

INDEX TO VOLUME 83

Compiled by Marion Anne Jenkinson

This index is primarily one to new information. Previously published information, which has been referred to in this volume, has not been indexed unless extensive comparisons or reinterpretations were involved. Also not included are the many avian species given (pp. 426-431) as prey items for accipiters and the various birds mentioned (pp. 457-467) in the Report of the Committee on Bird Protection. For some species, especially ones not in the A.O.U. Check-list area, scientific names only have been entered. New generic, specific, and subspecific names are printed in **bold-face** type.

- Accipiter
 cooperii, 308, 423-436
 gentilis, 137
 g. atricapillus, 423-436
 g. gentilis, 425, 430-432
 nisus, 430-432
 striatus velox, 423-436
- Aegolius *acadicus acadicus*, 133-134
- Aethia
 crystalata, 680
 pusilla, 680
- Agelaius
 phoeniceus, 313-314, 480-481, 540
 p. arctolegus, 314
- Aimophila *cassinii*, 129
- Aix *sponsa*, 303
- Alabama, 481
- Alaska, 130-135, 313-314, 349-351, 368-388, 517-533, 587-596, 603-615, 680
- Albatross (see also Hybrids),
 Black-footed, 111-116
 Laysan, 111-116, 670-673
- Alberta, 274-281
- Albinism, *Dendroica tigrina*, 667-668
- Alloctopterus *deliciosus*, 475-476, 479-480, see also 713
- Amadon, Dean, *Birds around the world. A geographical look at evolution and birds* (rev.), 491-492; see Murphy, Robert Cushman, and—
- American Ornithologists' Union,
 Brewster Memorial Award, 288-289
 Committees, 298-299
 Officers and officials, 298
 Proceedings of the Eighty-third Stated Meeting, 288-302
- Report of the Committee on Bird Protection, 457-467
 Treasurer's report, 299-302
- Ampelion, 3-9
 rubrocrystata, 4-6
- Anas
 discors, 389-402
 falcata, 134
 formosa, 130-131
 platyrhynchos, 233-239
 strepera, 664
- Anatomy (see also Anomalies and Osteology),
 bill, 10-51
 jaw muscles, 13-51
 recent literature on, 158, 329, 494
- Anomalies,
 Demigretta gularis, 481
 Dendroica tigrina, 667-668
- Anser *fabalis serrirostris*, 130
- Anthus
 cervinus, 135-136
 spinoletta, 135
- Aratinga
 astec, 66-83, 317
 canicularis, 317
 c. canicularis, 66-83
 c. eburnirostrum, 66-83
- Arboviruses,
 avian hosts, 84-97
 distribution of, 84-97
- Archilochus
 alexandri, 257-258, 262-263, see also Hybrids
 colubris, 138-139, 664
- Arizona, 258-265, 453-455

- Arkansas, 474
Arrival dates,
 Anas discors, 392
 Spizella pallida, 275
Artamus leucorhynchus, 7-8
Auklet,
 Crested, 680
 Least, 680
Aythya fuligula, 134

Banks, Richard C., see Hubbs, Carl L.,
 and—
Bartholomew, George A., see Smyth,
 Michael, and—
Bear, G., see Loveless, C. M., and—
Behavior (see also Vocalization),
 breeding, 138, 207-232, 368-369, 534-546
 cannibalism, 307, 433
 daily activity, 674-677
 drinking, 124-125, 126-128
 foraging, 471-472, 476, 479-480, 480-
 481
 many topics, 637-661
 sexual, 66-86, 98-110, 117-123, 262-
 263, 304-306, 534-546
 social, 66-83, 667-679
 territorial, 128-129, 534-546, 666
Behavior of (see also Vocalization),
 Agelaius phoeniceus, 480-481
 Alcotopterus deliciosus, 475-476
 Aratinga astec, 66-83
 A. c. canicularis, 66-83
 A. c. eburnirostrum, 66-83
 Biziura lobata, 98-110
 Buteo platypterus, 307
 Butorides virescens, 471-472
 Cochlearius cochlearius, 304-306
 Colius colius, 126-128
 C. indicus, 126-128
 C. striatus, 128
 doves and pigeons (many spp.), 117-
 123
 hummingbirds, 262-263
 Larus delawarensis, 677-679
 Leucophoyx thula, 471-472
 many species (reviewed), 637-661
 Melospiza georgiana, 666
 Molothrus ater, 207-232
 Oena capensis, 125
 Oxyura australis, 98-110
 O. jamaicensis, 106-110
 Pedioecetes phasianellus × *Tympanu-*
 chus cupido, 128-129
 Pterocles burchelli, 124-126
 P. namaqua, 124-126
 Spiza americana, 534-546
 Spizella arborea, 368-388
 Sterna sumatrana, 138
 Stigmatopelia senegalensis, 125
 Streptopelia capicola, 125
 Turdus migratorius, 674-677
Behavior, recent literature on, 158-160,
 329-331, 494-497, 692-693
Belanopterus chilensis, 309
Berger, Andrew J., Mid-winter nesting
 of the American Robin in western
 Pennsylvania, 668
Berger, Daniel D., see Mueller, Helmut
 C., and—
Bibliography of,
 Chapin, James Paul, 247-252
 Errington, Paul L., 58-65
 Gilliard, E. Thomas, 421-422
 recent Russian literature, 689-691
 Strong, Reuben Myron, 287
Biology, general, recent literature on, 165-
 168, 505-508, 700-703
Biziura lobata, 98-110
Blackbird, Red-winged, 313-314, 480-481,
 540
Blood proteins, *Procellariiformes*, 111-116
Bluebird, Eastern, 437-440
Bobwhite, 308
Bock, Walter J., An approach to the
 functional analysis of bill shape, 10-
 51
Bonasa umbellus, 437
Brachyramphus brevirostre, 349-351
Branta
 canadensis, 670
 canadensis subspp., 306-307
Breckenridge, W. J., Dovekie on Little
 Diomed Island, Alaska, 680
Breeding, general studies (most of which
 include information on Clutch size,
 Courtship, Eggs, Incubation, Nests,
 Nesting success, and Renesting, which
 entries also see for other species),
 Anas discors, 389-402
 Lophodytes cucullatus, 477-479
 Spiza americana, 534-546

- Spizella arborea*, 368-388
S. pallida, 274-281
Sturnus vulgaris, 623-636
 British Columbia, 185, 195-196
Brotogeris jugularis, 314-319
 Brown, Jerram L., The integration of agonistic behavior in the Steller's Jay, *Cyanocitta stelleri* (Gmelin) (rev.), 148-149
 Brown, Lauren E., and Harvey I. Fisher, Electrophoretic study of blood proteins of some procellariiform birds, 111-116
 Brush, Alan H., Avian heart size and cardiovascular performance, 266-273
Bubo virginianus, 308-309
Bubulcus ibis, 472
Bucephala
 albeola, 670
 clangula, 131, 310
 islandica, 131
 Bufflehead, 670
 Bullock, Dillman S., see Greer, J. Keever, and—
 Bunting, Indigo, 364
Buteo
 jamaicensis, 310
 lineatus, 310
 platypterus, 307
 ventralis, 308-309
Butorides virescens, 304-305, 471-472

