeon 28:245(r)
- Robin, Am. 27:188(r)
- Swift, Scissor-tailed 30:55(r)

- ROOSTING (cont.)  
of: (cont.)  
Tern, Gull-billed 28:109(r)  
Tyrant, Black-billed Shrike, in  
caves at night 24:119(r)  
sound to repel from, Starlings  
26:172(r)  
stereotyped behav., House Sparrow  
22:133(r)  
time & light relations, Swift  
28:174(r)  
-, & pop. changes, Starling  
28:150(r)  
- not related to light, Nuthatch  
26:127(r)  
winter, of:  
Blackbird, Eur. 29:197(r)  
Brambling, in Switz. 25:126(r)  
Chough, Alpine 30:133(r)  
Creepers, Brown 27:139(r); 28:174(r)  
-, Short-toed 28:174(r)  
Nuthatch 26:34(r)  
Pheasant, in IL. 25:165(r)  
Ravens, & food supply, in Engl.  
27:139(r)  
Swallow, Barn, in Afr. 27:139(r)  
Root, O.M. Birds of the Andover (MA.)  
region. 29:201(r)  
Rooth, J. (see Perdeck, A.C.)  
--- Food, habitat selection & decline  
of pop. of White Stork in Neth.  
30:249(r)  
Rose, R.G. (see Mewaldt, L.R.)  
Rosenberg, E. Our Harriers. 30:197(r)  
Rosenberg, N.T. & B.P.Nielsen.  
Waders, especially Little Ringed  
Plover, at Sonderso Lake, N.Z.  
28:244(r)  
Rosene, W.Jr. Summer whistling cock  
count of Bobwhite Quail as index  
to wintering pop. 29:60(r)  
--- & F.W.Fitch, Jr. Test of investi-  
gator as a variable in ageing Quail  
27:195(r)  
Rostratulidae (Painted Snipe)  
evol. of 29:205(r)  
Rostrhamus sociabilis (Everglade Kite)  
vocalizations, on recording  
31:108(r)  
Rothschild, M. & T. Clay. Fleas,  
flukes & cuckoos. 24:36(r)  
Routamo, E. (see Koskimies, J.)  
Rowan, M.K. Yellow-nosed Albatross  
at its breeding grounds, Tristan  
da Cunha group. 23:122(r)
- Rowan, M.K. (cont.) Breeding biol. &  
behav. of Redwing Starling.  
27:142(r)  
Rowell, W. Canada's problem of animal  
cons.- a question of cycles.  
23:89(r)  
--- Biol. of animal cycles. 25:162(r)  
Rowell, C.H.F. Breeding of Lapland  
Bunting in Swedish Lapland.  
28:235(r)  
Royama, T. Test of an automatic  
nest-recorder. 31:99(r)  
Rucner, D. Ring Dove in Yugoslavia  
25:31(r)  
Rudebeck, G. (see Broekhuysen, G.J.)  
--- Studies on bird migr. 22:94(r)  
--- Roost of Eur. Swallows & other  
birds in Transvaal. 27:139(r)  
Ruff (Philomachus pugnax)  
Ruhr, C.E. (see Due, L.A.)  
Ruppert, K. & R.Langer. Food of our  
forest birds. 28:182(r)  
--- - --- Is biol. pest control of  
Oak Leaf Roller possible?  
30:130(r)  
Russell, D.M. Mourning Dove investi-  
gations in KY. 27:43(r)  
Russell, R. (see Lockley, R.M.)  
Rust, H.J. Migr. & nesting of Night-  
hawks in n. ID. 22:84(r)  
Rutledge, R.F. & R.H.Watt. Distr. &  
status of wild geese in Ireland.  
29:204(r)  
Rydzewski, L.W. Nomadic movements  
& migr. of Eur. Common Heron.  
28:100(r)  
Rydzewski, W. Historical review of  
bird markings. 23:31(r)  
--- The Ring. 28:160(r)  
--- Recoveries of ringed birds,  
Mediterranean Is. 31:158(r)  
Ryser, R. (see Stricker, W.)

- Sabine, W.S. Winter society of Oregon Junco:the flock. 27:40(r)
- Sage, B.L. Observations on the Rufous Warbler. 31:231(r)
- & B.King. Influx of Phalaropes in autumn, 1957. 31:96(r)
- Saint-Paul, U. von (see Kramer,G.)
- compass directional training of Western Meadowlarks. 28:43(r)
- Sales, V.A.D. DDT poisoning of birds 28:177(r)
- Salinger, H.E. Pheasant breeding pop. study on irrigated lands in s.w. ID. 24:120(r)
- Salomonsen, F. Birds of Grnl. 22:42(r), 192(r); 23:94(r)
- Recoveries of birds banded in Grnl. 22:83(r); 27:33(r); 28:229(r) 30:235(r)
- Syst. notes on Philippine birds. 24:169(r)
- Occupation of Den. by Streptopelia decacocto. 25:31(r)
- Bird migr. & its routes. 25:131(r)
- Bird preservation in Grnl. 26:171(r)
- Evol. significance of bird migr. 27:96(r)
- Nissum Fjord & Brent Geese. 29:61(r)
- Salt, G.W. Relation of metabolism to climate & distr. in three *Carpodacus* finches. 24:121(r)
- Saltator maximus* (Buff-breasted *Saltator*)  
anting 26:79(r)
- Sanderling (*Calidris alba*)
- Sandpipers (*Scolopacidae*)
- , Baird's (*Calidris bairdii*)
- , Buff-breasted (*Tryngites subruficollis*)
- , Common (*Tringa hypoleucos*)
- , Curlew (*Calidris ferruginea*)
- , Green (*Tringa ochropus*)
- , Least (*Calidris minutilla*)
- , Pectoral (*C. melanotos*)
- , Purple (*C. maritima*)
- , Red-backed (= Dunlin)
- , Semipalmated (*C. pusillus*)
- , Solitary (*Tringa solitaria*)
- , Spotted (*T. macularia*)
- , Upland (*Bartramia longicauda*)
- , Western (*Calidris mauri*)
- , Wood (*Tringa glareola*)
- Sandplover, Kittlitz (*Charadrius pecuarius*)
- Sandreuter, A. Ontogeny of hemato-  
poiesis in domestic fowl & Starling. 23:118(r)
- Sapin-Jaloustre, J. & F. Bourliere. Incub., dev., displays & posture of Adelie Penguin. 23:120(r), 179(r)
- Sapsucker, Yellow-bellied, = Common (*Sphyrapicus varius*)
- Sargent, T.D. Winter studies on Tree Sparrow. 30:27
- Saries, J.G. Glaucous-winged Gull banded in British Columbia, recovered in Japan. 31:93(r)
- Sauer, F. Dev. of vocalizations in Whitethroats kept from egg in sound-proof chambers in comparison with others isolated later and with other wild birds. 26:33(r)
- Orient. by stars of Warblers migrating by night. 29:49(r)
- Celestial navigation by birds. 30:236(r)
- & E. Nocturnal migr. orient. of Eur. birds in s.w. Afr. 31:223(r)
- Saunders, A.A. Descr. of newly-hatched passerine birds. 27:121
- Forty yrs. of spring migr. in s. CT. 31:95(r)
- Sauter, U. Band. recoveries of Barn Owls in lower Saxony & Westphalia. 27:130(r)
- Band. studies on Barn Owl in Neckar region. 27:131(r)
- Results from band. of Barn Owls in Hesse. 27:131(r)
- & E. Schuz. Pop. changes in White Stork, 3rd review. 27:135(r)
- Sawyer, E.J. Bird houses, baths & feeding shelters. 27:103(r)
- Saxicola rubetra* (Whinchat)  
band. - see Banding Reports  
behav. during solar eclipse 27:194(r)  
migr. routes 25:153(r)
- torquata (Stonechat)  
ecol. & reproductive biol. 23:83(r)
- Sayornis phoebe (Eastern Phoebe)  
band. - see Banding Reports  
band size 25:14  
descr., newly hatched 27:123

- Sayornis phoebe (cont.)  
 in book, AR. birds 22:198(r)  
 - -, Audubon Bird Biographies  
 28:251(r)  
 nest construction & var. 31:47(r)  
 respiration rates 29:39  
 sex, age & daily wts. 26:19  
 young caught by Green Frog 24:67  
 - saya (Say's Phoebe)  
 band. - see Banding Reports  
 Scaup, Greater(Aythya marila)  
 -, Lesser (A. affinis)  
 Scenopoeetes dentirostris (Tooth-  
 billed Bowerbird)  
 leaf display & sex cycle 24:25(r)  
 Schaanning, H.T.L. Further results  
 from banded Nor. migr. birds.  
 22:127(r)  
 --- Migr. & winter area of Fieldfare  
 22:129(r)  
 Schaeffer, H.H. & E.H.Hess. Color  
 preferences in imprinting objects.  
 31:100(r)  
 --- - --- Innate behav. patterns as  
 indicators of critical periods.  
 31:101(r)  
 Schafer, E. Biol. of Nothocercus  
 bonapartei. 29:56(r)  
 Scheer, G. Expansion of range of  
 Scarlet Grosbeak. 23:132(r)  
 --- Influence of temp. on awakening  
 song of Chaffinches in different  
 years. 24:86(r)  
 Scheven, J. Prey seizure by Herons.  
 29:198(r)  
 Schierer, A. Storks of Alsace: result  
 of censuses, 1950 & '51. 24:115(r)  
 Schifferli, A. Reports of Swiss  
 Vogelwarte Sempach, 1949-'54.  
 23:76(r); 24:155(r); 25:114(r);  
 28:42(r); 29:186(r)  
 --- Brambling Invasion of Switz. in  
 1950-'51. 25:126(r)  
 --- Age & mort. for Tawny Owl & Barn  
 Owl in Switz. 29:51(r)  
 --- Beginning of laying & second  
 broods of Starling in Switz.  
 29:53(r)  
 Schleidt, M. Releasing of gobbling in  
 turkey. 26:168(r)  
 Schmidt, F. Double clutches of Blue  
 Tits & Pied Flycatchers. 29:118(r)  
 Schmidt, F.V. (see Kozicky, E.L.)  
 Schmidt, G.A.J. Sociability of Ravens  
 in Schleswig-Holstein. 29:58(r)  
 Schmidt, K.P. (see Allee, W.C.)  
 Schmidt-Koenig, K. Experimental  
 influences on 24-hour periodicity  
 of Homing Pigeons & their effects  
 on homing ability. 30:125(r)  
 Schmidt-Nielsen, K. & W.J.L. Sladen  
 Nasal salt secretion in Humboldt  
 Penguin. 30:131(r)  
 --- & R.Fange. Functions of salt  
 gland in Brown Pelican. 30:195(r)  
 Schnurre, O. Concerning the n. Ger.  
 Eagle Owl. 27:93(r)  
 --- Questions concerning two kite  
 species. 28:109(r)  
 Scholander, P.F., V. Walters, R. Hock &  
 L. Irving. Body insulation of arctic  
 & tropical birds & mammals.  
 23:116(r)  
 --- --- --- - --- Adaptation to cold  
 in arctic & tropical mammals & birds  
 in relation to body temp. insulation  
 & basal metabolic rate. 23:117(r)  
 ---, ---, ---, F. Johnson & L. Irving.  
 Heat regulation in arctic & tropical  
 mammals & birds. 23:117(r)  
 Scholtyseck, E. & W. Przygodda.  
 Coccidiosis in birds. 29:200(r)  
 Schorger, A.W. Passenger Pigeon, Nat.  
 hist. & extinction of 26:133(r)  
 --- Beard of the wild Turkey 30:59(r)  
 Schreiber, B. (see Gualtierotti, T.)  
 Schults, R. von (see Flach, B.)  
 Schuster, L. Spring arrival of the  
 Swallow. 25:116(r)  
 Schuz, E. (see Sauter, U.)  
 --- Question of inherited migr.  
 routes. 22:181(r)  
 --- Early release in w. Ger. of young  
 storks from e. Prussia through  
 Vogelwarte Rossiten. 23:31(r)  
 --- Migr. of birds. 24:130(r)  
 --- Migr. lanes of White Stork  
 according to ringing results  
 25:64(r)  
 --- Final communication of Starling  
 pop. in Rossiten. 25:154(r)  
 --- Migr. of w. Siberian pop. of  
 Black-throated Loon. 27:132(r)  
 --- White Stork migr. from Syria  
 through Egypt. 28:44(r)  
 --- Spring passage of Yellow Wagtail  
 on coast of Caspian Sea. 29:47(r)  
 --- Swallowing of own young ("kronism")  
 by birds & its significance. 31:51(r)

- Schuz, E. (cont.)  
 --- Bird World of s. Caspian lowlands 31:109(r)  
 --- & R. Bohringer, Migr. of White Stork in Afr. & Asia as indicated by band. recoveries to 1949. 22:83(r)  
 --- & H. Lohrl. More rigorous selection of material - accuracy in ornith. 27:87(r)  
 Schwartz, C.W. & E.R. California Quail in HI. 23:35(r)  
 Schwartz, M. Var. of Camargue Blue-headed Wagtail & its immigration into Switz. 28:178(r)  
 Schwartzkopff, J. (see Huchtker, R.)  
 --- Hearing in birds. 25:29(r)  
 Schweppenberg, F.G. von. Tameness in birds. 23:86(r)  
 Sciple, G.W. (see Bell, J.F.)  
 Scolopacidae  
 mist nets for 28:115  
 trans-gulf (of Mex.) migr. 29:45  
 Scolopax rusticola (Eurasian Woodcock)  
 band- see Banding Reports  
 in food of Goshawk 22:37(r)  
 Scoter, Black (*Melanitta nigra*)  
 -, White-winged, = Velvet, (*M. fusca*)  
 Scott, P. (see Hanson, H.C.)  
 --- Wild geese, wild ducks, waterfowl collection: the Am. boom trap. 24:155(r)  
 --- Myvatn, 1951. 24:161(r)  
 --- & H. Boyd. Reports of the Wildfowl Trust. 26:72(r); 27:102(r)  
 --- & J. Fisher. A thousand geese. 25:171(r)  
 --- - --- & F. Gudmundson. The Severn Wildfowl Trust expedition to central Iceland, 1951. 24:161(r)  
 Scott, T.G., Y.L. Willis & J.A. Ellis. Effects of field application of dieldrin on wildlife. 31:164(r)  
 Scrub-birds (*Atrichornis* spp.)  
 Sea birds  
 banding hints 30:47(r)  
 origin of arctic avifauna 30:131(r)  
 Seago, M.J. (see Richardson, R.A.)  
 Sergeant, D.E. Little Auks in Engl. 23:184(r)  
 Seibert, H.C. Differences between migr. & non-migr. birds in food & water intake at various temp. & photo-periods. 22:39(r)
- Seitz, A. Companion relationships of young Common Curlew. 22:91(r)  
 Seiurus spp.  
 in book on Warblers. 29:131(r)  
 in mist nets 28:115  
 - aurocapillus (Ovenbird)  
 band. - see Banding Reports  
 band size 25:15; 27:78; 29:93  
 broken leg, healed 28:158  
 descr., newly-hatched 27:125  
 food habits & terr. size 30:199(r)  
 respiratory rate 29:39  
 trap preferences 22:110  
 wt. 27:115  
 - motacilla (Louisiana Waterthrush)  
 band. - see Banding Reports  
 band size 29:93  
 s. limit of breeding in GA. 23:96(r)  
 - noveboracensis (Northern Waterthrush)  
 band. - see Banding Reports  
 band size 29:93  
 occurrence in Fr. 27:208(r)  
 subspp., syst. 29:66(r)  
 Selasphorus sasin (Allen's Hummingbird)  
 metabolism 23:33(r)  
 Semones, V.D. & C.G. Crispens, Jr. Records of ♂ Mongolian Pheasants incubating clutches. 27:191(r)  
 Serinus canaria (Canary)  
 distr., n.w. Ger. 29:65(r)  
 hybrid, X Goldfinch 24:161(r)  
 killed in cage by Shrike 22:121  
 migr. 27:132(r)  
 song learning 31:56(r)  
 Serventy, D.L. (see Marshall, H.A.)  
 --- Band. tech. for burrowing Petrels. 28:161(r)  
 --- Meth. of sexing Petrels in field observations. 28:177(r)  
 --- Banding programs on *Puffinus tenuirostris* 29:185(r)  
 --- Duration of immaturity in *Puffinus tenuirostris*. 29:193(r)  
 --- & A.J. Marshall. Factors influencing testis coloration in birds. 28:177(r)  
 --- & V.N. Serventy. Recovery of a group of ringed Gannets. 30:241(r)  
 Setophaga ruticilla (Am. Redstart)  
 age - see Age, maxima-  
 band- see Banding Reports  
 band size 25:15; 29:93

- Setophaga ruticilla (cont.)  
   DDT effects on 22:189(r)  
   disease & injury 28:158  
   mass mort., TX. 28:230(r)  
   pop. study 31:124  
   s.limit of breeding in GA. 23:96(r)  
   swollen toe 28:158  
   wt. 27:175  
   - & meas. 29:109  
 Sex ratios, change with age, Calif-  
   ornia Quail. 28:145  
 - -, graphs for detn. 22:189(r)  
 - - of:  
   Brambling, winter flocks 25:126(r)  
   Buffalo-weaver, Afr. 30:243(r)  
   Chat, Yellow-breasted 29:176  
   Dipper 25:154(r)  
   Dove, Mourning, in NC. 22:198(r)  
   Ducks, Eider 30:57(r)  
   Grosbeak, Black-headed 23:30(r)  
   Japanese birds 28:233(r)  
   Mallard, & productivity 30:242(r)  
   Pheasant, Ring-necked 23:89(r)  
   Pochard, Red-crested 29:199(r)  
   Sparrow, House 29:52(r); 30:51(r)  
   Swallow, Barn 24:95  
   Water birds, Switz. 25:126(r)  
   waterfowl 28:240(r); 29:203(r),  
     259(r)  
   Woodcock 27:195(r)  
 -, relation to wt. in geese 27:95(r)  
 -, reversal of roles, S. Afr. Button  
   Quail 31:48(r)  
 Sexing (see Techniques -)  
 Sexual maturity, age at, Bobwhite  
   Quail 23:121(r)  
 - -, - -, Eurasian Quail 27:134(r)  
 - -, - -, White Stork 27:135(r)  
 - -, early, of Mallard ♀ 29:55(r)  
 - reproduction, cycles of 23:96(r)  
 Shag (Phalacrocorax aristotelis)  
 Sharland, M. Egrets at Ulmarra, New  
   South Wales. 29:204(r)  
 Sharp, W.M. Social & range dominance  
   in pheasants & Prairie Grouse.  
   29:61(r)  
 Sharrack, J.T.R. (see Cramp, S.)  
 Shaub, B.M. Behav. & pop. of Pine  
   Siskins at Northampton, MA. 22:71  
 --- Device for removing overlapped  
   bands from birds' legs. 24:12  
 --- Juv. Evening Grosbeak appears in  
   Northampton, MA. 29:31  
 --- Destruction of nearly 100 Evening  
   Grosbeaks. 31:150
- Shaub, B.M. (cont.)  
 --- & M.S. Shaub Adult & young Eve-  
   ning Grosbeaks at Saranac Lake, NY.  
   24:135  
 --- - --- Evening Grosbeak incursions  
   & nestings in the n.e. 29:128(r)  
 Shaub, M.S. (see Shaub, B.M.; Mason,  
   E.A.)  
 --- Summer appearances of adult &  
   juv. Evening Grosbeaks. 25:87  
 --- Evening Grosbeak summer records  
   27:157  
 --- Evening Grosbeak juv. at Hadley,  
   MA. in July, 1958. 30:226  
 --- Evening Grosbeak records in the  
   maritimes, New England & NY,  
   summer, 1958. 31:106(r)  
 --- Evening Grosbeak incursion in  
   n.e., winter, 1957-'58. 31:140  
 Shaw, W.T. (see Jewett, S.G.)  
 Shearwaters (Procellariidae)  
 -, Greater (Puffinus gravis)  
 -, Little (P. assimilis)  
 -, Manx (P. puffinus)  
 -, Short-tailed (P. tenuirostris)  
 -, Sooty (P. griseus)  
 Sheathbill (Chionis alba)  
 Sheldon, M.G. (see Grieb, J.R.)  
 Sheldon, W.G. Trapping Woodcocks at  
   breeding grounds. 26:121(r)  
 --- Ann. survival of MA. ♂ Woodcocks  
   28:241(r)  
 --- Mist netting Woodcocks in summer  
   31:130  
 Shelduck (Tadorna tadorna)  
 Shelford, V.E. Experimental approach  
   to bird pop. study. 27:37(r)  
 --- & R.E. Yeatter. Relations of  
   Prairie Chicken abundance to rain-  
   fall & solar radiation. 27:43(r)  
 Sherman, A.R. Birds of IA. dooryard.  
   23:134(r)  
 Shimomura, K. Bird report from  
   Arasake, Kagoshima, Kyushu.  
   27:197(r)  
 Shorebirds (Charadriiformes)  
 Shoveller, Northern (Anas clypeata)  
 Shrikes (Lanius spp.)  
 -, California (= Migrant Shrike)  
 -, Fiscal (= Red-backed)  
 -, Great Gray (= Northern Shrike)  
 -, Lesser Grey (Lanius minor)  
 -, Loggerhead (= Migrant Shrike)  
 -, Migrant (L. ludovicianus)  
 -, Northern (L. excubitor)



