

INDEX TO VOLUME 50¹

Compiled by Penn Chu

- Abbott, I. J., see Smith, J. N. M., P. R. Grant, B. R. Grant, —, and L. K. Abbott
- Abbott, L. K., see Smith, J. N. M., P. R. Grant, B. R. Grant, I. J. Abbott, and —
- Abe, N., et al., Five years of bird ringing at Otayama Bird Observatory from 1973 through 1977, 267(r)
- Acanthis flavirostris*, vocalizations 90(r)
- Accipiter striatus*, age 34–44
- Accipiter gentilis*, feeding 387(r)
- Acridotheres tristis*, evolution 285(r)
- Acrocephalus arundinaceus*, decline 373(r)
- Adamacik, R. S., and L. B. Keith, Regional movements and mortality of Great-horned Owls in relation to Snowshoe Hare fluctuations 175(r)
- Adamacik, R. S., A. W. Todd, and L. B. Keith, Demographic and dietary responses of Red-tailed Hawks during a Snowshoe Hare fluctuation 379(r)
- Aegolius funereus*, nesting 168(r)
- , prey 287(r), 387(r)
- Agelaius phoeniceus*, epaulets 180(r)
- , physiol. of aggression 383(r)
- , radiotracking 81(r)
- AGING
- Gull, Herring 49–55
- Hawks, Sharp-shinned 34–44
- Woodpecker, Red-cockaded 23–29
- Aix sponsa*, dispersal 385(r)
- Alatalo, R. H., Resource partitioning in Finnish woodpeckers 184(r)
- Albatross, Short-tailed, see *Diomedea albatrus*
- Ali, S., Field Guide to the Birds of the Eastern Himalayas 291(r)
- Allez, G., see Mueller, H. C., D. D. Berger, and —
- Amlaner, C. J., Jr., and J. F. Stout, Aggressive communication by *Larus glaucescens*, Part VI: interactions of territory residents with a remotely controlled locomotory model 180(r)
- Anas, resp. physiol. 84(r)
- Anas platyrhynchos*, flight physiol. 280(r)
- , manage. 381(r)
- , mate selection and plum. 78(r)
- , testosterone effects 181(r)
- Anas strepera*, decoy trap 45–49
- ANATOMY AND MORPHOLOGY
- Anatids, size 85(r)
- Falconiformes, visual activity 86(r)
- Gulls, feather sensitivity 86(r)
- Owl, Tawny, color vision 85(r)
- Strigidae, resp. syst. 85(r)
- Anderson, D. R., see Bray, O. E., A. M. Gammel, and —
- Anderson, J. R., and R. W. Merritt, The impact of foraging meadowlarks, *Sturnella neglecta*, on the degradation of cattle dung pads 82(r)
- Anderson, K. R., and C. D. T. Minton, Origins and movements of Oystercatchers on the Wash 189(r)
- Andersson, M., Optimal egg shape in waders 178(r)
- Andreev, A. Energy balance and hypothermy in the Siberian Jay during the winter season 275(r)
- Anser*, size, polar conditions 85(r)
- Anser anser*, salt gland 278(r)
- Anser caerulescens*, incubation pattern 179(r)
- , nest. pop. 178(r)
- , plum. and mate selection 77(r)
- Anseriformes, Australian 87(r)
- , nesting ecol. 75(r)
- Anthus pratensis*, nestling growth 175(r)
- Applegate, R. D., American Woodcock hatches from cracked egg 69
- Appleton, G. F., and C. D. T. Minton, The primary moult of the Lapwing 188(r)
- Apteryx*, characteristics 383(r)
- Apteryx australis*, energy value of yolk 272(r)
- , incub. temp. 272(r)
- Aquila chrysaetos*, sheep predation 82(r)
- Ar, A., see Rahn, H., —, and C. V. Paganelli
- Ar, A., and Y. Yom-Tov, The evolution of parental care in birds 192(r)
- Archaeopteryx*, flight feathers 282(r)
- Arctic birds, polyphagous 80(r)
- Ardea herodias*, predation 264–265
- Arnold, K. A., and D. J. Jirovec, Arrivals and departures of wintering Common Snipe in Central Brazos Valley of Tex. 175(r)
- Artamus cinereus*, hybrid. 286(r)
- Artyukhov, A., see Syroechkovskii, E., A. Krechmar, and —
- Artyukhov, A., Notes on ecology of the Tufted Duck in the mid-stream of Anadyr River 182(r)
- Asio otus*, food 89(r)
- Askenmo, C., Effects of addition and re-

¹ (r)—in or title of a review

- removal of nestlings on nestling weight, survival and female weight loss in the Pied Flycatcher *Ficedula hypoleuca* (Pallas) 74(r)
Athene noctua, nest temp. 271(r)
 Avery, M. L. (ed.), Impacts of Transmission Lines on Birds in Flight
 Avocet, American, see *Recurvirostra americana*
Aythya fulvigula, ecol. in Siberia 182(r)
 Babbler, Hall's, see *Pomastromus halli*
 Bahr, J. P., see Kaplan, S., G. L. Kolesavi, and —
 Bailey, R. O., Wild Mallard stocking in a large marsh habitat 381(r)
 Bakaev, S., On breeding of the Booted Warbler in Zeravshan River lowlands 376(r)
 Baker, A. J., and A. Moeed, Evolution in the introduced N.Z. populations of the Common Myna, *Acridotheres tristis* (Aves: Sturnidae) 285(r)
 Baker, M. C., and S. F. Fox, Dominance, survival, and enzyme polymorphism in Dark-eyed Juncos, *Junco hyemalis* 286(r)
 Baker, M. C., and S. F. Fox, Differential survival in Common Grackles sprayed with Turgitol 192(r)
 Baker, M. C., and L. R. Mewaldt, Song dialects as barriers to dispersal in White-cr. Sparrows (*Zonotrichia leucophrys*) 195(r)
 Balda, R. P. and J. L. Brown., Observations on the behavior of Hall's Babbler 76(r)
 Baldaccini, N. E., see Ioalé, P., F. Papi, V. Fiaschi, and —
 Ball, M. E., see Love, J. A., —, and I. Newton
 Balthazart, J., Behavioral and physiological effects of testosterone propionate and cyproterone acetate in immature male domestic ducks, *Anas platyrhynchos* 181(r)
BANDING AND LONGEVITY
 Birds, Fla. 224–243; 297–303
 Birds, Jap. 267(r)
 Birds, P.R. 216–223
 Crane, Whooping, Juv. 370(r)
 Dotterel, N.Z. 267(r)
 Eagle, Ayres', longevity 267(r)
 Eagle, Bald 263–264
 Gull, Ring-bill, origins of colony 210–215
 Jay, Blue 69
 Owl, Tengmalm's, nesting, 168(r)
 Powdermill, band. at 167(r)
 Raptors, Can. 167–168(r)
 Sparrow, Wh.-cr. 252–255
 Swallows, Bank 69–70
 Swift, Chimney 30–33
 — trapping flocks 201–209
 Warbler, Magnolia, migr. 265
 Barkan, C. P., see Rappole, J. H., E. C. Rappole, and —
 Barnard, C. J., Predation and the evolution of social mimicry 284(r)
 Baudvin, H., Cannibalism in the Barn Owl (*Tyto alba*) 272(r)
 Barry, T. W., see Martin, M., and —
 Bartholomew, G. A., see White, F. N., —, and J. L. Kinney
 Batschelet, E., Second-order statistical analysis of directions 267(r)
 Bayer, R. D., Great Blue Heron attacks Horned Grebe 264–265
 Beaugrand, J., Test of magnetic sensitivity in seven species of Eur. birds using a cardiac nociceptive conditioning procedure 172(r)
 Bee-eater, Eur., see *Merops apiaster*
 Beehler, B. M., Birdlife of the Adirondack Park 95(r)
BEHAVIOR
 Arboreal birds, locomotion 162–163
 Babbler, Hall's 76(r)
 Blackbirds, mobbing 180(r)
 Bluebird, Mtn., adultery 179(r)
 Dipper, courtship 62–65
 Diver, Bl.-thtd., reprod. 273(r)
 Ducks, testosterone effects 181(r)
 Duck, Mallard, mate sel. 78(r)
 Falcon, N.Z., terr. 273(r)
 Flycatcher, Pied, mobbing 78(r)
 Goose, Snow, mate sel. 77(r)
 grassfinch, courtship 76(r)
 Grouse, Willow, breed. pr. 378(r)
 Gull, Glaucous-wg. 180(r)
 Gull, Herring, yng. recogn. 79(r)
 Gull, Relict, nest. 377(r)
 Hummingbird, Anna, terr. 180(r)
 Hummingbird, Rufous, terr. 377(r)
 Lapwing, song-flight 77(r)
 Miner, Noisy, interspecific aggression 76(r)
 Motmot, Turq.-browed, yng. 76(r)
 Pigeons, discr. learn. 273(r)
 Redstart, Am. 263
 Sandpiper, Least, display 377(r)
Sappho sparganura 79(r)
 Starling, Com., mate fidelity 180(r)
 Stint, Tem., terr. 377(r)
 Tern, Com., breed 322–337
 — group adherence 365
 Tit, Great, symmetry discrim. 181(r)
 — mate selection 378(r)
 Woodpecker, Acorn, social 181(r)

- Belopolskii, L., G. Goryainova, N. Milanova, I. Petrova, and N. Polonik, Particulars of the breeding of the Arctic Tern (*Sterna paradisaea*) on the Baltic, White, and Barents seas 75(r)
- Bengston, S. A., and S. Rundgren, Selective predation on lumbricids by Golden Plover *Pluvialis apricaria* 380(r)
- Benvenuti, S., see Papi, F., W. T. Keeton, A. I. Brown, and —
- Benvenuti, S., see Waldvogel, J. A., —, W. T. Keeton, and F. Papi
- Berger, D. D., see Mueller, H. C., —, and G. Allez
- Bergtold, P., and U. Querner, The continuing development and rate of fluctuation of populations of small birds: a five year study in middle Eur. 373(r)
- Bernstein, M. H., I. Sandoval, M. B. Curtis, and D. M. Hudson, Brain temperature in Pigeons: effects of anterior respir. bypass 278(r)
- Berggren, V., and J. Wahlstedt, The sand repertoire of the Great Gray Owl, *Strix nebulosa* 90(r)
- Berry, H. H., R. P. Millar, and G. N. Louw, Environmental cues influencing the breeding biology and circulating levels of various hormones and triglycerides in the Cape Cormorant 278(r)
- Berry, R., Nightjar habitats and breeding in East Anglia 374(r)
- Berthold, P., Studies on the breeding biology of warblers: on the choice of nest sites by Blackcaps (*Sylvia atricapilla*) in spruce (*Picea abies*) forests 272(r)
- Bianki, V., and E. Shutova, The ecology of the Great Tit in the Murmansk Region 177(r)
- Bibby, C. J., Some breeding statistics of Reed and Sedge Warblers 176(r)
- Bider, J. R., see Martin, M. L., and —
- Biderman, J. O., and R. W. Dickerson, Feeding behavior and food habits of the Boat-billed Heron (*Cochlearius cochlearius*) 89(r)
- Binckley, S., Light-to-dark transition and dark-time sensitivity: importance for the biological clock of the House Sparrow 187(r)
- Binkley, S. A., J. B. Richman, and K. B. Reilly, The pineal gland: a biological clock in vitro 188(r)
- Birchard, G. F., see Kilgore, D. L., D. F. Boggs, and —
- Bird, icons in the West 196(r)
- Birds, in Arctic Can. 189(r)
- , of Africa and Europe 189(r)
- , France 188(r)
- , rare Russian, vocalizations 90(r)
- , suburban pop. 185(r)
- Bjerk, see Fimreite, N., —, N. Kveseth, and E. Brun
- Blackbird, see *Turdus merula*
- Blackbird, Red-winged, see *Agelaius phoeniceus*
- Blackbird, Yellow-headed, see *Xanthocephalus xanthocephalus*
- Blackcap, see *Sylvia atricapilla*
- Blohm, R. J., and P. Ward, Experience with a decoy trap for male Gadwalls 45-48
- Blokpoel, H., and G. T. Haymes, Origins of Ring-billed Gulls at a new colony 210-215
- Blokpoel, H., P. M. Catling, and G. T. Haymes, Relationship between nest sites of Common Terns and vegetation on the Eastern Headland, Toronto Outer Harbor 73(r)
- Blondel, J., and R. Huc, Atlas of the Breeding birds of France and ecol. biogeography 188(r)
- Bluebird, Mountain, see *Sialia currucoides*
- Board, R., see Howey, P., —, and J. Kear
- Bock, C. E., see Stacey, P. B., and —
- Bock, C. E., J. B. Mitton, and L. W. Lephien, Winter biogeography of N. Amer. Fringillidae (Aves): a numerical analysis 191(r)
- Boersma, P. D., see Wheelwright, N. T., and —
- Bogdanov, L. V., and L. M. Shelobod, Genetic analysis of eggs from Common Tern *Sterna hirundo* 193(r)
- Boggs, D. F., see Kilgore, D. L., —, and G. F. Birchard
- Bohlen, H. D., An Annotated Check-list of the Birds of Illinois 196(r)
- Bondarev, D., see Krivonosov, G., and —
- BOOKS AND MONOGRAPHS
- A Birdwatcher's Guide to the Eastern United States 290(r)
- A Guide to Eastern Hawk Watching 198(r)
- A Guide to North American Bird Clubs 95(r)
- An Annotated Check-list of the Birds of Illinois 196(r)
- Animal Communication by Pheromones 289(r)
- Bird Migration in Asia 394-395(r)
- Birdhouses 93(r)
- Birdlife of the Adirondack Park 95(r)