 Cade, Tom J., Ernest J. Willoughby, and Gordon L. Maclean, Drinking behavior of sandgrouse in the Namib and Kalahari deserts, Africa, 124-126
 Cade, Tom J., and Lewis I. Greenwald, Drinking behavior of mousebirds in the Namib Desert, southern Africa, 126-128
 Cahalane, Victor H., see American Ornithologists' Union, Report of the Committee on Bird Protection
Calcarius
 lapponicus, 135
 ornatus, 135
 Caldwell, Larry D., see Schnell, Gary D., and—
Calidris
 alpina, 517-533
 bairdii, 521
 melanotos, 521
 pusilla, 521
 California, 135-136, 253-264, 517-533
Callipepla squamata, see Hybrids
Calypte costae, 257-258, 262-263, see also Hybrids
 Canaris, Albert G., Occurrence of *Collyriclum faba* (Trematoda) in a Varied Thrush with a note on a single bird's internal parasites, 139
 Cannibalism, 307, 432-433
Capito bourcierii, 479-480
Caprimulgus
 cayennensis, 470
 rufus, 470
 Caracara, Crested, 308-309
 Cardinal, 29-43, 309-311
Carpodacus purpureus, 352-360
Carpodectes, 2-9
 hopkei, 2
 nitidus, 4-6
 Carpornis, 3, 8
Casmerodius albus, 474
Centurus carolinus, 309-311
Cephalopterus, 2-9
 ornatus, 6
Certhia familiaris, 352-360
 Chabreck, Robert H., Molting Gadwall (*Anas strepera*) in Louisiana, 664
Chamaea fasciata, 381
 Chapin, James Paul, memorial to, 240-252
Charadrius vociferus, 678
 Chat, Yellow-breasted, 352-360, 643-644
 Chickadee, Black-capped, 309-311, 437
 Chile, 308-309
Chlorochrysa spp., 479
Chlorophanes spiza, 479-480
Chlorophonia cyanea, 479-480
Chordeiles
 acutipennis, 470
 minor, 469-470
 m. chapmani, 470
 m. henryi, 470
 m. minor, 470
 m. panamensis, 470
Ciconia (maltha?), 670
Circus
 cinereus, 308-309
 cyaneus, 471

- Clutch size (see also Breeding, general studies), *Aix sponsa*, 303
- Cochlearius cochlearius*, 304-306
- Cochran, Richard, see Hanebrink, Earl L., and—
- Coereba flaveola*, 479-480
- Colaptes auratus*, 437
- Colinus virginianus*, 308
- Colius*
colius, 126-128
indicus, 126-128
striatus, 128
- Collias, N. E., review by, 147-148
- Collins, V. Bruce, and Antoon de Vos, A
 nesting study of the Starling near
 Guelph, Ontario, 623-636
- Colombia, 475-476, 479-480
- Colorado, 128
- Columba
fasciata, 479-480
guinea, 117-123, 125
leuconota, 119
livia, 117-123
maculosa, 119
oenas, 117-123
palumbus, 117-123
picazuro, 117-123
trocax, 117-123
vitiensis, 119
- Columbidae, 124-126
- Columbigallina, 117
passerina, 454
- Columbina, 117
squamata, 117-123
- Competition, interspecific, 479-480
Empidonax hammondi and *E. difficilis*,
 194-195
E. hammondi and *E. minimus*, 195-196
- Conioptilon**, 2-9
meilhennyi, 2-9
- Connecticut, 473-474
- Conservation (see also Management),
 457-467
 recent literature on, 168-171, 340, 509-
 511, 703-704
- Coolidge, Herman W., obituary of Ivan
 Rexford Tomkins, 712
- Coot, European, 131-132
- Corvus brachyrhynchos*, 12-43, 137, 309-
 311
- Costa Rica, 669
- Cotinga, 1-9
cayana, 4-6
- Cotinga, 1-9
 Black-faced, 1-9
- Cotingidae, 1-9
- Cotinginae, 2-9
- Coturnix coturnix*, 271
- Courtship, see Breeding, general studies
- Cowbird, Brown-headed, 207-232, 277,
 279, 476-477, 539-541
- Creeper, Brown, 352-360
- Crow, Common, 12-43, 137, 309-311
- Curlew,
 Bristle-thighed, 135
 Far Eastern (= Australian), 132
- Currie, Mrs. Neill, Jr., see Hauser, Doris
 C., and—
- Cyanocitta cristata*, 309-311, 437
- Cynanthus latirostris*, see Hybrids
- Dane, Charles W., Some aspects of breed-
 ing biology of the Blue-winged Teal,
 389-402
- Delaware, 473-474
- Demigretta gularis*, 481
- Dendrocopos
pubescens, 309-311, 437
villosus, 437
- Dendroica
caerulescens, 352-360
castanea, 352-360, 680-682
coronata, 352-360
discolor, 352-360
magnolia, 352-360
palmarum, 352-360
pensylvanica, 352-360
petechia, 352-360
striata, 352-360
tigrina, 352-360, 667-668
virens, 352-360
- de Vos, Antoon, see Collins, V. Bruce,
 and—
- Dickcissel, 534-546
- Dickerman, Robert W., review by, 326-
 327
- Dimorphism, sexual,
Accipiter cooperii, 423-436
A. gentilis atricapillus, 423-436
A. striatus velox, 423-436