- Shrikes (cont.)  
 -, Red-backed (*Lanius collurio*)  
 -, Steppe (= Northern Shrike)  
 -, Woodchat (*L. senator*)  
 Shrike-Tyrant, Black-bellied  
 (*Agriornis montana*)  
 Shull, A.F. Evolution, 2nd ed. 23:  
 54(r)  
 Shultz, F.T. Anal. of egg shape of  
 chickens. 25:121(r)  
*Sialia currucoides* (Mountain  
 Bluebird) - aggregation after  
 snowstorms 30:222  
 - *mexicana* (Western Bluebird)  
 nesting attempts after volcano in  
 Mex. 31:47(r)  
 - *sialis* (Eastern Bluebird)  
 baiting with peanut hearts 26:27  
 band size 25:14; 27:78  
 communal roosting, winter 30:217  
 DDT effects on 24:164(r)  
 death, peculiar 25:59  
 descr., newly hatched 27:124  
 effects of x-rays on adults &  
 embryos 30:191(r)  
 ground traps for 25:112  
 host of Cowbird 25:157(r)  
 mort. in late winter storm  
 31:162(r)  
 pop. changes & weather 24:82(r)  
 respiratory rate 29:39  
 senescence ? 25:59  
 sex, age & daily wts. 26:19  
 young assist in care of second  
 brood 29:117(r)  
 Sibley, C.G. Species formation in Red-  
 eyed Towhees of Mexico. 22:142(r)  
 --- A white throated Golden-crowned  
 Sparrow. 29:260(r)  
 --- & D.A.West. Hybridization in Red-  
 eyed Towhees on Mex., the plateau  
 pop. 29:259(r)  
 Sibson, R.B. (see Falla, R.A.)  
 Sichel, H.S. (see Arbous, A.G.)  
*Sicalis flaveola* (Saffron Finch)  
 band size 29:93  
 soft part colors 27:181  
 wt. 27:175  
 Sick, H. Change of nesting habits in  
 Spine-tailed Swift. 23:87(r)  
 --- Biol. of Umbrella Bird. 29:56(r)  
 --- House Sparrow in Brazil. 29:204(r)  
 --- Distr. & nest of *Panyptila*  
*cayennensis* in Brazil. 30:55(r)
- Sick, H. (cont.)  
 --- & Ottow. Shiny Cowbird & its  
 hosts, especially Rufous-collared  
 Sparrow. 30:190(r)  
 Siebenaler, J.B. Autumnal trans-  
 gulf (of Mex.) migr. 25:154(r)  
 Siewert, H. & R. Dirksen. Storks.  
 27:50(r)  
 Sigmund, L. Postembryonic dev. of  
 Water Rail. 29:252(r)  
 Siivonen, L. (see Valikangas, I.)  
 --- Structure of short-cyclic fluc-  
 tuations in numbers of mammals &  
 birds in parts of n. hemisphere.  
 22:95(r)  
 --- Features of short-term fluctu-  
 ation. 25:162(r)  
 --- Correlation between fluctuations  
 of Partridge & European Hare pop.  
 & climatic conditions of winters  
 in s.w.Finl., last 30 yrs. 29:253(r)  
 --- & J. Koskimies. Pop. fluctua-  
 tions & the lunar cycle. 27:89(r)  
 Silver, H. Hist. of NH. game & fur-  
 bearers. 30:136(r)  
 Silverbill (*Euodice cantans*)  
 Silvereye (= White-eye, Japanese)  
 Simmons, K.E.L. Distraction-display  
 in Kentish Plover. 23:39(r)  
 --- ♂ Red-backed Shrike begging food  
 from ♀. 24:77(r)  
 --- Predator reactions of breeding  
 birds. 24:78(r)  
 --- Studies on Little Ringed Plover  
 25:121(r)  
 --- Nature of "anting" 26:128(r)  
 --- Significance of voice in behav.  
 of Little Ringed & Kentish Plovers.  
 26:169(r)  
 --- Nature of predator-reactions of  
 waders toward humans: role of  
 aggressive, escape & brooding  
 drives. 27:193(r)  
 --- Great Crested Grebes. 28:106(r)  
 --- Feather-eating & pellet formation  
 in Great Crested Grebe. 28:182(r)  
 --- Review of anting of passerine  
 birds. 29:119(r)  
 --- Anting by British passerine birds  
 in the wild. 31:164(r)  
 --- & R.W.Crowe. Displacement-sleeping  
 in Avocet & Oystercatcher as a reac-  
 tion to predators. 25:122(r)  
 Singleton, J.R. Production & utiliza-  
 tion of waterfowl food plants on

- e. TX. gulf coast. 22:184(r)
- Siren, M. Increasing Goldeneye pop. with nest boxes. 23:175(r)
- Siskin, European (*Carduelis spinus*) -, Pine (*C. pinus*)
- Sitta spp. (Nuthatches)  
distr. & evol. 25:168(r)  
DDT effects on 22:189(r)  
natal plumages 29:126(r)
- canadensis (Red-breasted Nuthatch) band. - see Banding Reports  
band size 29:92  
behav. 26:82(r)
- carolinensis (White-breasted Nuthatch)  
age- see Age, maxima-  
band. - see Banding Reports  
band size 25:14; 27:77  
in Saskatchewan, Can. 24:30(r)  
natal down 29:234  
sex, age & daily wts. 26:19  
trap for 22:114
- castanea (Chestnut-bellied Nuthatch)  
breeding biol., in book 29:207(r)
- europa (Nuthatch)  
competition from Starling for nest holes 28:103(r)  
distr. & evol. 25:168(r)  
feeds young Starling 27:140(r)  
flea pop. in nests 31:56(r)  
food storage & recovery 30:198(r)  
L.H. & behav., monogr. 29:207(r); 30:56(r)  
migr. 22:94(r)  
mixed broods 28:106(r)  
nest boxes for increasing pop. 28:104(r)  
- in wall of granary 29:196(r)  
problem solving 30:195(r)  
roosting time & light 26:127(r)  
-, winter 26:34(r)  
tax. 27:146(r)  
wandered, Sweden 27:146(r)
- pusilla (Brown-headed Nuthatch)  
comparative biosystematics 30:133(r)  
subsp. in GA. 23:96(r)
- pygmaea (Pygmy Nuthatch)  
comparative biosystematics 30:133(r)
- Skead, C.J. Study of Black-collared Barbet, with notes on its parasitism by Lesser Honeyguide. 23:83(r)
- Study of Hadedah Ibis. 23:123(r)
- Cuckoo studies on s.Afr. farm. 23:122(r); 24:23(r)
- Skead, C.J.(cont.)
- Status of Cattle Egret in e. Cape Province. 24:170(r)
- Skellam, J.G. Statistical ecol.: spatial distr. 24:158(r)
- Skovgaard, P. Danish migrants in Belgium. 24:71(r)
- Fr. & passage of Danish migrants. 30:235(r)
- Skua, Great (*Catharacta skua*)
- Skutch, A.F. Outline for ecol. L.H. of a bird based on Song Tanager. 22:134(r)
- L.H. of Longuemare's Hermit Hummingbird. 23:122(r)
- L.H. of Central Am. birds: Fringillidae, Thraupidae, Icteridae, Parulidae & Coerebidae. 26:78(r)
- L.H. of Tropical Kingbird. 26:168(r)
- Quest of the Divine 29:134(r)
- Incubation patterns of birds. 29:193(r)
- L.H. of White-whiskered Softwing. 30:54(r)
- Skylark (*Alauda arvensis*)
- Sladen, W.J.L. (see Schmidt-Nielsen, K.)
- Adelie Penguin 25:66(r)
- Pygoscelid Penguins. 30:251(r)
- & R.L.Penny. Penguin flipper bands used by USARP bird banding program. 31:79
- & W.L.N.Tickell. Antarctic bird banding by Falkland Is. Dependency survey, 1954-'57. 29:1
- Slijper, E.J. Flight among animals. 23:98(r)
- Sluiters, J.E. Kentish, Little Ringed & Ringed Plover breeding near Amsterdam. 26:124(r)
- Smith, A.E. (see Cornwallis, R.K.)
- Smith, A.G. & H.R.Webster. Effects of hail storms on waterfowl pop. in Alberta, Can. 27:91(r)
- Smith, F.R. Myrtle Warbler in Devon: a new Engl. bird. 26:169(r)
- Crossbill invasion of 1956 & subsequent breeding in 1957. 30:198(r)
- Smith, G-H. Cons. of natural resources 22:94(r)
- Smith, J.D. Hawaiian Goose restoration program 23:127(r)
- Smith, K.D. Winter breeding season of land birds in e. Eritrea. 27:137(r)
- Smith, R.H. (see Hanson, H.A.)

- Smith, R.H.(cont.)  
 --- Waterfowl production on artificial reservoirs in e. MT. 25:27(r)  
 Smith, S. (see Edwards,G.)  
 --- Yellow Wagtail 26:42(r)  
 Smith, W. (see Bagg,A.M.)  
 Smith, W.J. Movements of MI. Herring Gulls. 30:69  
 Smout, T.C. (see Nisbet,I.C.T.)  
 Snipe, Common, = Wilson's,(*Gallinago gallinago*)  
 -, Painted (*Rostratulidae*)  
 Snow, D.E. Ann. mort. of Blue Tit in different parts of its range. 28:45(r)  
 Snow, D.W. (see Thomson,A.L.,ed.)  
 --- Abnormal breeding of birds in winter,1953/54. 26:167(r)  
 --- Breeding of Blackbird at Oxford. 30:53(r)  
 ---, D.F.Owen & R.E.Moreau. Land & sea-bird migr. in n.w.Spain, autumn, 1954. 27:132(r)  
 Snow-finch (*Montifringilla nivalis*)  
 Snyder,D.E. (see Griscom,L.)  
 Snyder, L.L. Snowy Owl migr. of 1946-'47. 22:183(r)  
 --- Ontario birds. 22:193(r)  
 --- Eastern Empidonaces: with special reference to var. in E. traillii. 25:30(r)  
 --- Summer birds of w. Ontario 26:38(r)  
 --- Arctic birds of Can. 28:246(r)  
 Soft-wing, White-whiskered (= Puffbird)  
 Solitaire, Rufous-throated (*Myadestes genibarbis*)  
 -, Townsend's (*M. townsendi*)  
 Somateria spp. (Eiders)  
 at Visby, Sweden 28:181(r)  
 eggng 26:171(r)  
 in book 30:138(r)  
 increase in Neth. 22:43(r)  
 syst. 29:259(r);30:134(r)  
 - mollissima (Common Eider)  
 at Helsingfors 28:201  
 at Spitzbergen 30:248(r)  
 band. - see Banding Reports  
 behav. 23:84(r)  
 clutch size & egg mort. 23:119(r)  
 - - not limited by food 25:140  
 egg palatability 24:76(r)  
 emigration from Karslo, Sweden 25:128(r)  
 epizootic of acanthocephalids 30:195(r)  
 game status in NH. 30:136(r)  
 migr., Kalmar Sound 31:288(r)  
 nesting, in Spitzbergen 30:248(r)  
 - with Arctic Terns 30:245(r); 28:66  
 - records, 60 yrs., Sweden 31:57(r)  
 pop. breeding, in Finl. 23:129(r)  
 - fluctuations, Sweden 31:57(r)  
 - in Finl. 23:130(r)  
 - in Neth. 30:57(r)  
 predation on, by Black-backed Gulls 23:129(r)  
 range extensions 28:108(r); 31:105(r)  
 - spectabilis (King Eider)  
 as game in NH. 30:136(r)  
 SONG - See Sounds  
 Songbirds (see Passeriformes; Oscines)  
 Sooter, C.A. Tech. for bleeding nestling birds by cardiac puncture for viral studies. 26:36(r)  
 Sora (*Porzana carolina*)  
 Sorensen, J.H. Wildlife in Sub-antarctic 23:191(r)  
 Soulsby, E.J.L. (see Jennings,A.R.)  
 SOUNDS  
 dev. of, in Eur. Blackbird 29:56(r)  
 low frequency, to repel Corvids 28:110(r)  
 mechanical: drumming of Woodpeckers 24:18; of ♀ Woodpeckers 30:47  
 -, mimicry of, by Eur. Jay 23:37(r)  
 -, of Hummingbirds 26:81(r)  
 vocal:  
 calls, alarm, convergence of, in passerines 30:232  
 -, as begging releaser, Herring Gull 22:91(r)  
 -, as imprinting stimulus, Common Curlew 22:91(r)  
 -, dev. of in young Herring Gulls 27:193(r)  
 -, distress, recordings of, to repel Starlings & Gulls. 26:172(r)  
 -, fish, innate in Caspian Tern 28:170(r)  
 -, mimicry by Bullfinch 28:172(r)  
 -, -, review of function of 24:85(r)  
 - of:  
 Bee-eaters 23:121(r)

## SOUNDS, vocal (cont.)

## calls (cont.)

## of: (cont.)

- Chaffinch 30:62(r)
- Cuckoos, S. Afr. 23:122(r)
- Fowl, spectrograms of 25:77(r)
- Fulmar, Northern 31:163(r)
- Hummingbird, Longuemare's Hermit 23:127(r)
- Jays, Old World 24:117(r)
- Magpie 23:188(r)
- Nutcracker, Thick-billed 23:177(r)
- Owl, Boreal 25:158(r);31:102(r)
- Owls, Eur. 31:102(r)
- Starling, Redwing 23:36(r)
- Tit, Bearded 23:124(r)
- Turkey, releasers of gobbling 26:168(r)

predator alarm, of Am. Robin, Wood Thrush & Tufted Titmouse 30:46

used to trap Chukar Partridge 27:145(r)

## general, of:

- Buntings, comparative 29:206(r)
- Crow, used to attract or repel 29:67(r)
- Dove, Diamond 31:230(r)
- , Peaceful 28:168(r)
- Flycatcher, Hammond's 26:32(r)
- , Pied 30:192(r)
- Hummingbirds 26:81(r)
- Meadowlarks, comparative 28:249(r)
- Owl, Boreal 25:158(r)
- , Tawny 25:157(r)
- Partridge, Red-legged 27:40(r)
- Penguin, Emperor 25:119(r)
- Pigeon, Wood 25:129(r)
- Pigeons, comparative 28:49(r)
- Plovers, Ringed, significance of 26:169(r)
- Rail, Water, chicks 29:252(r)
- Robin, Eur., fledgling 27:141(r)
- Tit, Marsh 25:70(r)
- Titmouse, Tufted 28:137
- Warbler, Bonelli's 25:120(r)
- Whitethroat, dev. of in sound isolation 26:33(r)
- Woodpecker, Black, behav. significance 28:174(r)
- Woodpeckers, comparative study 28:183(r)

## song:

- all-day totals, Eur. birds 23:87(r)
- as preliminary stage of music & speech 23:87(r)
- related to music 30:135(r)
- awakening, of Chaffinch, relation to time & temp. 24:86(r)
- beginning & ending times, different latitudes. 29:262(r)
- - - -, many spp. 28:110(r)
- of, & arrival dates 22:183(r)
- book on field study of 23:134(r)
- cessation of, during solar eclipse. 27:194(r)
- , seasonal, Yellow-breasted Chat 29:180
- daily number of, Skylark 28:55(r)
- - - , Yellowhammer 30:62(r)
- dawn, of Eastern Kingbird 24:126(r)
- , summary of reports 24:170(r)
- dev. of by captive House Sparrow 27:154(r)
- effect of deafness on, Bullfinch 30:129(r)
- inheritance & learning of by Chaffinch 23:187(r)
- innate, in Linnet 28:55(r)
- , in Reed Bunting, Wood Warbler & Tree Pipit 23:188(r)
- learning as imprinting 23:39(r)
- by Bullfinch 31:107(r)
- by Chaffinch 26:41(r)
- by Linnet, Skylark & Lesser Whitethroat 23:188(r)
- in acoustic isolation, Eur. Blackbird 31:232(r)
- Leier, of Blackcap 26:41(r); 27:47(r)
- monotony threshold for 28:54(r)
- new periodical devoted to 24:86(r)
- of:
  - birds of AR., in book 22:198(r)
  - - Ontario, Can., in book 22:193(r)
  - Bunting, Cirl, winter 27:93(r)
  - Chaffinch, var. in 24:126(r)
  - Flycatcher, Least 22:187(r)
  - , Scissor-tailed 23:34(r)
  - Goatsucker, rate of 27:142(r)
  - Grosbeak, Pine, ♀ 28:184(r)
  - Honeycreepers, Hawaiian, in monogr. 22:191(r)

- SOUNDS, song of:(cont.)  
 Jay, Blue 29:214  
 Nuthatch, White-breasted, func-  
 tion of spring 26:82(r)  
 Owl, Pygmy 29:195(r)  
 Phylloscopus spp., comparative  
 study 28:183(r)  
 Pipit, Red-throated 29:66(r)  
 Warbler, Arctic 30:248(r)  
 Waxwing, Cedar 22:186(r)  
 wintering migrants, Afr. 25:32(r)  
 Wren, Carolina, var. in 28:55(r)  
 Yellowhammer, late season  
 30:62(r)  
 song recording, book of memoirs on  
 27:203(r)  
 - recordings of 23:188(r);24:85(r);  
 25:170(r),171(r);26:47(r);  
 28:183(r); 29:261(r),262(r);  
 31:107(r)  
 - - of Am. birds 23:125(r),126(r);  
 31:232(r)  
 - - of FL. birds 23:188(r)  
 - - of Japanese birds 26:132(r)  
 - - of Mockingbird mimicry 27:47(r)  
 -, secondary, classification of  
 24:170(r)  
 -, var. in intensity & amount in  
 different habitats 23:40(r)  
 -, whisper, of Am. Robin as terr.  
 threat 23:85(r)  
 sub-song, of Eur. Blackbird 22:134(r)  
 -, nature & characteristics of  
 30:199(r)
- SOUTH AMERICA  
 Brazil, book on birds of 30:65(r)  
 Chile, N. Am. migrants in 22:37(r)  
 Dutch Guiana, bird records from  
 23:36(r)  
 Patagonia, book, ecol. of 24:174(r)  
 Surinam, annotated list 27:206(r)  
 Venezuela, Ciconiiformes of  
 27:146(r)
- Southern, J. Spotted Flycatcher  
 feeding nestling Blackbirds.  
 24:77(r)
- Southern, W.E. Nesting of Red-eyed  
 Vireo in Douglas Lake region, MI.  
 30:127(r)  
 --- Homing of Purple Martins 31:44(r)
- Southwick, C. Age classification for  
 field studies of waterfowl broods.  
 24:167(r)
- Sowles, L.K. Prairie ducks. 27:50(r)
- Sowles, L.K. & L.A. Greenwalt. Large  
 traps for catching Quail 27:188(r)
- Spaepen, J. Ortolan Bunting as migr.  
 bird & as cage bird. 24:73(r)  
 --- Migr. of Tree Pipit in Eur. &  
 Afr. 25:64(r)  
 ---, H. Fragniere & P. Dachy. Orient.  
 among migr. birds. 24:73(r)
- Sparrows:  
 pop. changes, Japan 30:57(r)  
 recoveries 30:165  
 Chipping (*Spizella passerina*)  
 Clay-colored (*S. pallida*)  
 Crowned (*Zonotrichia* spp.)  
 English (= House)  
 Eur. Tree (*Passer montanus*)  
 Field (*Spizella pusilla*)  
 Fox (*Passerella iliaca*)  
 Gambel's (= White-crowned)  
 Golden-crowned (*Zonotrichia*  
*atricapilla*)  
 Grasshopper (*Ammodramus savannarum*)  
 Harris' (*Zonotrichia querula*)  
 Hedge (= Dunnock) (*Prunella*  
*modularis*)  
 Henslow's (*Ammodramus henslowii*)  
 House (*Passer domesticus*)  
 Ipswich (= Savannah)  
 Java (*Padda oryzivora*)  
 Lark (*Chondestes grammacus*)  
 LeConte's (*Ammospiza leconteii*)  
 Lincoln's (*Melospiza lincolni*)  
 Pine Woods (*Aimophila aestivalis*)  
 Rufous-collared (*Zonotrichia*  
*capensis*)  
 Savannah (*Passerculus sandwichensis*)  
 Seaside (*Ammospiza maritima*)  
 Sharp-tailed (*A. caudacuta*)  
 Song (*Melospiza melodia*)  
 Spanish (*Passer hispaniolensis*)  
 Swamp (*Melospiza georgiana*)  
 Tree (*Spizella arborea*)  
 Vesper (*Poocetes gramineus*)  
 White-crowned (*Zonotrichia*  
*leucophrys*)  
 White-throated (*Z. albicollis*)  
 Yellow-throated (*Petronia*  
*superciliaris*)  
 Spatula clypeata (Shoveler)  
 congeneric with *Anas* 24:127(r)
- Speaker, E.B. (see Kozicky, E.L.)
- Spears, J.M. Winter distr. of Robins  
 e. of Rocky Mts. 26:29(r)  
 --- Migr. phase of Robin behav.  
 27:188(r)