- Birds of Grady County, Georgia 289(r)
 Birds of Southeastern Michigan and Southwestern Ontario 391(r)
 Birds of Southwestern Oklahoma 394(r)
 Canada's Threatened Species and Habitats
 Feeding and Feeding Apparatus in Waders. A Study of Anatomy and Adaptations in the Charadrii 197(r)
 Field Guide to the Birds of the Eastern Himalayas 291(r)
 Guide to the Identification and Ageing of Holarctic Waders 94(r)
 Hawks and Owls of North America 392(r)
 How to Make Working Decoys 394(r)
 Impacts of Transmission Lines on Birds in Flight 291-292(r)
 Long Point Bird Observatory 1976 Annual Report
 Owls by Day and Night 199(r)
 Prairie Ducks: A Study of their Behavior, Ecology, and Management 292(r)
 Proceedings of the Workshop Management of Southern Forests for Non-game Birds 390(r)
 Rare and Endangered Biota of Florida
 Report of the Advisory Panel on the California Condor 293(r)
 Roberts' Birds of South Africa 92(r)
 Studies of Seabirds at Prince Leopold Island and Vicinity, Northwest Territories. Preliminary Report of Biological Investigations in 1975 293(r)
 Systematics of Smaller Asian Birds Based on Voice 393(r)
 The California Condor, 1966-1976: a look at its past and future 290(r)
 The Complete Outfitting and Source Book for Bird Watching
 The Coot and the Moorhen, 92(r)
 The Dream of Lhasa. The Life of Nikolay Przhevalsky (1839-1888), Explorer of Central Asia 95(r)
 The English Sparrow in the American Landscape: A Paradox in Nineteenth Century Wildlife Conservation 93(r)
 The Red Data Book of the USSR
 The World of Roger Tory Peterson 199(r)
 Water Birds of California 94(r)
 Weights of 151 species of Pennsylvania birds analyzed by month, age, and sex 389(r)
 Working Bibliography of Owls of the World. With summaries of current taxonomy and distributional status 199(r)
 Working Bibliography of the Bald Eagle 391(r)
Bonasa umbellus, pop. decline 175(r)
 Borodulina, T., Herbst corpuscles of remiges in two species of gulls 86(r)
 Borowsky, B., see Koopmans, H., J. A. Lackey, —, and J. H. Ostrum
 Bowmaker, J. K., and G. R. Martin, Visual pigments and color vision in a nocturnal bird, *Strix aluco* (Tawny Owl)
 Bradley, R. A., Geographic variation in the song of Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*) 388(r)
Branta, size, polar conditions 85(r)
Branta canadensis, eggs 73(r)
Branta ruficollis, conservation 381-382(r)
 Bray, O. E., A. M. Gammel, and D. R. Anderson, Survival of Yellow-headed Blackbirds banded in N.D. 252-255
 Brewster, G. J., see Stelfox, H. A., and —
 Brien, Y., E. Kiendl, and M. Le Démézet, Parks, preserves, and nature conservation in Que. 186(r)
 Brodhead, M. J., A Soldier-Scientist in the American Southwest 389(r)
 Brower, L. P., see Calvert, W. H., L. E. Hedrick, and —
 Brown, A. I., see Papi, F., W. T. Keeton, —, and S. Benvenuti
 Brown, J. L., see Balda, R. P., and —
 Brown, L. H., and P. R. A. Davey, Natural longevity, as determined by plumage variations, in Ayres' Eagle *Hieraetus dubis* 267(r)
 Bruderer, B., Effects of alpine topography and winds on migr. birds 370(r)
 Brun, E., see Fimreite, N., Bjerck, N. Kveseth, and —
 Brunton, P. M., Toheroa predation by Black-backed Gulls on Darganville Beach, North Auckland, N.Z. 89(r)
Bubo virginianus, pop. 174(r), 175(r)
Bubulcus ibis, N.Z. 282(r)
 Bucheister, C. W., see Morse, D. H., and —
 Bulbul, Red-vented, see *Pycnonotus cafer*
 Bullfinch, see *Pyrrhula pyrrhula*
 Bunting, Lark, see *Calomospiza melanocorys*
 Bunting, Reed, see *Emberiza schoeniclus*
 Burger, J., and F. Lesser, Breeding behavior and success in salt marsh Common Tern colonies 322-337
 Burham, S. E., see Feare, C. J., and —
 Burton, J. F. K., Feeding and Feeding Apparatus in Waders. A Study of Anatomy and Adaptations in the Charadrii 197(r)
 Bustard, Little, see *Otis tetrix*
Buteo jamaicensis, pop. dynamics 379(r)
 Byrkjedal, I., Altitudinal difference in

- breeding schedules of Golden Plovers *Pluvialis apricaria* (L.) in South Norway 376(r)
- Cabon-Raczynska, K., and A. Ruprecht, Estimation of pop. density of the common vole in Poland: an analysis of owl pellets 269(r)
- Caccamise, D. F., see Weather, W. W., and —
- Cairns, D., Censusing hole-nesting Auks by visual counts 358–364
- Calder, W., The Kiwi 383(r)
- Calder, W. A., and T. J. Dawson, Resting metab. rates of ratite birds 83(r)
- Calidris minutilla*, display flights 377(r)
- Calidris temminckii*, terr. 277–278(r)
- Callaes cinera*, distr. 282(r)
- Calvert, W. H., L. E. Hedrick, and L. P. Brower, Mortality of the monarch butterfly (*Danaus plexippus* L.): avian predation at five overwintering sites in Mex. 388(r)
- Calyptorhynchus funereus*, moth predation 82(r)
- Calypte anna*, terr. energetics 180(r)
- Calomospiza melanocorys*, polygyny 72–73(r)
- Cannings, R. J., see Threlfall, W., and —
- Capella gallinago*, migr. pop., Tex. 175(r)
- Capercaille, see *Tetrao urogallus*
- Carduelis spinus*, air current sensitivity 174(r)
- Carpenter, F. L., see Ewald, P. A., and —
- Caprimulgus europaeus*, breeding 374(r)
- Carduelis tristis*, breeding 375(r)
- Catbird, Gray, see *Dumetella carolinensis* 124–144
- Carroll, T. R., see Ryder, J. P., and —
- Casmerodius albus*, foraging 182(r)
- Catling, P. M., see Blokpoel, H., —, and G. T. Haymes
- Cayouette, R., Birdhouses 93(r)
- Centzontle, new Mex. journal 167(r)
- Chaetura pelagica*, band. 30–33
- , trapping flocks 201–209
- Chaffinch, see *Fringilla coelebs*
- Chambers, J. A., Unusual feeding behavior of a Hairy Woodpecker 365
- Charadrius alexandrinus*, breed. and movements 273(r)
- Charadrius binctus*, new subspecies 87(r)
- Charadrius obscurus*, band. 267(r)
- Chettusia gregaria*, conservation 382(r)
- Chicken, see *Gallus gallus*
- Chlidonias niger*, nesting 374(r)
- Chloris chloris*, molt 384(r)
- Cinclus cinclus*, nest. biol. 176(r)
- Cinclus mexicanus*, courtship 62–65
- Circetus gallicus*, nest. 179(r)
- Circus aeruginosus*, Reunion 88(r)
- Clark, G. A., Jr., Side-stepping and side-hopping in arboreal birds 162–163
- Clark, R. J., D. G. Smith, and L. H. Kelso, Working Bibliography of Owls of the World. With summaries of current taxonomy and distrib. status 199(r)
- Clench, M. H., see Leberman, R. C., and —
- Clark, W. S., see Lincer, J. R., —, and M. N. LeFranc, Jr.
- Clench, M. H., and R. C. Leberman, Weights of 151 species of Penn. birds analyzed by month, age, and sex 389(r)
- Clovet, M., Reunion Harrier (*Circus aeruginosus maillardi*) on Reunion Island 88(r)
- Clunie, F., F. C. Kinsky, and J. A. F. Jenkins, New bird records from the Fiji Archipelago 87(r)
- Cochlearius cochlearius*, feeding 89(r)
- Cockatoo, Yellow-tailed Black, see *Calyptorhynchus funereus*
- Cody, M. L., Habitat selection and interspecific terr. among the sylviid warblers of England and Sweden 274(r)
- Cogswell, H. L., Water Birds of California 94(r)
- Columba*, earthquake prediction 289(r)
- , homing 371(r)
- Condamin, M., Nesting of sea birds in French Guiana 386(r)
- Condor, California, see *Gymnogyps californicus*
- Conner, R. N., see Locke, B. A., —, and Kroll, J. C.
- Connor, E. F., and D. Simberloff, species number and compositional similarity of the Galápagos flora and avifauna 189–190(r)
- CONSERVATION AND MANAGEMENT
- air pollution effects 381(r)
- birds, N.Z. forest 381(r)
- bird pests on strawberries 185(r)
- bird pop., suburban 185(r)
- birds, rare, conservation tactics 382(r)
- blackbird, damage by roosting 276(r)
- Blackbird, Red-winged, radiotracking 81(r)
- Bustard, Great, chicks 277(r)
- Bustard, Little 83(r)
- Cockatoo, Yellow-tailed Black, moth pred. 82(r)
- Duck, Mallard 381(r)
- Eagle, Golden, sheep losses 82(r)
- Eagle, White-tailed, Eur. 185(r)
- Falcon, Peregrine, breed. and decline in Argentina 185(r)
- falconry, USSR 186(r)
- Grouse, Ruffed 381(r)
- Gull, breed. Calif. 277(r)

- Gull, Herring, contaminant indicators 185(r)
 Meadowlark, foraging 82(r)
 Osprey, pesticide effects 82(r)
 —, prod. after DDE decline 277(r)
 parks, Que. 186(r)
 pelican, USSR 381(r)
 Plover, Sociable, USSR 382(r)
 Sandpiper, Armstrong's 277(r)
 seabirds, Norwegian, pesticide effects 83(r)
 Silveryeye, acoustic deterrence 276(r)
 Sparrow, House 93(r)
 Tern, Least, artificial nest 163–164
 USSR, Caspian Sea area 381–382(r)
 Contino, F., Observations on the behavior of *Sappho sparganura* in the highlands of Santa Barbara, Jujuy, Argentina 79(r)
Conuropsis carolinensis, Ind. 86(r)
 Cooke, F., Early learning and its effect on population structure. Studies of a wild population of Snow Geese 77(r)
 Cormorant, Cape, see *Phalacrocorax capensis*
Corvus monedula, embryonic vocalization 288(r)
Coturnix coturnix, behav. genetics 89(r)
 —, biochem. genetics 88(r)
Coturnix novaezealandiae, breed. age 374(r)
 Cowbird, Brown-headed, see *Molothrus ater*
 Crane, Hooded, see *Grus monacha*
 Crane, Manchurian, see *Grus japonensis*
 Crane, Whooping, see *Grus americana*
 Cuckoo, Common, see *Cuculus canorus*
Cuculus canorus, egg development 74(r)
 Cunningham, D. L., and P. B. Siegel, Response to bidirectional and reverse selection for mating behav. in Jap. Quail *Coturnix coturnix japonica* 89(r)
 Curio, E., see Menne, M., and —
 Curio, E., U. Ernst, and W. Vieth, Cultural transmission of enemy recognition: one function of mobbing 180(r)
 Curtis, M. B., see Bernstein, M. H., I. Sandoval, —, and D. M. Hudson
Cyanocitta cristata, longevity 69
Cygnus, size in relation to polar conditions 85(r)
Cygnus cygnus, in USSR 386(r)
 Dabelsteen, T., An analysis of the song-flight of the Lapwing (*Vanellus vanellus* L.) with respect to causation, evolution and adaptations to signal function 77(r)
 Davey, P. R. A., see Brown, L. H., and —
 Dawson, D. G., P. J. Dilks, P. D. Gaze, J. G. R. McBurney, and P. R. Wilson, Seasonal differences in bird counts in forests near Reafton, South Island, N.Z. 381(r)
 Dawson, T. J., see Calder, W. A., and —
 DeGraaf, R. M., Proceedings of the Workshop Management of Southern Forests for Nongame Birds 390(r)
 Deffeyes, K. S., see Gould, J. L., J. L. Kirschvink, and —
 Dekker, D., Characteristics of Peregrine Falcons migrating through central Alberta, 1969–1978 371(r)
 Demong, N. J., see Emlen, S. T., and —
 Deguchi, T., Circadian rhythm of Serotonin N-acetyltransferase activity in organ culture of chicken pineal gland 281(r)
 Delius, J. D., and J. Emmerton, Sensory mechanisms related to homing in pigeons 268(r)
Dendragapus obscurus, reprod. physiol. 278(r)
 —, song 287(r)
Dendrocopos major, nesting 75(r)
Dendroica coronata, migr. 1–11
Dendroica magnolia, migr. 265
Dendroica striata, migr. 1–11
 Densley, M., Ross's Gull in Alaska 384(r)
 Devlin, J. C., and G. Naismith, The World of Roger Tory Peterson 199(r)
 de S. Disney, H. J., The age of breeding in the Stubble Quail 374(r)
 Deutsch, H., H. T. Hammel, E. Simon, and C. Simon-Opperman, Osmolality and volume factors in salt grand control of Pekin Ducks after adaptation to chronic salt loading 279(r)
 Dexter, R. W., Fourteen-year life history of a banded Chimney Swift 30–33
 Diamond, J. M., and A. G. Marshall, Niche shifts in New Hebridean birds 79(r)
 Dickerson, R. W., see Biderman, J. O., and —
 Dilks, P. J., see Dawson, D. G., —, P. D. Gaze, J. G. R. McBurney, and P. R. Wilson
 Dinsmore, J. J., see Schreiber, E. A., R. W. Schreiber, and —
Diomedea albatrus, nest. 271–272(r)
 Dipper, see *Cinclus cinclus*
 Dipper, North American, see *Cinclus mexicanus*
 Diver, Black-throated, see *Gavia arctica*
 Dmitrieva, L., see Khayutin, S., and —
 Dodo, see *Raphus solitarius*
 Dotterel, Banded, see *Charadrius bicinctus*
 Dotterel, New Zealand, see *Charadrius obscurus*

