

INDEX TO VOLUME 95

A

Abdominal lesions, 473-475
Abrasion, 736-738
Abundance, 145-156
Accessibility, 485-488
Activity patterns, 831-848
Adams, N. J., and C. B. Walter, Maximum diving depths of Cape Gannets, 734-736
Adaptation, 670-679
Adoption, 860-868
Age, effects, 72-82
 segregation, 475-479
 investment, 288-296
Agelaius phoeniceus, 217-219, 395-400, 730-734, 782-791, 1000-1005
Aggression, 723-728, 990-999
Aguilera, Eduardo, Cristina Ramo, and Benjamin Busto, Food habits of the Scarlet and White Ibis in the Orinoco Plains, 739-741
Ainley, David G., Christine A. Ribic, and Larry B. Spear, Species-habitat relationships among Arctic seabirds: a function of physical or biological factors?, 806-816
Aix sponsa, 220-222
Alarm calls, 233-239
Alaska, 330-342, 662-669
Alisaukas, Ray T., see Hobson, Keith A.
Allelochemicals, 625-640
Allometry, 282-287, 652-661
Altitude, high, 72-82
Amazonia, 896-903
Amazonian Brazil, 896-903
Amblycercus holosericeus, 641-651
Anas platyrhynchos, 45-56
Anatidae, 220-222, 377-387
Annual cycle, 680-693
Anous stolidus, 322-329
Antarctica, 806-816, 792-805
Antebrachium length, 559-567
Anthony, Robert G., see Pampush, Geoffrey J.
Apa, Anthony D., see Fischer, Richard A.
 see Connelly, John W.
Ar, Amos, see Yom-Tov, Yoram
Area requirements, 968-979
Arenaria interpres, 372-376, 694-705
 melanocephala, 372-376
Argentina, 475-479, 889-895
Arnold, Todd W., Factors affecting renesting in American Coots, 273-281
Arthropod feeding, 455-458
Artificial nests, 297-304
Aspen, 625-640
Atkinson, Eric C., Winter territories and night roosts of Northern Shrikes in Idaho, 515-527
Atkinson, Eric C., and Tom J. Cade, Winter foraging and diet composition of Northern Shrikes in Idaho, 528-535
Attentiveness, 115-126
Aythya valisineria, 377-387

B

Bahamas, 904-933
Baker, Allan J., see Loughheed, Stephen C.
Baker, Myron C., see Casey, Richard M.
 see Thompson, Andrew D., Jr.
Baker, Myron Charles, Evidence of intraspecific vocal imitation in Singing Honeyeaters (Meliphagidae) and Golden Whistlers (Pachycephalidae), 1044-1048
Balda, Russell P., Letter to the editor (scientific collecting), 759-760
Bamboo, 641-651
Banks, Richard C., Honorary membership, 251-252
Barclay, Robert M. R., see Firman, Mitchell C.
Bartholomew, George A., 1064
Basal metabolism, 1034-1037
Beckwith, Roy C., see Bull, Evelyn L.
Beetle, Dermestid, see *Dermestes nidum*
Behavior, 227-231, 330-342, 479-483
 social, 1-24
Belant, Jerrold L., Thomas W. Seamans, Steven W. Gabrey, and Sheri K. Ickes, Importance of landfills to nesting Herring Gulls, 817-830
Beletsky, Les D., and Gordon H. Orians, Factors affecting which male Red-winged Blackbirds acquire territories, 782-791
Benitez-Diaz, Hesiquio, Geographic variation in coloration and morphology of the Acorn Woodpecker, 63-71
Bensch, Staffan, and Mats Grahm, A new method for estimating individual speed of molt, 305-315
Bering Sea, 33-44, 226-227
Berlanga, Humberto A., see Ornelas, Juan Francisco
Bierregaard, Richard O., Jr., see Stouffer, Philip C.
Bill hardness, 736-738
 length, 652-661
 wiping, 736-738
Bird, David M., see Lacombe, Diane
Birth date, 782-791
Bittern, Least, see *Ixobrychus exilis*
Black, Jeffrey M., see Choudhury, Sharmila
Blackbird, Red-winged, see *Agelaius phoeniceus*
Bledsoe, Anthony H., see Raikow, Robert J.
Blem, Charles R., and Leann B. Blem, Do swallows sunbathe to control ectoparasites? An experimental test, 728-730
Blem, Leann B., see Blem, Charles R.
Blue Jay, see *Cyanocitta cristata*
Blue Warbler, Black-throated, see *Dendroica caerulescens*
Board of Directors, 1993 Nominees, 252
Board of Directors Award, 1075-1083
Body composition, 377-387, 792-805
 mass, 377-387, 559-567
 protein, 377-387
 temperature, 1034-1037
Bonasa umbellus, 625-640
Bonser, Richard H., and Mark S. Witter, Indentation