- Spatula* (= *Anas*)  
congeneric with *Anas* 24:127(r)
- Speaker, E.B. (see Kozicky, E.L.)
- Spears, J.M. Winter distr. of Robins  
e. of Rocky Mts. 26:29(r)
- Migr. phase of Robin behav.  
27:188(r)
- & R. Andoff. Nest attentivity of  
Lincoln's Sparrow, using thermistor  
bridge. 30:242(r)
- Spencer, K.G. "Force-of-habit" behav.  
of House Sparrows. 22:133(r)
- Spencer, R. (see Thomson, A.L.)
- Report of bird-ringing. 27:129(r)  
187(r); 28:162(r), 230(r); 29:112(r)  
30:184(r); 31:159(r)
- Spermestes cucullata* (Bronze Mannikin)  
introductions to New World & syst.  
29:205(r)
- Spheniscidae* (Penguins)  
band. tech. 22:47(r); 31:79  
fleas & ticks of 24:123(r)  
guano production 22:193(r)  
L.H. & pop. study 29:264(r)  
sexual behav., monogr. 22:190(r)  
syst., n. gen. et spp. Tertiary  
fossils of N.Z. 25:30(r)  
- & phylogeny 30:60(r)
- Spheniscus demersus* (Black-footed  
Penguin)  
artificial rearing, behav., &  
growth 24:166(r)  
terr., in zoo 22:89(r)  
- *humboldtii* (Humboldt Penguin)  
extra-renal salt excretion  
30:131(r)  
- *magellanicus* (Magellanic Penguin)  
band. in Falkland Is. 29:22
- Speotyto* spp.  
tail molt 26:38(r)  
- *cunicularia* (Burrowing Owl)  
vanishing species, in book on  
29:263(r)
- Sphyrapicus varius* (Yellow-bellied,=  
Common, Sapsucker)  
band. - see Banding Reports  
band size 27:77  
migr. in RI. 30:180  
-, race, & sex differences  
24:156(r)  
opening nest-hole, tech. for  
30:181  
recovery 30:153
- Spindalis zena* (Stripe-headed Tanager)  
band size 29:93
- Spindalis zena* (cont.)  
soft part colors 27:181
- Spinetail, Andean Tit (*Leptasthenura  
andicola*)  
-, Plain-breasted (*Synallaxis  
albescens*)  
-, Plain-crowned (*S. gujanensis*)  
-, Yellowthroated (*Certhiaxis  
cinnamomea*)
- Spinus lawrencei* (Lawrence's Goldfinch)  
breeding biol. 29:53(r)  
- *pinus* (= *Carduelis pinus*)  
- *psaltria* (Lesser Goldfinch)  
breeding biol. 29:53(r)  
- *tristis* (Am. Goldfinch)  
band. - see Banding Reports  
band size 25:15, 59  
breeding biol. 22:188(r)  
frequency in roadside census 29:171  
hybrid, X Canary 24:161(r)  
nest construction & var. 31:47(r)  
remains in Screech Owl pellet  
24:19  
respiratory rate 29:39  
s. limit of breeding in GA. 23:96(r)  
trap preferences 22:110
- Spiza americana* (Dickcissel)  
band. - see Banding Reports  
band size 25:15
- Spizella arborea* (Tree Sparrow)  
alarm calls 30:232  
band. - see Banding Reports  
band size 25:15, 59  
foot pox 23:170  
high % return to winter home 23:28  
sex, age & daily wts. 26:19  
wt. before & after a night of migr.  
31:95(r)  
- changes 27:16  
winter mort. & homing 30:27  
winter site tenacity 27:32  
- *pallida* (Clay-colored Sparrow)  
band. - see Banding Reports  
band size 27:79  
descr., newly hatched 27:127  
nesting study 23:101  
pop. in sprayed orchard 23:180(r)  
respiratory rate 29:39  
sex, age & daily wts. 26:19  
s. limit of breeding in GA. 23:96(r)  
temp. regulation, nestling 29:125(r)  
- *pusilla* (Field Sparrow)  
band. - see Banding Reports  
band size 25:15; 27:79  
descr., newly hatched 27:127

- Spizella pusilla (cont.)  
 food & water relation to photoperiod 22:39(r)  
 frequency in roadside census 29:171  
 L.H. & Cowbird parasitism 24:115(r)  
 natal down 29:236  
 s. limit of breeding in GA. 23:96(r)  
 temp. regulation, nestling 29:125(r)
- Spoftord, W.R. Mort. of birds at ceilometer of Nashville airport. 22:183(r)
- Spoonbill, Roseate (Platalea leucorodia)
- Springer, P.F. (see Robbins, C.S.)
- Sprunt, A. (see Griscom, L.)
- Spread of the Cattle Egret. 27:90(r)
- Squatarola (see Pluvialis)
- Squires, W.A. Birds of New Brunswick. 24:124(r)
- Stabler, F. Cormorants & Shags "drying" their wings. 29:120(r)
- Stacey, J.M. (see Richardson, R.E.)
- Stafford, J. Wintering of Blackcaps in British Isles. 28:179(r)
- Stallcup, W.B. Myology & serology of Fringillidae, a tax. study. 26:131(r)
- Stam, A. (see Bakker, D.)
- Stamm, D.D., D.E. Davis & C.S. Robbins Studying wild bird pops. by mist-netting & banding. 31:115
- Stande, J. Successful rearing of a Corn Crane. 28:103(r)
- Stanford, J.K. (see Tjomsen, A.L., ed.)
- Starling (Sturnus vulgaris)  
 -, Grey (S. cineraceus)  
 -, Redwinged (Onychognathus morio)  
 -, Rose-colored (Pastor roseus)  
 -, Violet-backed (Cinnyricinclus leucogaster)
- Starlings (Sturnidae)
- STATUS (see also Censuses, Conservation, Extinction, Populations, Faunal Dynamics)
- birds of:  
 Den., w. coast 27:199(r)  
 Grnl. 22:42(r)  
 Izu Is. 22:135(r)  
 Neth. 22:43(r), 134(r)  
 Rott Is. 22:135(r)  
 Toroshima 27:196(r)
- of:  
 Albatross, Steller's 27:196(r)  
 Blackcap, winter, in Engl. 28:179(r)
- Brant, in Nor. 29:61(r)
- Buzzard, in British Isles 28:244(r)
- Coot, in Mississippi flyway 25:73(r)
- Crane, White-necked, in Japan 27:196(r)
- Dove, Mourning in FL. 26:84(r);  
 -, -, in MA. 22:149(r)
- Egret, Cattle in S. Afr. 24:170(r)
- Finch, House, in e. U.S. 24:170(r)
- Geese, in Ireland 29:204(r)
- Goose, Ross', on breeding grounds 27:198(r)
- Kakapo 28:243(r)
- Owl, Eagle, in Sweden 22:41(r)
- Pheasant, Ring-necked, in MO. 23:90(r)
- Sandpiper, Baird's, in Grnl. 22:192(r)  
 sea-birds of Seychelles 30:58(r)
- Spoonbill in Japan 27:196(r)
- Stork, White 27:46(r), 89(r)
- Swan, Whooper, in Japan 27:196(r)
- Turkey in LA. 23:47(r)
- waterfowl in WA. 22:188(r)
- Waxwing, Bohemian, in Ger. 27:36(r)
- Staude, J. Artificial nest sites for bush-nesting birds. 29:196(r)
- Steatornis caripensis (Oilbird) acoustic orient. 25:78(r)  
 in book, "Listening in the Dark" 30:64(r)
- Steffen, E.W. Experience with a Saw-whet Owl. 24:21(r)
- Steffen, J. Little Owls & Tree Sparrows. 30:250(r)
- Steganopodes (= Pelecaniformes)
- Stegeman, L.C. Weight of some small birds in central NY. 26:19  
 --- Var. in a flock of European Starling. 26:37(r)
- Stein, R.C. Behav., ecol., & morph. characteristics of two pops. of Alder Flycatcher. 30:130(r)
- Steinbacher, G. Ethology of Muscovy Duck. 24:118(r)  
 --- Introduction to study of bird behav. 25:70(r)  
 --- Biol. of Red-crested Pochard 29:199(r)
- Steinbacher, J. Avian migr. & migr. research. 23:171(r)  
 --- Spring migr., Sicily, 26:29(r)

- Steinbacher, J. (cont.)  
 ---Autumn bird-life in Sardinia & Sicily 28:108(r)
- Steiniger, F. Mammal control & secondary poisoning of Hawks & Owls. 25:75(r)
- Steinparz, K. Effect of reservoirs in upper Austria on avifauna. 23:90(r)
- Stelgidopteryx ruficollis (Rough-winged Swallow)  
 band size 29:92  
 descr., newly hatched 27:127  
 natal down 29:234  
 notes on L.H. 24:107,108  
 returns 22:62
- Stenger, J. Food habits & available food of ovenbirds in relation to terr. size. 30:199(r)
- Sterbetz, I. Bird-life of Saser Bird Sanctuary of Hodmezorasarhely, from 1948 to 1954. 29:258(r)
- Stephanibyx coronatus (Crowned Lapwing, or Plover)  
 breeding behav. 24:115(r)
- Stercorariidae (Jaegers)  
 displays 31:75  
 light-phased skuas in Spitzbergen 30:248(r)  
 predation on Canada Geese 30:132(r)
- Stercorarius longicaudus (Long-tailed Jaeger)  
 breeding & vole supply, Lapland 29:66(r)  
 breeding biol., Bylot Is., Can. 31:63  
 subsp. in Grnl. 22:192(r)
- parasiticus (Parasitic Jaeger)  
 breeding in Finl. 23:129(r)  
 pair bond stability 31:98(r)
- pomarinus (Pomatorhine Jaeger)  
 breeding behav. 27:190(r)  
 dependence on Lemming as food 27:190(r)  
 predation on Lemmings 26:169(r)
- skua (= Catharacta skua)
- Sterna albifrons (Least, = Little, Tern)  
 age - see Age, maxima -  
 band. - see Banding Reports  
 cons. in Engl. 28:51(r)  
 L.H. in Mississippi River Valley 28:250(r)  
 ornithosis &, 28:94  
 response to adoption of Plovers 24:119(r)
- site tenacity 25:153(r)
- aleutica (Aleutian Tern)  
 nesting association with Arctic Terns 28:65
- anaethetus (Bridled Tern)  
 band size 29:91  
 wt. 27:175
- antillarum (= S. albifrons)
- bergii (Swift, = Greater Crested, Tern)  
 band. - see Banding Reports  
 seasonal dispersal & mort. 29:188(r)
- dougallii (Roseate Tern)  
 breeding in Nova Scotia 28:41  
 demography in MA. 27:55  
 identification in subantarctic 24:83(r)
- forsteri (Forster's Tern)  
 in book, birds of Saskatchewan River 31:109(r)
- fuscata (Sooty Tern)  
 age - see Age, maxima-  
 aircraft strikes, Midway Is. 29:254(r)  
 embryonic dev. 30:58(r)  
 in Hawaii 23:41(r)  
 pop. decrease in Seychelles 30:58(r)
- hirundo (Common Tern)  
 age - see Age, maxima-  
 band. - see Banding Reports  
 bill color of imm. 30:247(r)  
 breeding in Caribbean 28:243(r)  
 clutch mixed with Oystercatcher 28:236(r)  
 - size, detn. of 28:46(r)  
 colonies in Switzerland 26:120(r)  
 competition from Gulls 27:198(r)  
 cons. in Engl. 28:51(r)  
 demography, MA. 27:55  
 eggs in nest of Black-headed Gull 25:68(r)  
 group adherence 22:1  
 identification in subantarctic 24:83(r)  
 meas. of bill, eggs & nest 31:103(r)  
 migr. in w. hemisphere 24:39  
 mixed nest 25:68(r)  
 nesting in NY. 26:161
- relations with Tufted Duck & Gulls 24:160(r)  
 palatability of eggs 24:76(r)  
 pop. changes 22:134(r);27:101(r)  
 renesting 22:8



- Sterna hirundo* (cont.)  
 site tenacity 25:153(r)  
 verification of Aust. record 29:41  
 - *macrura* (= *S. paradisaea*)  
 age - see Age, maxima  
 band. - see Banding Reports  
 behav., predation & nest associates  
 30:245(r)  
 breeding biol., Bylot Is., Can.  
 31:63  
 - in Finl. 23:129(r)  
 color, adaptation of chick's  
 27:150(r)  
 competition from Gulls 27:198(r)  
 demography 27:55  
 ecol., breeding pop. 28:57  
 eggng 26:171(r)  
 evol. significance of migr. 27:96(r)  
 identification in subantarctic 24:  
 53(r)  
 meas. of bill, eggs & nests  
 31:103(r)  
 migr., map of 22:143(r)  
 - routes 29:247(r)  
 nesting in Spitzbergen 30:248(r)  
 occurrence in Aust. 30:249(r)  
 palatability of eggs 24:76(r)  
 plumage, age & mort. 29:126(r)  
 site tenacity 25:153(r)  
 - *sandvicensis* (Sandwich, = Cabot's,  
 Tern)  
 band. - see Banding Reports  
 band size 29:91  
 behav., adult 28:173(r)  
 -, begging of young releases adult  
 sex behav. 28:173(r)  
 clutch size 28:234(r)  
 in book, Neth. 23:43(r)  
 invasion, w. Sweden 29:248(r)  
 - *striata* (White-fronted Tern)  
 band. - see Banding Reports  
 identification in subantarctic  
 trans-Tasman dispersal of young  
 28:231(r)  
 - *vittata* (Antarctic Tern)  
 band. - see Banding Reports  
 identification in subantarctic  
 24:83(r)  
*Sternae* (Terns)  
 as guano producers 22:193(r)  
 breeding pops. in Finl. 24:29(r)  
 predation by Eur. Hedgehog 28:51(r)  
 Steven, D.M. Transference of "imprint  
 ing" in wild gosling. 27:141(r)
- Stevens, W.L. Samples with same  
 number in each stratum. 24:158(r)  
 Stevenson, H.M. Relative magnitude of  
 trans-gulf & circum-gulf (of Mex.)  
 spring migr. 29:45(r)  
 Stewart, P.A. Dispersal, breeding  
 behav. & longevity of banded Barn  
 Owls in N. Am. 24:28(r)  
 --- Combination substratum & auto-  
 matic trap for nesting Mourning  
 Doves. 25:6  
 --- Value of Christmas bird counts.  
 26:131(r)  
 --- Local movements of Wood Ducks.  
 30:57(r)  
 --- & E.H.Dustman. Use of auditory  
 stimuli for flushing Ring-necked  
 Pheasants. 27:144(r)  
 Stewart, R.E. Migr. movements of n.  
 Clapper Rail. 25:1  
 --- & J.W.Aldrich. Removal & repopul-  
 ation of breeding birds in a spruce-  
 fir forest community. 24:83(r)  
 ---, J.B.Cope, C.S.Robbins & J.W.  
 Brainerd. Seasonal distr. of bird  
 pop. at Patuxent Research Refuge.  
 23:185(r)  
 ---, A.D.Geis & C.D.Evans. Distr. of  
 pops. & hunting kill of Canvasback.  
 30:194(r)  
 --- & C.S.Robbins. Birds of MD. & DC.  
 30:65(r)  
 Stidolph, R.H.D. (see Falla, R.A.)  
 Stillwell, J. & N. Wild bird songs.  
 23:188(r)  
 --- - --- Bird songs of dooryard,  
 field & forest. 24:85(r); 25:170(r);  
 28:183(r)  
 Stilt, Black-necked (*Himantopus*  
*himantopus*)  
 Stimson, L.A. (see Moore, J.C.)  
 Stint (= Sandpiper)  
 Stockstad, D.S. Colored neckband for  
 marking birds. 28:163(r)  
 Stokes, A.W. Breeding behav. of  
 Goldfinch. 22:188(r)  
 Stolt, B.O. Fall migr. & weather at  
 Kvarngardet, near Uppsala.  
 30:240(r)  
 Stone, R.C. "Anting" by Wryneck.  
 26:80(r)  
 Stonechat (*Saxicola torquata*)  
 Stonehouse, B. The King Penguin of  
 South Georgia. 29:56(r)

- Stonehouse, B. (cont.)  
 --- Notes on ringing & breeding distr. of Giant Petrel. 30:50(r)
- Stoner, D. & L.C. Birds of Washington Park, Albany, NY. 24:124(r)
- Stoner, E.A. Homing instinct of Cowbird. 24:26(r)
- Stoner, L.C. (see Stoner, D.)
- Storer, R.W. (see Urner, C.A.)
- Seasonal occurrence of shorebirds on Bay Farm Is., Alameda County, CA. 23:32(r)
- Storgaard, K. (see Madsen, H.)
- Storks (Ciconiidae)  
 -, Black (*Ciconia nigra*)  
 -, White (*C. ciconia*)
- Storm-Petrels (Hydrobatidae)
- Storr, G.M. Migr. routes of Arctic Tern. 29:247(r)
- Strahm, J. Reproduction of Crag Martin. 29:194(r)
- Movements of Alpine Choughs wintering at Bulle (Fribourg) 30:133(r)
- Street, M.G. (see Houston, C.S.)
- Streptopelia spp. (Turtle Doves)  
 voice & display 28:49(r)  
 - chinensis (Spotted Dove)  
 feather posture as a social signal 28:106(r)  
 - decaocto (Collared Turtle, = Indian Ring, Dove)  
 breeding in s. Sweden 28:169(r)  
 ecol. 27:145(r)  
 extinction, Japan 22:135(r)  
 first breeding in Sweden 26:39(r)  
 L.H. in newly pop. region 29:65(r)  
 new record, Engl. 29:65(r)  
 predation by Jackdaws 25:31(r)  
 spread in Eur. 25:31(r); 27:145(r)  
 - risoria (= *S. roseogrisea*)  
 - roseogrisea (Pink-headed Turtle Dove)  
 albino deficient in vision & flight 24:79(r)  
 behav. 24:116(r)  
 - turtur (Turtle Dove)  
 band. - see Banding Reports  
 nest made of wires 29:119(r)
- Streptoprocne (a Swift)  
 saliva NOT used in nest-building 29:256(r)
- Stresemann, E. (see Thomsen, P.)
- Birds collected during Capt. Cook's last expedition. 23:43(r)
- Hist. of ornith. from Aristotle to present. 23:91(r)
- A collection of birds from Georgia & Carolina made about 1810 by John Abbot. 24:167(r)
- Orient. of migr. birds. 25:20(r)
- Bowers & display of Bowerbirds. 25:72(r)
- Migr. of Wood Warbler 26:166(r)
- Stricker, W. & R. Ryser. Common Tern colonies at Alterrhein & Fanel in 1952. 25:120(r)
- Strigiformes (Owls)  
 as releaser for mobbing 22:89(r)  
 band. - see Banding Reports  
 books 23:51(r); 24:88(r); 29:69(r)  
 cannibalism among 28:104(r)  
 characters releasing mobbing of 22:89(r)  
 coccidiosis in 29:200(r)  
 early breeding in mild year. 30:243(r)  
 egg tooth 30:119  
 folklore 30:200(r)  
 food habits 23:189(r); 24:20;  
 28:69, 182(r); 29:252(r); 30:98  
 heart wt. 27:45(r)  
 laying, incub. & hatching sequence 28:103(r)  
 mist netting 28:124  
 mobbing of, by Eur. Jays 23:86(r)  
 of Grml., in book 23:94(r)  
 rodenticides & mort. of 25:75(r)
- Strigops habroptilus (Kakapo)  
 nearly extinct sp., in review of extinction 28:243(r)
- Strix spp.  
 competition & habitat selection 23:40(r)  
 tail molt 26:38(r)  
 - aluco (Tawny Owl)  
 band. - see Banding Reports  
 behav. in captivity 24:79(r)  
 calls & displays 31:102(r)  
 destroy eggs of Red-footed Falcon 27:38(r)  
 food 29:206(r)  
 mobbing of, by Eur. Jay 23:86(r)  
 mort. & life expectancy 29:51(r)  
 -, winter, central Sweden 30:190(r)  
 nesting, observations on 28:47(r)  
 pellet anal. 25:129(r)  
 pop. increase, s.w. Eur. 29:203(r)  
 - on Rhine 24:157(r)