- Doughty, R., The English Sparrow in the American Landscape: A paradox in Nineteenth Century Wildlife Conservation 93(r)
- Dove, Mourning, see *Zenaida macroura*
- Dow, D. D., Indiscriminate interspecific aggression leading to almost sole occupancy of space by a single species of bird 76(r)
- Dowitcher, Short-billed, see *Limnodromus griseus*
- Duck, Mallard, see *Anas platyrhynchos*
- Duck, Pink-eared, see *Malacorhynchus scarletti*
- duck, resp. physiol. 84(r)
- Duck, Tufted, see *Aythya fulvigula*
- Duck, Wood, see *Aix sponsa*
- Dumetella carolinensis*, weight and size 124-144
- Dunn, E. H., Nesting biology and development of young in Ont. Black Terns 374(r)
- Dunn, E. H., D. J. T. Hussell, and R. E. Ricklefs, The determination of incubation stage in starling eggs 114-120
- Eagle, Ayres', see *Hieraetus dubis*
- Eagle, Bald, see *Haliaeetus leucocephalus*
- Eagle, Golden, see *Aquila chrysaetos*
- Eagle, Short-toed, see *Circaetus gallicus*
- Eagle, Steller's Sea, see *Haliaeetus pelagicus*
- Eagle, White-tailed, see *Haliaeetus albicilla*
- ECOLOGICAL
- Avocet, American, time budget 81(r)
- birds, pastureland 380(r)
- Duck, Tufted, Siberia 182(r)
- Egret, Great, foraging 182(r)
- energy content of insects 275(r)
- Finches, Darwin's, foraging 380(r)
- Flycatcher, Pied, competition 275(r)
- foliage gleaning insectivores 274(r)
- Hawk, Red-tailed, pop. stability 379(r)
- Honeyeaters and lorikeets, pollination 80(r)
- hummingbirds, and flower phenologies 276(r)
- Jay, Piñon, interdependence with pines 182(r)
- Jay, Siberian, energy balance 275(r)
- mixed species flocks 81(r)
- nest dispersion 379(r)
- New Hebridean species, niches 79(r)
- niche concept 184(r)
- owls, as predators 274(r)
- Plover, Golden, foraging 380(r)
- polyphagous arctic birds 80(r)
- Puffin, Tufted 184(r)
- Redshank, foraging 380(r)
- Tit, Great, competition 275(r)
- , Japan 183(r)
- , foraging 81(r)
- warbler, sylviid, terr. 274(r)
- woodpeckers, foraging, Finland 184(r)
- woodpeckers, Malaysia 79(r)
- Editors of "Zoologicheskii Zhurnal," Work output of "Zoologicheskii Zhurnal" in 1974-1976 91(r)
- EGGS
- chicken, temp. dynamics 83(r)
- Cuckoo, Common, development 74(r)
- Flycatcher, Pied 74(r)
- Goose, Canada 73(r)
- Gull, Greater Black-backed, oil treatment 108-113
- Grackle, Common 73(r)
- Osprey, pesticide effects 82(r)
- porosity to gases 281(r)
- seabirds, Norwegian, pesticide effects 83(r)
- shape, optimal 178(r)
- Starling, stage of development 114-120
- water loss 272(r)
- Woodcock, American 69
- Egret, Cattle, see *Bubulcus ibis*
- Egret, Great, see *Casmerodius albus*
- Elowe, K. D., and S. Payne, Aging young Herring Gulls from measurements of body parts 49-55
- Emberiza schoeniclus*, Zugunruhe 269(r)
- Emlen, S. T., and N. J. Demong, Orientation strategies used by free-flying bird migrants: a radar tracking study 171(r)
- Enemar, A., B. Sjöstrand, and S. Svensson, The effect of observer reliability on bird census results obtained by a territory mapping technique 270(r)
- Erithacus rubecula*, migr. readiness 370(r)
- , orientation 170(r)
- Erolia ferruginea*, food 388(r)
- Ernst, U., see Curio, E., —, and W. Vieth
- EVOLUTION AND GENETICS
- altriciality 192(r)
- birds, Australian, speciation 286(r)
- Dodo, coevolution 287(r)
- Duck, Mallard, mate sel. 78(r)
- flight, origins 285(r)
- Grackle, Common, differ. survival 192(r)
- Goose, Snow, mate sel. 77(r)
- Junco, Dark-eyed, dominance and genetics 193(r)
- Junco, Dark-eyed, heterozygosity 286(r)
- Harrier, Reunion 88(r)

- mimicry, social 284(r)
 Myna, Common, differentiation 285(r)
 Quail, Jap., behav. genetics 89(r)
 —, biochem. genetics 88(r)
 Sparrow, White-cr., song 387(r)
 Tern, Common, egg genetics 193(r)
 Woodswallow, Black-faced, hybrid. 286(r)
Zosterops lateralis, Norfolk Island 88(r)
 Ewald, P. A., and F. L. Carpenter, Territorial responses to energy manipulation in the Anna Hummingbird 180(r)
 Faaborg, J., and J. E. Winters, Winter resident returns and longevity and weights of Puerto Rican birds 216–223
Falco peregrinus, Argentina 185(r)
 —, breed. 374(r)
 —, migr. 371(r)
Falco novaeseelandiae, distr. 386(r)
 —, terr. 273(r)
 Falcon, N.Z., see *Falco novaeseelandiae*
 Falcon, Peregrine, see *Falco peregrinus*
 Falconiformes, breed. 271(r)
 —, vision 86(r)
 Falconry, USSR 186(r)
 Falla, A. R., Banded Dotterel at the Auckland Islands; description of a new subspecies 87(r)
 Falls, J. B., and M. K. McNicholl, Neighbor-stranger discrimination by song in male Blue Grouse 287(r)
 Farner, D. S., see Wingfield, J. C., and —
 Feare, C. J., and S. E. Burham, Lack of nest site tenacity and mate fidelity in the Starling 180(r)
 Feduccia, A., *Presbyornis* and the evolution of ducks and flamingos 87(r)
 Feduccia, A., and H. B. Tordoff, Feathers of *Archaeopteryx*: asymmetric vanes indicate aerodynamic function 283(r)
 Feldsa, J., The Coot and the Moorhen 92(r)
 Fiala, K., A laparotomy technique for nesting birds 366–367
 Fiaschi, V., see Ioalé, P., F. Papi, —, and N. E. Baldaccini
Ficedula hypoleuca, breed. Finland 178(r)
 —, competition 275(r)
 —, eggs 74(r)
 —, mobbing 78(r)
 —, nestlings 74(r)
 Field, M., and W. Rayner, Hawk Cliff raptor banding station sixth annual report 1976 167–168(r)
 Fimreite, N., Bjerk, N. Kveseth, and E. Braun, DDE and PCBs in eggs of Norwegian seabirds 83(r)
 Finch, Zebra, see *Taenopygia guttata*
 Findell, P. R., see Gessaman, J. A., and —
 Fisk, E. J., Fall and winter birds near Homestead, Fla. 224–243; 297–303
 Fjeldsa, J., The systematic affinities of sandgrouse, Pteroclididae 283(r)
 Flint, V. E., Strategy and tactics for rare bird conservation 382(r)
 Flint, V. E., The Red Data Book of the USSR 390(r)
 Flycatcher, Pied, see *Ficedula hypoleuca*
 Follett, B. K., see Harding, C. F., and —
 FOOD AND FEEDING
 butterfly predation by birds 388(r)
 Egret, Great 182(r)
 Goshawk, Britain 387(r)
 Gull, Black-backed 89(r), 193(r)
 Heron, Boat-billed 89(r)
 honeyeaters 387(r)
 Meadowlark, on dung pads 82(r)
 mixed species flocks 81(r)
 New Hebridean species 79(r)
 Owl, Long-eared 89(r)
 Owl, Tengmalm's, vole prey 287(r)
 owls, preying on voles 387(r)
 polyphagous arctic birds 80(r)
 Rail, Water, ice-fishing 287(r)
 Sandpiper, Curlew 388(r)
 Tit, Great 81(r), 387(r)
 Tit, Varied 89(r)
 Woodpecker, Hairy 365
 Fooks, P., Leach's fork-tailed storm petrel 385(r)
 Ford, H. A., see Paton, D. D., and —
 Ford, J., Geographical isolation and morphological and habitat differentiation between birds of the Kimberly and Northern Territory 286(r)
 Ford, J., Hybridization between the white-vented and black-vented forms of the Black-faced Woodswallow 286(r)
 Fowl, Red Jungle, see *Gallus gallus*
 Fox, N. C., Territorial spacing of the N.Z. Falcon (*Falco novaeseelandiae*) 273(r)
 Fox, N. C., The distribution and numbers of N.Z. Falcons (*Falco novaeseelandiae*) 386(r)
 Fox, S. F., see Baker, M. C., and —
 Frankel, C., Sociobiology and its critics 389(r)
 Franks, E. C., see Zammuto, R. M., and —
 Freer, V. M., Factors affecting site tenacity in N.Y. Bank Swallows 349–357
Fringilla coelebs, wind effects on altitude 174(r)
 Fringillidae, N.A. winter dist. 191(r)
 Gadwall, see *Anas strepera*
 Galápagos seabirds 56–61
 species diversity 189–190(r)

- Gallus gallus*, cellular circadian clock 280(r)
 —, egg physiol. 83(r)
 —, pineal circadian rhythm 281(r)
 —, vocalizations 90(r)
 Galushin, V. M., The Short-toed Eagle 179(r)
 Gammel, A. M., see Bray, O. E., —, and D. R. Anderson
 Gass, C. L., Territory regulation, tenure, and migr. in Rufous Hummingbirds 377(r)
 Gaston, A. J., see Nettleship, D., and —
 Gates, J. E., and L. W. Gysel, Avian nest dispersion and fledging success in field-forest ecotones 379(r)
 Gauthreaux, S. A., Jr., Importance of daytime flights of nocturnal migrants: re-determined migr. following displacement 170(r)
Gavia arctica, repro. behav. 273(r)
Gavia species, Prudhoe Bay 189(r)
 Gavrilov, E., Bioenergetics of larger passerines. I. Rest and existence energy metabolism 383(r)
 Gaze, P. D., see Dawson, D. G., P. J. Dilks, —, J. G. R. McBurney, and P. R. Wilson
 Geffen, A. M., A Birdwatcher's Guide to the Eastern United States 290(r)
 Geitgey, M. S., see Morton, E. S., —, and S. McGrath
 Gerrard, M., D. W. A. Whitfield, P. Gerrard, P. N. Gerrard, and W. J. Maher, Migratory movements and plumage of subadult Sask. Bald Eagles 172(r)
 Gerrard, P., see Gerrard, M., D. W. A. Whitfield, —, P. N. Gerrard, and W. J. Maher
 Gerrard, P. N., see Gerrard, M., D. W. A. Whitfield, P. Gerrard, —, and W. J. Maher
 Gessaman, J. A., and P. R. Findell, Energy cost of incubation in the Amer. Kestrel 383(r)
 Gewecke, M., and M. Woike, Breast feathers and an air-current sense organ for the control of flight behav. in a songbird (*Carduelis spinus*) 174(r)
 Gibson, F., Ecological aspects of the time budget of the Amer. Avocet 81(r)
 Gill, R., Jr., and L. R. Mewaldt, Dispersal and migr. patterns of San Francisco produced herons, egrets, and terns 385(r)
 Gillespie, N. M., see Rusch, D. H., —, and D. J. McKay
 Gilmore, J. P., see Zucker, I. H., R. C. Huskey, C. E. C. Haack, and —
 Gilyarov, A., Contemporary status of the ecological niche concept 184(r)
 Gnatcatcher, Blue-gray, see *Poliophtila caerulea*
 Gochfeld, M., Group adherence in emigration of Common Terns 365
 Goldfinch, Amer. see *Carduelis tristis*
 Golovanova, E., Evaluation of bird damage to strawberry patches in the Leningrad region 185(r)
 Golubeva, T., Heterochronous development of avian hearing during ontogeny 288(r)
 Goodpasture, K. A., A transient Magnolia Warbler returns 265
 Goose, Can., see *Branta canadensis*
 Goose, Domestic, see *Anser anser*
 Goose, Red-br., see *Branta ruficollis*
 Goose, Snow, see *Anser caerulescens*
 Goryainova, G., see L. Belopolskii, —, N. Miloranova, I. Petrova, and N. Polonik
 Goshawk, see *Accipiter gentilis*
 Goss-Custard, J., Optimal foraging and size selection of worms by Redshank, *Tringa totanus* in the field 380(r)
 Gould, J. L., J. L. Kirschvink, and K. S. Deffeyes, Bees have magnetic resonance 72(r)
 Grackle, Common, see *Quiscalus quiscula*
 Graf-Jaccottet, M., see Pedrolì, J. C., and —
 Grant, B. R., see Smith, J. N. M., P. R. Grant, —, I. J. Abbott, and L. K. Abbott
 Grant, P. R., Recent evolution of *Zosterops lateralis* on Norfolk Island, Australia 88(r)
 Grant, P. R., see Smith, J. N. M., —, B. R. Grant, I. J. Abbott, and L. K. Abbott
 Grassfinches, see *Poephila* species 76(r)
 Green, G. H., see Harris, M. P., C. Morley, and —
 Greenfinch, see *Chloris chloris*
 Greenwood, P. J., P. H. Harvey, and C. M. Perrins, Mate selection in the Great Tit *Parus major* in relation to age, status and natal dispersal 378(r)
 Groszycynski, J., Connections between predatory birds and mammals and their prey 274(r)
 Grouse, Blue, see *Dendragapus obscurus*
 Grouse, Ruffed, see *Bonasa umbellus*
 Grouse, Willow, see *Lagopus lagopus*
 GROWTH
 Starling, European, nestling 338-348
Grus americana, band. juv. 370(r)
Grus japonensis, conservation 382(r)
Grus monacha, USSR 190(r)