- hardness of the bill keratin of the European Starling, 736–738
- Books in ornithology, 245–250, 491–494, 764–766, 1074
- Boone, Carol, see Greenberg, Russell
- Boundary conditions, 33–44
- Brachyramphus marmoratus*, 662–669, 831–848
- Bradley, David W., see Bradley, Richard A.
- Bradley, Richard A., and David W. Bradley, Wintering shorebirds increase after kelp (*Macrocystis*) recovery, 372–376
- Branta canadensis*, 193–210, 680–693
- leucopsis*, 860–868
- Brazil, 896–903
- Breeding, 45–56, 316–322, 479–483
- failure, 330–342
- success, 1–24, 330–342, 782–791
- Breese, Dawn, see Tershy, Bernie R.
- Brigham, R. Mark, see Firman, Mitchell C.
- Briskie, James V., and Robert Montgomerie, Patterns of sperm storage in relation to sperm competition in passerine birds, 442–454
- British Columbia, 831–848
- Bromley, Robert G., and Robert L. Jarvis, The energetics of migration and reproduction of Dusky Canada Geese, 193–210
- Brood parasitism, 536–545, 860–868, 1000–1005, 1006–1015
- reduction, 362–371
- Brown, Bryan T., Winter foraging ecology of Bald Eagles in Arizona, 132–138
- Brugger, Kristin E., Digestibility of three fish species by Double-crested Cormorants, 25–32
- Bucephala clangula*, 467–469, 849–859
- Bugden, Shawn C., see Lee, Sandra C.
- Bull, Evelyn L., and Roy C. Beckwith, Diet and foraging behavior of Vaux's Swifts in northeastern Oregon, 1016–1023
- Bunting, Indigo, see *Passerina cyanea*
- Lark, see *Calamospiza melanocorys*
- Burger, Joanna, see Clark, Kathleen E.
- see Shealer, David A.
- Burness, Gary P., and Ralph D. Morris, Direct and indirect consequences of mink presence in a Common Tern colony, 708–711
- Burns, Kevin J., Geographic variation in ontogeny of the Fox Sparrow, 652–661
- Busto, Benjamin, see Aguilera, Eduardo
- Buteo albicaudatus*, 233–239
- swainsoni*, 475–479
- Bylaws, Cooper Ornithological Society, 253–268

C

- Cache, 483–484, 742–744
- robber, 742–744
- site, 742–744
- Caching behavior, 483–484
- Cacique, Yellow-billed, see *Amblycercus holosericeus*
- Cade, Brian S., see Skagen, Susan K.
- Cade, Tom J., see Atkinson, Eric C.
- Caithamer, David F., see Gates, Robert J.
- Calamospiza melanocorys*, 401–413
- Calcarius mccownii*, 401–413
- Calcium, 536–545
- Calidris alba*, 694–705
- canutus*, 694–705
- pusilla*, 694–705, 944–956
- California, 343–361, 372–376
- Call function, 769–781
- Canvasback, see *Aythya valisineria*
- Cape Gannets, 734–736
- Capitonidae, 178–192
- Caprimulgus vociferus*, 744–747
- Caribbean, 904–933
- Casey, Richard M., and Myron C. Baker, Aggression and song development in White-crowned Sparrows, 723–728
- Casey, Richard M., and Myron C. Baker, Social tutoring of adult male White-crowned Sparrows, 718–723
- Catbird, Gray, see *Dumetella carolinensis*
- Catharus fuscescens*, 934–943
- minimus*, 934–943
- ustulatus*, 934–943
- Cavity-nesting, 282–287
- Centrocerus urophasianus*, 1038–1041, 1041–1043
- Certhia americana*, 483–484
- Certhiidae, 483–484
- Chaetura vauxi*, 1016–1023
- Chain reaction, 465–466
- Chapman, Angela, see Remsen, J. V., Jr.
- Charadrius melodus*, 145–156
- Chasiempis sandwichensis*, 980–989
- Chavez-Ramirez, Felipe, and Sen S. Tan, Habitat separation and arthropod resource use in three Lesser Antillean hummingbirds, 455–458
- Chen canagica*, 222–225, 879–888
- rossii*, 388–394
- Chickadee, Black-capped, see *Parus atricapillus*
- Chiroxiphia linearis*, 769–781
- Choco, 227–231
- Chordeiles minor*, 157–162
- Choudhury, Sharmila, Catherine S. Jones, Jeffrey M. Black, and Jouke Prop, Adoption of young and intraspecific nest parasitism in Barnacle Geese, 860–868
- Christidis, Leslie, see Leeton, Peter
- Clark, Kathleen E., Lawrence J. Niles, and Joanna Burger, Abundance and distribution of migrant shorebirds in Delaware Bay, 694–705
- Clark, Robert G., see Hobson, Keith A.
- Clawson, Richard L., see Wenny, Daniel G.
- Clutch size, 273–281, 546–553, 554–558
- Colombia, 479–483
- Colonial breeding, 708–711
- Coloniality, interspecific, 139–144
- Color-band effects, 395–400
- Colorado, 217–219
- Colorado River, 132–138
- Coloration, 63–71, 736–738
- Columbia Basin, 957–967
- Colwell, Mark A., Shorebird community patterns in a seasonally dynamic estuary, 104–114
- Colwell, Mark A., and Sarah L. Landrum, Nonrandom shorebird distribution and fine-scale variation in prey abundance, 94–103
- Comet, TallChief A., see Willson, Mary F.
- Communities, Neotropical forest, 178–192
- Community structure, 33–44, 101–114, 568–579
- Competition, 322–329