- Strix aluco* (cont.)  
 predation on Black-headed Gull  
 29:249(r)  
 - - Scops Owl 29:203(r)  
 prey of Eagle Owl 25:79(r)  
 range changes & climate 22:93(r)  
 rhythms, diurnal & ann. 25:157(r)  
 terr. & breeding on Rhine 24:157(r)  
 - *flammeus* (= *Asio flammeus*)  
 - *nebulosa* (Great Gray Owl)  
 breeding in Sweden 27:146(r)  
 calls & displays 31:102(r)  
 in book, Can. birds 30:137(r)  
 - *uralensis* (Ural Owl)  
 calls & displays 31:102(r)  
 - *varia* (Barred Owl)  
 band. - see Banding Reports  
 new record for Saskatchewan  
 31:109(r)  
 screams save Wm. Bartram from  
 alligator 29:263(r)  
 Stromberg, G. First breeding record  
 of Indian Ring Dove in Sweden.  
 26:39(r)  
 --- Notes on Great Black-headed Gull  
 29:128(r)  
 Strong, R.M. A bibliography of birds:  
 part 4- Finding Index 30:251(r)  
*Struthio camelus* (Ostrich)  
 extinction in Eur., in book  
 29:262(r)  
 Stulken, D.E. (see Kirkpatrick, C.M.)  
 Sturkie, P.D. Avian Physiology.  
 25:173(r)  
*Sturnella* spp. (Meadowlarks)  
 mist netting 28:126  
 - *magna* (Eastern Meadowlark)  
 band size 29:93  
 comparative biol. 28:249(r)  
 dieldrin effects on 31:164(r)  
 frequency in roadside census  
 29:171  
 - *neglecta* (Western Meadowlark)  
 comparative biol. 28:249(r)  
 training to compass direction  
 28:43(r)  
*Sturnus cineraceus* (Grey Starling)  
 anting 29:120(r)  
 egg size var. 30:52(r)  
 - *vulgaris* (Starling)  
 age 26:19  
 - detn. 22:16  
 alighting on sea 27:88(r)  
 anting 31:164(r)
- attempt to usurp Wryneck nest  
 31:99(r)  
 band size 25:13,59; 27:78  
 band. - see Banding Reports  
 behav., begging & light 23:176(r)  
 - during solar eclipse 27:194(r)  
 - young fed by Eur. Nuthatch  
 27:140(r)  
 biol., reproductive 25:156(r)  
 brain dev. 23:187(r)  
 breeding, abnormal 26:167(r)  
 - & food supply 27:136(r)  
 - biol., N. Am. 29:191(r)  
 brood size 27:136(r)  
 -, second, in N. Am. 25:120(r)  
 -, limitation of 25:138  
 Bursa Fabricius in ageing 22:20  
 cage for holding large numbers for  
 banding 31:221  
 competition for nest holes with  
 Woodpeckers & Nuthatches  
 28:103(r)  
 dev. of hand-reared young 22:132(r)  
 dieldrin effects on 31:164(r)  
 dispersal from banding site 28:150  
 distr. 25:20(r)  
 fallen at light vessels 27:189(r)  
 flea pop. in nests 31:56(r)  
 flock defense against raptors at  
 roost 31:51(r),103(r)  
 flying at night without landing  
 31:227(r)  
 food, in forests 28:182(r)  
 - of nestlings includes cherries  
 28:245(r)  
 hematopoiesis, ontogeny of 23:118(r)  
 in Herring Gull pellets 29:129(r)  
 internal clock 26:164(r)  
 longevity 29:52(r)  
 meas., var. in 26:37(r)  
 migr. 23:80(r),116(r); 25:20(r),  
 21(r); 29:50(r); 30:175;  
 31:46(r),216  
 - effect of wind, Engl. 28:166(r)  
 - sampling by trapping 27:107  
 molt 28:130  
 mort. from DDT 28:108(r)  
 - - smog inhalation 31:56(r)  
 natal plumage 29:126(r)  
 nesting study 29:53(r)  
 orient. 22:183(r); 25:20(r);  
 31:223(r)  
 - by sun 26:163(r)  
 ova ovulated vs. clutch size  
 30:55(r)

- Sturnus vulgaris* (cont.)  
 pop. dynamics 25:21(r)  
 - in Rossiten 25:154(r)  
 radar display characteristics  
 31:43(r)  
 recoveries (see also Banding Reports)  
 26:72(r), 75(r); 27:129(r), 136(r),  
 186(r), 187(r), 189(r)  
 repelled by recordings 26:172(r)  
 respiratory rate 29:39  
 returns 26:118  
 roost with House Sparrows 24:126(r)  
 roosting times & pop. changes  
 28:50(r)  
 sex determination 22:16; 26:19  
 sleep, winter habits 28:174(r)  
 utilize sheep flocks in winter  
 31:51(r)  
 weather effects on nesting 23:173(r)  
 wt., daily 26:19  
 - of starved migrants 30:126(r)  
 wintering in UT. 24:125(r)  
 Suffer, C. Pied Wagtail swimming.  
 27:94(r)  
 Sugarbird, Cape (*Promerops cafer*)  
*Sula bassana* (Gannet)  
 band. - see Banding Reports  
 migr. & dispersal, N.Z. 30:241(r)  
 orient. 30:118  
 palatability of eggs 24:76(r)  
 pop. changes 24:33(r); 27:101(r);  
 28:52(r)  
 - *capensis* (Cape Gannet)  
 band. - see Banding Reports  
 migr. & dispersal, N.Z. 30:241(r)  
 - serrator (Australian Gannet)  
 band. - see Banding Reports  
 breeding behav. 30:244(r)  
 census, N.Z. 24:82(r)  
 migr. & dispersal, N.Z. 30:241(r)  
 Summers-Smith, D. Breeding biol. of  
 Spotted Flycatcher 23:173(r)  
 --- House Sparrow: colonial behav.  
 26:80(r); movements 28:166(r);  
 mort. 28:167(r); & nest site  
 selection, pair formation & terr.  
 30:54(r)  
 Sunbird, Double-collared (*Nectarinia*  
*afra*)  
 Sunkel, W. Tawny & Water Pipits in n.  
 Hessen & in the Rhone. 25:79(r)  
 --- Hessian band returns. 28:163(r)  
 Sutter, E. Growth & differentiation  
 of brain in nidifugous & nidicolous  
 birds. 23:187(r)  
 --- Growth of Penguins. 24:166(r)  
 --- Fall migr. near Maloja & on  
 Splugenpass. 26:28(r)  
 --- Occurrence of Kittiwake in Switz.  
 winter of 1954/55. 28:179(r)  
 --- Radar as an instrument of bird  
 migr. research 29:114(r)  
 --- Radar observations of nocturnal  
 bird migr. 29:115(r)  
 Sutton, G.M. & D.F. Parmelee. Nesting  
 of Horned Lark on Baffin Is. 26:1  
 --- - --- Breeding of Semipalmated  
 Plover on Baffin Is. 26:137  
 --- - --- The Peregrine Falcon on  
 Baffin Is. 26:147  
 --- - --- Breeding of Snowy Owl in  
 s.e. Baffin Is. 29:250(r)  
 Svardson, G. (see Thomson, A.L., ed.)  
 --- Activities of the Ottenby Ornith.  
 Station. 22:128(r); 23:76(r);  
 25:152(r)  
 --- Competition & habitat selection  
 in birds. 23:40(r)  
 --- The Nuthatch as a wanderer into  
 Sweden. 27:146(r)  
 --- The "Invasion" type of bird migr.  
 29:49(r)  
 --- Habitat selection & breeding of  
 Black-headed Gull. 29:249(r)  
 Svensson, S. Nuthatch feeds young of  
 Starling. 27:140(r)  
 Swales, M.K. Observations from Lista  
 26:77(r); 27:133(r)  
 Swallows (*Hirundinidae*)  
 -, Bank (*Riparia riparia*)  
 -, Barn (*Hirundo rustica*)  
 -, Cliff (*Petrochelidon pyrrhonota*)  
 -, Cliff, Afr. (*P. spilodera*)  
 -, Lesser Wood (*Artama leucorhynchus*)  
 -, Oriental (= Barn Swallow)  
 -, Pearl-breasted (*Hirundo dimidiata*)  
 -, Rough-winged (*Stelgidopteryx*  
*ruficollis*)  
 -, Tree (*Iridoprocne bicolor*)  
 -, Violet-green (*Tachycineta*  
*thalassina*)  
 -, Wood (*Artamidae*)  
 Swans (*Cygnus* spp.)  
 -, Bewick's (*C. bewickii*)  
 -, Mute (*C. olor*)  
 -, Trumpeter (*C. buccinator*)  
 -, Whistling (*C. columbianus*)  
 -, Whooper (*C. cygnus*)

- Swanberg, P.O. Concept of "incubation period". 22:37(r)
- Food storage terr. & song in Thick-billed Nutcracker. 23:177(r)
- Eversmann's Warbler. 25:121(r)
- Feeding, brooding, & bathing habits in a pair of Kingfishers. 25:155(r)
- Incub. in Thick-billed Nutcracker. 29:117(r)
- Swank, W.G. Trapping & marking adult Nesting Doves. 23:114(r)
- Feather molt as aging tech. for Mourning Doves. 27:95(r)
- Swanson, C.V. Asparagus as emergency Pheasant food. 23:116(r)
- Sweden (see Europe-)
- Swennen, C. & G. van der Baan. Tracking birds on tidal flats & beaches. 30:193(r)
- Swifts (Apodiformes)
- , Eur. (*Apus apus*)
- , Alpine (*Apus melba*)
- , Black (*Cypseloides niger*)
- , Chimney (*Chaetura pelagica*)
- , Scissor-tailed (*Panyptila cayennensis*)
- , Spine-tailed, = Ashy-tailed (*Chaetura andrei*)
- Swiftlet, Himalayan (*Collocalia brevirostris*)
- Switzerland (see Europe-)
- Sylvia atricapilla* (Blackcap)
- band. - see Banding Reports
- "Lier-song" 26:41(r); 27:47(r)
- orient. 29:49(r); 30:236(r)
- , in cage 22:182(r)
- response to prevention of continued laying 28:237(r)
- vocal mimicry 23:37(r)
- winter records, Engl. 28:179(r)
- borin (Garden Warbler)
- band. - see Banding Reports
- orient. 29:49(r); 30:236(r)
- pop. estimate in Finl. 24:29(r)
- response to prevention of continued laying 28:237(r)
- communis (Whitethroat)
- band. - see Banding Reports
- mob stuffed Jay 25:26(r)
- orient., in cage 22:183(r)
- parental care 27:38(r)
- response to prevention of continued laying 28:237(r)
- slugs kill nestlings 25:77(r)
- songs, all-day totals 23:87(r)
- vocalizations, dev. of 26:32(r)
- curruca (Lesser Whitethroat) band. - see Banding Reports
- depth of sleep 23:82(r)
- food consumption, anal. of 29:205(r)
- migr. routes 25:153(r)
- navigation, celestial 31:226(r)
- song partially learned 23:188(r)
- star orient. 29:49(r)
- undulata (Dartford Warbler)
- occurrence in Fr. 27:208(r)
- Sylviidae* (Old World Warblers)
- dieldrin & E-605 forte effects 28:242(r)
- migr. 25:116(r)
- , delay of in Scandinavia 28:161(r)
- , orient, s.w.Afr. 31:223(r)
- migrational drift 24:72(r)
- navigation, celestial 30:236(r); 31:226(r)
- reaction to Cuckoos 22:90(r)
- Symmes, T.C.L. Breeding of Crowned Plover. 24:115(r)
- Synallaxis albescens* (Plain-breasted Spinetail)
- host of Lark Cuckoo 27:138(r)
- gujanensis (Plain-crowned Spinetail)
- host of Lark Cuckoo 27:138(r)
- SYSTEMATICS (see also, Adaptations, Anatomy, Behavior, Distribution, Paleontology, Zoogeography)
- Birds of:
- Belgium 22:145(r)
- Canada, folk-names 29:201(r)
- Grnl. 22:42(r)
- Mex., distr. check-list 22:97(r)
- middle Am. 27:103(r)
- Ontario 22:193(r)
- Philippines 24:169(r)
- Serbia 22:44(r)
- Spain, local races in Pyrenees 29:258(r)
- Sweden 22:196(r)
- world, revised classification 23:91(r)
- General topics:
- animal identification, book. 22:196(r)
- aortic arches & - 27:147(r)
- Check-lists (see Lists-)
- cytogenetics as basis for classification, Ducks 24:127(r)
- egg-white proteins in, 24:129(r)

## SYSTEMATICS (cont.)

## General topics (cont.)

geogr. var., Dowitchers 22:96(r)  
 hemoglobin, possible use in, 29:70  
 history of avian, in book 23:91(r)  
 hybridization, significance in,

23:42(r)

isolating mechanisms, Gulls  
 23:31(r)

numerical taxonomy proposed  
 31:106(r)

serology as basis for classifica-  
 tion of Ducks 29:205(r)

speciation 24:32(r)

subsp., allowable overlap for  
 23:43(r)

n. gen. et spp.

fossil penguins 25:30(r)

n. sp.

Rhabdornis longirostris from  
 Philippines 24:169(r)

n. subsp. of:

Aphelocoma coerulescens 23:47(r)

Branta canadensis 23:91(r)

Luscinia megarhynchos 23:43(r)

Melospiza melodia 29:66(r)

Otus bakkamoena 23:43(r)

Tyrannus dominicensis 23:43(r)

of:

Anatidae, comparative serology  
 29:205(r)

-, cytogenetics & 24:126(r)

Capercaillie, subsp. 31:132(r)

Dove, Mourning, subsp. 29:257(r)

Doves, Am., generic 30:198(r)

Dowitchers, geogr. var. in  
 22:96(r)

Drepaniidae, monogr. 22:191(r)

Duck, Eider 29:259(r); 30:134(r)

-, Mandarin 24:127(r); 29:205(r)

Falcon, Peregrine, subsp.

26:150

Falconiformes, N. & middle Am.  
 22:43(r)

Finches, Aust., intraspecific var.  
 30:198(r)

-, Weaver 29:205(r)

Flycatcher, Alder 30:130(r)

-, Empidonax, var. among 25:30(r)

Fringillidae, myology & serology  
 26:131(r)

-, skull anat. 26:132(r)

Gulls, isolating mechanisms  
 23:31(r)

Heron, Great White 30:61(r)

Kingbird, Gray, geogr. var.  
 23:43(r)

Kites, Elanus spp. 29:260(r)

Meadowlarks 28:249(r)

Neognathae, combined with  
 Paleognathae 23:91(r)

Nuthatch (Eur.) 29:207(r)

-, distr. history 25:168(r)

-, subsp. in Eur. 27:146(r)

Nuthatches, Brown-headed & Pygmy  
 30:133(r)

Owl, Great Horned, subsp.  
 30:61(r)

passerines, natal down & 29:126(r)

penguins 30:60(r)

petrels 24:129(r)

Pheasants, in N.Z. 29:123(r)

Ptarmigan, subsp. in Grnl.  
 22:192(r)

Quail, Bobwhite, in N.Z. 28:244(r)  
 recent birds, classification of  
 22:190(r)

Scrub birds 24:83(r)

Sparrow, House, in Aust.

29:204(r)

-, Ipswich 29:241

-, Pine Woods, restriction of  
 type locality 24:168(r)

Swallow, Pearl-breasted, subsp.  
 22:84(r)

Thrush, Mistle, pop. ecol. &  
 races, n.w.Eur. 25:79(r)

Titmice, crested, w. U.S. 27:  
 197(r)

Towhee, Rufous-sided, geogr. var.  
 24:127(r)

-, -, hybridization with Collared  
 Towhee 29:259(r)

-, -, subsp. in GA. 23:96(r)

Turdus thrushes 22:136(r)

Wagtail, Blue-headed, subsp.  
 28:178(r)

-, Yellow, subsp. 29:47(r)

Warbler, Great Reed 29:258(r)

-, Reed 29:258(r)

-, Rufous, family relationships  
 31:231(r)

Waterthrushes, northern subsp.  
 29:66(r)

Waxwings & allies 23:97(r)

Wood-Swallows, movements &  
 geogr. var. 30:198(r)

Phylogeny & speciation in:  
 Aphelocoma Jays 23:47(r)  
 in book 22:195(r)

SYSTEMATICS (cont.)

Phylogeny & Speciation (cont.)

in Drepaniidae 22:191(r)

in Towhees 22:142(r)

- Taapken, J. (see Junge, G.C.A.; Perdeck, A.C.; TenKate, C.G.B.)
- Results of ringing investigation by Royal Mus. of Nat. Hist, Leiden 29:45(r), 113(r); 30:48(r)
- Taber, R.D. (see Collias, N.E.)
- Breeding behav. of Ring-necked Pheasant 22:91(r)
- Taber, W. Reviews of "Birds of Fr." 25:33, 174; 26:42, 134; 27:104, 105, 207, 208.
- Tachycineta thalassina (Violet-green Swallow)  
returns, 22:62
- Tachyeres patachonicus (Flying Steamer Duck)  
hostile & sex behav. 30:57(r)
- Tadorna spp.  
syst. 24:127(r)
- tadorna (Shelduck)  
breeding in Tunisia 28:52(r)  
molt migr. 22:83(r)  
movements in Den. 29:49(r)  
pop. increase, Den. 31:99(r)
- Takahashi, H. & N. Kuroda. Picture book of birds. 30:135(r)
- Takahe (Notornis mantelli)
- Takashima, H. Black Stork in Japan. 30:58(r)
- Tamayo, G.Y. Ciconiiform birds, especially Venezuelan spp. 27:146(r)
- Tanagers (Thraupidae)
- , Scarlet (Piranga olivacea)
- , Scarlet-rumped (Ramphocelus passerinii)
- , Stripe-headed (Spindalis zena)
- , Summer (Piranga rubra)
- , Western (P. ludoviciana)
- Tanagra spp.  
nestling period 26:79(r)
- Tangavius aeneus (Red-eyed Cowbird)  
hosts of 23:36(r)
- Tanner, J.T. Black-capped Chickadees & Carolina Chickadees in s. Appalachian Mts. 24:125(r)
- Juncos in Great Smoky Mts. 31:50(r)
- & others. Bird mort. during night migr. 26:122(r)
- Tanner, W.D. & G.O. Hendrickson. Ecol. of Virginia Rail in Clay County, IA. 26:125(r)
- Tanzen, R. Storks in Oldenburg & nearby areas. 23:131(r); 27:89(r)
- Tapaculos (Rhinocryptidae)
- Tapera naevia (Lark Cuckoo)  
hosts in Surinam 27:138(r)
- Tarshis, I.B. Traps & tech. for trapping California Quail. 27:1
- Tarsiger cyanurus (Red-flanked Bluetail)  
range extension to Finl. 30:60(r)
- Taverner, J.H. Spread of Eider in Great Britain. 31:105(r)
- Taylor, G.E. (see Cuthbertson, E.I.)
- Taylor, W.P. (see Jewett, S.G.)
- Teal, Blue-winged (Anas discors)
- , Cinnamon (A. cyanoptera)
- , Green-winged, = Eurasian (A. crecca)
- , Gray (Anas gibberifrons)
- TECHNIQUES (see also Age, Artificial Propagation, Banding, Censuses, Management)
- activity recording of caged birds 24:55
- aids for study of Bobwhite Quail 24:21(r)
- ageing:  
at time of banding 28:43(r)  
of:  
Baldpate 24:167(r)  
Coot, Am. 23:186(r); 31:54(r)  
Dove, Mourning 23:34(r); 27:95(r)  
Duck, Canvasback, juv. 31:54(r)  
Finch, Purple 25:133; 26:89  
Grosbeak, Black-headed 23:30(r)  
-, Evening 22:23  
Grouse, Blue 29:127(r)  
-, Sage 27:44(r)  
Gull, California 28:178(r)  
Jay, Eur. 22:41(r)  
-, Blue 26:27; 29:43  
Pheasant, Ring-necked 25:75(r)  
Pintail 24:167(r)  
Quail, Bobwhite 27:195(r); 29:60(r)  
-, California 28:145  
-, -, in N.Z. 30:203  
-, Scaled 27:201(r)  
Starling 22:16  
Swift, Chimney 29:256(r)  
Teal, Green-winged 24:167(r)  
Tits, nestling 22:88(r)  
waterfowl 24:167(r)  
Widgeon, Am. 24:167(r)  
Woodcock, Am. 23:34(r); 24:167(r)  
artificial nestling for food study 26:34(r); 28:49(r)



## TECHNIQUES (cont.)

- artificial nests for:  
 Duck, Wood 31:54(r)  
 Goldeneye, Am. 23:175(r);30:130(r)  
 increasing pop. of forest birds  
 29:189(r),254(r);30:128(r),  
 130(r)  
 - - - Black-headed Gull & Red-  
 footed Falcon 29:253(r)  
 - - - Canada Goose 24:120(r)  
 - productivity of waterfowl  
 28:240(r)  
 Owl, Great Horned 29:60(r)  
 passerines, 9 spp. in Ger.  
 29:196(r)  
 Swallow, Bank, box for study  
 26:167(r)  
 Swallows 25:157(r)  
 Tern, Common, floats for 25:120(r)  
 attracting Crows by recorded calls  
 29:67(r)  
 baiting 26:155  
 Evening Grosbeak 22:32  
 Mourning Dove 22:175  
 shorebirds, with shrimp 25:112  
 band size & tarsal diam. 25:11  
 - - detn. of 31:159(r)  
 - - -, gauge for 25:11  
 - - of species (see species names)  
 - - - birds of Fr. 26:134(r)  
 - - - - U.S. 25:11,58; 27:76;  
 29:90; 30:121  
 banding, book on 31:234(r)  
 - nestlings, Mourning Doves 23:28  
 - penguins 22:47  
 - shearwaters 28:161(r)  
 - shorebirds at night 22:181(r)  
 - precautions in sea-bird colonies  
 30:47(r)  
 bands, cautions in application of  
 24:65  
 -, colored anodized, for sea birds  
 24:71(r)  
 -, celluloid 26:119  
 -, extruded plastic 23:31(r)  
 -, plexiglas leg, for waterfowl  
 25:62(r)  
 -, comparison of FIDS, BTO & USF&W  
 29:1  
 -, fluorescent, for night identifi-  
 cation, Woodcock 27:144(r)  
 -, for penguins 22:47; 31:79  
 -, locking type for large raptors  
 31:90  
 -, pliers for closing 23:115(r)  
 -, reapplying removed ones 24:107  
 -, removal of overlapped 24:12  
 behavior studies using decoys,  
 Black Woodpecker 28:173(r)  
 blood sampling 27:148(r)  
 - - by cardiac puncture 26:36(r)  
 bursal inspection, Mourning Dove  
 27:148(r)  
 calculation, determination, or  
 estimation of (see also Tech.,  
 statistical)  
 association among individuals  
 22:119  
 egg temp. by telemetry 30:242(r)  
 - volume, in field 25:157(r);  
 26:32(r)  
 flight direction from lunar obs-  
 ervations. 31:96(r)  
 flock size by aerial survey  
 29:123(r)  
 - - - - phot. 26:67(r)  
 height of migr. 30:186(r);31:45(r)  
 incub., stage of, in field  
 25:157(r); 26:32(r)  
 lead shot in waterfowl by  
 fluoroscopy 27:95(r)  
 longevity 22:92(r)  
 migr., by netting & trapping  
 27:107  
 -, nocturnal, by audio 31:94(r)  
 -, rate of passage 24:7  
 nest attentiveness 27:195(r)  
 - - by magnetic recorder 31:99(r)  
 - - - thermistor 30:242(r)  
 percent kill, game birds 26:35(r)  
 pop. size 23:77(r),78(r),165,  
 184(r); 24:26(r),80(r),123(r);  
 25:117(r),118(r); 31:115  
 - - by banding 22:103; 24:158(r)  
 - - - Lincoln Index 22:104  
 - - - netting 28:203  
 spatial distr. 24:158(r)  
 trapping interval, Black-capped  
 Chickadees 23:74  
 - success, meth. of comparing  
 traps 22:110  
 weight, without capture, Titmice  
 24:156(r)  
 candling eggs in field, waterfowl  
 27:195(r)  
 capture (see also netting & trap-  
 ping, below)  
 Geese, Blue & Snow white flight-  
 less 25:63(r)  
 Gulls, by throw-nets 25:65(r)