- Gull, Black-headed, see *Larus ridibundus*
 Gull, Glaucous-winged, see *Larus glaucescens*
 Gull, Great Black-backed, see *Larus marinus*
 Gull, Herring, see *Larus argentatus*
 Gull, Kittiwake, see *Rissa tridactyla*
 Gull, Laughing, see *Larus atricilla*
 Gull, Lesser Black-backed, see *Larus fuscus*
 Gull, Relict, see *Larus relictus*
 Gull, Ring-billed, see *Larus delawarensis*
 Gull, Ross's, see *Rhodostethia rosea*
 Gwinner, E., and W. Wiltschko, Endogenously controlled changes in migr. direction of the Garden Warbler (*Sylvia borin*) 172(r)
Gymnogyphs californicus, 290(r), 293(r)
Gymnorhinus cyanocephalus, seed dependence 182(r)
 Haack, C. E. C., see Zucker, I. H., R. C. Huskey, —, and J. P. Gilmore
Haematopus ostralegus, recov. Britain 189(r)
 Haemig, P. D., Aztec Emperor Auitzotl and the Great-tailed Grackle 86(r)
 Hakala, T., see Haukioja, E., and —
 Hakkinen, I., see Lagerström, M., and —
Haliaeetus albicilla, manage. 185(r)
Haliaeetus leucocephalus, bibliography 391(r)
 —, longevity 263–264
 —, migr. 172(r)
Haliaeetus pelagicus, nest. 282(r)
 Hall, G. A., Hybridization between Mourning and MacGillivray's warblers 101–107
 Hallett, D. J., see Norstrum, R. J., —, and R. A. Sonstegard
 Halse, S. A., Feeding habits of six species of honeyeater in SW Australia 387(r)
 Hammel, H. T., see Deutch, H., —, E. Simon, and C. Simon-Opperman
 Hannon, S. J., Plasma calcium as an indicator of reprod. condition in female Blue Grouse 278(r)
 Hansen, K., see Rabøl, J., and —
 Harding, C. F., and B. K. Follett, Hormone changes triggered by aggression in a natural population of blackbirds 383(r)
 Harper, P. C., The plasma proteins of some albatrosses and petrels as an index of relationship in the Procellariiformes 279–280(r)
 Harrell, B. E., see Whitney, N. R., Jr., —, B. K. Harris, N. Holden, J. W. Johnson, B. J. Rose, and P. F. Springer
 Harrier, Reunion, see *Circus aeruginosus*
 Harris, B. K., see Whitney, N. R., Jr., B. E. Harrell, —, N. Holden, J. W. Johnson, B. J. Rose, and P. F. Springer
 Harris, M. P., Survival and ages of first breeding of Galápagos seabirds 56–61
 Harris, M. P., C. Morley, and G. H. Green, Hybridization of Herring and Lesser Black-backed gulls in Britain 191(r)
 Harvey, P. H., see Greenwood, P. J., —, and C. M. Perrins
 Hasegawa, H., Recent observations of the Short-tailed Albatross *Diomedea albatrus* on Torishima 271–272(r)
 Haukioja, E., and T. Hakala, On the relationship between avian clutch size and life span 373(r)
 Hawk, Red-tailed, see *Buteo jamaicensis*
 Hawk, Sharp-shinned, see *Accipiter striatus*
 Hayashi, H., see Kawaji, N., S. Shiraishi, and —
 Haymes, G. T., see Blokpoel, H., and —
 Haymes, G. T., see Blokpoel, H., P. M. Catling, and —
 Heather, B. D., The Cattle Egret in N.Z. 282(r)
 Hedrick, L. E., see Calvert, W. H., —, and L. P. Brower
 Heinonen, E., see Kellomaki, E., —, and H. Tiainen
 Heintzelman, D. S., A Guide to Eastern Hawk Watchng 198(r)
 Heintzelman, D. S., Hawks and Owls of North America 392(r)
 Hernandez, R., see Spitzer, P. R., R. W. Risebrough, W. Walker, —, A. Poole, D. Puleston, and I. C. T. Nisbet
 Heron, Boat-billed, see *Cochlearius cochlearius*
 Heron, Great Blue, see *Ardea herodias*
 Heusmann, H. W., Current status and mortality rates of Mass. Mourning Doves 256–262
Hieraetus dubis, longevity 267(r)
 Higuchi, H., Stored nuts, *Castanopsis cuspidata*, as a food resource of nestling Varied Tits, *Parus varius* 89(r)
 Hilden, O., The timing of arrival and departure of the Spotted Redshank *Tringa erythropus* in Finland 372(r)
 Hildén, O., Territoriality and site tenacity of Temminck's Stint *Calidris temminckii* 377–378(r)
Hippolais caligata, breeding 376(r)
 Holden, N., see Whitney, N. R., Jr., B. E. Harrell, B. K. Harris, —, J. W. Johnson, B. J. Rose, and P. F. Springer
 Honeyeaters, see Meliphagidae
 Houston, C. S., Recoveries of Saskatchewan-banded Great-horned Owls 174(r)

- Howe, H. F., Egg size, hatching asynchrony, sex, and brood reduction in the Common Grackle 73(r)
- Howe, H. F., Initial investment, clutch size, and brood reduction in the Common Grackle (*Quiscalus quiscula* L.) 375(r)
- Howey, P., R. Board, and J. Kear, A pulse-position-modulated multichannel radio telemetry system for the study of the avian nest microclimate 271(r)
- Huc, R., see Blondel, J., and —
- Hudson, D. M., see Bernstein, M. H., I. Sandoval, M. B. Curtis, and —
- Hulsman, K., Breeding success and mortality of terns at One Tree Island, Great Barrier Reef 72(r)
- Hummingbird, Anna, see *Calypte anna*
- Hummingbird, Rufous, see *Selasphorus rufus*
- Huskey, R. C., see Zucker, I. H., —, C. E. C. Haack, and J. P. Gilmore
- Hussell, D. J. T., see Dunn, E. H., —, and R. E. Ricklefs
- Hutchinson, G. E., Zoological iconography in the West after A.D. 1200 196(r)
- Hutterer, L. R., An experiment in determining optimum feeding frequency for hand rearing Great Bustard chicks 277(r)
- Ilyichev, V., Spatial orientation and behavior control 72(r)
- Ingels, J., Notes on the nesting of three common tanagers in Fr. Guiana 375(r)
- Ioalé, P., F. Papi, V. Fiaschi, and N. E. Baldaccini, Pigeon navigation: effects upon homing behavior by reversing wind direction at the loft 371(r)
- Isemann, P., The Marseilles dump as foraging habitat for the Black-headed Gull *Larus ridibundus* 193(r)
- Itamies, J., and M. Ojanen, Autumn predation of *Parus major* and *P. montanus* upon two leaf-mining species of *Lithocolletis* (Lepidoptera) 387(r)
- Jackdaw, see *Corvus monedula*
- Jackson, J., Age characteristics of Red-cockaded Woodpeckers 23–29
- Jaeger, Parasitic, see *Stercorarius parasiticus*
- Jakobsson, S., see Jarvi, T., T. Radesäter, and —
- Janossy, D., Plio-Pleistocene bird remains from the Carpathian Basin III. Strigiformes, Falconiformes, Caprimulgiformes, Apodiformes 87–88(r)
- Järvi, T., T. Radesäter, and S. Jakobsson, Aggressive responses of two hole-nesting passerines, *Parus major* and *Ficedula hypoleuca*, to the playback of sympatric species song 388(r)
- Järvinen, O., Estimating relative densities of land birds by point counts 373(r)
- Järvinen, O., and R. A. Väisänen, Recent changes in forest bird populations in Northern Finland 372(r)
- Jay, Blue, see *Cyanocitta cristata*
- Jay, Piñon, see *Gymnorhinus cyanocephalus*
- Jay, Siberian, see *Perisoreus infaustus*
- Jehl, J. R., Jr., Nest-shifting by a Dowitcher 367–368
- Jellman, J., and G. Vauk, Spring migr. patterns in the German Bight, studied by radar and results of trapping and visual observations on Heligoland 269(r)
- Jenkins, J. A. F., see Clunie, F., F. C. Kinsky, and —
- Jirovec, D. J., see Arnold, K. A., and —
- Johnson, J. W., see Whitney, N. R., Jr., B. E., Harrell, B. K. Harris, N. Holden, —, B. J. Rose, and P. F. Springer 394(r)
- Judd, W. W., Death of a Blue Jay after 22 years in captivity 69
- Junco, Dark-eyed, see *Junco hyemalis*
- , dominance and genetics 193(r)
- Kacelnik, A., see Krebs, J. T., —, and P. Taylor
- Kadosaki, M., The lung and air-sac system of the Strigidae, 1 85(r)
- Kagarise, C. M., Breeding biol. of the Wilson's Phalarope in N.D. 12–22
- Kale, H. W., Rare and Endangered Biota of Florida 391(r)
- Kaletsii, A., The Kirghiz Republic's Game Manage. Administration 186(r)
- Kallander, H., Food of the Long-eared Owl *Asio otus* in Sweden 89(r)
- Kaminski, M., see Lucotte, G., and —
- Kaplan, S., G. L. Kolesari, and J. P. Bahr, Temp. dynamics of the fertile chicken egg 83(r)
- Kasal, C. A., M. Menaker, and J. R. Perez-Palo, Circadian clock in culture: N-acetyltransferase activity of chick pineal glands oscillates in vitro 280(r)
- Kawaji, N., S. Shiraishi, and H. Hayashi, Birds on the north coast of the Sea of Adria. I. Seasonal changes in number of species and individuals of the representative birds 282(r)
- Kear, J., see Howey, P., R. Board, and —
- Keeton, W. T., see Larkin, T., and —
- Keeton, W. T., see Papi, F., —, A. I. Brown, and S. Benvenuti
- Keeton, W. T., see Schmidt-Koenig, K., and —
- Keeton, W. T., see Waldvogel, J. A., S. Benvenuti, —, and F. Papi