- Biziura lobata, 98–99, 109
 Empidonax hammondi, 189–192
 Falco a. albicularis, 433–434
 F. c. columbarius, 433–434
 F. mexicanus, 433–434
 F. peregrinus anatum, 433–434
 F. rusticolus obsoletus, 433–434
 F. sparverius paulus, 433–434
 F. sparverius sparverioides, 433–434
 F. s. sparverius, 433–434
 Diomedea
 immutabilis, 111–116, 670–673
 immutabilis × nigripes, 111, 112
 nigripes, 111–116
 Diomedeidae, 114–115
 Diseases and parasites (see also Arboviruses),
 Circus cyaneus, 471
 Ixoreus naevius, 139
 recent literature on, 160–161, 331–332, 497–498, 693–694
 Displays, see Behavior and Vocalizations
 Distribution and annotated lists, recent literature on, 161–163, 332–334, 498–500, 694–697
 Distributional records,
 Aegolius acadicus acadicus, 133–134
 Agelaius phoeniceus, 313–314
 Aimophila cassinii, 129
 Anas formosa, 130–131
 Anser fabalis serrirostris, 130
 Anthus cervinus, 135–136
 Chordeiles minor, 469–470
 Dendroica castanea, 680–682
 Elaenia martinica, 662–663
 Fulica atra atra, 131–132
 Gavia arctica pacifica, 130
 G. stellata, 130
 Larus minutus, 482
 Lophodytes cucullatus, 131
 Mareca americana, 131
 Mergellus albellus, 131
 Motacilla alba, 134
 M. cinerea robusta, 134
 Numenius madagascariensis, 132
 N. phaeopus variegatus, 132
 Pandion haliaetus, 131
 Philomachus pugnax, 473–474
 Plegadis falcinellus, 474
 Regulus satrapa amoenus, 134
 Scardafella inca, 669
 Stercorarius longicaudus, 673
 Sterna hirundo longipennis, 133
 Totanus erythropus, 133
 T. nebularia, 133
 Turdus obscurus, 134
 Tyrannus verticalis, 669
 Vireo vicinior, 303
 Doliornis, 8
 Dove,
 Ground, 454
 Inca, 441–456, 669
 Laughing, 127
 many species, 117–123
 Mourning, 271, 451–452, 454, 597–602
 White-winged, 441–456
 Dovekie, 680
 Dryocopus pileatus, 310
 Du Bois, Alexander Dawes, obituary, 712–713
 Du Bois, Charlotte, obituary of Alexander Dawes Du Bois, 712–713
 Duck,
 Blue-billed, 98–110
 Musk, 98–110
 Ruddy, 106–110
 Tufted, 134
 Wood, 303
 Ducula
 aenea, 117–123
 bicolor, 118–123
 Duncan, Stewart, An analysis of the stomach contents of some Cooper's Hawks (*Accipiter cooperii*), 308
 Dunlin, see Sandpiper, Red-backed

 Eagle, Bald, 309–311
 Ecology, recent literature on, 163–164, 334–337, 501–504, 697–700
 Eggs, description, weights, and measurements of (see also Breeding, general studies),
 artificial, 468–469
 Brachyramphus brevirostre, 349–351
 Chordeiles minor, 469–470
 Plegadis falcinellus, 474
 Vireo nanus, 476–477
 Egret,
 Cattle, 472
 Common, 474
 Snowy, 304, 471–472

- Eisenmann, Eugene, reviews by, 153-155,
155, 489-490, 490-491; see Olson,
Storrs L., and—
- Elaenia
flavogaster, 479-480, 662-663
martinica, 662-663
sp. (obscura?), 479-480
- Elaenia,
Caribbean, 662-663
Yellow-bellied, 662-663
- Elanus leucurus, 308-309
- Electrophoresis of blood proteins, Procel-
lariiformes, 111-116
- Embryology, recent literature on, 158,
329, 494
- Emlen, John T., Don E. Miller, Roger
M. Evans, and David H. Thompson,
Predator-induced parental neglect in
a Ring-billed Gull colony, 677-679
- Emlen, John T., see Emlen, Stephen T.,
and—
- Emlen, Stephen T., and John T. Emlen,
A technique for recording migratory
orientation of captive birds, 361-367
- Empidonax
d. difficilis, 194-195
hammondii, 179-200
minimus, 195-196
- Eremophila alpestris, 135
- Erolia
alpina, see *Calidris alpina*
bairdii, 135
minutilla, 135
- Errington, Paul Lester, memorial to, 52-
65, see also 516
- Ethology (see also Behavior),
review of, 637-661
- Etkin, William (ed.), Social behavior
and organization among vertebrates
(rev.), 147-148
- Eugenes
fulgens, 261-262, see also Hybrids
f. spectabilis, 261
- Epoda montana, 135
- Evans, Keith, Observations on a hybrid
between the Sharp-tailed Grouse and
the Greater Prairie Chicken, 128-129
- Evans, Roger M., see Emlen, John T.,
et al.
- Evolution and genetics, recent literature
on, 164-165, 337-340, 504-505, 700
- Falco
a. albigularis, 433-434
biarmicus feldeggii, 205
cherrug, 201-206
columbarius columbarius, 433-434
mexicanus, 201-206, 433-434
peregrinus, 201-206
p. anatum, 433-434
rusticolus, 201-206
r. obsoletus, 433-434
sparverius, 201-206, 308-309, 664
s. paulus, 433-434
sparverius sparverioides, 433-434
s. sparverius, 433-434
tinnunculus, 204-205
- Falcon,
Lanner, 201-206
Peregrine, 201-206, 433-434
Prairie, 201-206, 433-434
Saker, 201-206
White-throated (= Bat), 433-434
- Farrar, R. B., Jr., Lean dry weight and
water balance in Slate-colored Juncos,
616-622
- Feeding habits, see Food and—
- Ficken, Millicent S., review by, 148-149;
see Ficken, Robert W., and—
- Ficken, Robert W., and Millicent S.
Ficken, A review of some aspects of
avian field ethology, 637-661
- Finch,
bill shape, 29-43
Purple, 352-360
- Fisher, Harvey I., Aerial census of Laysan
Albatrosses breeding on Midway
Atoll in December, 1962, 670-673;
see Brown, Lauren E., and—
- Fisher, James, and Roger Tory Peterson,
The world of birds (rev.), 488-489
- Flicker, Yellow-shafted, 437
- Florida, 471-472
- Florida caerulea, 474
- Flycatcher,
Great Crested, 437
Hammond's, 179-200
Least, 195-196
Scissor-tailed, 669
Sulphur-bellied, 315
Western, 194-195