## TECHNIQUES (cont.)

- capture (cont.)
  - night-driving, for Coot 28:153
  - night-lighting 31:40(r)
  - shorebirds 24:147
    - at night 23:181(r)
  - Swallow, Rough-winged 24:107
  - waterfowl 24:155(r),156(r)
    - , by driving 24:111(r)
- casting pulmonary system in resin 29:256(r)
- censusing (see also, Censuses)
  - by call counts, Mourning Dove 25:74(r)
    - drumming counts, Ruffed Grouse 25:27(r)
  - for Mourning Dove 24:80(r)
    - Quail in fall 27:195(r); 29:60(r)
    - Woodcock on feeding grounds 27:194(r)
- collecting ectoparasites 24:123(r); 26:36(r); 28:218; 31:157
- dating nesting events, Willow Ptarmigan 28:168(r)
- describing egg shapes 25:23(r)
- determination of - see above, calculation,-)
- drying form for study skins 28:156
- estimation of- (see above, calculation,-)
- fat classification, live Am. Buntings 31:1
- feather color var., anal. of 26:89
- flushing pheasants before mowing, auditory 27:144(r)
- following flight of ducks released at night, using penlight 29:80
- food anal. of raptors 23:189(r)
  - - - young, using neck bands 30:62(r),128(r)
  - availability & yield, meas. of 27:45(r)
- hand-rearing Purple Martins 25:67(r)
- handling safely, Evening Grosbeaks 22:34
  - -, sea birds 30:47(r)
- lunar study of migr. 23:43(r)
- marking, color for waterfowl 27:34(r)
  - , of Dove, Mourning 23:114(r)
  - , - Grosbeak, Evening 22:32
  - , - Penguins 22:47
  - , - Hungarian Partridge 28:163(r)

-, using:

- plastic, extruded colored 23:31(r)
- neck collars for Geese 27:34(r); 28:163(r)
  - tags for pheasant 27:87(r)
  - - for Woodcock 27:188(r)
- reflecting plastic tape for Weka, at night 30:123(r)
- wing tags for waterfowl 22:83(r)
- nets:
  - bending a lane 27:33
  - cannon, for Geese 27:188(r)
    - , - Sharp-tailed Grouse 27:144(r)
  - mist, for Mourning Dove 30:184(r)
    - , - Redwinged Blackbird 30:42
    - , - Reed Warblers 28:220
    - , - shorebirds 26:159
  - throw 26:163(r)
  - vs. traps, for Twite 28:220
    - -, Helgoland, comparison 28:123; 30:38
- netting 27:67; 28:115
  - shorebirds, using decoys 31:89
  - Woodcock in summer 31:130
- opening nest holes 30:181
- photographing birds 28:249(r)
- radars 30:41(r)
  - for migr. study 29:114(r)
- repelling birds by recordings 26:172(r); 28:110(r)
  - Crows by recordings 29:67(r)
- reproductive cycle, study by ovulated follicles 22:184(r)
- sexing of:
  - Chat, Yellow-breasted 29:176
  - Coot, Am. 23:186(r); 31:54(r)
  - Dove, Mourning 23:34(r)
  - Finch, Purple 25:133; 26:89
  - Grouse, Ruffed, juv. 30:196(r)
  - , Sage 27:44(r)
  - passerines, by cloacal protruberance 23:159
  - Quail, Scaled 27:201(r)
  - Rail, Sora 26:125(r)
  - Shearwater, Short-tailed 28:177(r)
  - Starling 22:16
  - Swift, Chimney 29:256(r)
  - Woodcock 24:167(r)
- sperm smear 23:163
- statistical, anal. of age classes 27:171

- TECHNIQUES (cont.)  
 statistical (cont.)  
   anal. of mail survey data, water-  
     fowl 27:144(r)  
   - - roadside counts, pheasants  
     27:143(r)  
   confidence intervals for % incr-  
     eases 26:31(r)  
   - limits, Lincoln Index 22:189(r)  
   for pop. dynamics 30:217  
   mathematical theory of trapping  
     23:78(r)  
   retrapping anal. 26:31(r)  
 taming wild birds, book 24:175(r)  
 traps:  
   all-purpose 26:152  
   automatic bow-net 25:115(r)  
   Bal-Chatri, for raptors 30:18,  
     60(r)  
   collapsible 22:107  
   effectiveness, meth. for compar-  
     ison 22:110  
   for Am. Blackbirds 23:154;27:170  
   - Dove, Mourning 22:175  
   - -, -, nesting 25:6  
   - Grouse, Ruffed 30:184(r)  
   - Thrushes 23:23  
   general 22:35(r)  
   Helgoland 24:71(r)  
   -, reconstruction of 27:188(r)  
   nest, for waterfowl 29:236  
   portable, for ducks 26:28(r)  
   solenoid for springing 28:163(r)  
   tree 26:163(r)  
   -, top-opening 22:113  
 trapping:  
   bias due to sex & age 22:117  
   differing responses to 27:42(r)  
   effect on repeat data 29:219  
   methods 22:35(r)  
   of:  
     Blackbird, Redwinged, in Mourn-  
       ing Dove trap 22:179  
     Bluebird 25:112  
     Catbird 22:33  
     Dove, Mourning 22:174;23:114(r)  
     Geese 27:34(r), 188(r)  
     Grosbeak, Rose-breasted 22:81  
     Grouse, Ruffed 27:86(r), 144(r)  
     -, Sharp-tailed 27:144(r)  
     Hawks 25:115(r)  
     Oriole, Baltimore 22:33  
     Partridge, Chukar, using  
       recorded calls 27:145(r)  
     Pigeon, Band-tailed 27:86(r)  
     Quail, California 27:1  
     -, Gambel's 27:188(r)  
     Rails 29:246(r)  
     Sparrow, House 22:33  
     Swallow, Bank 22:55  
     Swift, Chimney 22:79  
     Woodcock 26:121(r); 27:86(r)  
     zugunruhe, investigation of  
       29:187(r)  
 Tedd, J.G. & D.Lack. Detection of  
 bird migr. by high-power radar.  
 31:41(r)  
 Telmatodytes palustris (Long-billed  
 Marsh Wren  
 descr., newly hatched 27:123  
 natal plumages, anal. of var.  
 29:126(r)  
 TEMPERATURE (see also, Eggs, Incuba-  
 tion; Behavior; Migration;  
 Physiology; Ecology, weather)  
 and:  
   attentiveness rhythm, Eur. Wren  
     25:68(r)  
   breeding seasons 22:87(r)  
   courtship, inhibition by drop,  
     Collared Flycatcher 23:86(r)  
   energy resources, House Sparrow  
     22:38(r)  
   first nesting, Titmice 22:88(r)  
   food & water intake 22:39(r)  
   incubation, Chipping Sparrow  
     23:106  
   nest attentiveness, Great Tit  
     22:131(r)  
   wt., White-throated Sparrow  
     22:85(r)  
   range extensions of Greenish  
     Warbler & Water Rail 23:42(r)  
   body, of many spp. 25:167(r)  
   cold, reduces homing ability of  
     Pigeons 29:64(r)  
   of eggs, during incub:  
     Adelie Land birds 27:91(r)  
     Arctic birds 28:53(r)  
     Penguin, Yellow-eyed 30:195(r)  
     Titmice 22:88(r)  
   regulation 23:116(r), 117(r)  
 Tenison, W.P.C. "Anting" by Blackbird  
 26:80(r)  
 Ten Kate, C.G.B. Recovery in Neth.  
 of birds banded abroad. 22:129(r);  
 25:153(r); 27:187(r); 28:230(r);  
 29:246(r)

- TERATOLOGY (see also Injuries & Accidents)  
 deformed bill, Blue Jay & Catbird 31:158  
 general 28:157  
 in chick embryos 23:34(r)  
 winglessness, Song Thrush & Eur. Swift 28:237(r)
- Terns (Sterninae)  
 - Arctic (*Sterna paradisaea*)  
 - Black (*Chlidonias niger*)  
 - Black, White-winged (*C. leucopterus*)  
 - Bridled (*Sterna anaethetus*)  
 - Cabot's (= Sandwich)  
 - Caspian (*Hydroprogne caspia*)  
 - Crested, Greater (*Sterna bergii*)  
 - Common (*Sterna hirundo*)  
 - Forster's (*S. forsteri*)  
 - Gull-billed (*Geochelidon nilotica*)  
 - Hawaiian (= Noddy, White-capped)  
 - Least (*Sterna albifrons*)  
 - Noddy, Brown (*Anous stolidus*)  
 - -, White-capped (*A. minutus*)  
 - Roseate (*Sterna dougallii*)  
 - Sandwich (*S. sandvicensis*)  
 - Sooty (*S. fuscata*)  
 - Swift (= Great Crested)  
 - Whiskered (*Chlidonias hybrida*)  
 - White-fronted (*Sterna striata*)
- Terres, J.K. Songbirds in your garden. 25:82(r)
- TERRITORY (see also, Behavior; Courtship; Displays; Ecology; Home Range; Homing; Life Histories; Nesting; Polygamy; Roosting; Sounds)  
 behav., in book, AR. birds 22:198(r)  
 communal, of Western Magpie in Aust. 28:235(r)  
 control of density by, Titmice 25:160(r)  
 in book 23:50(r)  
 functions of, a review 28:239(r)  
 of:  
 Blackbird 25:159(r)  
 -, Redwinged 22:187(r)  
 -, -, ♂ & ♀ 23:38(r)  
 Chat, Yellow-breasted 29:175  
 Cowbird, Brown-headed 22:187(r)  
 Crane, Sandhill, nesting & feeding 23:35(r)  
 Curlew 28:169(r)  
 Dipper, in Ger. 25:154(r)  
 Flycatcher, Hammond's 26:32(r)  
 -, Least 22:187(r)  
 -, Scissor-tailed 23:34(r)
- Goldfinch, Am. 22:188(r)  
 Goose, Barnacle, in zoo 22:98(r)  
 Grouse, Black 25:71(r)  
 Gull, Herring 24:78(r)  
 Gulls, young, in new colony 23:124(r)  
 Hornbill, Crowned 23:121(r)  
 Lapwing, in autumn 28:239(r)  
 Lark, Wood 31:99(r)  
 Mockingbird, at feeder 23:88(r)  
 Nutcracker, Thick-billed 23:177(r)  
 Owl, Tawny 24:157(r)  
 Penguin, Black-footed, in zoo 22:89(r)  
 Pheasant, Ring-necked 22:91(r); 23:87(r)  
 Pigeon, Wood 30:56(r)  
 Ruff 25:156(r)  
 Shrikes 29:195(r)  
 Sparrow, Chipping 23:101  
 -, House 30:54(r)  
 -, Song, in salt marshes 27:191(r)  
 Starling 25:156(r)  
 Takaha 24:23(r); 30:48(r)  
 Tanager, Scarlet-rumped, lack of 22:134(r)  
 Tit, Bearded 23:38(r)  
 Titmouse, Plain 28:167(r)  
 Towhee, Rufous-sided 26:79(r)  
 Warbler, Great Reed 27:194(r)  
 Waxwing, Cedar 22:186(r)  
 Woodlark 31:99(r)  
 range of, Rufous-sided Towhee 26:79(r)  
 size less on small islands, Song Sparrow, Red-eyed Vireo & Yellow Warbler 28:234(r)  
 winter, of Gray Shrike 28:160  
 -, - Am. Kestrel 27:41(r)  
 Tetrao parvirostris (Black-billed Capercaillie)  
 syst. relations with *T. urogallus* 30:132(r)  
 - *urogallus* (Capercaillie)  
 band. - see Banding Reports  
 flocking behav. 29:197(r)  
 home range 23:170(r)  
 pop. & lunar cycles 27:89(r)  
 - & syst. 30:132(r)  
 - fluctuations 22:96(r); 28:176(r)  
 sex ratio & hunting laws 23:182(r)  
 wt. var. 30:57(r)

- Tetrastes bonasia (Hazel Hen = Hazel Grouse)  
 L.H. 23:178(r); 27:92(r)  
 painting of 22:44(r)  
 prey of Goshawk 22:37(r)
- Textor cucullatus (Black-headed Weaverbird)  
 breeding behav. 31:229(r)
- nigerrimus (Black Weaver Finch)  
 polygamy 27:94(r)
- Thalassica antarctica (Antarctic Petrel)  
 in check-list, Mex. 22:98(r)
- Thalasseus sandvicensis (= Sterna sandvicensis)
- Thick-knees (Burhinus spp.)
- Thielke, G. Preying tech. of Northern Shrike & other predators on mice. 28:239(r)
- Thielke-Poltz, H. & G. Thielke.  
 Acoustic learning of sound isolated Blackbirds & dev. of learned motives without & with testosterone 31:232(r)
- Thimme, E. Bigamy in Pied Flycatcher 30:245(r)
- Thomas, R.H. (see Nice, M.M.)  
 --- Crip, come home 23:135(r)
- Thomas, W.E.(ed.) Man's role in changing face of earth. 29:133(r)
- Thompson, D.R. (see Dorney, R.S.)
- Thomson, P. & E. Stresemann. Johann Friedrich Naumann: Father of Ger. ornith. 29:67(r)
- Thomson, A.L.(ed.) Study of visible migr. of birds 25:17(r)
- Migr. of Engl. Warblers as shown by results of ringing. 25:116(r)
- Migr. of Engl. Chats (Oenanthe, Saxicola, Phoenicurus) as shown by results of ringing. 27:189(r)
- Migr. of Engl. Falcons as shown by results of ringing 29:247(r)
- The Engl. contribution to study of bird migr. 30:240(r)
- & E.P. Leach. Reports on bird-ringing, 1951-'52. 24:20(r), 70(r); 25:62(r)
- & R. Spencer. Report on bird-ringing for 1953. 26:72(r)
- Thorne, O. Solenoid mechanism for springing bird traps. 28:163(r)
- Thorpe, W.H. (see Hinde, R.A.)  
 --- Learning ability of birds. 22:90(r); 23:39(r)
- Thorpe, W.H. (cont.)  
 --- Process of song-learning in Chaffinch studied by sound spectrograph. 26:41(r)
- Concepts of ethology. 26:80(r)
- Dev. of original & unusual feeding meth. by wild passerine birds. 28:173(r)
- & P.M. Pilcher. Nature & characteristics of sub-song. 30:199(r)
- Thrasher, Brown (Toxostoma rufum)  
 -, Sage (Oreoscoptes montanus)
- Thraupidae (Tanagers)  
 book on L.H. 26:78(r)  
 origins of West Indian 22:93(r)  
 wts., Surinam 24:130(r)
- Thraupis spp.  
 nestling periods 26:79(r)
- Thrushes (Turdidae)  
 Austral, =Falkland Is. (Turdus falcklandii)  
 Bicknell's (= Gray-cheeked)  
 Black, = Red-throated (T. ruficollis)  
 Dusky (= Naumann's)  
 Gray-cheeked (Catharus minima)  
 Grey (Turdus cardis)  
 Ground-scraper (T. lutescens)  
 Hermit (Catharus guttatus)  
 Mistle (T. viscivorus)  
 Naumann's (T. naumanni)  
 Olive-backed (= Swainson's)  
 Red-bellied (T. chrysolaus)  
 Rock (Monticola saxatilis)  
 Siberian (Turdus sibiricus)  
 Song (T. philomelos)  
 Swainson's (Catharus ustulata)  
 Varied (Ixoreus naevius)  
 White-chinned (Turdus aurantius)  
 White-eyed (T. jamaicensis)  
 Wood (Hylocichla mustelina)
- Thryomanes bewickii (Bewick's Wren)  
 natal down 29:234
- Thryothorus ludovicianus (Carolina Wren)  
 band. - see Banding Reports  
 band size 29:92  
 natal down 29:234  
 nesting study of 22:87(r)  
 song var. 28:55(r)
- Thurston, M.H. (see Burton, P.J.K.)
- Tiaris bicolor (Black-faced Grassquit)  
 band size 29:93  
 injuries 28:158  
 soft part colors 27:181

- Tiaris bicolor* (cont.)  
 wt. 27:175  
 - *olivacea* (Yellow-faced Grassquit)  
 band size 29:93  
 soft part colors 27:181  
 wt. 27:175
- Tibbits, D. (see Beer, J.R.)
- Ticehurst, N.F. Mute Swan in Engl.:  
 hist. & ancient custom of Swan-  
 keeping. 29:208(r)
- Tickell, W.L.N. (see Sladen, W.J.L.)
- Tilgner, W. (see Langer, R.)
- Timmerman, H. Breeding biol. of  
 Swift 28:105(r)
- Tinamous (Tinamiformes)  
 heart wt. 27:45(r)
- , Highland (*Nothocercus bonapartei*)
- Tinbergen, L. (see Kluyver, H.N.)
- Tinbergen, N. (see Ashmole, N.P.)  
 --- Study of Instinct. 23:132(r)  
 --- Recent advances in study of bird  
 behav. 23:177(r)  
 --- "Derived" activities, their  
 causation, biol. significance,  
 origin, & emancipation during evol.  
 24:24(r)  
 --- Herring Gull's World: study of  
 social behav. of birds 25:81(r)  
 --- Social behav. in animals, with  
 special reference to vertebrates  
 25:84(r)  
 --- Bird Life. 26:134(r)  
 --- Functions of terr. 28:239(r)  
 --- Curious naturalists. 30:138(r)  
 --- Phot. studies of Ruff. 31:101(r)  
 --- Comparative studies of behav. of  
 Gulls. 31:163(r)  
 --- "Appeasement" displays. 31:163(r)  
 --- & M. Moynihan. Head flagging in  
 Black-headed Gull: its function &  
 origin. 23:125(r)  
 --- & A.C. Perdeck. Stimulus situation  
 releasing begging response in newly  
 hatched Herring Gull. 22:91(r)
- Tits (*Parus* spp. or *Paridae*)  
 -, Bearded (*Panurus biarmicus*)  
 -, Blue (*Parus caeruleus*)  
 -, Coal (*P. ater*)  
 -, Crested (*P. cristatus*)  
 -, Great (*P. major*)  
 -, Long-tailed (*Aegithalos caudatus*)  
 -, Marsh (*Parus palustris*)  
 -, Penduline (*Remiz pendulinus*)  
 -, Siberian (*Parus cinctus*)  
 -, Willow (*P. montanus*)
- Titmouse, Plain (*Parus inornatus*)  
 -, Tufted (*P. bicolor*)
- Todus todus (Jamaican Tody)  
 band size 29:91
- Tomasz, J. Ecol. of Indian Ring Dove  
 27:145(r)
- Tomich, P.Q. (see Pitelka, F.A.)
- Tomkins, I.R. Summer schedule of  
 Eastern Willet in GA. 28:234(r)
- Tompsett, D.H. Casts of pulmonary  
 system of birds. 29:256(r)
- Tordoff, H.B. Syst. study of  
 Fringillidae based on structure  
 of skull. 26:132(r)
- Tornroos, V. Lapwing on Is. Hiiloto.  
 27:137(r)
- Toschi, A. Migr. of birds 23:49(r)  
 --- Biol. of Fiscal Shrike 23:83(r)  
 --- Quantitative var. in pop. of  
 birds in a tropical area. 26:31(r)  
 --- Vertebrates of Is. of Montecristo  
 26:39(r)
- Totanus (= *Tringa*)
- Touracos (*Musophagidae*)
- Towhee, Brown (*Pipilo fuscus*)  
 -, Collared (*P. ocai*)  
 -, Red-eyed, = Rufous-sided  
 (*P. erythrophthalmus*)  
 -, Spotted (= Red-eyed)
- Toxostoma rufum (Brown Thrasher)  
 band. - see Banding Reports  
 band size 25:14  
 book 23:135(r)  
 descr., newly hatched 27:124  
 dieldrin effects on 31:164(r)  
 eye color 24:17  
 natal down 29:234  
 respiration rate 29:39  
 returns, NY. 23:61
- Traps & Trapping (see Techniques)
- Tratz, E.P. Golden Eagle of Austria  
 25:79(r)
- Traylor, M.A. (see Rand, A.L.)  
 --- Var. in S. Am. Great Horned Owls  
 30:61(r)
- Tree-ducks (*Dendrocygna* spp)
- Treichel, G.W. (See Pitelka, F.A.)
- Treichler, R. (see Coburn, D.R.)
- Trelfa, G. Woodpigeon covering eggs.  
 25:121(r)
- Trettan, W. Planned banding of Pied  
 Flycatchers in Hessen. 24:71(r)
- Tringa erythropus* (Spotted Redshank)  
 band. - see Banding Reports