- Keith, L. B., see Adamacik, R. S., A. W. Todd, and —
- Keith, L. B., see Adamacik, R. S., and —
- Kelley, A. H., Birds of Southeastern Michigan and Southwestern Ont. 391(r)
- Kellomaki, E., E. Heinonen, and H. Tiainen, Two successful nestings of Tengmalm's Owl in one summer 168(r)
- Kelso, L. H., see Clark, R. J., D. G. Smith, and —
- Kenward, R. E., Winter predation by Goshawks in lowland Britain 387(r)
- Kestrel, Amer., incub. physiol. 383(r)
- Khayutin, S., and L. Dmitrieva, Development acceleration of sensory and motor mechanisms of nestling as factors in systemogeny of some bird species 74(r)
- Khrokov, V. V., The Sociable Plover 382(r)
- Kiend, E., see Brien, Y., —, and M. Le-Démézet
- Kiepenhever, J., Inversion of the magnetic field during transport: its influence on the homing behavior of pigeons 169(r)
- King, J. R., see Mahoney, S. A., and —
- Kilgore, D. L., D. F. Boggs, and G. F. Birchard, Role of the "rete ophthalmicum" in maintaining the body-to-brain temp. difference in pigeons 278(r)
- Kinney, J. L., see White, F. N., G. A. Bartholomew, and —
- Kinsky, F. C., see Clunie, F., —, and J. A. F. Jenkins
- Kirschvink, J. L., see Gould, J. L., —, and K. S. Deffeyes
- Kishchinskii, A., Birds and the Bering land bridge problem 384(r)
- Kishchinskii, A., Trophic relations of birds and some invertebrates in tundra ecosystems 80(r)
- Kiwi, see *Apteryx australis*
- Klint, T., Significance of mother and sibling experience for mating preferences in the mallard (*Anas platyrhynchos*) 78(r)
- Knight, T. A., and F. N. Robinson, A possible method of protecting grape crops by using an acoustical device to interfere with communication calls by Silvereyes 276(r)
- Knudsen, E. I., and M. Konishi, Center-surround organization of auditory receptive fields in the owl 187(r)
- Kokako, North Island, see *Callaeas cinerea*
- Kolesari, G. L., see Kaplan, S., —, and J. P. Bahr
- Konishi, M., see Knudsen, E. I., and —
- Konishi, M., and E. I. Knudsen, The Oil-bird: hearing and echolocation 281(r)
- Koopmans, H., J. A. Lackey, B. Borowsky, and J. H. Ostrom, The early bird 386(r)
- Korpimäki, E., Breeding biology of the Starling *Sturnus vulgaris* in western Finland 178(r)
- Kostin, Y. V., Is the Little Bustard doomed? 83(r)
- Krebs, J. R., Habituation and song repertoire in the Great Tit 195(r)
- Krebs, J. T., A. Kacelnik, and P. Taylor, Test of optimal sampling by foraging Great Tits 81(r)
- Krechmar, A., and E. Syroechkovskii, Incub. ecology of Snow Geese on Wrangell Is. 179(r)
- Krechmar, A., see Syroechkovskii, E., —, and A. Artyukhov
- Kreithen, M. L., Sensory mechanisms for animal orientation—can any new ones be discovered 267–268(r)
- Krivososov, G., and D. Bondarev, The Pelicans' fate on the Volga Delta 381(r)
- Krivososov, G., N. Morozkin, and N. Skokova, Problems in Kyzyl-Agach 381–382(r)
- Kroll, J. C., see Locke, B. A., R. N. Conner, and —
- Kurosawa, O., see Nakamura, T., —, and S. Shinkai
- Kushlan, J. A., Nonrigorous foraging by robbing egrets 182(r)
- Kushmarev, E., see Nazarov, Y., O. Valchuk, and —
- Kveseth, N., see Fimreite, N., Bjerk, —, and E. Brun
- Kuyt, E., Banding of juvenile Whooping Cranes on the breeding range in the NW Terr., Can. 370(r)
- Lackey, J. A., see Koopman, H., —, B. Borowsky, and J. H. Ostrom
- Lagerstrom, M., and I. Hakkinen, The uneven sex ratio of voles in the food of *Aegolius funereus* and *Strix aluco* 287(r)
- Lapwing, see *Vanellus vanellus*
- Larkin, T., and W. T. Keeton, An apparent lunar rhythm in the day-to-day variations in initial bearings of homing pigeons 169(r)
- Larson, G. E., see Tigner, J. R., and —
- Larus argentatus*, aging 49–55
- , as organochlorine indicators 185(r)
- , cross-fostering of young 79(r)
- , hybrid. 191(r)
- , nest. colonies 384(r)
- , nest. success 177(r)
- , oil effects on liver 85(r)
- Larus atricilla*, breed. 304–321
- Larus bulleri*, clam predation 89(r)

- Larus delawarensis*, origins of colony members 210-215
- Larus fuscus*, hybrid. 191(r)
- Larus glaucescens*, aggressive commun. 180(r)
- Larus marinus*, oil effects on eggs 108-113
- Larus relictus*, nest. behav. 377(r)
- Larus ridibundus*, foraging in dumps 193(r)
- Larus* species, tactile sensitivity of feathers 86(r)
- Lavers, R. B., Distribution of the North Island Kokako (*Callaeas cinera wilsoni*): A review 282(r)
- LeDémézet, M., see Brien, Y., E. Kiendl, and —
- Leberman, R. C., see Clench, M. H., and —
- Leberman, R. C., and M. H. Clench, Bird-banding at Powdermill 167(r)
- LeFranc, M. N., Jr., see Lincer, J. L., W. S. Clark, and —
- Leonov, E., On lability in evident embryo adaptation in the Common Cuckoo 74(r)
- Lepthien, L. W., see Bock, C. E., J. B. Mitton, and —
- Lesser, F., see Burger, J., and —
- Lien, M. R., Song pattern of the Cypress Hills pop. of White-cr. Sparrows 387(r)
- Lincer, J. L., W. S. Clark, and M. N. LeFranc, Jr., Working Bibliography of the Bald Eagle 391(r)
- Ligon, J. D., Reproductive interdependence of Piñon Jays and piñon pines 182(r)
- Limnodromus griseus*, nest-shift 367-368
- Little, B., see Newton, I., E. R. Mech, and —
- Liversidge, R., see McLachlin, G. R., and —
- Lobkov, E., Steller's Sea Eagle on Kamchatka 282(r)
- Locke, B. A., R. N. Conner, and J. C. Kroll, Use of Velcro for handling birds 369
- Loftin, R. W., and L. A. Thompson, An artificial nest structure for Least Terns 163-164
- Lomov, A., An analysis of genome divergence of ratite and carinate birds by DNA molecular hybrid. method 283(r)
- Long Point Bird Observatory 1976 Annual Report 291(r)
- Loons, see *Gavia*
- Loridae, flower pollination 80(r)
- Lorikeets, see Loridae
- Louw, G. N., see Berry, H. H., R. P. Millar, and —
- Love, J. A., M. E. Ball, and I. Newton, White-tailed Eagles in Britain and Norway 185(r)
- Lovegrove, T. G., Seabird observations between N.Z. and Fiji 385(r)
- Lowther, P. E., Overlap of House Sparrow broods in the same nest 160-162
- Lucotte, G., and M. Kaminski, Biochemical homeostasis of the heterozygote at the lysozyme locus in the Jap. Quail 88(r)
- Lunda cirrhata*, ecol. and behav. 184(r)
- McBurney, J. G. R., see Dawson, D. G., P. J. Dilks, P. D. Gaze, —, and P. R. Wilson
- McEwan, E. H., and P. M. Whitehead, Influence of weathered crude oil on liver enzyme metab. of testosterone in gulls 85(r)
- McGill, P. A., and M. E. Richmond, Hatching success of Great Black-backed Gull eggs treated with oil 108-113
- McGrath, S., see Morton, E. S., M. S. Geitgey, and —
- McInnis, R. S., and P. B. Carne, Predation of cassid moth larvae by Yellow-tailed Black Cockatoos causing losses in plantations of *Eucalyptus grandis* in north coastal New South Wales 82(r)
- McKay, D. J., see Rusch, D. H., N. M. Gillespie, and —
- McKenzie, H. R., N.Z. Dotterel banding report number one 267(r)
- McKinley, D., The Carolina Parakeet in Indiana 86(r)
- McLachlin, G. R., and R. Liversidge, Roberts' Birds of South Africa 92(r)
- McNicholl, M. K., see Falls, J. B., and —
- Mahoney, S. A., and J. R. King, The use of the equivalent black-body temp. in the thermal energetics of small birds 84(r)
- Maki, W. S., Discrimination learning without short-term memory: dissociation of memory processes in pigeons 273(r)
- Malacorhynchus scarletti*, new fossil species 87(r)
- Maltby, L. S., Birds of the coastal zone of Melville Island, 1973-1975 189(r)
- Mannan, R. W., Amer. Redstart assists at Yellow Warbler nest 263
- Manning, T. H., Measurements and weights of eggs of the Can. Goose, *Branta canadensis*, analyzed and compared with those of other species 73(r)
- Manorina melanocephala*, interspecific aggression 76(r)
- Marchant, J. H., see Prater, A. J., —, and J. Vourinen
- Marshall, A. G., see Diamond, J. M., and —
- Marshall, J. T., Systematics of Smaller Asian Night Birds Based on Voice 393(r)

- Martin, G. R., see Bowmaker, J. K., and —
 Martin, M., and T. W. Barry, Nesting behavior and food habits of Parasitic Jaegers at Anderson River Delta, NW Terr. 176(r)
- Martin, M. L., and J. R. Bider, A transmitter attachment for blackbirds 81(r)
- Maugh, T. H., II, Birds fly, why can't I? 280(r)
- Meadowlark, see *Sturnella neglecta*
- MEASUREMENTS
- Catbird, Gray, size and weight 124-144
- Goose, Can., eggs 73(r)
- Gull, Herring 49-55
- Hawk, Sharp-shinned 34-44
- Woodpecker, Red-cockaded 23-29
- Meck, E. R., see Newton, I., —, and B. Little
- Melanerpes formicivorous*, social plasticity 181(r)
- Meliphagidae, pollination 80(r)
- Menaker, M., see Kasal, C. A., —, and J. R. Perez-Palo
- Menne, M., and E. Curio, Investigations into the symmetry concept in the Great Tit (*Parus major* L.) 181(r)
- Merops apiaster*, nest. physiol. 83(r)
- Merritt, R. W., see Anderson, J. R., and —
- Mewaldt, L. R., see Baker, M. C., and —
- Mewaldt, L. R., see Gill, R., Jr., and —
- Middleton, A. L. A., Influence of age and habitat on reproduction by the Amer. Goldfinch 375(r)
- MIGRATION, ORIENTATION, AND HOMING
- behavior control 72(r)
- birds, Eur., earthquake infrasound detection 173(r)
- , magnetic sensitivity 172(r)
- Bullfinch, dispersal 370(r)
- Bunting, Reed, Zugunruhe 269(r)
- Chaffinch, wind effect on altitude 174(r)
- Eagle, Bald, migr. in Sask. 172(r)
- Falcon, Peregrine, Can. 371(r)
- magnetic cues, proposed principles 173(r)
- magnetic resonance in bees 72(r)
- migrants, Jap. 282(r)
- , noct. 170(r), 171(r)
- Owl, Barn, over water 68
- Pigeon, Homing, lunar rhythm effect 169(r)
- , behav. affected by wind 371(r)
- , magnetic anomalies 171(r)
- , magnetic field effect 169(r)
- , olfactory hypothesis 171(r), 371-2(r)
- , sens. mechanisms 268(r)
- Redshank, Spotted, migr. 373(r)
- Robin, "emigration ratio" 370(r)
- Robin, Eur., magnetic compass 170(r)
- Sensory cues 267-268(r)
- Siskin, Pine, air current sensitivity 174(r)
- Sparrow, White-throated 173(r)
- Starling, Common 168(r)
- , radar study 269(r)
- Statistical analysis 267(r)
- Warbler, Garden 172(r)
- warblers, Blackpoll and Yellow-rumped 1-11
- Mikhtaryants, E., Notes on ecology and behavior of the Tufted Puffin 184(r)
- Millar, R. P., see Berry, H. H., —, and G. N. Louw
- Miller, D. B., Species-typical and individually distinctive acoustic features of crow calls of the Red Jungle Fowl 90(r)
- Miller, E. H., Functions of display flights by males of the Least Sandpiper, *Calidris minutilla* (Viell.), on Sable Island, N.S. 377(r)
- Miller, W. H., see Snyder, A. W., and —
- Mills, J. A., and J. P. Ryder, Trap for capturing shore and seabirds 121-123
- Milovanova, N., see Belopolskii, L., G. Goryainova, —, I. Petrova, and N. Polonik
- Miner, Noisy, see *Manorina melanocephala*
- Minton, C. D. T., see Anderson, K. R., and —
- Minton, C. D. T., see Appleton, G. F., and —
- MISCELLANEOUS
- Cairns, John S., letters by 91(r)
- Centzontle, new journal (Mexican) 167(r)
- Couves, 19th century natural historical observations 389(r)
- Sociobiology 389(r)
- Zoological iconography in the West 196(r)
- Zoologicheskii Zhurnal* output 91(r)
- Mitton, J. B., see Bock, C. E., —, and L. W. Lephthien
- mixed species flocks, foraging 81(r)
- Moed, A., see Baker, A. J., and —
- Molothrus ater*, fledgling survival 66-68
- Morley, C., see Harris, M. P., —, and G. H. Green
- Moore, F., Sunset and the orientation of a noct. migr. bird 173(r)
- Morozkin, N., see Krivososov, G., —, and N. Skokova
- MORPHOLOGY AND ANATOMY
- Kiwi 383(r)