- Food and feeding habits of (see also
Predation by),
Accipiter cooperii, 308, 423-436
A. gentilis atricapillus, 423-436
A. striatus velox, 423-436
Agelaius phoeniceus, 480-481
Allocotopterus deliciosus, 476
Bubo virginianus, 308-309
Buteo ventralis, 308-309
Butorides virescens, 471-472
Circus cinereus, 308-309
Colius colius, 126-127
C. indicus, 126-127
Conioptilon mcilhennyi, 8
Elanus leucurus, 308-309
Falco sparverius, 308-309
Lagopus lagopus, 603-615
Lamprocolius nitens, 127
Leucophox thula, 471-472
numerous species, in Colombia, 479-480
numerous species, in Illinois, 309-311
Onychognathus naboroup, 127
Parabuteo unicinctus, 308-309
Phasianus colchicus karpowi, 311-313
Plegadis falcinellus, 474
Polyborus plancus, 308-309
Scardafella inca, 453-454
Stigmatopelia senegalensis, 127
Turdus migratorius, 674-677
Zenaida asiatica, 453-454
- Fossils,
and past numbers of avian species, 403-415
Branta canadensis, 670
Bucephala albeola, 670
cf. Ciconia maltha, 670
naming subspecies of, 306-307
Podiceps auritus, 670
- Franks, Edwin C., A simple technique for hollow metal egg construction, 468-469
- Friedmann, Herbert, In memoriam:
James Paul Chapin, 240-252
- Frisch, Johan Dalgas, Songs of Brazilian birds (recording) (rev.), 144; see Frisch, Svend, and—
- Frisch, Svend, and Johan Dalgas Frisch, Aves Brasileiras (rev.), 143
- Fulica atra atra, 131-132
- Gadwall, 664
- Gallicolumba
crinigera, 120
luzonica, 117-123
- Gauthreaux, Sidney A., Jr., see Palmisano, Angelo W., Jr., and—
- Gavia
arctica pacifica, 130
stellata, 130
- Genetics, see Evolution and—
- Geopelia
cuneata, 117-123
humeralis, 117-123
striata, 117-123
- Geophaps, 119
- Georgia, 140-141
- Geotrygon montana, 120
- Gilliard, E. Thomas, memorial to, 416-422
- Goldeneye,
Barrow's, 131
Common, 131, 310
- Goldfinch, American, 310
- Goodall, J. D., A. W. Johnson, and R. A. Philippi, 2° suplemento de las aves de Chile (rev.), 155
- Goodwin, Derek, The bowing display of pigeons in reference to phylogeny, 117-123
- Goose,
Bean, 130
Canada, 306-307, 670
- Goshawk, 137, 423-436
- Graber, Richard R., and Steven L. Wunderle, Telemetric observations of a Robin (*Turdus migratorius*), 674-677
- Grackle, Common, 674-677
- Grebe, Horned, 667
- Greenshank, 133
- Greenwald, Lewis I., see Cade, Tom J., and—
- Greer, J. Keever, and Dillman S. Bullock, Notes on stomach contents and weights of some Chilean birds of prey, 308-309
- Grosbeak,
Evening, 34-36
Rose-breasted, 30, 352-360

- Grouse,
 Ruffed, 437
 Sharp-tailed, see Hybrids
Grube, George E., Introductory ornithology (rev.), 686-688
Gull,
 Bonaparte's, 482
 Franklin's, 482
 Herring, 309-311
 Little, 482
 Ring-billed, 309-311, 677-679
Gymnoderinae, 2-9
Gymnoderus, 2-9
 foetidus, 6-7
Gyr Falcon, 201-206, 433-434

Habia cristata, 479-480
Haematoderus militaris, 6
Haliaeetus leucocephalus, 309-311
Handley, Charles O., Jr., reviews by, 143-144
Hanebrink, Earl L., and Richard Cochran, An inland nesting record for the Glossy Ibis, *Plegadis falcinellus*, in Arkansas, 474
Hanson, Harold C., The giant Canada Goose (rev.), 684
Hardy, John William, Physical and behavioral factors in sociality and evolution of certain parrots (*Aratinga*), 66-83
Harrier, Cinereous, 308-309
Hauser, Doris C., and Mrs. Neill Currie, Jr., Hummingbird survives through December in North Carolina, 138-139
Hawk,
 Broad-winged, 307
 Cooper's, 308, 423-436
 European Sparrow, 430
 Harris', 308-309
 Marsh, 471
 Pigeon, 433-434
 Red-shouldered, 310
 Red-tailed, 310
 Rufous-tailed, 308-309
 Sharp-shinned, 423-436
 Sparrow, 201-206, 308-309, 433-434, 664
Heart size and performance, 266-273
Heimerdinger, Mary A., reviews by, 149-150, 493
Heintzelman, Donald S., Cannibalism at a Broad-winged Hawk nest, 307
Heron,
 Black-crowned Night, 304-305
 Boat-billed, 304-306
 Green, 304-305, 471-472
 Little Blue, 474
 Reef, 481
Hesperiphona vespertina, 34-36
Hines, John Q., see Thompson, Max C., *et al.*
Holmes, Richard T., Molt cycle of the Red-backed Sandpiper (*Calidris alpina*) in western North America, 517-533
Hormones,
 Lagopus mutus, 594
 Molothrus ater, 207-232
Howell, Thomas R., Precise location of Leicus Creek, Nicaragua, as a type locality, 665
Hubbard, John P., A possible back-cross hybrid involving Scaled and Gambel's quail, 136-137
Hubbs, Carl L., and Richard C. Banks, Wandering onto the eastern Pacific Ocean of an eastern North American land bird, the Bay-breasted Warbler, 680-682
Hummingbird (see also Hybrids),
 Black-chinned, 257-258, 262-263
 Broad-billed, 261-262
 Costa's, 257-258, 262-263
 Rivoli's, 261-262
 Ruby-throated, 138-139, 262-265, 664
Hybrids and hybridization,
 Calypte costae × *Archilochus alexandri*, 253-265
 Diomedea immutabilis × *D. nigripes*, 111, 112
 Eugenes fulgens × *Cyananthus latirostris*, 253-265
 hummingbirds, 253-265
 Junco o. oregonus × *J. hyemalis cismontanus*, 134
 Lophortyx gambelii × *Callipepla squamata*, 136-137
 Pediocetes phasianellus jamesi × *Tympanuchus cupido pinnatus*, 128-129
 parrots, 80-81

- Hyalocichla*
fuscescens, 352-360
guttata, 352-360, 437
minima, 352-360
ustulata, 352-360
- Ibis, Glossy, 474
- Icteria virens*, 352-360, 643-644
- Icterus galbula*, 437-440
- Illinois, 309-311
- Incubation, see Breeding, general studies
- Iodopleura*, 7
- Ixoreus naevius*, 139
- Jaeger, Long-tailed, 673
- Jay, Blue, 309-311, 437
- Jehl, Joseph R., Jr., Subspecies of Recent and fossil birds, 306-307; Fossil birds from the Sand Draw local fauna (Aftonian) of Brown County, Nebraska, 669-670
- Johnsgard, Paul A., Behavior of the Australian Musk Duck and Blue-billed Duck, 98-110
- Johnson, A. W., The birds of Chile and adjacent regions of Argentina, Bolivia, and Peru. Vol. 1 (rev.), 490-491
- Johnson, Ned K., Morphologic stability versus adaptive variation in the Hammond's Flycatcher, 179-200; Biosystematics of sibling species of flycatchers in the *Empidonax hammondi-oberholseri-wrightii* complex (rev.), 321-326
- Johnson, Oscar W., Quantitative features of spermatogenesis in the Mallard (*Anas platyrhynchos*), 233-239
- Junco
hyemalis, 309-311, 352-360, 616-622
o. oreganus × *h. cismontanus*, 134
- Junco,
 hybrid, 134
 Slate-colored, 309-311, 352-360, 616-622
- Kale, Herbert W., II, Plumages and molts in the Long-billed Marsh Wren, 140-141
- Kansas, 534-546
- Kessel, Brina, The Red-winged Blackbird in Alaska, 313-314
- Kestrel, 204-205
- Kilham, Peter, Birds on a May morning, Songs of the forest, The swamp in June, Song Sparrow, The brook (recordings) (rev.), 155-156
- Killdeer, 678
- Kingbird,
 Tropical, 669
 Western, 669
- Kingfisher*, Vol. 1, no. 1 *et seq.* (Richard Fitter, ed.) (rev.), 156
- Kingfisher, Belted, 309-311
- Kinglet, Golden-crowned, 134
- Kite, White-tailed, 308-309
- Korea, 311-313
- Lagopus
lagopus, 603-615
mutus, 587-596
- Lamprocolius nitens*, 127
- Lanius ludovicianus*, 278, 281
- Lanyon, Wesley E., A record of *Elaenia martinica* for western Puerto Rico, 662-663
- Lapwing, Southern, 309
- Lark, Horned, 135
- Larus
argentatus, 309-311
delawarensis, 309-311, 677-679
minutus, 482
philadelphia, 482
pipixcan, 482
- Leck, Charles F., The history and status of the Ruff in eastern North America, 473-474
- Leptotila jamaicensis*, 117-123
- Leucophoyx thula*, 304, 471-472
- Leucosarcia melanoleuca*, 117-123
- Longspur,
 Chestnut-collared, 135
 Lapland, 135
- Loon,
 Arctic, 130
 Red-throated, 130
- Lophodytes cucullatus*, 131, 477-479
- Lophophaps plumifera*, 117-123
- Lophortyx
californicus, 271
gambelii, see Hybrids