- Tringa (cont.)
- flavipes (Lesser Yellowlegs)
    - leg & band sizes 30:121
  - glareola (Wood Sandpiper)
    - band. - see Banding Reports
    - breeding pop. & distr., Den. 31:106(r)
  - hypoleucos (Common Sandpiper)
    - band. - see Banding Reports
    - census, Engl. 23:185(r)
    - diving flight 27:42(r)
    - migr. 25:114(r)
  - macularia (Spotted Sandpiper)
    - band size 25:14; 27:77; 30:121
    - nesting relations with Laridae 24:160(r)
    - nesting study 23:36(r)
    - wt., sex, age & daily var. 26:19
  - melanoleucus (Greater Yellowlegs)
    - leg & band size 30:121
    - migr. & increase in NJ. 23:40(r)
  - nebularia (Greenshank)
    - response to Redshank chick in captivity 31:48(r)
    - unusual feeding behav. 28:245(r)
  - ochropus (Green Sandpiper)
    - nest on old squirrel's nest 28:180(r)
  - solitaria (Solitary Sandpiper)
    - leg & band size 30:121
    - sex, age, & daily wt. 26:19
  - totanus (Redshank)
    - band. - see Banding Reports
    - Bergmann's Rule & migr. 30:49(r)
    - evol. significance of migr. 27:97(r)
    - migr. 23:78(r)
    - nest association with Lapwing 29:195(r), 196(r)
    - pop. on Rott Is. 22:135(r)
    - raised by Lapwings in captivity 31:48(r)
    - response to parent warning calls 30:130(r)
- Trochilidae (Hummingbirds)
- breeding in both summer & winter quarters 30:56(r)
  - courtship behav. 26:81(r)
  - origins of West Indian 22:93(r)
  - poikilothermy, influence on breeding 27:139(r)
  - roost in caves in high Andes 24:119(r)
  - wts., Surinam 24:130(r)
- Trochilus polytmus (Streamer-tailed Hummingbird)
- band size 29:91
  - bill injury 28:157
  - meas. 27:181
  - soft part colors 27:179
  - wt. 27:175
- Troglodytes aedon (House Wren)
- band. - see Banding Reports
  - band size 27:77
  - DDT effects on 22:189(r); 24:164(r)
  - descr., newly hatched 27:122
  - destrory Tree Swallow eggs 26:59
  - frequency in roadside census 29:171
  - intestine length 25:106
  - palatability of eggs 24:75(r)
  - parental care, book 24:86(r)
  - range extension in s.w.U.S. 28:181(r)
  - respiratory rate 29:39
  - use Goldfinch nest as winter roost 24:75(r)
- troglodytes (Winter, = Eur., Wren)
- band. - see Banding Reports
  - band size 27:77
  - book 27:99(r)
  - breeding behav. 25:69(r)
  - - & biol. in Hebrides 24:118(r)
  - distr. & climate, n. Sweden 29:128(r)
  - feeding rates 30:52(r)
  - young of Great Tit 31:49(r)
  - history, behav., breeding biol. 25:25(r)
  - incub. attentiveness & air temp. 25:69(r)
  - L.H. on St. Kilda 25:25(r); 30:133(r)
  - polygamy depends on food availability 29:197(r)
  - song, daily totals 23:87(r)
  - use of artificial nests 29:196(r)
  - winter sleeping habits 28:174(r)
  - wt. changes 27:19
- Troglodytidae (Wrens)
- in mist nets 28:117
  - in Operation Recovery 29:147
  - ornithosis & 28:94
- Trogon violaceus (Violaceous, = Gartered, Trogon)
- nesting in wasp nests 31:98(r)
- Trumpeters (Psophiidae)
- , Gray-winged (Psophia crepitans)
- Tryngites subruficollis (Buff-breasted Sandpiper)
- occurrence in Fr. 27:208(r)

- Tschantz, B. Breeding biol. of Guillemot. 31:47(r)
- Tubinares (= Procellariiformes)
- Tuck, L.M. & L.Lemieux. Avifauna of Bylot Is., Can. 31:106(r)
- Tuft, H.R. Nest-sanitation & fledging of Green Woodpecker. 27:140(r)
- Tui, = Parson-bird (Prothemadera novaeseelandiae)
- Tunmore, B.G. Visual observation of night migr. 28:166(r)
- Turbott, E.G. (see Falla, R.A.)
- Winter observations on *Notornis* in 1949. 23:122(r)
- Turcek, F.J. Stratification of avian pop. of Querceto-Carpinetum forest communities in s. Slovakia. 24:29(r)
- Ecol. anal. of bird & mammal pop. of a primeval forest on Polana Mt. (Slovakia) 25:159(r)
- Bird pops. of three types of forest communities in Slovakia 27:95(r)
- Use of food by Jay & Crossbill. 28:246(r)
- Bird banding in USSR. 29:111
- Food requirement in captivity of Great Tit & Lesser Whitethroat for larvae of fir bud moth. 29:205(r)
- Food study of Hawfinch. 29:206(r)
- Bud-eating by Finches. 29:206(r)
- Bird succession in conifer plantations on mat-grass land in Slovakia. 29:253(r)
- Destruction of seed infestations by Titmice 29:260(r)
- Turdidae (Thrushes)
- alarm calls 30:232
- band. - see Banding Reports
- effect of E-605 forte on 27:149(r)
- egg color, significance 30:53(r)
- fat deposition 29:106
- in bird sanctuary, Ger. 29:124(r)
- Operation Recovery 29:141;30:157
- mass mort. in GA. 29:116(r)
- - in TX. 28:231(r)
- migr, late, Scandinavia 28:161(r)
- , nocturnal 25:116(r)
- , temporal pattern in nocturnal 31:160(r)
- mist netting 28:115; 30:38
- nesting on buildings 30:52(r)
- nets vs. traps for capture 30:38
- phot. 23:69
- physiol., migr. 22:130(r)
- prey of Goshawk 22:37(r)
- respiratory rates 29:39
- responses to Eur. Jays 25:26(r)
- return dates 24:146
- song, time of beginning 24:171(r)
- subsong 30:199(r)
- syst. 22:136(r)
- trap for 23:22
- Turdus* spp.
- band. - see Banding Reports
- night migr. 26:77(r)
- oology in syst. 22:136(r)
- syst. 22:136(r)
- *aurantius* (White-chinned Thrush)
- band size 29:92
- soft part colors 27:180
- swollen toes 28:157
- *cardis* (Grey Thrush)
- eggs & syst. 22:136(r)
- *chrysolaus* (Red-bellied Thrush)
- eggs & syst. 22:136(r)
- *ericetorum* (= *T. philomelos*)
- *eunomus* (= *T. naumanni*)
- *falcklandii* (Austral Thrush)
- bandings 29:22
- *jamaicensis* (White-eyed Thrush)
- band size 29:92
- soft part colors 27:180
- *litsipsirupa* (Ground-scraper Thrush)
- syst. 22:136(r)
- *merula* (Blackbird)
- albinism, relation to age 28:54(r)
- anting 26:80(r); 31:164(r)
- average age of pop., Belgium 30:51(r)
- band. - see Banding Reports
- band loss, unusual 27:187(r)
- behav. 27:43(r)
- , breeding 29:56(r)
- , during solar eclipse 27:194(r)
- , effect of testosterone on 31:232(r)
- , learning song in sound isolation 31:232(r)
- , pair formation 25:159(r)
- , snail eating 25:128(r)
- , winter roosting 29:197(r)
- breeding, abnormal 26:167(r)
- eggs of 22:136(r)
- food anal. 28:182(r)
- hybrid, X *T. pilaris* 28:169(r)
- incub. 30:52(r)
- longevity - see Age, maximum-mass mort., Helgoland 30:126(r)
- meas. 27:45(r)



- Turdus merula* (cont.)  
 migr. 26:76(r)  
 mort. rate 24:81(r)  
 movements 25:62(r)  
 pesticides, E-605 forte effects on 27:149(r)  
 physiol., migr. 22:130(r)  
 plumages 25:62(r)  
 pop. changes 22:43(r); 27:101(r)  
 range changes & climate 22:93(r)  
 songs, 6140 in one day 23:87(r)  
 subsong 22:134(r)  
 syst. & egg characters 22:136(r)  
 taming of 24:175(r)  
 terr. 25:159(r)  
 use of artificial nests 29:196(r)  
 visual acuity 24:31(r)  
 vocalizations, dev. of 29:56(r)  
 wt. changes 25:62(r); 27:19  
 young fed by Spotted Flycatcher 24:77(r)
- *migratorius* (Am. Robin)  
 accident, thorn in throat 22:126  
 activity in arctic summer 24:21(r)  
 age groups 22:92(r)  
 alarm call to predators 30:46  
 albino, partial, 9 yrs. old 31:137  
 band. - see Banding Reports  
 band size 25:14 ; 29:92  
 behav., migr. 27:188(r)  
 -, remating % 30:123  
 -, roosting 27:188(r)  
 -, terr. 23:85(r)  
 broods, three 23:29  
 clutch size in Newfoundland 23:46(r)  
 depigmentation 23:114  
 descr., newly hatched 27:124  
 DDT effects on 31:165(r)  
 dieldrin effects on 31:164(r)  
 dispersal 22:130(r); 28:152; 30:122  
 distr., winter 26:29(r)  
 -, Cape Cod, MA. 22:156  
 in book, Can. birds 30:137(r)  
 longevity - see Age, maxima-  
 migr. RI. 30:175  
 movements 23:168; 24:156(r)  
 natal down 29:234  
 nest construction & var. 31:47(r)  
 nesting study 27:93(r)  
 pesticide effects on 22:189(r);  
 28:108(r); 31:164(r), 165(r)  
 pop. in sprayed orchards 23:180(r)  
 respiration rates 29:39  
 songs, morning & evening 29:262(r)
- wt., sex, age & daily 26:19  
 - *musicus* (Redwing)  
 band. - see Banding Reports  
 behav., snail-eating 25:128(r)  
 Bergmann's Rule & migr. 30:49(r)  
 breeding range, northward extension 30:248(r)  
 -, southward extension 28:181(r)  
 eggs & syst. 22:136(r)  
 migr. 26:76(r)  
 - physiol. 22:130(r)  
 - to Fair Isle 30:188(r)
- *naumanni* (Naumann's, = Dusky, Thrush)  
 eggs & syst. 22:136(r)
- *philomelos* (Song Thrush)  
 band. - see Banding Reports  
 behav., during solar eclipse 27:194(r)  
 -, snail-eating 25:128(r)  
 breeding, abnormal 26:167(r)  
 eggs & syst. 22:136(r)  
 hatched without left wing 28:237(r)  
 migr. 26:76(r)  
 pop. changes 22:43(r); 27:101(r)
- *pilaris* (Fieldfare)  
 band. - see Banding Reports  
 breeding in Jura Mts. 28:52(r)  
 depth of sleep 23:82(r)  
 eggs & syst. 22:136(r)  
 establishment in Grml. 23:94(r)  
 hybrid, X *T. merula* 28:169(r)  
 migr. physiol. 22:130(r)  
 - route 22:129(r)  
 nest associations with Kestrel & Gray Shrike 29:195(r); 31:49(r)  
 nesting on cliff, Lapland 28:180(r)  
 range extension 24:34(r)  
 - -, two types of 28:179(r)  
 visual acuity 24:31(r)  
 winter area 22:129(r)
- *ruficollis* (Black- or Red-throated Thrush)  
 eggs & syst. 22:136(r)
- *sibiricus* (Siberian Thrush)  
 band. - see Banding Reports  
 first record from Engl. 27:187(r)
- *torquatus* (Ring-Ouzel)  
 band - see Banding Reports  
 migr. 26:76(r)
- *viscivorus* (Mistle Thrush)  
 band. - see Banding Reports  
 behav., reproductive, by juv. 25:159(r)

- Turdus viscivorus* (cont.)  
 behav. & pop. 25:79(r)  
 breeding biol., notes on 23:175(r)  
 eggs & syst. 22:136(r)  
 increase in Neth., in book 22:43(r)  
 L.H. 24:75(r)  
 migr. & reproduction 23:171(r);  
 24:74(r)  
 nest in same tree as Chaffinch  
 23:172; 24:74(r)  
 range changes & climate 22:93(r)
- Turkey (*Meleagris gallopavo*)
- Turnbull, N. (see Carrick, R.)
- Turner, B.C. Feeding behav. of Chough  
 31:167(r)
- Turner, J.T. (see Howell, J.C.)
- Turner, L.B. Improved tech. in goose  
 trapping with cannon-type net traps  
 27:188(r)
- Turnicidae (Hemipodes)  
 breeding biol. 31:48(r)
- Turnix sylvatica (Button Quail)  
 breeding biol. 31:48(r)
- Turnstones (*Arenaria* spp.)  
 -, Ruddy (*A. interpres*)
- Tutt, H.R. Excavation of nest hole &  
 feeding of young of Green Wood-  
 pecker 23:173(r)
- A pair of Nightjars at the nest  
 27:38(r)
- Tuzet, O. & C. Besslere Spermatog-  
 enesis in Mallard. 23:118(r)
- Twite (*Acanthis flavirostris*)
- Tyler, G. Habitat requirements of  
 Wood Warbler in central Sweden.  
 31:167(r)
- Tympanuchus cupido* (Greater Prairie  
 Chicken)  
 booming 25:71(r)  
 habits, fall & winter 23:123(r)  
 Heath Hen, in book 23:49(r)  
 in Saskatchewan, Can. 24:30(r)  
 interspecific conflicts with  
 pheasants & Sharp-tailed Grouse  
 29:61(r)  
 mgt., guide to 29:253(r)  
 mort., cyclic 25:162(r)  
 movements in WI. 22:36(r)  
 weather relations 27:43(r)
- Tyrannidae (Flycatchers, New World)  
 band. 23:26  
 in book, AR. birds 22:198(r)  
 in Operation Recovery 29:165;30:157  
 mass mort., TX. 28:231(r)  
 nets for 28:115
- wts., Surinam 24:30(r)
- Tyrannus* spp.  
 natal plumages 29:126(r)
- caudifasciatus (Loggerhead  
 Flycatcher)  
 band size 29:91  
 soft part colors 27:179  
 swollen toes 28:157
- dominicensis (Gray Kingbird)  
 geogr. var. & new subspp. 23:43(r)
- melancholicus (Tropical Kingbird)  
 L.H. 26:168(r)  
 nesting attempts after volcano in  
 Mex. 31:47(r)
- tyrannus (Eastern Kingbird)  
 band. - see Banding Reports  
 band size 29:91  
 morning song 24:126(r)  
 sex, age & daily wts. 26:19
- verticalis (Western Kingbird)  
 band. - see Banding Reports
- Tyto alba* (Barn Owl)  
 band. - see Banding Reports  
 behav. in captivity 24:79(r)  
 dispersal, breeding behav., &  
 longevity 24:28(r)  
 food 28:109(r); 29:206(r)  
 mort. & life expectancy 29:51(r)  
 - rates 24:27(r)  
 night-lighting for capture 31:40(r)  
 not a releaser for mobbing 22:89(r)  
 pellet anal. 25:129(r)  
 recovery 1140 miles from banding  
 site 25:149  
 wt. of two subspp. 22:85(r)

- Udagawa, T. First specimen record of *Branta bernicla nigricans* from Shikoku. 22:135(r)
- Eastern Ring Dove may be extirpated from Japan. 22:135(r)
- Pop. changes in birds during the hunting season. 30:57(r)
- Udvardy, M.D.F. Body temp. of birds. 25:167(r)
- Summer movements of Black Swifts in relation to weather. 26:123(r)
- Body temp. of Parids in arctic winter. 27:201(r)
- Uhlig, H.G. & R.W.Bailey. Factors influencing distr. & abundance of wild turkey in VA. 23:128(r)
- Ulfstrand (see Lennerstedt, I.)
- Flight of spring migrants at Malmo. 26:30(r)
- Migr. of birds at Falsterbo. 28:164(r); 29:186(r); 31:46(r)
- Ann. fluctuations in migr. of Honey Buzzard over Falsterbo. 30:49(r)
- Avifauna 1956-57 of Krankesjon & its environment. 31:106(r)
- Umbrella bird (*Cephalopterus ornatus*)
- Upupa epops (Hoopoe)  
decreases in Neth., in book 22:43(r)  
feeding of young 24:114(r); 28:172(r)
- Upupidae  
biol. of, in book 22:145(r)
- Uraeginthus angolensis (Blue-breasted Waxbill)  
breeding behav. in captivity. 31:164(r)
- Uria spp. (Guillemots or Murres)  
band. - see Banding Reports  
egging 26:171(r)
- aalge (Guillemot, = Common Murre) at Stora Karlso, Sweden 25:127(r)  
band. - see Banding Reports  
breeding biol. 29:251(r); 31:47(r)  
migr. in Nor. 25:153(r)  
on Rouzic Is. 28:52(r)  
proportion of bridled type 29:127(r)
- grylle (= *Cepphus grylle*)
- lomvia (Brunnich's Guillemot)  
band. - see Banding Reports  
nesting in Spitzbergen 30:248(r)
- Urner, C.A. & R.W.Storer. Distr. & abundance of shorebirds on n. & central NJ. coast, 1928-1938. 23:40(r)
- U.S.A. (see also, Alaska, Banding Reports, Canada, Hawaii, Recoveries & Returns)  
book, GA. birds 30:137(r)  
-, Great Salt Lake, UT. 30:201(r)  
-, Rocky Mt. Naturalists 22:100(r)  
-, MD. birds 30:65(r)  
-, WI. birds 22:196(r)  
-, Wildlife & plants 23:50(r)  
lists, annotated:  
IL., Chicago region 28:51(r)  
NH. 27:207(r)  
NJ. 27:205(r)  
NY., Albany 24:124(r)  
MA., Andover region 29:201(r)  
MI., distributional, 31:57(r)  
PA., State College 24:84(r)
- USSR  
birds of western Siberia 25:168(r)  
breeding biol. of passerines, monogr. 30:251(r)
- Uttendorfer, O. New findings on food habits of birds of prey. 23:189(r)

- Valikangas, I. Expansion of *Phylloscopus trochiloides viridanus* in n.w. Eur., especially in Finl., & its causes. 23:42(r)
- , with H.Huuskonen, J. Koskimies, G.Nordstrom & L. Siivonen. Bird banding in Finl., 1939-'54  
22:127(r),128(r); 25:151(r);  
26:75(r); 27:130(r); 29:113(r)
- Valverde, J.A. Little Egret in Fr. 28:101(r)
- Ecol. sketch of Coto Donana. 29:203(r)
- Van Doren, M. Travels of William Bartram. 26:175(r)
- Vanellus vanellus (Lapwing)  
age - see Age, maxima-  
band. - see Banding Reports  
behav. at egg destruction 27:94(r)  
breed in captivity & raise Redshank 31:48(r)  
flight at 6000 ft. 26:123(r)  
innate food selection 26:33(r)  
migr. followed by radar 28:165(r)  
mort. rate 24:81(r)  
nest association with Redshank 29:195(r), 196(r)  
nesting on newly exposed lake shore 28:244(r)  
palatability of eggs 24:76(r)  
pop. changes 22:43(r),134(r),135(r)  
23:120(r); 27:101(r)  
range extension to Finl. 27:89(r),  
137(r),199(r)  
response to parental warning calls 30:130(r)  
terr. behav. in fall 28:239(r)  
wing length 25:99
- Van Etten, R.C. (see Mitchell, R.T.)
- Van Riper, W. & E.R.Kalmbach. Homing not hindered by wing magnets. 23:179(r)
- Van Tyne, J. (see Zimmerman,D.A.)
- Home range & duration of family ties in Tufted Titmouse.22:41(r)
- & A.J.Berger. Fundamentals of Ornithology. 31:59(r)
- Van Weelder, J.W. (see Clark, G.M.)
- Vasvari, M. Meas. of Hungarian birds 27:148(r)
- Vauk, G. Mass mortality of migrant birds on Is. of Helgoland, April, 1958. 30:126(r)
- Vaurie, C. New records of birds from Bimini, n.w.Bahamas. 24:170(r)
- Veery (*Catharus fuscescens*)
- Venables, L.S.V. & V.M. Birds & mammals of Shetland. 27:101(r)
- Venilornis sanguinensis (Blood-colored Woodpecker)  
L.H. 24:163(r)
- Verheyen, R. White Stork in its winter area. 22:36(r)
- Doves, Galliform birds, Swifts, Goatsuckers, Bee-eaters, Rollers, Kingfishers & Hoopoes of Belgium. 22:145(r)
- Bird banding in Belgium, 1949-1957. 23:77(r); 24:70(r);  
25:114(r); 26:163(r); 27:85(r);  
29:45(r),113(r); 30:124(r);  
31:92(r)
- Migr. of Red-backed Shrike, Hobby & Eur. Cuckoo 23:79(r);  
of Greenfinch, 27:87(r); of  
Curlew 30:127(r), in Belgium.
- Origin of migr. aggregations. 24:114(r)
- Do migrants sing in winter quarters? 25:32(r)
- Brambling in Belgium 26:165(r)
- Linnet, a breeding bird & winter visitor in Belgium. 26:166(r)
- Polygamy in Black Weaver Finch. 27:94(r)
- Dispersion of Siskins banded or recovered in Belgium. 29:47(r)
- Seasonal deployment of Belgian pop. of Tree Sparrow. 29:116(r)
- Average age of Blackbird 30:51(r)
- Convergence or paramorphogenesis: Syst. & phylogeny of Penguins. 30:60(r)
- Basic syst. & ornithogeography. 31:106(r)
- & G. leGrelle. Migr. of Redshank in Eur., from band. results. 23:78(r)
- - --- Recoveries of banded Meadow Pipits. 23:80(r)
- - --- Belgian banding data on Common Heron, Lapwing & Black-headed Gull. 24:81(r)
- - --- Banding nestling Thrushes in Belgium. 24:81(r)
- - --- Banding Starlings & Chaffinches in the nest. 25:21(r)
- Vermivora bachmanii (Bachman's Warbler)  
song recordings 29:261(r);31:108(r)