- Condor, The, History of*, 748–757
 Coniferyl benzoate, 625–640
 Connelly, John W., Richard A. Fischer, Anthony D. Apa, Kerry P. Reese, and Wayne L. Wakkinen, Renesting by Sage Grouse in southeastern Idaho, 1041–1043
 Connelly, John W., see Fischer, Richard A.
 Conrad, Kelvin F., and Raleigh J. Robertson, Patterns of parental provisioning by Eastern Phoebe, 57–62
 Conservation, 422–441, 694–705
Contopus virens, 616–624
 Cooke, Fred, see Watson, Michelle D.
 Cooper Ornithological Society, 748–757, 1061–1063, 1064, 1065–1067, 1075–1083
 Cooperation, male-male, 769–781
 Coot, American, see *Fulica americana*
 Cormorant, Double-crested, see *Phalacrocorax auritus*
Corvus caurinus, 595–615
 Costa Rica, 641–651, 769–781
Coturnicops noveboracensis, 1024–1027
Coturnix japonica, 388–394
 Cowbird, Brown-headed, see *Molothrus ater*
 Creeper, Brown, see *Certhia americana*
 Cruz, Alexander, see Ortega, Joseph C.
 Curlew, Long-billed, see *Numenius americanus*
Cyanocitta cristata, 497–506
Cypseloides cherriei, 479–483
 Cytochrome b, 465–466
- D**
- Daily energy expenditure, 1028–1030
 Dawson, T. J., see Maloney, S. K.
 de Lourdes Navarajo, Ma., see Ornelas, Juan Francisco
 del Coro Arizmendi, Maria, see Ornelas, Juan Francisco
 Delaware Bay, 694–705
 Delahantú, Daniv J., Frances F. Roberts Award, 1075–1083
Dendroica caerulescens, 568–579
 cerulea, 616–624
 petechia, 362–371
 pinus, 616–624
 midum, 473–475
 DeSante, David F., see Pyle, Peter
 Desertion, 72–82
 Determinate laying, 546–553, 554–558
 Detoxication, 625–640
 Dialects, 414–421, 588–595
 Diet, 178–192, 475–479, 479–483, 528–535, 706–708, 739–741, 792–805, 879–888, 1016–1023
 breadth, 528–535
 composition, 528–535, 616–624
 Differential migration, 580–587
 Diflubenzuron, 616–624
 Digestion, 25–32
 Dispersal, 1–24, 716–718, 782–791
 natal, 782–791
 Distribution, 145–156, 226–227, 458–464, 479–483, 662–669, 694–705, 904–933, 1024–1027
 nonbreeding, 94–103
 pelagic, 33–44
 prey, 127–131
 seabird, 33–44
 shorebird, 94–103
- Diving depths, 734–736
 DNA, 465–466, 889–895
 fingerprinting, 860–868, 1006–1015
 –DNA hybridization, 465–466
 Dove, White-winged, see *Zenaida asiatica*
Dromaius novaehollandiae, 1034–1037
 Dry forest, tropical, 422–441
 Duck, Wood, see *Aix sponsa*
Dumetella carolinensis, 1048–1050
 Dykstra, Cheryl R., and William H. Karasov, Daily energy expenditure by nestling House Wrens, 1028–1030
- E**
- Eagle, Bald, see *Haliaeetus leucocephalus*
 Ecology, stopover, 163–177
 winter foraging, 132–138
 Ectoparasites, 473–475, 728–730
 Ecuador, 227–231, 479–483
 Editorial, 758–759
 Egg formation, 45–56
 laying, 536–545, 546–553, 554–558, 1031–1034, 1048–1050
 laying interval, 869–878
 neglect, 507–514
 predation, 297–304
 production, 536–545
 size, 273–281
 Eider, Common, see *Somateria mollissima*
 ‘Elepaio, see *Chasiempis sandwichensis*
 Elphick, Chris S., and George L. Hunt, Jr., Variations in the distributions of marine birds with water mass in the northern Bering Sea, 33–44
 Embryonic temperatures, 507–514
Empidonax oberholseri, 83–93
 traillii extimus, 1075–1083
 Emu, see *Dromaius novaehollandiae*
 Endangered species, 145–156
 Endangered Species Act, 758–759
 Endogenous control, 580–587
 Energetics, 115–126, 157–162, 163–177, 193–210, 680–693, 744–747, 792–805, 934–943, 944–956, 1028–1030, 1034–1037
 Epaulets, 395–400
Eremophila alpestris, 401–413
 Estradiol cypionate (ECP), 211–217
 Estuaries, 94–103, 104–114
Eudocimus ruber, 739–741
 Evans, Roger M., see Lee, Sandra C.
 Even-aged management, 239–241
 Ewald, Paul W., An interdisciplinary approach to parasitism. (Review of *Bird-Parasite Interactions: Ecology, Evolution, and Behavior*, edited by J. E. Loye and M. Zuk), 242–244
 Exposure, 708–711
 Extra-pair copulations, 860–868
 paternity, 1006–1015
- F**
- Faaborg, John, see Wenny, Daniel G.
Falco columbarius, 316–322
 peregrinus, 706–708
 sparverius, 559–567
 Farallon Island, 343–361
 Farquhar, C. Craig, Individual and intersexual varia-