- Morris, L., Effect of blackened epaulets on the terr. behav. and breed. success of male Red-winged Blackbirds 180(r)
- Morse, D. H., Feeding behavior and predator avoidance in heterospecific groups 81(r)
- Morse, D. H., and C. W. Bucheister, Nesting patterns of Leach's Storm-Petrels on Matinicus Rock, Maine 145-158
- Morse, P. J., Pairing and courtship in the N. Amer. Dipper 62-64
- MORTALITY**
- Dove, Mourning 256-262
terns 72(r)
- Woodpecker, Red-cockaded, anomaly 368
- Morton, E. S., M. S. Geitgey, and S. McGrath, On bluebird "responses to apparent female adultery" 179(r)
- Mosquin, T., and C. Suchal (eds.), Canada's Threatened Species and Habitats 95(r)
- Moss, R., see Watson, A., and —
- Mueller, A. J., see Peterson, P. C., and —, 69-70
- Mueller, H. C., Over-water flights of Barn Owls 68
- Mueller, H. C., D. D. Berger, and G. Allez, Age and sex differences of Sharp-shinned Hawks 34-44
- Murray, B. G., Jr., Fall migr. of Blackpoll and Yellow-rumped Warblers at Island Beach, N.J. 1-11
- Muscisaxicola*, in Argentina 191(r)
- Muzaev, V., The moult of the Garden Warbler in the northeast Leningrad Region 281(r)
- Myna, Common, see *Acridotheres tristis*
- Naismith, G., see Devlin, J. C., and —
- Nakamura, T., O. Kurosawa, and S. Shin-kai, Activities of caged *Emberiza schoeniclus* exposed to different artificial temp. 269(r)
- Nankinov, D., On the possible influence of earthquakes on the migr. of birds 173(r)
- Nankinov, L. D., Postnesting movements of the Common Starling 168(r)
- Nazarov, Y., O. Yalchuk, and E. Kushmarov, On the biology of the Vinous-throated Parrotbill 175(r)
- Nechaev, V., On the biology and behavior of Armstrong's Sandpiper on Sakhalin Is. 277(r)
- Nesbitt, S. A., An evaluation of four wild-life marking materials 159
- NESTING AND REPRODUCTION**
- Albatross, Short-tailed 271-272(r)
- Anseriformes, around owls 75(r)
- Bee-eater, Eur., physiol., nest 83(r)
- birds, tropics 374(r)
- Blackcap, nest site choice 272(r)
- Bunting, Lark 72-73(r)
- Dipper, nest. biol. 176(r)
- Dowitcher, Short-billed, nest-shift 367-368
- Eagle, Short-toed 179(r)
- egg shape 178(r)
- Falcon, Peregrine 374(r)
- Falconiformes, breed. strategies 271(r)
- Flycatcher, Pied, 74(r)
- Flycatcher, Pied, Finland 178(r)
- Galápagos seabirds 56-61
- Goldfinch, Amer. 375(r)
- Goose, Snow 178(r), 179(r)
- Grackle, Common 375(r)
- Gull, Herring 177(r)
- Gull, Laughing 304-321
- Jaegers, Parasitic 176(r)
- Kiwi, incub. temp. 272(r)
- Kiwi, yolk reserve energy 272(r)
- Merlin 176(r)
- Nightjar 374(r)
- Owl, Barn, cannibalism 272(r)
- Owl, Little, nest temp. 271(r)
- Parrotbill, Vinous-throated 175(r)
- passerines, Finland 177(r)
- Petrel, Fork-tailed Storm 376(r)
- Petrel, Leach's Storm, 145-158
- Phalarope, Wilson's 12-22
- Pipit, Meadow, nesting growth 175(r)
- Plover, Snowy 273(r)
- Quail, Stubble 374(r)
- radiotelemetry, in the nest 271(r)
- Sparrow, House, brood overlap 160-162
- songbird, time of egg-laying 375(r)
- Starling, Common, Finland 178(r)
- Swallow, Bank, site tenacity 349-357
- tanagers 375(r)
- Tern, Antarctic 75(r)
- Tern, Arctic 75(r)
- Tern, Black 374(r)
- Tern, Common 73(r)
- terns 72(r)
- Tit, Great 177(r)
- Warbler, Booted 376(r)
- warblers, Reed and Sedge 176(r)
- Woodpecker, Great Spotted 75(r)
- Nettleship, D. N., Studies of Seabirds at Prince Leopold Island and vicinity, NW Terr. Preliminary Report of Biological Investigations in 1975 293(r)

- Nettleship, D., and A. J. Gaston, Patterns of pelagic distribution of Seabirds in Western Lancaster Sound and Barrow Straight, NWT 282(r)
- Neufeldt, I. A., Range of the Hooded Crane 190(r)
- NEW JOURNALS
- Birding News Survey 266(r)
- Bird Watcher's Digest 266(r)
- Newman, J. R., Effects of industrial air pollution on wildlife 381(r)
- Newton, I., Breeding strategies in birds of prey 271(r)
- Newton, I., E. R. Meck, and B. Little, Breeding ecol. of the Merlin in Northumberland 176(r)
- Newton, I., see Love, J. A., M. E. Ball, and —
- Nightjar, see *Caprimulgus europaeus*
- Nisbet, I. C. T., see Spitzer, P. R., R. W. Risebrough, W. Walker II, R. Hernandez, A. Poole, D. Puleston, and —
- Norberg, R., Energy content of spiders and insects on branches of spruce (*Picea abies*) in winter; prey of certain passerine birds 275(r)
- Norstrum, R. J., D. J. Hallett, and R. A. Sonstegard, Coho salmon (*Oncorhynchus kisutch*) and Herring Gulls (*Larus argentatus*) as indicators of organochlorine contamination in Lake Ontario 185(r)
- Noskov, G., and E. Smirnov, Experimental research on photoperiodic regulation of postnuptial molt in the Greenfinch (*Chloris chloris* L.) 384(r)
- Oceanodroma*, N.Z. 385(r)
- Oceanodroma furcata*, incub. 376(r)
- Oceanodroma leucorhoa*, nest. 145-158
- Oilbird, see *Steatornis caripensis*
- Ojanen, M., and M. Orell, Method for determining the incubation stage of Pied Flycatcher *Ficedula hypoleuca* eggs 74(r)
- Ojanen, M., M. Orrel, and R. A. Väisänen, Egg and clutch sizes in four passerine species in northern Finland 177(r)
- Ojanen, M., see Itamies, J., and —
- Olson, S. L., Notes on Subfossil Anatidae from N.Z., including a new species of Pink-eared Duck *Malacorhynchus* 87(r)
- Olson, S. L., The identity of the fossil ducks described from Australia by C. W. DeVis 87(r)
- Oniki, Y., Is nesting success of birds low in the tropics? 374(r)
- Oniki, Y., see Willis, E. O., and —
- Oporornis philadelphia*, hybrid 101-107
- Oporornis tolmiei*, hybrid 101-107
- Orell, M., see Ojanen, M., and —
- Orrel, M., see Ojanen, M., —, and R. A. Väisänen
- Osprey, see *Pandion haliaetus*
- Ostrum, J. H., Bird flight: how did it begin? 285(r)
- Ostrum, J. H., see Koopmans, H., J. A. Lackey, B. Borowsky, and —
- Otis tarda*, hand rearing chicks 277(r)
- Otis tetrax*, survival 83(r)
- Owadally, A. M., and S. A. Temple, The Dodo and the tambaloque tree 287(r)
- Owl, Barn, see *Tyto alba*
- Owl, Great Gray, see *Strix nebulosa*
- Owl, Great-horned, see *Bubo virginianus*
- Owl, Little, see *Athene noctua*
- Owl, Long-eared, see *Asio otus*
- Owl, Tawny, see *Strix aluco*
- Owl, Tengmalm's, see *Aegolius funereus*
- owls, in Russia, duetting 90(r)
- Owls, see Strigidae
- Oystercatcher, see *Haematopus ostralegus*
- Paganelli, C. V., see Rahn, H., A. Ar, and —
- Pandion haliaetus*, pesticide effects 82(r)
- , productivity 277(r)
- Papi, F., see Ioalé, P., —, V. Fiaschi, and N.E. Baldaccini
- Papi, F., see Waldvogel, J. A., S. Benvenuti, W. T. Keeton, and —
- Papi, F., W. T. Keeton, A. I. Brown, and S. Benvenuti, Do Amer. and Ital. pigeons rely on different homing mechanisms 372(r)
- Parakeet, Carolina, see *Conuropsis carolinensis*
- Parker, A., Peregrines at a Welsh coastal eyrie 374(r)
- Parrot, African Grey, see *Psittacus erithacus*
- Parrotbill, Vinous-throated, see *Suthora webbiana*
- Parus major*, alarm call response 196(r)
- , auditory responses 195(r)
- , competition 275(r)
- , foraging 81(r)
- , mate selection 378(r)
- , nesting 177(r)
- , nestling develop. 74(r)
- , playback response to song 388(r)
- , predation on insects 387(r)
- , song repertoire 195(r)
- , symmetry discrimination 181(r)
- , winter flocks, Jap. 183(r)
- Parus varius*, stored food 89(r)
- Pasanen, S., Breeding biology of the Pied Flycatcher *Ficedula hypoleuca* in Eastern Finland 178(r)
- Passer domesticus*, Asian form 283(r)

- , biological clock 187(r)
 —, brood overlap 160–162
Passerculus sandwichensis, nestling growth 164–166
 passerines, bioenergetics at rest 383(r)
 —, nesting, Finland 177(r)
 Passmore, M. F., Use of Velcro for handling birds 369
 Paton, D. D., and H. A. Ford, Pollination by birds of native plants in S. Australia 80(r)
 Payne, S., see Elowe, K. D., and —
 Pedrolli, J. C., and M. Graf-Jaccottet, Growth of nestling Meadow Pipits *Anthus pratensis* 175(r)
Pelecanus crispus, pop. decline 381(r)
 pelican, see *Pelecanus crispus*
 Perez-Palo, J. R., see Kasal, C. A., M. Menaker, and —
 Pergolani de Costa, M. J. I., The *Muscisaxicola* of Argentina 191(r)
Perisoreus infaustus, metab. 275(r)
 Perrins, C. M., see Greenwood, P. J., P. H. Harvey, and —
 Peters, S., see Ricklefs, R. E., and —
 Peterson, P. C., and A. J. Mueller, Longevity and colony loyalty in Bank Swallows 69–70
 Petitmermet, P., Water Rail fishes through thin ice 287(r)
 Petrel, Fork-tailed Storm, see *Oceanodroma furcata*
 Petrel, Leach's Storm, see *Oceanodroma leucorhoa*
 Petrova, I., see Belopolskii, L., G. Goryainova, N. Milovanova, —, and N. Polonik
 Pettigrew, J. D., A role for the avian pecten oculi in orientation to the sun 268(r)
Phalacrocorax capensis, hormonal levels 278(r)
 Phalarope, Wilson's, see *Phalaropus tricolor*
Phalaropus tricolor, breed. 12–22
 Phillips, D., see Tyler, H., and —
 Phillips, J. B., see Schmidt-Koenig, K., and —
- PHYSIOLOGY**
 Bee-eater, Eur., nest 83(r)
 biological clock, pineal 188(r)
 birds, small, thermal energetics 84(r)
 Blackbird, Red-winged, aggression 383(r)
 chicken, in vitro pineal oscillations 280(r)
 —, pineal circadian rhythm 281(r)
 —, temp. dynamics of egg 83(r)
 Cormorant, Cape, hormonal levels 278(r)
 duck, in flight 280(r)
 —, parabronchial volume 84(r)
 —, Pekin, salt gland 279(r)
 egg, porosity to gaseous exchange 281(r)
 Finch, Zebra, testosterone, courtship 188(r)
 Goose, Domestic, salt gland 278(r)
 Grouse, Blue, reprod. 278(r)
 Gull, Herring, oil effects 85(r)
 Kestrel, Amer., incub. costs 383(r)
 Oilbird, hearing, echolocation 281(r)
 Owl, Barn, auditory field 187(r)
 Parakeets, Monk, temp. acclimatization 84(r)
 passerines, bioenergetics 383(r)
 pigeon, brain blood circulation 278(r)
 —, brain temp. 278–279(r)
 Procellariiformes, plasma proteins 279–280(r)
 ratites, resting metab. rate 83(r)
 Skimmer, Black, aerodynamic flight 279(r)
 Sparrow, House, biological clock 187(r)
 Sparrow, White-cr., endocrinology 187(r)
 Strigidae, hearing 187(r)
Picoides borealis, age 23–29
 —, unusual cause of death 368
Picoides villosus, feed. behav. 365
 Plover, Golden, see *Pluvialis apricaria*
 Plover, Sociable, see *Chettusia gregaria*
Pluvialis apricaria, breed. schedule 376(r)
 —, foraging 380(r)
 pigeon, see *Columba*
 —, homing 169–172(r)
 Pineal gland 188(r)
 Pipit, Meadow, see *Anthus pratensis*
 Pleszczynska, W. K., Microgeographic prediction of polygyny in the Lark Bunting, 72–73(r)
 Plover, Snowy, see *Charadrius alexandrinus*
- PLUMAGES AND MOLT**
 Duck, Mallard, genetics and behav. 78(r)
 Gnatcatcher, Blue-gray 71
 Goose, Snow, genetics and behav. 77(r)
 Greenfinch, photoperiodic control of molt 384(r)
 Gull, feather tactile sensitivity 86(r)
 Gull, Ross's 384(r)
 Lapwing, primary molt 188(r)
 Warbler, Golden, Soviet Union 281(r)
Poephila species, courtship 76(r)
 policy, conservation in Que. 186(r)
Polioptila caerulea, plumage 71
 Polonik, N., see Belopolskii, L., G. Goryainova, N. Milovanova, I. Petrova, and —
 Poluda, A., Wind effect on the flight altitude of the Chaffinch 174(r)
Pomatostromus halli, behav. 76(r)
 Poole, A., see Spitzer, P. R., R. W. Rise-