- Vermivora (cont.)
- celata (Orange-crowned Warbler)
    - band. - see Banding Reports
    - band size 27:78
    - wt. & meas. 29:109
  - chrysoptera (Golden-winged Warbler)
    - band size 25:15
    - on Nantucket Is., MA. 30:148
    - song recording 29:261(r)
  - leucobronchialis (Brewster's Warbler)
    - band. - see Banding Reports
  - luciae (Lucy's Warbler)
    - song recording 29:261(r)
  - peregrina (Tennessee Warbler)
    - band. - see Banding Reports
    - band size 25:14; 27:78; 29:92
    - fat depots in tower kills 29:105
    - wt. & meas. 29:109
  - pinus (Blue-winged Warbler)
    - band. - see Banding Reports
    - band size 27:78
    - descr., newly hatched 27:125
  - ruficapilla (Nashville Warbler)
    - band size 27:78
    - wt. & meas. 29:109
- Vertse, A. Z. Zsak & Z. Kaszab. Food & agricultural importance of Perdix perdix in Hungary. 27:202(r)
- Veselovsky, Z. Postembryonic dev. of Tufted Duck, 25:78(r) & wild ducks 26:37(r)
- Swimming movements of diving ducks. 26:34(r)
- Vesey-Fitzgerald, D.F. Breeding colonies of Red-billed Quelea in s.w. Tanganyika. 30:54(r)
- Vestergren, G. Finnish & Norwegian Black-headed Gulls in Den. 31:231(r)
- Vestiaria coccinea (Iiwi)
  - ann. cycle, environment & evol. 25:123(r)
- Viduinæ (Widow-birds)
  - scratching movements 25:71(r)
- Vietinghoff Riesch, A. Scientific foundations for protection of Swallow. 26:36(r)
- The Barn Swallow. 27:152(r)
- Vince, M.A. (see Hinde, R.A.)
- Vincent, J. Check list of birds of S. Afr. 24:131(r)
- Vireo, Bell's (Vireo bellei)
  - , Black-capped (V. atricapillus)
  - , Black-whiskered (V. altiloquus)
  - , Blue-headed (= Solitary)
  - , Blue Mountain (V. osburni)
  - , Jamaican White-eyed (V. modestus)
  - , Philadelphia (V. philadelphicus)
  - , Red-eyed (V. olivaceus)
  - , Solitary (V. solitarius)
  - , Thick-billed (V. crassirostris)
  - , Warbling (V. gilvus)
  - , White-eyed (V. griseus)
  - , Yellow-throated (V. flavifrons)
- Vireo spp.
  - adaptive var. in genus 31:58(r)
- altiloquus (Black-whiskered Vireo)
    - band size 29:92
    - soft part colors 27:180
  - atricapillus (Black-capped Vireo)
    - natal down 29:235
  - crassirostris (Thick-billed Vireo)
    - band size 29:92
  - flavifrons (Yellow-throated Vireo)
    - band. - see Banding Reports
    - nest construction & var. 31:47(r)
  - gilvus (Warbling Vireo)
    - band. - see Banding Reports
    - natal down 29:235
    - nest construction & var. 31:47(r)
  - griseus (White-eyed Vireo)
    - band. - see Banding Reports
    - natal down 29:235
  - modestus (Jamaican White-eyed Vireo)
    - band size 29:92
    - soft part colors 27:180
  - olivaceus (Red-eyed Vireo)
    - band. - see Banding Reports
    - band size 27:78 ; 29:92
    - banded young rejected by parent 25:61
    - DDT effects on 22:189(r)
    - descr., newly hatched 27:125
    - fat depots in tower kills 29:105
    - L.H. 25:24(r)
    - natal down 29:235
    - nest construction & var. 31:47(r)
    - nesting study 30:127(r)
    - terr. size on small Is. 28:234(r)
  - osburni (Blue Mountain Vireo)
    - band size 29:92
    - soft part colors 27:180
  - philadelphicus (Philadelphia Vireo)
    - natal down 29:235
  - solitarius (Solitary Vireo)
    - band size 25:14
    - in John Abbott collections 24:168(r)
- Vireonidae
  - DDT effects on 22:189(r)

- Vireonidae (cont.)  
 mass mort., TX. & GA. 28:231(r);  
 29:116(r)  
 unusual migr. & spring storm  
 24:71(r)
- VISION  
 acuity in geese 27:141(r)  
 - in passerines 24:31(r)  
 color preferences, Carrion Crow &  
 Jackdaw 30:195(r)  
 - -, chicks & ducklings 29:255(r)  
 colored grain not avoided by  
 birds 30:250(r)  
 field of, ducks 26:172(r)  
 optical fixation differs in three  
 spp. of Owls 24:79(r)
- Vleugel, D.A. Wind direction & inten-  
 sity of migr. by Chaffinch 23:80(r)  
 --- High migr. of Chaffinch over  
 North Sea in relation to wind  
 direction 23:115(r)  
 --- Importance of wind to orient. of  
 migr. Chaffinches 25:115(r)  
 --- Night migr. of Thrushes & their  
 probable orient. 26:77(r)  
 --- Possibility of sun orient. of  
 some spp. in migr. 27:131(r)  
 --- Preference for headwind by migr.  
 Chaffinches. 27:132(r)  
 --- Inadequacy of visual orient. for  
 straight flight especially in migr.  
 of Chaffinch 27:132(r)  
 --- Orient. of Homing Pigeon 28:231(r)  
 --- Temporal pattern of nocturnal  
 migr. in Thrushes. 31:160(r)
- Vleugel, V.A. Herring Gulls learning  
 by experience to feed after explo-  
 sion of mines. 23:39(r)
- Vocalizations - see Sounds
- Vogel, H.H.Jr. Social behav. in  
 Turkey Vultures. 23:37(r)
- Voigt, A. Field book for study of  
 bird voices. 23:134(r)
- Voipio, P. Evol. at pop. level with  
 special reference to game animals  
 & practical game mgt. 22:136(r)  
 --- One-sided levying of males, a  
 disastrous procedure for dev. of  
 game stocks. 23:182(r)
- Volkmann, G. First arrival of White  
 Wagtail in Ger., 1948-'56.  
 28:232(r)
- Voous, K.H. Distr. hist. of Eur-  
 asian Bullfinches. 22:32(r)  
 --- The breeding seasons of birds  
 in Indonesia 22:87(r)  
 --- Post-glacial distr. of *Corvus*  
*monedula* in Eur. 22:135(r)  
 --- Birds of St.Martin, Saba, & St.  
 Eustatius. 27:198(r)  
 --- Birds of Aruba, Curacao, &  
 Bonaire 28:242(r)  
 --- & J.G. vanMarle. Distr. hist.  
 of *Sitta europa* 25:168(r)  
*Vultur gryphus* (Andean Condor)  
 egg rolling 25:71(r)  
 incub. period 24:87(r)  
*Vulture*, New World, (Cathartidae)  
 -, Black (*Coragyps atratus*)  
 -, Cape (*Gyps coprotheres*)  
 -, Griffon (*Gyps fulvus*)  
 -, Turkey (*Cathartes aura*)

- Wachtenfeldt, T. von. Autumnal migr., 1957, at Bosphorus. 30:125(r)
- Wacknagel, H. Artificial rearing of two Spectacled Penguins. 24:166(r)
- Waders (= Charadriiformes)
- Wagner, H.O. Anal. of Hummingbird courtship 26:81(r)
- Influence of poikilothermy in hummingbirds on their breeding biol. 27:139(r)
- Yearly & daily rhythm in migr. birds. 28:166(r)
- Technical basis of experimental research on bird migr. 29:187(r)
- Mixed bird flocks in Mex., behav. of northern migrants. 30:56(r)
- Choice of nest place & releasing stimuli for nest building with some Mex. birds. 31:47(r)
- Spread of House Sparrow in Mex. 31:104(r)
- Wagtails (*Motacilla* spp.)
- , Blue-headed (= Yellow)
- , Cape (*M. capensis*)
- , Grey (*M. cinerea*)
- , Pied, = White (*M. alba*)
- , Yellow (*M. flava*)
- Wahlin, B. Ornith. notes from Soteskar. 27:200(r)
- Wahlstedt, J. Birds of Torne region, Lapland. 29:66(r)
- Calls & displays of Owls. 31:102(r)
- Walcott, C. (see Dane, B.)
- Walkinshaw, L.H. Sandhill Crane in Baker Sanctuary, MI. 23:35(r)
- Chipping Sparrow notes. 23:101
- Nesting & abundance of Cuban Sandhill Crane on Isle of Pines. 24:160(r)
- & C.J. Henry. Yellow-bellied Flycatcher nesting in MI. 29:53(r)
- Wallace, G.J. Insecticides & birds. 31:165(r)
- Another year of Robin losses on a university campus. 31:165(r)
- Wallgren, H. Dependence of standard metabolism on environmental temp. in Yellow & Ortolan Buntings. 24:113(r)
- Energy metabolism of two spp. of *Emberiza* correlated with distr. & migr. 27:99(r)
- Bird migr. as an adaptation phenomenon 27:131(r)
- Wallin, L. (see Hansson, G.)
- Wallmo, O.C. Determination of sex & age of Scaled Quail, 27:201(r)
- Wallraff, H.G. (see Pratt, J.G.)
- Reproductive biol. of Starling. 25:156(r)
- Correlation between homing abilities of pigeons & temp. 30:237(r)
- Influence of experience in homing of Pigeons. 31:93(r)
- Homing behav. of Homing Pigeon as conditioned by place & time. 31:93(r)
- Correlations between homing behav. of Pigeons & meteorological & geophysical factors. 31:224(r)
- Can *Sylviids* navigate by stars? 31:226(r)
- Walters, J. Birds of extension-plans of Amsterdam-west in 1953. 25:80(r)
- Egg-retrieving & orient. at nest site in Kentish & Little Ringed Plovers. 28:234(r)
- Removal of damaged eggs by Little Ringed & Kentish Plovers. 28:236(r)
- Walters, V. (see Scholander, P.F.)
- Warblers:
- Aust. (*Gerygone* spp.)
- New World, = Wood (*Parulidae*)
- Old World (*Sylviidae*)
- , Arctic (*Phylloscopus borealis*)
- , Audubon's (*Dendroica auduboni*)
- , Bachman's (*Vermivora bachmanii*)
- , Bar-throated (*Apalis thoracica*)
- , Bay-breasted (*Dendroica castanea*)
- , Black-and-white (*Mniotilta varia*)
- , Blackburnian (*Dendroica fusca*)
- , Blackpoll (*D. striata*)
- , Black-throated Blue (*D. caerulescens*)
- , Black-throated Green (*D. virens*)
- , Blue-winged (*Vermivora pinus*)
- , Bonelli's (*Phylloscopus bonelli*)
- , Brewster's (*Vermivora leucobronchialis*)
- , Bush (= Australian)
- , Cairn's (= Black-throated Blue)
- , Canada (*Wilsonia canadensis*)
- , Cape May (*Dendroica tigrina*)
- , Cerulean (*D. cerulea*)
- , Chestnut-sided (*D. pensylvanica*)
- , Connecticut (*Oporornis agilis*)
- , Dartford (*Sylvia undulata*)
- , Garden (*S. borin*)
- , Golden (= Yellow)

- Warblers (cont.)  
 -, Golden-winged (*Vermivora chrysoptera*)  
 -, Grasshopper (*Locustella naevia*)  
 -, Great Reed (*Acrocephalus arundinaceus*)  
 -, Greenish (*Phylloscopus trochiloides*)  
 -, Hooded (*Wilsonia citrina*)  
 -, Kentucky (*Oporornis formosus*)  
 -, Kirtland's (*Dendroica kirtlandii*)  
 -, Lucy's (*Vermivora luciae*)  
 -, MacGillivray's (*Oporornis tolmiei*)  
 -, Magnolia (*Dendroica magnolia*)  
 -, Marsh (*Acrocephalus palustris*)  
 -, Mourning (*Oporornis philadelphia*)  
 -, Nashville (*Vermivora ruficapilla*)  
 -, Northern Parula (*Parula americana*)  
 -, Northern Yellowthroat (*Geothlypis trichas*)  
 -, Orange-crowned (*Vermivora celata*)  
 -, Paddyfield (*Acrocephalus agricola*)  
 -, Pallas's (*Phylloscopus proregulus*)  
 -, Palm (*Dendroica palmarum*)  
 -, Pine (*D. pinus*)  
 -, Prairie (*D. discolor*)  
 -, Prothonotary (*Protonotaria citrea*)  
 -, Reed (*Acrocephalus scirpaceus*)  
 -, Rufous (*Cercotrichas galactotes*)  
 -, Sedge (*Acrocephalus schoenobaenus*)  
 -, Southern Great Reed (*A. stentoreus*)  
 -, Sutton's (*Dendroica potomac*)  
 -, Swainson's (*Limnothlypis swainsonii*)  
 -, Tennessee (*Vermivora peregrina*)  
 -, Willow (*Phylloscopus trochilus*)  
 -, Wilson's (*Wilsonia pusilla*)  
 -, Wood (*Phylloscopus sibilatrix*)  
 -, Worm-eating (*Helminthos vermivorus*)  
 -, Yellow (*Dendroica petechia*)  
 -, Yellow-rumped (*D. coronata*)  
 -, Yellowthroated (*D. dominica*)  
 Ward, P. (see Weller, M.W.)  
 Wareborn, I. Winter biol. of Swedish Blackbirds. 29:197(r)  
 Warga, K. Nests of ten spp. in same tree. 27:141(r)  
 --- XVIth report on bird banding in Hungary 27:185(r)  
 Warham, J. Tech. of phot. birds. 28:249(r)  
 --- Phot. studies of Little Shearwater. 30:128(r)
- Warham, J. (cont.)  
 --- Nesting of Aust. Gannet. 30:244(r)  
 Warren, E.F. Fledging of a brood of Ravens. 26:167(r)  
 Wasserfall, W.J. (see Woodford, J.)  
 "Waterbirds"  
 band. - see Banding Reports  
 migr., diurnal 30:186(r)  
 plant foods of 23:51(r)  
 Waterfowl (Anatidae)  
 Waterhen, = Moorhen (*Gallinula chloropus*)  
 Waterthrush, Louisiana (*Seiurus motacilla*)  
 -, Northern (*S. noveboracensis*)  
 Watson, A. Behav., breeding & food ecol. of Snowy Owl. 29:250(r)  
 Watson, J.S. Recovery of ringed Harriers. 26:165(r)  
 Watt, R.H. (see Ruttledge, R.F.)  
 Waxbill, Blue-breasted (*Uraeginthus angolensis*)  
 -, Grey (*Estrilda troglodytes*)  
 -, Little Ruddy, = Rosy Fire-Finch (*Lagonosticta senegala*)  
 -, Orange-cheeked (*Estrilda melpada*)  
 Waxwings (*Bombycillidae*)  
 -, Bohemian (*Bombycilla garrulus*)  
 -, Cedar (*B. cedrorum*)  
 -, Japanese (*B. japonica*)  
 Wayne, P. Starlings flying at night 31:227(r)  
 --- & G.F. Jolly. Breeding of Iceland Gyrfalcon. 30:52(r)  
 Weavers (*Ploceidae*)  
 -, Cape (*Ploceus capensis*)  
 - Pink-billed (*Quelea quelea*)  
 Weaverbird, Black-headed (*Textor cucullatus*)  
 Webb, J.S. & D.K. Wetherbee. South-eastern breeding range of Brown-headed Cowbird. 31:83  
 Webbe, D. (see Pennyquick, C.J.)  
 Webbe, R. On Spitzbergen & migrating Pink-footed Geese. 30:126(r)  
 Webber, B. Tree Sparrow hung by nest material. 28:237(r)  
 Weber, H. Trapping equipment at Serrahn Sanctuary. 26:163(r)  
 Webster, C.G. (see Robbins, C.S.)  
 Webster, J.D. & R. Orr. Var. in Great Horned Owls of middle Am. 30:61(r)  
 Weeden, R.B. (see Westfall, C.Z.)



- Weglau, I. (see Marz,R.)  
 Wehr, E.E. (see Herman, C.M.)  
 --- & C.M.Herman. Age as a factor in acquisition of parasites by Canada Geese. 26:166(r)  
 Weidmann, U. Behav. of Mallard: fixed patterns 28:238(r); release & imprinting of following & flocking, 30:129(r)
- WEIGHT
- as sexing criterion, Starling 22:17  
 cyclic changes in liver & spleen of  
 White-throated Sparrow 24:113(r)  
 - - in liver, spleen, testis, & body of White-crowned Sparrow 27:201(r)  
 decrease, in lead poisoning of ducks 22:185(r)  
 geogr. var., game spp. 22:136(r)  
 heart, many spp. 27:45(r)  
 internal organs, Starling 26:37(r)  
 of:  
 airport kills, many spp. 30:51(r)  
 Blackgame 30:57(r)  
 Brambling, seasonal var. 29:61(r)  
 Buntings, N. Am., winter 31:1  
 Capercaillie 30:57(r)  
 Chat, Yellow-breasted 29:178  
 Chickadee, Black-capped 30:196(r)  
 Czech. birds 25:160(r)  
 Dove, Mourning 22:198(r)  
 -, -, at hatching 22:198(r)  
 Duck, Tufted, postembryonic growth 25:78(r)  
 Ducks, many spp. 26:37(r)  
 eggs of:  
 Merganser, Red-breasted 28:102(r)  
 Nightjar, Eur. 29:54(r)  
 Penguin, Yellow-eyed 29:264(r)  
 Starling 25:156(r)  
 -, Grey 30:52(r)  
 Titmice 22:88(r)  
 Fair Isle birds banded 23:172(r)  
 Finch, Gray-crowned Rosy 24:141  
 -, Purple, winter 27:45(r)  
 Flycatcher, Pied 26:126(r)  
 game birds 24:167(r)  
 Grosbeak, Evening 24:140  
 Grouse, Blue 29:127(r)  
 Honeycreepers, Hawaiian 25:123(r)  
 Hungarian birds, many spp. 27:148(r)  
 Jamaican birds, many spp. 27:174  
 NY. birds, many spp. 26:19
- Nightjar, Eur., young 29:54(r)  
 Owl, Barn, subspp. 22:85  
 Penguin, Emperor 25:119(r); 30:246(r)  
 -, Spectacled, young 24:166(r)  
 Pipit, Water 29:52(r)  
 Plover, Little Ringed 28:105(r)  
 Poor-will, hibernating 22:85(r)  
 Ptarmigan, Rock 29:259(r)  
 Quail, Bobwhite 28:222  
 -, California 27:191(r)  
 -, -, in N.Z. 30:203  
 Skokholm birds, many spp. 28:108(r)  
 Sparrow, Chipping & Field, nestlings 29:125(r)  
 -, House 29:64(r)  
 -, -, seasonal var. 29:61(r)  
 -, White-throated, winter 22:85(r)  
 Starling, post-hatching 22:132(r)  
 -, sex differences 22:17  
 Sugarbird, Cape, dev. of young 31:228(r)  
 Surinam birds 22:85(r); 24:130(r)  
 Swallow, Bank 28:233(r)  
 -, Barn 25:78(r); 27:152(r)  
 -, Tree 25:35, 102, 136  
 Swift, nestling 23:83(r)  
 -, fasting 22:39(r)  
 -, Chimney 23:157; 29:98  
 Titmice, nestling 22:88(r)  
 Titmouse, Tufted 28:143  
 Towhee, Rufous-sided 29:259(r)  
 Warblers, Wood, many spp. 29:109  
 Wheatear 28:130; 30:49(r)  
 Woodcock, Am. 27:195(r)  
 recording without capture, Titmice 24:156(r)  
 relation to age & sex, Gray Lag & Pink-footed Geese 27:95(r)  
 - - age, sex & diurnal rhythm, Redwinged Blackbird 26:19  
 - - age, sex, & season. Bobwhite Quail 28:225  
 - - clutch & brood size & survival of Tree Swallow 25:35  
 - - diet & photoperiod, White-throated Sparrow 28:177(r)  
 - - light-dark cycles, Bobwhite Quail 29:125(r)  
 - - - - , White-throated Sparrow 25:77(r)  
 - - migr., White-throated Sparrow 26:122(r)