tion in alarm calls of the White-tailed Hawk, 234-239
 Fasting, 388-394
 Fat, 377-387, 680-693, 934-943, 944-956
 Feather growth, 305-315, 680-693
 Feathers, 465-466
 Fecundity, 536-545
 Feeding behavior, 792-805
 repellent, 625-640
 Fidelity, 1038-1041
 Field metabolic rate, 1028-1030
 Firman, Mitchell C., R. Mark Brigham, and Robert M. R. Barclay, Do free-ranging Common Night-hawks enter torpor?, 157-162
 Fischer, Richard A., Anthony D. Apa, Wayne L. Wakkinen, Kerry P. Reese, and John W. Connelly, Nesting-area fidelity of Sage Grouse in south-eastern Idaho, 1038-1041
 Fischer, Richard A., see Connelly, John W.
 Fish-eating, 25-32
 Fledging, 282-287
 mass, 362-371
 rate, 362-371
 Floaters, 782-791
 Florida, 473-475
 Fly, Soldier, see *Hermetia illucens*
 Flycatcher, Dusky, see *Empidonax oberholseri*
 Southwestern Willow, see *Empidonax traillii eximius*
 Food choices, 596-615
 habits, 817-830
 hoarding, 483-484, 742-744
 preferences, 596-615
 provisioning, 792-805
 selection, 625-640, 879-888
 shortage, 330-342
 stress, 330-342
 supplementation, 1031-1034
 Foraging, 127-131, 132-138, 157-162, 227-231, 455-458, 528-535, 568-579, 734-736, 980-989, 990-999
 ability, 485-488
 optimal, 132-138
 strategy, 792-805
 success, 322-329, 528-535
 Ford, R. Glenn, see Piatt, John F.
 Formicariidae, 227-231
Fregata, 458-464
 Frugivory, 485-488, 596-615, 990-999
 Fruit traits, 596-615
Fulica americana, 273-281
 Fulmar, Northern, see *Fulmarus glacialis*
Fulmaris glacialis, 226-227

G

Gabrey, Steven W., see Belant, Jerrold L.
 Gates, Robert J., David F. Caithamer, Thomas C. Tacha, and Charles R. Paine, The annual molt cycle of *Branta canadensis interior* in relation to nutrient reserve dynamics, 680-693
 Gaunt, Sandra L. L., Honorary Membership, 1082-1083
Gavia, 458-464
 Geese, Barnacle, see *Branta leucopsis*

Canada, see *Branta canadensis*
 Ross', see *Chen rossii*
 Geographic variation, 641-651, 652-661
Geotrygon montana, 896-903
 Glasgow, Angela A., see Raikow, Robert J.
 Gnatcatcher, Blue-gray, see *Poliophtila caerulea*
 Godwit, Bar-tailed, see *Limosa lapponica*
 Goldeneye, Common, see *Bucephala clangula*
 Goose, Dusky Canada, see *Branta canadensis occidentalis*
 Emperor, see *Chen canagica*
 Gowaty, Patricia Adair, Variation in conflict and cooperation. (Review of *Dunnock Behaviour and Social Evolution*, by N. R. Davies), 1069-1070
 Grackle, Boat-tailed, see *Quiscalus major*
 Grahm, Mats, see Bensch, Staffan
 Grassland, 401-413
 Greater Antilles, 904-933
 Grebe, Eared, see *Podiceps nigricollis*
 Greenberg, Russell, Daniel K. Niven, Steven Hopp, and Carol Boone, Frugivory and coexistence in a resident and a migratory vireo on the Yucatan Peninsula, 990-999
 Ground nests, 401-413
 Grouse, Ruffed, see *Bonasa umbellus*
 Sage, see *Centrocercus urophasianus*
 Growth, 559-567, 792-805
 energetics, 792-805
 hormone, 559-567
 rate, 792-805
 Grubb, Thomas C., Jr., see Yosef, Reuven
 Guglielmo, Christopher G., see Jakubas, Walter J.
 Guild, 178-192
 Gulf of California, 458-464, 706-708
 of Mexico, 934-943
 Gull, Heermann's see *Larus heermanni*
 Herring, see *Larus argentatus*

H

Habitat, 45-56, 239-241, 694-705
 alteration, 806-816
 availability, 104-114
 disturbance, 980-989
 fragmentation, 297-304, 968-979
 loss, 1024-1027
 preferences, 33-44
 selection, 83-93, 568-579, 806-816, 879-888, 968-979, 980-989
 separation, 455-458
 specialization, 904-933
 use, 455-458, 515-527, 904-933, 957-967
 Haig, Susan M., and Jonathan H. Plissner, Distribution and abundance of Piping Plovers: results and implications of the 1991 international census, 145-156
Haliaeetus leucocephalus, 132-138, 1053-1056
 Hamilton-Orians Hypothesis, 1000-1005
 Handford, Paul, see Loughheed, Stephen C.
 see Tubaro, Pablo L.
 Hardness, bill, 736-738
 Hardy, John William, Honorary Membership, 251-252
 Hatch, Scott A., see Roberts, Bay D.
 Hatching asynchrony, 362-371
 Hawaii, 980-989