- brough, W. Walker, R. Hernandez, —, D. Puleston, and I. C. T. Nisbet
 Poole, R. W., B. J. Rathcke, and F. G. Stiles, Regularity, randomness, and aggregation in flowering phenologies 276(r)
POPULATION DYNAMICS
 birds, Eur. 373(r)
 —, Rhodesia 376(r)
 census method, line transect 270(r)
 —, point count 373(r)
 —, terr. mapping 270(r)
 Gannet, White Island, N.Z. 270(r)
 Grouse, Ruffed, decline 175(r)
 life history traits 373(r)
 Owl, Great-horned 174(r), 175(r)
 owl, in relation to vole numbers 269(r)
 seabirds, visual count 358–364
 Snipe, Common, migr. Tex. 175(r)
 terns 72(r)
 Tetraonidae 373(r)
 Postupalsky, S., An invalid record of a 14-year-old banded Bald Eagle 263–264
 Powdermill, banding at 167(r)
 Prater, A. J., J. H. Marchant, and J. Vourinen, Guide to the Identification and Ageing of Holarctic Waders 94(r)
PREDATION
 Cockatoo, Yellow-tailed, on moths 82(r)
 Eagle, Golden, sheep losses 82(r)
 Heron, Great Blue 264–265
Presbyornis 87(r)
 Procellariiformes, relationships 279–280(r)
 Prove, E., Quantitative investigations of the interactions between courtship and testosterone titers in male Zebra Finches (*Taenopygia guttata castanotis* Gould) 188(r)
Psittacus erithacus, vocalizations 90(r)
 Pteroclididae, systematics 283(r)
 Puffin, Tufted, see *Lunda cirrhata*
 Pukinskii, Y. B., On rare and little known birds of Bikin River Basin 90(r)
 Puleston, D., see Spitzer, P. R., R. W. Risebrough, W. Walker, R. Hernandez, A. Poole, —, and I. C. T. Nisbet
 Pulliainen, E., Behavior of a Willow Grouse *Lagopus lagopus* at the nest 378(r)
 Puttick, G. M., The diet of the Curlew Sandpiper at Langbaan Lagoon, S. Afr. 388(r)
Pycnonotus cater, Fiji 87(r)
Pyrrhula pyrrhula, dispersal 370(r)
 Quail, Jap., see *Coturnix coturnix*
 Quail, Stubble, see *Coturnix novaezealandiae*
 Querner, U., see Bergtold, P., and —
Quiscalus quiscula, clutch size 375(r)
 —, dominance and genetics 192(r)
 —, eggs and survival 73(r)
 Rabenold, K. N., Foraging strategies, diversity, and seasonality in bird communities of Appalachian spruce-fir forests 274(r)
 Rabøl, J., and K. Hansen, Environmental variables and the nightly emigration ratio of the robin (*Erithacus rubecula*) on the island Hjelms, Denmark 370(r)
 Radesäter, T., see Järvi, T., —, and S. Jakobsson
 Rahn, H., A. Ar, and C. V. Paganelli, How bird eggs breathe 281(r)
 Rail, Water, see *Rallus aquaticus*
Rallus aquaticus, ice-fishing 287(r)
Raphus solitarius, coevolution 287(r)
 Rappole, J. H., E. C. Rappole, and C. P. Barkan, Basic plumage in the male blue-gray Gnatcatcher 71
 raptors, Can., band. 167–168(r)
 Rathcke, B. J., see Poole, R. W., —, and F. G. Stiles
 ratites, resting metabolic rates 83(r)
 Rauch, N., Structure of the vocalizations of a speech-imitating Afr. Grey Parrot 90(r)
 Rayfield, D., The Dream of Lhasa. The Life of Nikolay Przhevalsky (1839–1888), Explorer of Central Asia 95(r)
 Rayner, W., see Field, M., and —
 Raynor, G. S., Weight and size variation in the Gray Catbird 124–144
Recurvirostra americana, time budget 81(r)
 Redshank, see *Tringa totanus*
 Redshank, Spotted, see *Tringa erythropus*
 Redstart, Amer., see *Setophaga ruticilla*
 Reid, B., The energy value of the yolk reserve in a North Island Brown Kiwi chick 272(r)
 Reid, B., and G. Williams, The Kiwi 383(r)
 Reilly, K. B., see Binkley, S. A., J. B. Richman, and —
Rhodostethia rosea, plumage 384(r)
 Richman, J. B., see Binkley, S. A., —, and K. B. Reilly
 Richmond, M. E., see McGill, P. A., and —
 Rickert, J. E., Sr., A Guide to N. Amer. Bird Clubs 95(r)
 Ricklefs, R. E. (ed.), Report of the Advisory Panel on the California Condor 293(r)
 Ricklefs, R. E., and S. Peters, Intraspecific variation in the growth rate of nestling European Starlings 338–348
 Ricklefs, R. E., see Dunn, E. H., D. J. T. Hussell, and —
Riparia riparia, longevity and colony loyalty 69–70
 —, nest site tenacity 349–357
 Risebrough, R. W., see Spitzer, P. R., —,

- W. Walker II, R. Hernandez, A. Poole, D. Puleston, and I. C. T. Nisbet
Rissa tridactyla, individual vocal recognition 195(r)
- Robin, Eur., see *Erithacus rubecula*
- Robinson, F. N., see Knight, T. A., and —
- Rose, B. J., The Birds of South Dakota. Check-list 394–395(r)
- Rothstein, S. I., Effects of banding on the tarsus of the White-cr. Sparrow 244–251
- Rowe, B., Incubation temperatures of the North Island Brown Kiwi (*Apteryx australis*) 272(r)
- Rundgren, S., see Bengston, S. A., and —
- Ruprecht, A., see Cabon-Raczynska, K., and —
- Rusch, D. H., N. M. Gillespie, and D. J. McKay, Decline of a Ruffed Grouse population in Man. 175(r)
- Ryden, O., Differential responsiveness of Great Tit nestlings, *Parus major*, to natural auditory stimuli: response-strength as related to stimulus significance and previous individual exposure 195(r)
- Ryden, O., The significance of antecedent auditory experiences on later reactions to the 'seeet' alarm-call in Great Tit nestling *Parus major* 196(r)
- Ryder, J. P., and T. R. Carroll, Reproductive success of Herring Gulls on Granite Island, northern Lake Superior, 1975 and 1976 177(r)
- Ryder, J. P., see Mills, J. A., and —
- Rynchops nigra*, aerodynamic flight 279(r)
- Sagar, P., Breeding of Antarctic Terns in the Snares Islands, N.Z. 75(r)
- Saitou, T., Ecological study of the social organization in the Great Tit, *Parus major* L. I. Basic structure of the winter flocks 183(r)
- Salo, J., see Soikkeli, M., and —
- Salo, L. J., Characteristics of Ruffed Grouse drumming sites in western Wash. and their relevance to management 381(r)
- Sandgrouse, see Pteroclididae
- Sandoval, I., see Bernstein, M. H., —, M. B. Curtis, and D. M. Hudson
- Sandpiper, Armstrong's see *Tringa guttifer*
- Sandpiper, Curlew, see *Erolia ferruginea*
- Sandpiper, Least, see *Calidris minutilla*
- Sappho sparganura*, behav. 79(r)
- Schalter, M. D., Mobbing in the Pied Flycatcher. Effect of experiencing a live owl on responses to a stuffed facsimile 78(r)
- Schamel, D., Bird use of a Beaufort Sea barrier island in summer 189(r)
- Scheid, P., Estimation of effective parabrachial gas volume during intermittent ventilatory flow: theory and application in the duck 84(r)
- Schifferli, L., Why do songbirds lay their eggs early in the morning? 375(r)
- Schmidt-Koenig, K., and J. B. Phillips, Local anesthesia of the olfactory membrane and homing in pigeons 171(r)
- Schmidt-Koenig, K., and W. T. Keeton, Further analysis of the magnetic compass of migr. birds 170(r)
- Schreiber, E. A., R. W. Schreiber, and J. J. Dinsmore, Breeding biol. of Laughing Gulls in Fla. Part I: Nesting, egg, and incub. parameters 304–321
- Schreiber, R. W., see Schreiber, E. A., —, and J. J. Dinsmore
- Scofield, M., The Complete Outfitting and Source Book for Bird Watching 197(r)
- Scolopax minor*, egg hatching 69
- seabirds, censusing by visual count 358–364
- , distrib., Can. 282(r)
- , trap 121–123
- , N.Z. 87(r)
- , Norwegian, pesticide effects on eggs 83(r)
- Selasphorus rufus*, terr. 377(r)
- Setophaga ruticilla*, helper at nest 263
- Shaw, G., The breeding biol. of the Dipper 176(r)
- Shelobod, L. M., see Bogdanov, L. V.
- Shen Ling-huang, Can animals help to predict earthquakes 289(r)
- Shinkai, S., see Nakamura, T., O. Kurosawa, and —
- Shiraishi, S., see Kawaji, N., —, and H. Hayashi
- Shorey, H. H., Animal Commun. by Pheromones
- Short, L. L., Sympatry in woodpeckers of lowland Malayan forest 79(r)
- Shutova, E., see Bianki, V., and —
- Sialia currucoides*, behav. 179(r)
- Siegel, P. B., see Cunningham, D. L., and —
- Silvereye, see *Zosterops lateralis*
- Simberloff, D., see Connor, E. F., and —
- Simon, E., see Deutsch, H., H. T. Hammel, —, and C. Simon-Opperman
- Simon-Opperman, C., see Deutsch, H., H. T. Hammel, E. Simon, and —
- Simpson, M. G., Jr., The letters of John S. Cairns to William Brewster, 1887–1895 91(r)
- Sirotkin, A., Nesting of the Great Spotted Woodpecker (*Dendrocopos major* L.) in the Leningrad region 75(r)
- Siskin, Pine, see *Carduelis pinus*

- Sjölander, S., Reproductive behavior of the Black-throated Diver *Gavia arctica* 273(r)
- Sjöstrand, B., see Enemar, A., —, and S. Svensson
- Skimmer, Black, see *Rynchops nigra*
- Skokova, N., see Krivonosov, G., N. Morozkin, and —
- Slagsvold, T., Competition between the Great Tit *Parus major* and the Pied Flycatcher *Ficedula hypoleuca*: an experiment 275(r)
- Smirnov, E., see Noskov, G., and —
- Smith, D. G., see Clark, R. J., —, and L. H. Kelso
- Smith, J. N. M., P. R. Grant, B. R. Grant, I. J. Abbott, and L. K. Abbott, Seasonal variation in feeding habits of Darwin's ground finches 380(r)
- Smith, S. M., The behav. and vocalization of young Turquoise-browed Motmots 76(r)
- Snipe, Common, see *Capella gallinago*
- Snow, D. W., Relationship between the Eur. and Afr. avifaunas 189(r)
- Snyder, A. W., and W. H. Miller, Telephoto lens system of falconiform eyes 86(r)
- Soikkeli, M., and J. Salo, The bird fauna of abandoned shore pastures 380(r)
- Solonen, T., Population dynamics of the Garden Warbler, *Sylvia borin* in southern Finland 375(r)
- SONGS AND VOCALIZATIONS
- Fowl, Red Jungle 90(r)
- Grouse, Blue, neighbor recognition 287(r)
- Gull, Kittiwake, individual vocal recognition 195(r)
- Jackdaw, embryonic 288(r)
- Motmot, Turquoise-browed, young 76(r)
- Owl, Great Gray 90(r)
- owls, Russia, duetting 90(r)
- Parrot, Afr. Grey 90(r)
- siskin, signal acoustics 288(r)
- Sparrow, Savannah, song variation 388(r)
- Sparrow, White-cr. 195(r), 288(r)
- Tit, Great, auditory stimuli 195(r)
- , function of repertoire 195(r)
- , playback response 388(r)
- , response to alarm call 196(r)
- Twite, 90(r)
- Sonstegard, R. A., See Norstrum, R. J., D. J. Hallett, and —
- Sotherland, P. R., see Tracy, C. R., and —
- Sowls, L. K., Prairie Ducks: A Study of their Behav., Ecol., and Manage. 292(r)
- Sparrow, House, see *Passer domesticus*
- Sparrow, Indian, see *Passer domesticus*
- Sparrow, Savannah, see *Passerculus sandwichensis*
- Sparrow, White-cr., see *Zonotrichia leucophrys*
- Sparrow, White-thtd., see *Zonotrichia albicollis*
- Spinus pinus*, acoustics 288(r)
- Spitzer, P. R., R. W. Risebrough, W. Walker, R. Hernandez, A. Poole, D. Puleston, and I. C. T. Nisbet 277(r)
- Springer, P. F., see Whitney, N. R., Jr., B. E. Harrell, B. K. Harris, N. Holden, J. W. Johnson, and —
- Spritzer, P. R., R. W. Risebrough, W. Walker II, R. Hernandez, A. Poole, D. Puleston, and I. C. T. Nisbet 82(r)
- Staaav, R., Dispersal of Caspian Terns *Sterna caspia* in the Baltic 386(r)
- Stacey, P. B., and C. E. Bock, Social plasticity in the Acorn Woodpecker 181(r)
- Starling, Common, see *Sturnus vulgaris*
- Starr, G. R., Jr., How to Make Working Decoys 394(r)
- Steatornis caripensis*, echolocation 281(r)
- Stelfox, H. A., and G. J. Brewster, Colonial-nesting Herring Gulls and Common Terns in northeastern Sask. 384(r)
- Stenchenko, A., Whooper Swans winter in Kamchatka 386(r)
- Stercorarius parasiticus*, nest. 176(r)
- Sterna albifrons*, artificial nest 163–164
- Sterna caspia*, dispersal 386(r)
- Sterna forsteri*, dispersal, migr. 385(r)
- Sterna hirundo*, breeding behav. 322–337
- , egg genetics 193(r)
- , group adherence 365
- , nest sites 73(r)
- Sterna paradisaea*, breeding 75(r)
- Sterna vittata*, breed. 75(r)
- Sturnella neglecta*, foraging 82(r)
- Stewart, P. A., Radial dispersal of Wood Ducks after the nesting season and before fall migration 385(r)
- Stewart, R. M., Crisis at Mano Lake 277(r)
- Stiles, F. G., see Poole, R. W., B. J. Rathcke, and —
- Stint, Temminck's, see *Calidris temminckii*
- Stoddard, H. L., Jr., Birds of Grady County, Ga. 289(r)
- Stout, J. F., see Amalaner, C. J., Jr., and —
- Strigidae, hearing 187(r)
- , resp. syst. 85(r)
- Strix aluco*, color vision 85(r)
- , prey 287(r), 387(r)
- Strix nebulosa*, vocalizations 90(r)
- Sturnus vulgaris*, eggs 114–120