- WEIGHT (cont.)  
 relation to (cont.)
- - migr, before & after, of Song & Tree Sparrows 31:95(r)
  - - molt, Wheatear 28:130
  - - sex identification, Starling 22:17
  - - starvation of migrants 30:126(r)
  - - temp. 22:38(r)
  - var., daily & seasonal 26:22;27:16
  - , eggs of Grey Starling 30:52(r)
  - , geogr., game spp. 22:136(r)
  - , seasonal, Brambling & House Sparrow 29:61(r)
- Weinzierl, H. Mixed broods of Great & Blue Tits, 29:196(r)
- Weitnauer, E. Does the Swift spend the night in the air? 25:122(r); 26:35(r); 28:172(r)
- 17-yr. old Swift. 26:168(r)
  - & D. Lack. Breeding biol. of the Swift in Oltingen & Oxford. 28:47(r)
- Weka (*Gallirallus australis*)
- Wellein, E.G. (see Petraborg, W.H.)
- Weller, M.W. (see Elder, W.H.)
- Field candler for waterfowl eggs 27:195(r)
  - Incub. behav. of a Common Night-hawk. 30:54(r)
  - & P.Ward. Migr. & mort. of hand-reared Redheads 31:165(r)
- Wenlan, V. Pop. studies on Hawks. 25:21(r); 25:154(r)
- Wendt, R.F. (see Dorney, R.S.; Hale, J.B.)
- West, D.A. (see Sibley, C.G.)
- Westerhagen, W. von. Migr. association of raptors. 28:165(r)
- Westerskov, K. Pheasant banding in N.Z. 25:75(r)
- Post-juv. molt & first winter plumage in Pheasant. 27:46(r)
  - Age detn. & dating nesting events in Willow Ptarmigan. 28:168(r)
  - Tax. status of Bobwhite Quail in N.Z. 28:244(r)
  - Tax., distr. & habitat utilization of N.Z. Pheasants. 29:123(r)
  - Pheasant mgt. & shooting in N.Z. 29:123(r)
  - Value of reneesting in game birds 29:199(r)
  - Incub. period of Pheasant. 29:250(r)
- Productivity of N.Z. Pheasant pop. 29:254(r)
  - Social behav. of Pheasants. 30:56(r)
  - Nesting habitat of Royal Albatross on Campbell Is. 31:53(r)
- Westermann, J.H. Nature preservation in Caribbean. 25:165(r)
- Westfall, C.Z. & R.B. Weeden. Plastic neck markers for Woodcock. 27:188(r)
- Wetherbee, D.K. (see Coil, W.H.; Webb, J.S.)
- Natal plumages & downy pteryloses of passerine birds of N. Am. 29:126(r), 232
- Wetherbee, O.P. Am. Goldfinch & Canary cross. 24:161(r)
- Wetmore, A. Revised classification for birds of world. 23:91(r)
- Wharton, G.W. (see Baker, E.W.)
- Wharton, W.P. Recoveries of birds banded at Groton, MA., 1932-1950. 24:1
- Wheatear (*Oenanthe oenanthe*)
- Wheeler, W.R. (see Carrick, R.)
- Whimbrel (*Numenius phaeopus*)
- Whinchat (*Saxicola rubetra*)
- Whip-poor-will (*Caprimulgus vociferus*)
- Whitaker, L. A resume of anting, with particular reference to a captive Orchard Oriole. 29:119(r)
- White, E. (see Coulsen, J.C.)
- White, H.C. Eastern Belted Kingfisher in Maritime Provinces. 25:80(r)
- White-eyes, Cape (*Zosterops pallida*)
- , Japanese (*Z. japonica*)
- Whitehouse, H.L.K. & E.A. Armstrong. Rhythms in breeding behav. of Eur. Wren. 25:69(r)
- Whitethroat (*Sylvia communis*)
- , Lesser (*S. curruca*)
- Whittles, L.J. (see Dennis, J.V.)
- Whyte, W.H. Jr. Securing open space for urban Am.: conservation easements. 31:169(r)
- Widgeon, Am., = Baldpate (*Anas americana*)
- , Eur. (*A. penelope*)
- Widow-birds (*Viduinæ*)
- Wight, H.M. Field tech. for bursal inspection of Mourning Doves. 27:148(r)
- Wikerhauser, T. (see Zukovic, M.)

- Wikstrom, D. Hunting of seafowl in n. countries 23:181(r)
- Wildhagen, A. (see Martinsen, M.)
- Wiley, F.A. Selections from writings of John Burroughs. 23:53(r)
- Wilkinson, D.A. Hirundines following tractor & taking moths. 23:39(r)
- Wilkinson, D.H. The random element in bird navig. 25:20(r)
- Willet (Catatrophorus semipalmatus)
- Williams, A.B. Birds of Cleveland region. 22:144(r)
- Williams, G.G. Weather & spring migr. 22:37(r)
- Nature & causes of the "coastal hiatus". 22:182(r)
- Birds on the Gulf of Mex. 24:111(r)
- Williams, G.R. Notornis in March, 1951 24:23(r)
- California Quail in N.Z. 24:121(r)
- Changes in sex ratio occurring with age in young California Quail in central Otago, N.Z. 28:145
- The Kakapo: reappraisal of a near-extinct species. 28:243(r)
- Pop. dynamics of the Takahe. 29:190(r)
- Aging, growth-rate & breeding season phenology of California Quail in N.Z. 30:203
- & K.H. Miers. Five-yr. band. study of the Takahe. 30:48(r)
- Williams, J. Fall of the Sparrow. 23:49(r)
- Williams, L. Breeding behav. of Brewer Blackbird. 23:172(r)
- Williams, M.C. Birds in relation to arthropod-borne zoonoses. 29:200(r)
- Williamson, K. (see Lack, D.)
- Fair Isle Observatory Trust, Ann reports. 23:172(r); 29:50(r)
- Migr. drift in Engl. in autumn. 24:72(r); 25:116(r); 31:161(r)
- Flocking behav. of Oystercatchers. 24:163(r)
- Am. vagrants on Fair Isle. 25:115(r)
- Fair Isle apparatus for collecting ectoparasites. 26:36(r)
- Migr. of Iceland Merlin 26:123(r)
- Incub. rhythm of Fulmar 26:168(r)
- Fledging of a group of young Fulmars. 26:168(r)
- Synopsis of 1953 Crossbill irruption. 27:90(r)
- Autumn immigration of Greenland Redpoll into Scotland. 27:189(r)
- Post-nuptial molt in Wheatear 28:129
- Mist-nets vs. Helgoland traps. 28:213.
- Longevity in local passerines. 29:52(r)
- Bergmann's Rule & obligatory overseas migr. 30:49(r)
- Pop. & breeding environment of St. Kilda & Fair Isle Wrens. 30:133(r)
- Autumn immigration of Turdus musicus into Fair Isle. 30:188(r)
- Changes of mating in a colony of Arctic Skuas. 31:98(r)
- & P. Davis. Autumn 1953 invasion of Lapland Buntings & its source. 27:133(r)
- & N.F. Petersen a Botni. Bird migr. at Faeroe Is in 1949 with comparative notes from Fair Isle. 23:78(r)
- Willis, Y.L. (see Scott, T.G.)
- Wilman, B. Results from band. of Herring & Great Black-backed Gulls in Nor. 22:129(r)
- Wilson, N., E.J. & F.W. Preston. The gloss of eggs. 30:192(r)
- Wilson, V.T. (see Akker, J.B. van den)
- Wilsonia canadensis (Canada Warbler) band. - see Banding Reports band size 29:93
- circum-gulf (of Mex.) migr. route 29:45(r)
- descr., newly hatched 27:126
- wts. & meas. 29:109
- citrina (Hooded Warbler) band. - see Banding Reports band size 29:93
- song, recording of 29:261(r)
- wts. & meas. 29:109
- pusilla (Wilson's Warbler) band size 29:93
- circum-gulf (of Mex.) migr. route 29:45(r)
- wts. & meas. 29:109
- Wing, L.W. Counts of bird pop. in coniferous forests near limit of trees. 22:189(r)
- Practice of wildlife cons. 22:194(r)
- Natural hist. of birds. 29:68(r)

- Winge, A. Mute Swans in Scania, Sweden  
30:248(r)
- Wingstrand, K.G. Structure & dev. of  
avian pituitary from comparative &  
functional viewpoints. 25:172(r)
- Redwing breeding at Lake Hornborg  
Vastergotland. 28:181(r)
- Winston, F.A. Status, movement & mgt.  
of Mourning Doves in FL. 26:84(r)
- Color marking of waterfowl.  
27:34(r)
- Winterbottom, J.M. Mixed bird parties  
in the tropics: n. Rhodesia.  
22:41(r), 187(r)
- Breeding of South Afr. Hoopoe.  
24:114(r)
- Incub. period of Cape White-eyes.  
27:38(r)
- Wodzicki, K.A. (see Fleming, C.A.)
- & P. Stein. Migr. & dispersal of  
N.Z. Gannets. 30:241(r)
- Wolf, K. Effects of fluctuating &  
falling water levels on waterfowl  
production. 26:129(r)
- Wolfarth, F.P. (see Bagg, A.M.)
- Wolff, G. Nesting activity of Hedge  
Sparrow. 29:118(r)
- Wolfson, A. Cloacal protruberance -  
determining breeding condition in  
live ♂ passerines. 23:159
- Body wt. & fat deposition in  
captive White-throated Sparrows in  
relation to mechanics of migr.  
26:122(r)
- Day length, migr. & breeding  
cycles in birds. 25:77(r)
- Gonadal & fat response to a 5:1  
ratio of light to darkness in the  
White-throated Sparrow. 25:77(r)
- Wolters, H.E. Classification of  
Weaver Finches. 29:205(r)
- Wood, H.B. Homing ability of female  
Cowbirds. 24:26(r)
- Wood, M. Birds of State College, PA.  
24:84(r)
- Improved drying form for bird  
study skins. 28:156
- Wood, N.A. Birds of MI. 23:94(r)
- Woodbury, A.M. & H.Knight. Results of  
Pacific Gull color-band. project.  
23:31(r)
- Woodcock, Am. (*Philohela minor*)  
-, Eurasian (*Scolopax rusticola*)  
Woodcreeper, = Woodhewer  
(*Dendrocolaptidae*)
- Woodford, J. Use of mist-nets &  
Helgoland trap at Point Pelee.  
30:38
- & F.T.Lovesy. Wts. & meas. of  
Wood Warblers at Pelee Is. 29:109
- & W.J.Wasserfall. Point Pelee  
Bird Band. Station, 1954-'57.  
31:160(r)
- Woodgerd, W. Food habits of Golden  
Eagle. 24:113(r)
- Wood-Gush, D.G.M. Behav. of domestic  
chicken: a review. 27:141(r)
- Woodlark (*Lullula arborea*)
- Woodpeckers (*Picidae*)
- Arctic Three-toed (*Picoides*  
*arcticus*)
- Black (*Dryocopus martius*)
- Black-backed (= Arctic 3-toed)
- Blood-colored (*Venilornis*  
*sanguinensis*)
- Cardinal (*Dendropicos fuscescens*)
- Downy (*Dendrocopos pubescens*)
- Gray-headed (*Picus canus*)
- Great Spotted (*Dendrocopos major*)
- Green (*Picus viridus*)
- Hairy (*Dendrocopos villosus*)
- Ivory-billed (*Campephilus*  
*principalis*)
- Lesser Spotted (*Dendrocopos minor*)
- Pied (*D. spp.*)
- Pileated (*Dryocopus pileatus*)
- Red-bellied (*Centurus carolinus*)
- , West Indian (*C. superciliosus*)
- Red-cockaded (*Dendrocopos borealis*)
- Red-headed (*Melanerpes*  
*erythrocephalus*)
- White-backed (*Dendrocopos leucotos*)
- Woolfenden, G.E. Comparative breed-  
ing behav. of *Ammospiza caudacuta*  
& *A. maritima*. 29:52(r)
- Woon, E.B. (see Mewaldt, R.)
- Wooten, W.A. A trapping tech. for  
Band-tailed Pigeons. 27:86(r)
- Worth, C.B. Pox virus of Slate-  
colored Junco. 28:54(r)
- , V. Hamparian & G. Raki.  
Serological survey of ornithosis  
in bird banders. 28:92
- Wrens (*Troglodytidae*)
- Australian (*Malurus spp.*)
- Bewick's (*Thryomanes bewickii*)
- Colour-ringed Blue (*Malurus*  
*cyaneus*)
- Carolina (*Thryothorus ludovicianus*)
- Fair Isle (= Winter)

- Wrens (cont.)  
   Hebridean (= Winter)  
   House (Troglodytes aedon)  
   Long-billed Marsh (Telmatodytes palustris)  
   St. Kilda (= Winter)  
   Short-billed Marsh (Cistothorus platensis)  
   Willow (= Greenish Warbler)  
   Winter (Troglodytes troglodytes)  
 Wren tit (Chamaea fasciata)  
 Wright, B.S. Relation of Bald Eagles to breeding ducks in New Brunswick. 24:165(r)  
 Wryneck (Jynx torquilla)  
 Wulff, V.G. (see Prosser, C.L.)  
 Wynn, A.H.A. (see Maguire, B.A.)
- Yamagiwa, T. Taming of Whooper Swan at Lake Hyoko, Suibara, Niigata Prefecture. 27:196(r)  
 Yamamoto, M. Rediscovery of Steller's Albatross of Toroshima. 26:86(r)  
 Yamashina, Y. Classification of Anatidae based on cytogenetics. 24:126(r)  
 Yapp, W.B. Two physiol. considerations in bird migr. 28:163(r)  
 Yeatter, R.E. (see Shelford, V.E.)  
 Yellowhammer, = Yellow Bunting (Emberiza citrinella)  
 Yellowlegs, Greater (Tringa melanoleucus)  
 -, Lesser (T. flavipes)  
 Yellowthroat, Common (Geothlypis trichas)  
 Yelverton, C.S. & T.L. Quay. Food habit of Canada Goose in NC. 31:55(r)  
 Yocum, C.F. Waterfowl & their food plants in WA. 23:188(r)  
 --- Tech. to increase nesting of Canada Geese. 24:120(r)  
 --- & S.W. Harris. Food habits of Mountain Quail in WA. 24:159(r)  
 Yoskii, M. (see McClure, H.E.)  
 Young, H. Terr. behav. of Eastern Robin. 23:85(r)  
 --- Breeding behav. & nesting of Eastern Robin 27:93(r)  
 --- Cardinal repeat data. 29:219  
 Ytreberg, N. Black-headed Gull in Nor. Nest, eggs & incub. 29:55(r)  
 YUGOSLAVIA (see Europe-)
- Xanthocephalus xanthocephalus  
   (Yellow-headed Blackbird)  
   band. - see Banding Reports  
 Xema sabini (= Larus sabini)

- Zahavi, A. Breeding birds of Huleh Swamp & Lake, N. Israel. 29:258(r)
- Zarhynchus wagleri (Chestnut-headed Oropendola)  
nestling period 26:79(r)
- Zedler, W. Starling flocks & birds of prey. 31:103(r)
- Zenaida spp.  
syst., includes Zenaidura, Melopelia & Nesopelia 30:198(r)
- asiatica (White-winged Dove)  
band size 29:91  
wt. 27:175
  - galapagoensis (Galapagos Dove)  
breeding season in Galapagos. 22:87(r)
  - macroura (Mourning Dove)  
ageing by bursal examination 27:36(r)  
-, by feather molt 27:95(r)  
attacked in trap by raptors 22:179  
band. - see Banding Reports  
band size 27:77; 29:91  
breeding density in GA. 28:241(r)  
censuses, by call counts 25:74(r)  
-, methods 24:80(r)  
-, var. among participants 30:194(r)  
distr., migr. & subsp. 29:257(r)  
egg tooth 30:120  
food, in MO. 30:199(r)  
frequency in roadside census 29:171  
in Nova Scotia 23:73  
investigations, SC. 29:122(r)  
L.H. & productivity 24:159(r)  
mgt. 26:84(r); 27:43(r)  
mort. rates 24:27(r)  
nest, in use 2 yrs. 24:16  
-, - - 9 yrs. 22:126  
nesting on ground 30:194(r)  
nesting study 22:149, 197(r)  
nesting success 23:55  
nets, mist, for 30:184(r)  
origins of migrants in FL. 24:112(r)  
pop. in NC. 26:83(r)  
- dynamics 22:149  
- ecol. 24:165(r)  
productivity in ID. orchards 31:165(r)  
- in ND. 23:184(r); 26:130(r)  
recorded in S. Am. 29:42  
respiratory rate 29:39  
tech. for age & sex detn. 23:34(r)  
- - bleeding 26:36(r)  
- - bursal examination 27:148(r)
- - nestling banding 23:28
  - - trapping 22:174; 23:114(r); 25:6
  - - -, using collapsible trap 22:109
  - toxicity, insecticides 26:128(r)
  - Trichomoniasis in 23:186(r); 24:11
  - , possible spread of to raptors 31:220
- Zenaidura (= Zenaida)
- Zijlstra, J.J. (see Perdeck, A.C.)
- Zim, H.S. (see Martin, A.C.)
- Zimmerman, D.A. & J. VanTyne. Distr. check-list of MI. birds. 31:57(r)
- Zimmerman, D. Reproductive biol. of Jackdaw. 23:119(r)
- Zink, G. Determining age of birds at banding time. 28:43(r)
- Study of marked pop. of Great Tits at Moggingen-Radolfzell. 31:48(r)
- Zonotrichia spp. (Crowned Sparrows)
- albicollis (White-throated Sparrow)  
alarm calls 30:232  
band. - see Banding Reports  
band size 25:15  
cross Atlantic on ship 30:126(r)  
fat & migr. 23:117(r); 29:105  
fat & wt. 26:122(r)  
incub. patch, anat. & physiol. 24:124(r)  
migr. rate 24:8  
migr. sampling by trapping 27:107  
photoperiod, fat, gonad & water relations 22:39(r); 25:77(r), 167(r); 28:177(r)  
plumages 25:60, 148 ; 28:160  
pop. & survival 23:30(r)  
respiratory rates 29:39  
sexing by cloacal protruberance 23:162  
winter dates in MD. 30:121  
wt. in migr. & in winter 22:85(r)  
- of liver & spleen, cyclic changes 24:113(r)  
-, sex, age & daily 26:19
  - atricapilla (Golden-crowned Sparrow)  
band. - see Banding Reports  
refractory period 25:167(r)  
specimen with white throat 29:260(r)
  - capensis (Rufous-collared Sparrow)  
parasitism by Shiny Cowbird 30:190(r)  
reproduction near equator 30:129(r)

- Zonotrichia (cont.)
- coronata (= *Z. atricapilla*)
  - gambellii (= *Z. leucophrys*)
  - leucophrys (White-crowned Sparrow)
    - band. - see Banding Reports
    - band size 29:93
    - collapsible trap for 22:107
    - ecol. & syst. 24:169(r)
    - gonad increase inhibited by prolactin 23:33(r)
    - liver & spleen wt. 27:201(r)
    - pop. & survival 23:30(r)
    - refractory period, termination of 28:53(r)
    - reproductive cycle, histol., behav. & physiol. 22:98(r)
    - sex, age & daily wts. 26:19
    - winter habitat preferences 31:106(r)
    - zugunruhe orientation 31:160(r)
  - nigrilora (= *Z. leucophrys*)
  - querula (Harris' Sparrow)
    - band. - see Banding Reports
    - descr. of nestlings 24:169(r)
- ZOOGEOGRAPHY (see also under geographic areas; Distribution; Evolution Invasions; Migration; Paleontology; Recoveries & Returns; Systematics)
- distr., breeding, of N. Am. migrants to neotropics. 31:104(r)
  - , geogr., of White Stork 22:145(r)
  - , historical, of Bullfinches 22:93(r)
  - , relation to metabolism, *Carpodacus* finches. 24:121(r)
  - Life Zones in Mex. 23:52(r), 98(r)
  - of birds of:
    - AR., in book 22:198(r)
    - Belgium 22:145(r)
    - Eur., northern, ranges & climate 22:92(r)
    - Faeroe Is., Rock Ptarmigan introduction in 22:192(r)
    - Grnl., in book 22:42(r), 192(r)
    - Hawaiian Is., in monogr. 22:191(r)
    - Serbia 22:43(r)
  - of guano deposits, in book 22:192(r)
  - origins of arctic avifauna 30:131(r)
  - - Dowitchers in N. Am. 22:96(r)
  - - Swiss pops of Blue-headed Wagtail 28:178(r)
  - - West Indian avifauna 22:93(r)
  - post-glacial, of Jackdaw 22:135(r)
- Zoos, animals of, book 22:45(r)
- Zosteropidae (White-eyes)
- incub. period 25:65(r)
- Zosterops sp.
- competitor of *Drepanis* 25:123(r)
  - japonica (Japanese White-eye)
    - extinction of Toroshima 27:196(r)
  - lateralis (Silvereye)
    - band. - see Banding Reports
  - pallida (Cape White-eye)
    - incub. period 27:38(r)
- Zsak, Z. (see Vertse, A.)
- Zugunruhe (see Behavior-)
- Zukovic, M. & T. Wikerhauser. Ectoparasitic fauna of birds from Croatia. 28:176(r)
- Zumpt, F. Ticks of sea birds. 24:123(r)