Hawk, Swainson's, see *Buteo swainsoni*
 White-tailed, see *Buteo albicaudatus*
 Hebert, Percy Norman, An experimental study of brood reduction and hatching asynchrony in Yellow Warblers, 362-371
Helmitheros vermivorus, 616-624, 968-979
 Henderson, R. Philip, see Pyle, Peter
 Hepp, Gary R., see Hipes, Daniel L.
 Herbivory, 879-888
Hermetia illucens, 473-475
 Hibbard, Kathy A., see Lacombe, Diane
 Hickey, M. Brian C., Thermoregulation in free-ranging Whip-poor-wills, 744-747
 Hindlimb muscles, 497-506
 Hipes, Daniel L., and Gary R. Hepp, Effect of mate removal on nest success of female Wood Ducks, 220-222
 Historical perspectives, 748-757, 1061-1063
 History of *The Condor*, 748-757
 Hobson, Keith A., Ray T. Alisauskas, and Robert G. Clark, Stable-nitrogen isotope enrichment in avian tissues due to fasting and nutritional stress: implications for isotopic analyses of diet, 388-394
 Hohman, William L., Body composition of wintering Canvasbacks in Louisiana: dominance and survival implications, 377-387
 Holberton, Rebecca L., An endogenous basis for differential migration in the Dark-eyed Junco, 580-587
 Hole-nesters, 282-287
 Holford, Kenneth C., and Daniel D. Roby, Factors limiting fecundity of captive Brown-headed Cowbirds, 536-545
 Honorary Memberships, Cooper Ornithological Society, 251-252, 1082-1083
 Hopp, Steven, see Greenberg, Russell
 Hormones, 211-217, 559-567
 Howell, A. Brazier, Award, 1075-1083
 Hubbard, John P., Review of *The Known Birds of North and Middle America. Part 2, Bombycillidae, Sylviidae to Sturnidae, Vireonidae*, by A. R. Phillips, 761-762
 Human-caused mortality, 758-759
 Hunt, George L., Jr., see Elphick, Chris S.
 Hunting, 127-131
 capability, 127-131
 ranges, 316-322
 Hybridization, 670-679
 Hyde, Mary Ann, see Remsen, J. V., Jr.
Hylocichla mustelina, 934-943
 Hypervariability, 889-895

I

Ibis, Scarlet, see *Eudocimus ruber*
 White, see *Eudocimus ruber albus*
 Ice, 806-816
 Ickes, Sheri K., see Belant, Jerrold L.
 Icteridae, 641-651
 Idaho, 515-527, 528-535, 1038-1041, 1041-1043
 Incubation, 115-126, 282-287, 507-514, 849-859
 rhythm, 849-859
 temperature, 507-514
 Indentation hardness, 736-738
 Indeterminate laying, 546-553

Inki, Kimmo, and Jukka Suhonen, Characteristics of cache sites most likely to be robbed by Willow Tits (*Parus montanus*), 742-744
 Insecticide, 616-624
 Interference, 322-329
 Intersexual differences, 57-62
 Interspecific brood parasitism, 860-868, 1000-1005, 1006-1015
 Intraspecific variation, 497-506
 Introgression, 889-895
 Isotopic analyses, 388-394
 Isotopic enrichment, 388-394
Ixobrychus exilis, 139-144

J

Jackman, Ronald E., see Jenkins, J. Mark
 Jakubas, Walter J., William H. Karasov, and Christopher G. Guglielmo, Ruffed Grouse tolerance and biotransformation of the plant secondary metabolite coniferyl benzoate, 625-640
 Jalisco, 422-441
 Jaramillo, Alvaro P., Wintering Swainson's Hawks in Argentina: food and age segregation, 475-479
 Jarvis, Robert L., see Bromley, Robert G.
 Jehl, Joseph R., Jr., Observations on the fall migration of Eared Grebes, based on evidence from a mass downing in Utah, 470-473
 Jenkins, J. Mark, and Ronald E. Jackman, Mate and nest site fidelity in a resident population of Bald Eagles, 1053-1056
 Jones, Catherine S., see Choudhury, Sharmila
 Journal articles offered by the Western Foundation of Vertebrate Zoology, 495-496
 Jukema, Joop, see Piersma, Theunis
Junco hyemalis, 580-587

K

Källander, Hans, and Johnny Karlsson, Supplemental food and laying date in the European Starling, 1031-1034
 Karasov, William H., see Dykstra, Cheryl R.
 see Jakubas, Walter J.
 Karlsson, Johnny, see Källander, Hans
 Karyotype, 1051-1053
 Kelly, John P., The effect of nest predation on habitat selection by Dusky Flycatchers in limber pine-juniper woodland, 83-93
 Kelp, 372-376
 Keratin, 736-738
 Kestrel, American see *Falco sparverius*
 Kittiwake, Black-legged, see *Rissa tridactyla*
 Knight, Richard L., see Miller, Clinton K.
 Knopf, Fritz L., see Skagen, Susan K.
 Knot, Red, see *Calidris canutus*
 Koenig, Walter D., Review of *The Ostrich Communal Nesting System*, by C. R. Bertram, 762-763
 Kratter, Andrew W., Geographic variation in the Yellow-billed Cacique, *Amblycercus holosericeus*, a partial bamboo specialist, 641-651