- , mate fidelity 180(r)
 —, migr. 269(r)
 —, nest. 178(r)
 —, nestling growth rate 338–348
 —, pine damage by 276(r)
 —, postnesting movements 168(r)
 Suchal, C., see Mosquin, T., and —
 Summers, D. D. B., Bullfinch dispersal and migr. in relation to fruit bud damage 370(r)
Suthora webbiana, nest. 176(r)
- SURVIVAL**
 Blackbird, Yellow-headed 252–255
 Bustard, Little 83(r)
 Cowbird, Brown-hd. fledglings 66–68
 Flycatcher, Pied, nestlings 74(r)
 Galápagos seabirds 56–61
 Grackle, Common, young 73(r)
 Svensson, S., see Enemar, A., B. Sjöstrand, and —
 Swallow, Bank, see *Riparia riparia*
 Swan, Whooper, see *Cygnus cygnus*
 Swift, Chimney, see *Chaetura pelagica*
Sylvia atricapilla, nest site selection 272(r)
Sylvia borin, migr. 172(r)
 —, molt 281(r)
 —, pop. and breed. 375(r)
Sylvia species, habitat sel. 274(r)
 Syroechkovskii, E., Colonies of Anseriformes around Snowy Owl nests on Wrangell Island 75(r)
 Syroechkovskii, E., The size of swans, geese and brant relative to adaptation to polar conditions 85(r)
 Syroechkovskii, E., see Krechmar, A., and —
 Syroechkovskii, E., A. Krechmar, and A. Artyukhov, Fluctuations of the nesting populations of Snow Geese of Wrangell Island in 1969–1973 178(r)
- SYSTEMATICS AND PALEONTOLOGY**
 Anseriformes, Australian 87(r)
 Archaeopteryx, feathers 283(r)
 bird, early evolution 386(r)
 Dotterel, Banded, new subspecies 87(r)
 Duck, Pink-eared 87(r)
 Gull, Herring and Lesser Black-backed 191(r)
 nucleotide sequencing 283(r)
Presbyornis 87(r)
 Sandgrouse 283(r)
 Sparrow, House, Asia 283(r)
 Strigiformes, fossils 87–88(r)
 Tyrannidae, Argentina 191(r)
 Warblers, Mourning and MacGillivray's 101–107
- Taenopygia guttata*, testosterone and courtship 188(r)
 Tanager, see *Thraupis*
 Tarburton, M. K., Some recent observations on seabirds breeding in Fiji 386(r)
 Taylor, P., see Krebs, J. T., A Kacelnik, and —
TECHNIQUES
 decoy trap 45–49
 handling, use of Velcro 369
 laparotomy, for nestlings 366–367
 marking tags 159
 trap, shore and seabirds 121–123
 Telepev, V., Capercaille and gastrolites 387(r)
 Temple, S. A., see Owadally, A. M., and —
 Tern, Antarctic, see *Sterna vittata*
 Tern, Arctic, see *Sterna paradisaea*
 Tern, Black, see *Chlidonias niger*
 Tern, Caspian, see *Sterna caspia*
 Tern, Common, see *Sterna hirundo*
 Tern, Forster's, see *Sterna forsteri*
 Tern, Least, see *Sterna albifrons*
 Tetraonidae, pop. cycles 373(r)
Tetrao urogallus, feeding 387(r)
Tetrastes bonasia, manage. 381(r)
 Thompson, L. A., see Loftin, R. W., and —
Thraupis, nest. 375(r)
 Threlfall, W., and R. J. Cannings, Growth of nestling Savannah Sparrows 164–166
 Tiainen, H., see Kellomaki, E., E. Heinonen, and —
 Tigner, J. R., and G. E. Larson, Sheep losses on selected ranches in southern Wyo. 82(r)
 Timco, P. L., see Withers, P. C., and —
 Tit, Great, see *Parus major*
 Tit, Varied, see *Parus varius*
 Todd, A. W., see Adamack, R. S., —, and L. B. Keith
 Tracy, C. R., and P. R. Sotherland, Boundary layers of bird eggs: do they ever constitute a significant barrier to water loss 272(r)
Tringa erythropus, migr. 372(r)
Tringa guttifer, biol. and behav. 277(r)
Tringa totanus, foraging 380(r)
 Trochilidae, behav. 79(r)
Turdus merula, mobbing 180(r)
 Twite, see *Acanthis flavirostris*
 Tyler, J. D., Birds of Southwestern Okla. 394(r)
 Tyler, H., and D. Phillips, Owls by Day and Night 199(r)
Tyto alba, auditory fields 187(r)
 —, cannibalism 272(r)
 —, flights 68

- Väisänen, R. A., see Järvinen, O., and —
 Väisänen, R. A., see Ojanen, M., M. Orrel, and —
 Valchuk, O., see Nazarov, Y., —, and E. Kushmarev
 Vale, T., and G. Vale, Suburban bird pop. in west-central Calif. 185(r)
 Van Dyk, T., A comparative study of hearing in owls of the family Strigidae 187(r)
Vanellus vanellus, primary molt 188(r)
 —, song-flight 77(r)
 Vasina, W. G., Notes on *Falco peregrinus* in Argentina 185(r)
 Vauk, G., see Jellman, J., and —
 Veitch, C. R., Seabirds found dead in N.Z. in 1976 87(r)
 Vieth, W., see Curio, E., U. Ernst, and —
 Vernon, C. J., Breeding seasons of birds in deciduous woodland at Zimabuc, Rhodesia, from 1970 to 1974 376(r)
 von Rautenfeld, D. B., Comments on the exchangeability of Herring Gull chicks after the first week of life 79(r)
 Vourinen, J., see Prater, A. J., J. H. Marchant, and —
 waders, holarctic 94(r)
 Wahlstedt, J., see Berrgren, V., and —
 Walcott, C., Anomalies in the Earth's magnetic field increase the scatter of pigeons vanishing bearings 171(r)
 Waldvogel, J. A., S. Benvenuti, W. T. Keeton, and F. Papi, Homing pigeon orientation influenced by deflected winds at home loft 371(r)
 Walker, W., see Spitzer, P. R., R. W. Risebrough, —, R. Hernandez, A. Poole, D. Puleston, and I. C. T. Nisbet
 Wallraff, H. G., Proposed principles of magnetic field perception in birds 173(r)
 Warbler, Blackpoll, see *Dendroica striata*
 Warbler, Booted, see *Hippolais caligata*
 Warbler, Garden, see *Sylvia borin*
 Warbler, Great Reed, see *Acrocephalus arundinaceus*
 Warbler, MacGillivray's, see *Oporornis philadelphia*
 Warbler, Magnolia, see *Dendroica magnolia*
 Warbler, Mourning, see *Oporornis tolmiei*
 Warbler, Reed, see *Acrocephalus scirpaceus*
 Warbler, Sedge, see *Acrocephalus schoenobaenus*
 Warbler, Yellow-rumped, see *Dendroica coronata*
 Ward, P., see Blohm, R. J., and —
 Warriner, J., and R. Warriner, Pajaro's plovers 273(r)
 Warriner, R., see Warriner, J., and —
 Watling, D., Observations on the naturalized distrib. of the Red-vented Bulbul in the Pacific, with special reference to the Fiji Islands 87(r)
 Watson, A., and R. Moss, Pop. cycles in the Tetraonidae 373(r)
 Weathers, W. W., and D. F. Caccamise, Seasonal acclimatization to temp. in Monk Parakeets 84(r)
 Wheelright, N. T., and P. D. Boersma, Egg chilling and the thermal environment of the Fork-tailed Storm Petrel (*Oceanodroma furcata*) nest 376(r)
 White, F. N., G. A. Bartholomew, and J. L. Kinney, Physiol. and ecol. correlates of tunnel nesting in the European Bee-eater, *Merops apiaster* 83(r)
 Whitehead, P. M., see McEwan, E. H., and —
 Whitfield, D. W. A., see Gerrard, M., —, P. Gerrard, P. N. Gerrard, and M. J. Maher
 Whitney, N. R., Jr., B. E. Harrell, B. K. Harris, N. Holden, J. W. Johnson, B. J. Rose, and P. F. Springer 394(r)
 Wilbur, S. R., The California Condor, 1966–1976: a look at its past and future 290(r)
 Williams, G., see Reid, B., and —
 Willis, E. O., and Y. Oniki, Birds and army ants 379(r)
 Wilson, P. R., see Dawson, D. G., P. J. Dilks, P. D. Gaze, J. G. R. McBurney, and —
 Wiltschko, W., see Gwinner, E., and —
 Wingfield, J. C., and D. S. Farner, The endocrinology of a natural breeding population of the White-cr. Sparrow (*Zonotrichia leucophrys pugetensis*) 187(r)
 Winters, J. E., see Faaborg, J., and —
 Withers, P. C., and P. L. Timco, The significance of ground effect to the aerodynamic cost of flight and energetics of the Black Skimmer (*Rynchops nigra*) 279(r)
 Wodzicki, K., White Island—volcanic activity and bird life 270(r)
 Woike, M., see Gewecke, M., and —
 Wooler, R. D., Individual vocal recognition in the Kittiwake Gull, *Rissa tridactyla* 195(r)
 Woodcock, Amer., see *Scolopax minor*
 Woodpecker, Acorn, see *Melanerpes formicivorus*
 Woodpecker, Great Spotted, see *Dendrocopos major*

- Woodpecker, Hairy, see *Picoides villosus*
 Woodpecker, Red-cockaded, see *Picoides borealis*
 woodpeckers, Finnish, foraging 184(r)
 —, Malaysia 79(r)
 Woodswallow, Black-faced, see *Artamus cinereus*
 Woodward, P. W., and J. C. Woodward, Survival of fledgling Brown-hd. Cowbirds 66–68
Xanthocephalus xanthocephalus, survival 252–255
 Yakobi, V., On the specific distinction of the Indian Sparrow 284(r)
 Yom-Tov, Y., see Ar, A., and —
 Yui, M., Studies on the line transect census method of the woodland bird pop. I. An analysis of diurnal change of the census effectivity 270(r)
 Yurlov, K. T., Bird Migr. in Asia 394(r)
 Zablotskaya, M., Acoustic behavior of the Twite, *Acanthis flavirostris* (L.) (Passeres, Fringillidae) and the taxonomic status of its disjunct geographic forms 90(r)
 Zablotskaya, M., Signal acoustics of the Siskin (*Spinus pinus*) 288(r)
 Zabukin, V., Display and nesting behavior of the Relict Gull (*Larus relictus*) on Barun-Tor Lake 377(r)
 Zammuto, R. M., and E. C. Franks, Trapping flocks of Chimney Swifts in Ill. 201–209
 Zann, R., Pair-bond and bonding behavior in three species of grassfinches in the genus *Poephila* (Gould) 76(r)
Zenaida macroura, mortality 256–262
Zonotrichia albicollis, migr. 173(r)
Zonotrichia leucophrys, endocrinology 187(r)
 —, effect of banding 244–251
 —, song 288(r), 387(r)
 —, song dialects 195(r)

ZOOGEOGRAPHY AND DISTRIBUTION

- Afr. and Eur. avifaunas 189(r)
 Bering land bridge 384(r)
 birds, breed., France 188(r)
 —, arctic Can. 189(r)
 —, new sighting on Fiji 87(r)
 Bulbul, Red-vented, in Fiji 87(r)
 Crane, Hooded, USSR 190(r)
 Duck, Wood, dispersal 385(r)
 Eagle, Steller's Sea 282(r)
 Egret, Cattle, N.Z. 282(r)
 Falcon, N.Z. 386(r)
 Fringillidae, winter biogeography 191(r)
 Galápagos species 189–190(r)
 Grackle, Great-tailed 86(r)
 Gull, Herring, nests, Can. 384(r)
 herons, dispersal and migr. 385(r)
 Kokako, North Island 282(r)
 loons, Prudhoe Bay 189(r)
 oystercatchers, Britain 189(r)
 Petrel, Storm Leach's, N.Z. 385(r)
 Parakeet, Carolina, Ind. 86(r)
 Petrel, Leach's Storm 385(r)
 seabirds, Fiji 386(r)
 —, Fr. Guiana 386(r)
 —, northwestern Can. 282(r)
 —, N.Z. 87(r), 385(r)
 Swan, Whooper, USSR 386(r)
 swans, geese, and brant, size 85(r)
 Tern, Caspian, Sweden 386(r)
Zosterops lateralis, Australia's Norfolk Island 88(r)
 —, manage. 276(r)
 Zubkov, N., The temperature cycle of egg incubation of the Little Owl in Moldavia 271(r)
 Zucker, I. H., R. C. Huskey, C. E. C. Haack, and J. P. Gilmore, Functional maturation of the salt gland 278(r)