- Louisiana, 664, 673
- Loveless, C. M., and G. Bear, Notes on the food habits of the Korean pheasant, 311-313
- Lowery, George H., Jr., and Robert J. Newman, A continentwide view of bird migration on four nights in October, 547-586
- Lowery, George H., Jr., and John P. O'Neill, A new genus and species of cotinga from eastern Peru, 1-9
- Maclean, Gordon L., see Cade, Tom J., *et al.*
- MacMillen, Richard E., and Charles H. Trost, Water economy and salt balance in White-winged and Inca doves, 441-456
- Maggie, Black-billed, 279
- Maine, 473-474
- Maldiv Islands, 138
- Mallard, 233-239
- Management (see also Conservation), 311
recent literature on, 168-171, 340, 509-511, 703-704
- Manakin, Club-winged, 475-476, 479-480, see also 713
- Manitoba, 389-402
- Mareca americana, 131
- Marples, Timothy G., see Wagner, Richard H., and—
- Maryland, 303, 473-474, 477-479
- Maser, Chris, Abnormal tongue in a Reef Heron, 481
- Massachusetts, 473-474
- Mayr, Ernst, Hummingbird caught by Sparrow Hawk, 664
- McCaskie, R. Guy, The occurrence of Red-throated Pipits in California, 135-136
- McGilvrey, Frank B., Second nestings of the Wood Duck, 303; Nesting of Hooded Mergansers on the Patuxent Wildlife Research Center, Laurel, Maryland, 477-479
- Meadowlark,
Eastern, 540
Western, 540
- Meanley, Brooke, Red-winged Blackbirds searching beneath pine bark for insects in winter, 480-481
- Measurements, birds, see Weights and—
- Measurements, eggs, see Eggs—
- Megaceryle alcyon, 309-311
- Melanerpes erythrocephalus, 27-29, 309-311
- Melospiza
georgiana, 352-360, 364, 666
lincolnii, 352-360
melodia, 276, 309-311
- Meng, Martha S., see West, George C., and—
- Mengel, Robert M., notes and news, 175-178, 345-346, 516, 710; review by, 488-489; frontisp. facing p. 349; The birds of Kentucky (rev.), 685-686
- Merganser,
Common, 309-311
Hooded, 131, 477-479
- Mergellus albellus, 131
- Mergus merganser, 309-311
- Mewaldt, L. Richard, see American Ornithologists' Union, Proceedings
- Mexico, Guanajuato, 476-477
- Meyerriecks, Andrew J., Additional observations on "foot-stirring" feeding behavior in herons, 471-472; review by, 683-684
- Michigan, 137
- Midway Atoll, 670-673
- Migration (see also Orientation),
general, 547-586
many species, 352-360
recent literature on, 171, 340-341, 511-512, 704-705
- Miller, Don E., see Emlen, John T., *et al.*
- Mniotilta varia, 352-360, 479
- Molothrus ater, 207-232, 277, 279, 476-477, 539-541
- Molts and plumages (see also Hybrids),
Anas strepera, 664
Calidris alpina, 517-533
Conioptilon mcilhennyi, 3-6
Falco spp., 201-206
F. sparverius, 201-206
Lagopus mutus, 587-596
Telmatodytes palustris, 140-141
- Monroe, Burt L., Jr., review by, 483
- Moran, Richard J., Predation on a Greater Prairie Chicken by a Goshawk, 137

- Moreau, R. E., On estimates of the past numbers and of the average longevity of avian species, 403-415
- Motacilla
 alba, 134
 cinerea robusta, 134
- Mousebird,
 Red-faced, 126-128
 White-backed, 126-128
- Mueller, Helmut C., and Daniel D. Berger, A record of the Gray Vireo in Wisconsin, 303
- Murphy, Robert Cushman, and Dean Amadon, In memoriam: E. Thomas Gilliard, 416-422
- Murray, Bertram G., Jr., Migration of age and sex classes of passerines on the Atlantic coast in autumn, 352-360
- Murrelet, Kittlitz's, 349-351
- Muscivora forficata, 669
- Myadestes ralloides, 479-480
- Myiarchus crinitus, 437
- Myiodynastes luteiventris, 315
- Nebraska, 665, 669-670
- Nero, Robert W., Birds of the Lake Athabasca region, Saskatchewan (rev.), 151, see also 493
- Nests, nest sites, and nesting (see also Breeding, general studies),
 Alloctopterus deliciosus, 476
 Brachyramphus brevirostre, 349-351
 Buteo platypterus, 307
 Chordeiles minor, 469-470
 Diomedea immutabilis, 670-673
 Larus delawarensis, 677-679
 Plegadis falcinellus, 474
 Sterna sumatrana, 138
 Turdus migratorius, 668
 Vireo nanus, 476-477
- Nesting success (see also Breeding, general studies),
 Aix sponsa, 303
 Icterus galbula, 437-440
 Iridoprocne bicolor, 437-440
 Pipilo erythrophthalmus, 437-440
 Sialia sialis, 437-440
 Toxostoma rufum, 437-440
- New Hampshire, 473-474
- New Jersey, 129, 352-360, 473-474
- New Mexico, 137
- New York, 473-474
- Newman, Robert J., see Lowery, George H., Jr., and—; see American Ornithologists' Union, Treasurer's report
- Nicaragua, 665
- Nigerian Ornithologists' Society, Bulletin (C. H. Fry, ed.) (rev.), 493
- Nighthawk,
 Common, 469-470
 Lesser, 470
- Nightjar,
 Rufous, 470
 White-tailed, 470
- Norris, Robert A., A preliminary study of avian blood groups with special reference to the Passeriformes (rev.), 326-327
- North, Myles E. W., and Donald S. McChesney, More voices of African birds (rev.), 151-152
- North Carolina, 138-139, 473-474, 480-481
- Nova Scotia, 473-474
- Numenius
 madagascariensis, 132
 phaeopus variegatus, 132-133
 tahitiensis, 135
- Nuthatch,
 Red-breasted, 310, 352-360
 White-breasted, 309-311, 352-360, 437
- Nyctibius griseus, 470
- Nycticorax nycticorax, 304-305
- Nyctidromus albigollis, 470
- Ocyphaps lophotes, 117-123
- Oena capensis, 125
- Oenanthe oenanthe, 643
- Officer, Hugh R., Brigadier, Australian honeyeaters (rev.), 483
- Olson, Storrs L., and Eugene Eisenmann, Notes on breeding of the Common Nighthawk in Panama, 469-470
- O'Neill, John P., frontisp. facing p. 1; see Lowery, George H., Jr., and—
- Ontario, 623-636
- Onychognathus nabouroup, 127
- Oporornis
 agilis, 352-360
 philadelphia, 352-360
- Oregon, 139