L

Lacey Act, 758-759
 Lacombe, Diane, David M. Bird, Colin G. Scanes, and Kathy A. Hibbard, The effect of restricted feed-

- ing on plasma growth hormone (GH) concentrations in growing American Kestrels, 559–567
- Lagopus lagopus*, 211–217, 554–558
- Laing, Karen K., and Dennis G. Raveling, Habitat and food selection by Emperor Goose goslings, 879–888
- Landrum, Sarah L., see Colwell, Mark A.
- Lanius excubitor*, 515–527, 528–535
- ludovicianus*, 127–131, 231–233
- Lark, Horned, see *Eremophila alpestris*
- Larus*, 458–464
- argentatus*, 507–514, 817–830
- heermanni*, 706–708
- Laying date, 1031–1034
- rate, 536–545
- Lee, Robert M., III, see Lima, Steven L.
- Lee, Sandra C., Roger M. Evans, and Shawn C. Bugden, Benign neglect of terminal eggs in Herring Gulls, 507–514
- Leeton, Peter, Leslie Christidis, and Michael Westerman, Feathers from museum bird skins—a good source of DNA for phylogenetic studies, 465–466
- Lek, 769–781, 1038–1041
- Lesions, abdominal, 473–475
- Lesser Antillean islands, 455–458
- Lima, Steven L., and Robert M. Lee, III, Food caching and its possible origin in the Brown Creeper, 483–484
- Limosa lapponica*, 163–177
- Lipid estimation, 944–956
- reserves, 680–693
- Longevity, 1053–1056
- Longspur, McCown's, see *Calcarius mccownii*
- Loughheed, Stephen C., Paul Handford, and Allan J. Baker, Mitochondrial DNA hyperdiversity and vocal dialects in a subspecies transition of the Rufous-collared Sparrow, 889–895
- Louisiana, 377–387
- Lunar cycle, 343–361
- M**
- Male-male cooperation, 769–781
- Mallard, see *Anas platyrhynchos*
- Mallory, Mark L., and Patrick J. Weatherhead, Incubation rhythms and mass loss of Common Goldeneyes, 849–859
- Mallory, Mark L., and Patrick J. Weatherhead, Observer effects on Common Goldeneye nest defense, 467–469
- Maloney, S. K., and T. J. Dawson, Sexual dimorphism in basal metabolism and body temperature of a large bird, the Emu, 1034–1037
- Manakin, Long-tailed, see *Chiroxiphia linearis*
- Manitoba, 869–878
- Marin A., Manuel, and F. Gary Stiles, Notes on the biology of the Spot-fronted Swift, 479–483
- Marquez-Valdelamar, Laura, see Ornelas, Juan Francisco
- Martin, Dennis J., Song similarity in populations of Fox Sparrows: a rejection of Naugler's and Smith's conclusions, 1057–1059
- Martin, Kathy, and Cynthia A. Wright, Estradiol cypionate (ECP) markedly improves survival of Willow Ptarmigan in captivity, 211–217
- Mass, body, 222–225, 849–859
- loss, 849–859
- Mate choice, 163–177
- fidelity, 1053–1056
- removal, 220–222
- replacement, 1053–1056
- Mating effort, 730–734
- McDonald, David B., see Trainer, Jill M.
- McLaren, Ian A., Many views of bird populations. (Review of *Bird Population Studies. Relevance to Conservation and Management*, edited by C. M. Perrins, J. D. Lebreton, and G. J. M. Hirons), 489–490
- Meal composition, 792–805
- Megastictus*, 227–231
- Melanerpes formicivorus*, 63–71
- Meliphaga virescens*, 1044–1048
- Meliphagidae*, 1044–1048
- Merlin, see *Falco columbarius*
- Metabolic rate, 792–805
- Metabolism, basal, 1034–1037
- Metabolizable energy coefficient, 25–32
- Metz, Karen J., and Patrick J. Weatherhead, An experimental test of the contrasting-color hypothesis of red-band effects in Red-winged Blackbirds, 395–400
- Mewaldt-King Student Research Award, 1075, 1083
- Mexico, 422–441, 990–999
- Microclimate, 401–413
- Migration, 163–177, 193–210, 222–225, 343–361, 470–473, 580–587, 694–705, 896–903
- differential, 580–587
- Migratory activity, 934–943
- action, 580–587
- Bird Treaty Act, 758–759
- Miller, Alden Holmes, 1065–1067
- Miller, Clinton K., and Richard L. Knight, Does predator assemblage affect reproductive success in songbirds?, 712–715
- Miller, Loye Holmes, 1065–1067
- Miller, Loye, and Alden, Research Award, 1064
- Mink, 708–711
- Missouri, 968–979
- Mist nets, 1075–1083
- Mitchell, Jeremy S., and Raleigh J. Robertson, Tree Swallows cannot be classified as determinate or indeterminate layers, 546–553
- Mitochondrial DNA, 465–466
- Molothrus ater*, 217–219, 536–545
- Molt, 163–177, 305–315, 479–483, 680–693
- cycle, 680–693
- duration, 305–315
- Momotidae, 178–192
- Montane, 72–82
- Montgomerie, Robert, see Briskie, James V.
- Moore, Frank R., see Yong, Wang
- Morawski, Joseph F., see Stern, Mark A.
- Morphological specialization, 641–651
- Morphometrics, 63–71
- Morris, Ralph D., see Burness, Gary P.
- Mortality, 470–473
- Morton, Martin L., Harry R. Painton Award, 1075–1083
- Morton, Martin L., Keith W. Sockman, and Linda E.