- Orientation,
 recent literature on, 171, 340-341, 511-512, 704-705
 technique for studying, 361-367
- Oriole, Baltimore, 437-440
- Osprey, 131
- Osteology (see also Fossils),
 Corvus brachyrhynchos (skull and bill), 12-43
 cotingids (skulls), 3-8
 general (skull and bill), 10-51
 Melanerpes erythrocephalus (skull and bill), 27-29, 50
 Richmondena cardinalis (skull and bill), 29-43
- Ovenbird, 352-360
- Owl,
 Great Horned, 308-309
 Saw-whet, 133-134
- Oxyura
 australis, 98-110
 jamaicensis, 106-110
- Paleontology (see also Fossils),
 recent literature on, 173-174, 343-344, 514-515, 707-709
- Palmer, Ralph S., review by, 684; see Vaurie, Charles, and—
- Palmisano, Angelo W., Jr., and Sidney A. Gauthreaux, Jr., First specimen of the Long-tailed Jaeger from the northern Gulf coast, 673
- Panama, 469-470, 534
- Pandion haliaetus*, 131
- Parabuteo unicinctus*, 308-309
- Parakeet,
 Aztec, 66-83, 317
 evolution, 80-81
 Orange-chinned, 314-319
 Orange-fronted, 66-83, 317
- Parasites (see also Diseases and—),
 recent literature on, 160-161, 331-332, 497-498, 693-694
- Parasitism, brood (hosts),
 Spiza americana, 539-541
 Spizella pallida, 277, 279
 Vireo nanus, 476-477
- Parasitism, brood, physiological basis of, 207-232
- Parkes, Kenneth C., editor of reviews, 142-157, 320-327, 483-493, 683-688;
 reviews by, 156, 157, 484-487
- Parula americana*, 352-360, 620
- Parus
 atricapillus, 309-311, 437
 bicolor, 309-311
 Passer domesticus, 674
 Passerculus sandwichensis, 276, 352-360
 Passerina cyanea, 362-364
 Pauraque, 470
 Pedioecetes phasianellus, see Hybrids
 Pennsylvania, 307, 473-474, 668
 Peru, 1-9
 Petrel, Bonin Island, 111-116
- Phaps
 chalconoptera, 117-123
 elegans, 119
 Phasianus colchicus karpowi, 311-313
 Pheasant, Ring-necked, 311-313
 Phœucticus ludovicianus, 30, 352-360
- Philippi-B., Rodulfo A., Catálogo de las aves Chilenas con su distribución geográfica (rev.), 489-490
- Phillips, Allan R., reviews by, 142-143, 321-326;—Joe Marshall, and Gale Monson, *The birds of Arizona* (rev.), 484-487; see Short, Lester L., Jr., and—
- Philomachus pugnax*, 473-474
- Phoenicircus, 3
- Photoperiodic effects, 201-202, 397
- Phylloscopus trochilus acredula*, 383
- Physiology (see also Blood proteins, Electrophoresis, Heart size and performance, Hormones, Salt balance, Water economy, and Weight changes),
 recent literature on, 172-173, 342-343, 513-514, 706-708
- Pica pica*, 279
- Piculus rubiginosus*, 479-480
- Pigeons, many species, 117-123
- Pinto, Oliverio M. de O., *Ornitologia Brasileira. Catálogo descritivo e ilustrado das aves do Brasil, Vol. 1* (rev.), 153-155
- Pipilo erythrophthalmus*, 437-440
- Pipit,
 Red-throated, 135-136
 Water, 135
- Pipraeidea melanonota*, 479-480
- Pipreola*, 3, 8
 arcuata, 6

- aureopectus, 6
 riefferii, 6
 Piranga olivacea, 352-360
 Plautus alle, 680
 Plegadis falcinellus, 474
 Plover,
 Black-bellied, 135
 Golden, 135
 Mountain, 135
 Plumages, see Molts and—
 Pluvialis dominica, 135
 Podiceps auritus, 670
 Polyborus plancus, 308-309
 Polygyny,
 Melospiza georgiana, 666
 Spiza americana, 534-546
 Poole, Earl L., Pennsylvania birds. An annotated list (rev.), 320-321
 Populations, recent literature on, 163-164, 334-337, 501-504, 697-700
 Potoo, Common, 470
 Powderdown, 7-8
 Artamus leucorhynchus, 7-8
 Conioptilon mcilhennyi, 2-9
 Cotingidae, 7-8
 Power, Dennis M., Antiphonal dueting and evidence for auditory reaction time in the Orange-chinned Parakeet, 314-319; Parasitism of the Dwarf Vireo (*Vireo nanus*) by cowbirds, 476-477
 Prairie Chicken, Greater, 137, see also Hybrids
 Predation on (adults),
 Archilochus colubris, 664
 Belanopterus chilensis, 309
 Colinus virginianus, 308
 numerous species, 423-436
 Tympanuchus cupido, 137
 Zonotrichia capensis, 308-309
 Predation on (young and eggs),
 Larus delawarensis, 677-679
 Spiza americana, 541
 Spizella pallida, 278-281
 Sturnus vulgaris, 632-633
 Predation by (see also Food and feeding habits),
 Accipiter gentilis, 137
 Falco sparverius, 664
 Lanius ludovicianus, 278-281
 Pica pica, 279
 Pribilof Islands, 130-135
 Procellariidae, 114-115
 Procellariiformes, 111-116
 Proteins, blood, 111-116
 Psittaciformes, evolution of, 80-81
 Ptarmigan,
 Rock, 587-596
 Willow, 603-615
 Pterocles
 burchelli, 124-126
 namaqua, 124-126
 orientalis, 125
 Pteroclididae, 124-126
 Pterodroma leucoptera, 111-116
 Pterylography,
 Calidris alpina, 519-521
 C. bairdii, 521
 C. melanotos, 521
 C. pusilla, 521
 Conioptilon mcilhennyi, 2-8
 cotingids, 7-8
 Ptilonopus melanospila, 118-123
 Puerto Rico, 662-663
 Puffinus
 nativitatus, 111-116
 pacificus, 111-116
 Pulich, Warren M., A specimen of the Little Gull, *Larus minutus*, from Dallas County, Texas, 482
 Pyrocephalus rubinus pinicola, 665
 Pyroderus, 2-9
 scutatus, 6
 Quail,
 California, 271
 Scaled × Gambel's, 136-137
 Querula purpurata, 6
 Quiscalus quiscula, 674-677
 Ramphocelus icteronotus, 479-480
 Rand, A. L., In memoriam: Reuben Myron Strong, 282-287; A display of the Boat-billed Heron, *Cochlearius cochlearius*, 304-306; review by, 491-492
 Redshank, Spotted, 133
 Reed, Chester A., North American birds eggs (revised edit.) (rev.), 157
 Regulus satrapa amoenus, 134
 Renesting (see also Breeding, general studies), *Aix sponsa*, 303