Peterson, Nest predation in the Mountain White-crowned Sparrow, 72–82
Morus capensis, 734–736
 Motivation, 485–488
 mtDNA, 465–466, 889–895
 Muehter, Vincent R., Board of Directors Award, 1075–1083
 Murrelet, Marbled, see *Brachyramphus marmoratus*
 Museum skins, 465–466
Mycteria americana, 473–475
 Myological variation, 497–506
 Myology, 497–506

N

Nagy, Kenneth A., see Obst, Bryan S.
 Natal dispersal, 782–791
 Naugler, Christopher T., and Peter C. Smith, Similarity breeds confusion: a reply to Martin, 1059–1060
Nectarinia violacea, 115–126
 Neotropical migrant, 990–999
 Neotropics, 178–192, 641–651
 Nest, 239–241, 479–483, 817–830, 1038–1041, 1041–1043
 artificial, 83–93
 defense, 288–296, 467–469
 loss, 1000–1005
 predation, 72–82, 83–93, 297–304, 712–715
 site fidelity, 1053–1056
 site selection, 401–413, 568–579, 957–967
 success, 72–82, 220–222, 712–715, 957–967
 Nesting synchrony, 706–708
 -area fidelity, 1038–1041
 Nestling mortality, 362–371
 provisioning, 730–734
 Nestlings, 57–62, 473, 475, 479–483, 1028–1030
 feeding, 57–62
 New Jersey, 694–705
 Nichols, James D., Passerine ecology: from individual to populations. (Review of *Population Biology of Passerine Birds: An Integrated Approach*, edited by J. Blondel, A. Gosler, J. D. Lebreton, and R. McCleery), 1070–1072
 Nighthawk, Common, see *Chordeiles minor*
 Niles, Lawrence E., see Clark, Kathleen E.
 Nitrogen correction, 25–32
 Nitrogen-15, 388–394
 Niven, Daniel K., see Greenberg, Russell
 Nocturnal migrant, 343–361
 restlessness, 934–943
 Noddy, Brown, see *Anous stolidus*
Numenius americanus, 957–967
 Nur, Nadav, see Pyle, Peter
 Nutrient limitation, 273–281
 Nutrient reserves, 45–56, 273–281, 680–693
 Nutrition, 45–56, 163–177, 273–281, 680–693
 Nutritional stress, 388–394, 680–693

O

Observer effects, 467–469
 Obst, Bryan S., and Kenneth A. Nagy, Stomach oil and the energy budget of Wilsons Storm-Petrel nestlings, 792–805
Oceanodroma, 458–464
 Ohio, 817–830
 Old-growth forests, 662–669, 831–848

Ontogeny, 652–661
Oporonis formosus, 968–979
 Oregon, 957–967, 1016–1023, 1024–1027
 Orians, Gordon H., see Beletsky, Les D.
 Ornelas, Juan Francisco, Maria del Coro Arizmendi, Laura Marquez-Valdelamar, Ma. de Lourdes Navarajo, and Humberto A. Berlanga, Variability profiles for line transect bird censuses in a tropical dry forest in Mexico, 422–441
 Ornithology, books in, 245–250, 491–494, 764–766, 1064
 Ortega, Catherine P., see Ortega, Joseph C.
 Ortega, Joseph C., Catherine P. Ortega, and Alexander Cruz, Does Brown-headed Cowbird egg coloration influence Red-winged Blackbird responses towards nest contents?, 217–219
Otus asio, 288–296
 Ovenbird, see *Seiurus aurocapillus*
 Oviduct, 442–454
 Owl, Mexican Spotted, see *Strix occidentalis lucida*