- Rhode Island, 473-474
Richmondia cardinalis, 29-43, 309-311
Robertson, William B., Jr., The terns of the Dry Tortugas (rev.), 145-146
Robin, 668, 674-677
Ruff, 473-474
Russell, Stephen M., A distributional study of the birds of British Honduras (rev.), 142-143
Russian literature, review of, 689-691
- Salt, W. Ray, A nesting study of *Spizella pallida*, 274-281
Salt balance,
 Scardafella inca, 441-456
 Zenaida asiatica, 441-456
 Zenaidura macroura, 597-603
Saltator atripennis, 479-480
Sandgrouse, 124-126
Sandpiper,
 Baird's, 135
 Least, 135
 Red-backed, 517-533
 Wood, 135
Sapsucker, Yellow-bellied, 309-311
Scardafella inca, 117-123, 441-456, 669
Scharf, William C., *Ornithoica vicina* (Diptera: Hippoboscidae) a new host record from the Marsh Hawk, 471
Schnell, Gary D., and Larry D. Caldwell, Xanthochroism in a Cape May Warbler, 667-668
Schorger, A. W., In memoriam: Paul Lester Errington, 52-65
Seiurus
 aurocapillus, 352-360
 noveboracensis, 352-360
Selander, Robert K., and Suh Yung Yang, Behavioral responses of Brown-headed Cowbirds to nests and eggs, 207-232
Shearwater,
 Christmas Island, 111-116
 Wedge-tailed, 111-116
Shelford, Victor E., The ecology of North America (rev.), 487-488
Short, Lester L., Jr., Field Sparrow sings Chipping Sparrow song, 665; and Allan R. Phillips, More hybrid hummingbirds from the United States, 253-265
Shrike, Loggerhead, 278, 281
Sialia sialis caribaea, 665
Sitta
 canadensis, 310, 352-360
 carolinensis, 309-311, 352-360, 437
 carolinensis cookei, 352
Skutch, Alexander F., Western Kingbird and Inca Dove in Costa Rica, 669
Sladen, William J. L., Additions to the avifauna of the Pribilof Islands, Alaska, including five species new to North America, 130-135
Smew, 131
Smyth, Michael, and George A. Bartholomew, Effects of water deprivation and sodium chloride on the blood and urine of the Mourning Dove, 597-602
Song, see Vocalization
Southern, William E., Utilization of shad as winter food by birds, 309-311
Sparrow,
 Andean, 308-309
 Cassin's, 129
 Chipping, 352-360, 665
 Clay-colored, 274-281
 Field, 352-360, 665
 House, 674
 Lincoln's, 352-360
 Savannah, 352-360, 276
 Song, 276, 309-311
 Swamp, 352-360, 364, 666
 Tree, 309-311, 368-388
 White-crowned, 352-360, 364
 White-throated, 352-360
Spermatogenesis, Mallard, 233-239
Sphyrapicus varius, 309-311
Spinus tristis, 310
Spiza americana, 534-546
Spizella
 arborea, 309-311, 368-388
 pallida, 274-281
 passerina, 352-360, 665
 pusilla, 352-360, 665
Squatarola squatarola, 135
Stamm, Donald D., Relationships of birds and arboviruses, 84-97
Starling, 623-636, 674-677
 Pale-wing, 127

- Cape Glossy, 127
- Starnoenas cyanocephala*, 117-123
- Stercorarius longicaudus*, 673
- Sterna*
hirundo longipennis, 133
sumatrana mathewsi, 138
- Stigmatopelia senegalensis*, 125, 127
- Storer, Robert W., Sexual dimorphism and food habits in three North American accipiters, 423-436
- Stork, fossil, 670
- Streptopelia*
capicola, 125
chinensis, 117-123
decaocto, 117-123
decipiens, 117-123
 "risoria," 117-123
roseogrisea, 117-123
semitorquata, 117-123
senegalensis, 117-123
tranquebarica, 117-123
turtur, 117-123
- Strong, Reuben Myron, memorial to, 282-287
- Sturnella*
magna, 540
neglecta, 540
- Sturnus vulgaris*, 623-636, 674-677
- Swallow, Tree, 437-440
- Swinebroad, Jeff, Cassin's Sparrow in New Jersey, 129; review by, 686-688
- Tanager, Scarlet, 352-360
- Tangara
arthus, 479-480
cyanicollis, 479-480
florida, 479
gyrola, 479-480
heinei, 479-480
icterocephala, 479-480
johannae, 479
labradorides, 479-480
larvata, 479
nigroviridis, 479-480
palmeri, 479
parzudakii, 479-480
ruficapilla, 479-480
ruficervix, 479
rufigula, 479
xanthocephala, 479
- Taxonomy,
 and behavioral characters, 652-655
 recent literature on, 173-174, 343-344, 514-515, 707-709
- Taxonomy of,
Cochleariidae, 305-306
Coliiformes, 128
Columbidae, 117-123
Cotingidae, 1-9
Diomedeidae, 114
Procellariidae, 114
Pteroclididae, 124-126
Trochilidae, 263-264
- Teal,
 Baikal, 130-131
 Blue-winged, 389-402
 Falcated, 134
- Telemetry, 674-677
- Telmatodytes*
palustris griseus, 140-141
p. palustris, 140-141
p. waynei, 140-141
p. dissaepus, 140-141
- Tern,
 Black-naped, 138
 Common, 133
- Territory,
Melospiza georgiana, 666
Pedioecetes phasianellus × *Tympanuchus cupido*, 128-129
Spiza americana, 538-544
Spizella pallida, 275
- Texas, 482
- Thompson, David H., see Emlen, John T., *et al.*
- Thompson, Max C., John Q. Hines, and Francis S. L. Williamson, Discovery of the downy young of Kittlitz's Murrelet, 349-351
- Thrasher, Brown, 437-440
- Thraupis*
palmarum, 479-480
virens, 479-480
- Thrush,
 Eye-browed, 134
 Gray-cheeked, 352-360
 Hermit, 352-360, 437
 Swainson's, 352-360
 Varied, 139
- Tijuca, 8
- Titmouse, Tufted, 309-311

- Tityra, 7
Todd, W. E. Clyde, review by, 320-321
Tomkins, Ivan Rexford, obituary, 712
Totanus
 erythropus, 133
 nebularia, 133
Towhee, Rufous-sided, 437-440
Toxostoma rufum, 437-440
Traylor, Melvin A., review by, 492
Tringa glareola, 135
Troglodytes aedon, 352-360, 380-385
Trost, Charles H., see MacMillen, Richard E., and—
Turdus
 ignobilis, 479-480
 migratorius, 668, 674-677
 obscurus, 134
Turtur brehmeri, 117-123
Tympanuchus cupido, 137, see also Hybrids
Tyrannus
 melancholicus, 479-480, 669
 verticalis, 669
Udall, Stewart L., The quiet crisis (rev.), 149-150
Udvardy, Miklos D. F., reviews by, 151, 487-488
van Tets, Gerard Frederick, A comparative study of some social communication patterns in the Pelecaniformes (rev.), 683-684
Variation, geographic,
 Empidonax hammondi, 179-200
Vaurie, Charles, Recent Russian ornithological literature, 689-691; and Ralph S. Palmer, The Russian Ornithological Congresses, 347-348
Veery, 352-360
Vermivora
 peregrina, 352-360, 479-480
 ruficapilla, 352-360
Vireo
 nanus, 476-477
 olivaceus, 352-360
 philadelphicus, 352-360
 solitarius, 352-360
 vicinior, 303
Vireo,
 Dwarf, 476-477
 Gray, 303
 Philadelphia, 352-360
 Red-eyed, 352-360
 Solitary, 352-360
 Virginia, 473-474
Vocalization,
 Biziura lobata, 101-103
 Brotogeris jugularis, 314-319
 Elaenia flavogaster, 662-663
 E. martinica, 662-663
 Myiodynastes luteiventris, 315
 Oxyura australis, 108
 Spizella pusilla, 665
Voous, K. H., review by, 145-146
Wagner, Richard H., and Timothy G. Marples, The breeding success of various passerine birds under chronic gamma irradiation stress, 437-440
Wagtail,
 Gray, 134
 White, 134
Wallace, Robert A., Nesting and defensive behavior of the Black-naped Tern in the Maldive Islands, 138
Warbler,
 Bay-breasted, 352-360, 680-682
 Black-and-white, 352-360, 479
 Black-throated Blue, 352-360
 Black-throated Green, 352-360
 Blackpoll, 352-360
 Canada, 352-360
 Cape May, 352-360, 667-668
 Chestnut-sided, 352-360
 Connecticut, 352-360
 Magnolia, 352-360
 Mourning, 352-360
 Myrtle, 352-360
 Nashville, 352-360
 Palm, 352-360
 Parula, 352-360, 620
 Prairie, 352-360
 Tennessee, 352-360, 479
 Wilson's, 352-360
 Yellow, 352-360
Water economy and consumption,
 Colius colius, 126-128
 C. indicus, 126-128
 Junco hyemalis, 616-622
 Pterocles burchelli, 125-126
 P. namaqua, 125-126
 P. orientalis, 125

- Scardafella inca*, 441-456
Zenaida asiatica, 441-456
Zenaidura macroura, 451-452, 597-602
 Waterthrush, Northern, 352-360
 Weeden, J. Stenger, Diurnal rhythm of attentiveness of incubating female Tree Sparrows (*Spizella arborea*) at a northern latitude, 368-388
 Weeden, Robert B., Molt of primaries of adult Rock Ptarmigan in central Alaska, 587-596
 Weights and measurements of birds,
 Accipiter cooperii, 424
 A. gentilis atricapillus, 424
 A. striatus velox, 424
 Anthus cervinus, 135
 Archilochus alexandri, 255-256
 Archilochus alexandri × *Calypte costae*, 255-256
 Calypte costae, 255-256
 Coniophila mcilhennyi, 6-7
 cotingids (skulls), 6
 Cyananthus latirostris magicus, 259
 Empidonax hammondi, 181-193
 Eugenes fulgens × *Cyananthus latirostris*, 259
 Eugenes f. fulgens, 259
 Spizella pallida (nestlings), 280
 Weights of eggs, see Eggs—
 Weights of hearts, 266-273
 Weight changes (experimental),
 Junco hyemalis, 616-622
 Scardafella inca, 441-456
 Zenaida asiatica, 441-456
 Zenaidura macroura, 597-602
 West, George C., and Martha S. Meng, Nutrition of Willow Ptarmigan in northern Alaska, 603-615
 Wetmore, Alexander, review by, 685-686
 Wheatear, 643
 Whimbrel, 132
 White, C. M. N., A revised check list of African non-passerine birds (rev.), 492
 Widgeon, American, 131
 Wildenthal, Joyce L., review by, 155-156
 Williamson, Francis S. L., see Thompson, Max C., *et al.*
 Willis, Edwin O., Notes on a display and nest of the Club-winged Manakin, 475-476, see also 713; Competitive exclusion and birds at fruiting trees in western Colombia, 479-480, see also 713
 Willoughby, Ernest J., Wing and tail molt of the Sparrow Hawk, 201-206; see Cade, Tom J., *et al.*
 Willson, Mary F., Polygamy among Swamp Sparrows, 666
 Wilsonia
 canadensis, 352-360
 pusilla, 352-360
 Wisconsin, 303
 Woodpecker,
 bill, 27-29, 50
 Downy, 309-311, 437
 Hairy, 437
 Red-bellied, 309-311
 Red-headed, 27-29, 309-311
 Pileated, 310
 Woolfenden, Glen E., editor of recent literature, 158-174, 329-344, 494-515, 692-709
 Wren,
 House, 352-360, 380-385
 Long-billed Marsh, 140-141
 Wrentit, 381
 Wunderle, Steven L., see Graber, Richard R., and—
 Xanthochroism, *Dendroica tigrina*, 667-668
 Xipholena, 7-8
 punicea, 4-6
 Yang, Suh Yung, see Selander, Robert K., and—
 Zaratornis, 8
 stresemanni, 4-6
 Zenaida, 117
 asiatica, 120, 441-456
 auriculata, 117-123
 Zenaidura macroura, 117-123, 271, 451-452, 454, 597-602
 Zimmerman, Dale A., review by, 151-152
 Zimmerman, John L., Polygyny in the Dickcissel, 534-546
 Zonotrichia
 albicollis, 352-360
 capensis, 308-309
 leucophrys, 352-360, 362, 364