P

Pachycephala pectoralis, 1044–1048
 Pachycephalidae, 1044–1048
 Pack ice, 806–816
 Paine, Charles R., see Gates, Robert J.
 Painton, Harry R., Award, 1075–1083
 Pair bonds, 220–222
 Pampush, Geoffrey J., and Robert G. Anthony, Nest success, habitat utilization and nest-site selection of Long-billed Curlews in the Columbia Basin, Oregon, 957–967
 Panama, 227–231
 Parasitism, brood, 217–219
 Parental care, 57–62, 507–514, 730–734
 effort, 730–734
 investment, 57–62, 670–679
 neglect, 708–711
 Parulinae, 904–933
Parus atricapillus, 616–624
 bicolor, 616–624
 montanus, 742–744
Passerculus sandwichensis, 712–715
Passerella iliaca, 652–661, 1057–1059, 1059–1060
Passerina cyanea, 1–24
 Passerines, 442–454
 Paton, Peter W. C., A. Brazier Howell Award, 1075–1083
 Payne, Laura L., see Payne, Robert B.
 Payne, Robert B., and Laura L. Payne, Breeding dispersal in Indigo Buntings: circumstances and consequences for breeding success and population structure, 1–24
 Pelagic colony, 662–669
 seabirds, 662–669, 806–816
Pelecanus, 458–464
 Pesticides, 616–624
 Peterson, Linda E., see Morton, Martin L.
Phaethon, 458–464
Phalacrocorax auritus, 25–32
 Philopatry, 716–718
 Phoebe, Eastern, see *Sayornis phoebe*
Phylloscopus trochilus, 305–315
 Phylogenetic studies, 465–466, 497–506
 Phylogeny, 497–506

- Physiological condition, 222–225
 Piatt, John F., and R. Glenn Ford, Distribution and abundance of Marbled Murrelets in Alaska, 662–669
 Pidae, 282–287
 Pierotti, Raymond, and Cynthia A. Annett, Hybridization and male parental investment in birds, 670–679
 Piersma, Theunis, and Joop Jukema, Red breasts as honest signals of migratory quality in a long-distance migrant, the Bar-tailed Godwit, 163–177
Piranga olivacea, 616–624
 Pitelka, Frank A., Academic family tree for Loye and Alden Miller, 1065–1067
 Plant nutrients, 879–888
 Plissner, Jonathan H., see Haig, Susan M.
 Plover, Piping, see *Charadrius melodus*
Podiceps, 458–464
 nigricollis, 470–473
Polioptila caerulea, 616–624
 Pollution, 372–376
 Polygyny, 1006–1015
 Polymerase, 465–466
 Population, 226–227, 968–969
 fluctuations, 422–441
 structure, 1–24
 trends, 145–156
Populus tremuloides, 625–640
 Post, William, and Carol A. Seals, Nesting associations of Least Bitterns and Boat-tailed Grackles, 139–144
 Power, Dennis M., Honorary Membership, 1082–1083
 Predation, 72–82, 83–93, 297–304, 706–708, 708–711, 869–878
 Premigratory movement, 716–718
 Prey abundance, 94–103, 316–322
 choice, 528–535
 transport, 231–233
 Prop, Jouke, see Choudhury, Sharmila
 Protein, 680–693
 Ptarmigan, Willow, see *Lagopus lagopus*
Puffinus, 458–464
 Pyle, Peter, Nadav Nur, R. Philip Henderson, and David F. DeSante, The effects of weather and lunar cycle on nocturnal migration of landbirds at Southeast Farallon Island, California, 343–361
- Q**
- Quail, Japanese, see *Coturnix japonica*
 Quail-Dove, Ruddy, see *Geotrygon montana*
Quiscalus major, 139–144
- R**
- Radiative cover, 401–413
 Radio-telemetry, 316–322, 515–527, 744–747, 1038–1041, 1041–1043
 Raikow, Robert J., Anthony H. Bledsoe, Tahniat Syed, and Angela G. Glasgow, Intraspecific variation in the hindlimb muscles of the Ivory-billed Woodcreeper and the Blue Jay, with a review of other species, 497–506
 Rail, Yellow, see *Coturnicops noveboracensis*
 Ramo, Cristina, see Aguilera, Eduardo
 Ramphastidae, 178–192
 Ratite, 1034–1037
 Raveling, Dennis G., see Laing, Karen K.
 Reed, J. Michael, A parametric method for comparing dispersal distances, 716–718
 Reese, Kerry P., see Connelly, John W.
 see Fischer, Richard A.
 Regehr, Heidi M., see Rodway, Michael S.
 Rejecters, 217–219
 Relationship, numerical, 94–103
 Relative growth, 652–661
 Remating, 1–24
 Removal experiments, 211–217
 Remsen, J. V., Jr., Mary Ann Hyde, and Angela Chapman, The diets of Neotropical trogons, motmots, barbets and toucans, 178–192
 Renesting, 273–281, 1041–1043
 Reproduction, 72–82, 193–210, 1041–1043
 Reproductive strategies, 442–454
 success, 83–93, 139–144, 712–715
 Resolutions, Cooper Ornithological Society, 1075–1083
 Restoration ecology, 372–376
 Reversed sexual dimorphism, 288–296
 Ribic, Christine A., see Ainley, David G.
Rissa tridactyla, 330–342
 Rissler, Leslie J., Board of Directors Award, 1075–1083
 Ritchison, Gary, see Sproat, Thomas McKell
 River discharge, 104–114
 Roberts, Bay D., and Scott A. Hatch, Behavioral ecology of Black-legged Kittiwakes during chick rearing in a failing colony, 330–342
 Roberts, Frances F., Award, 1075–1083
 Robertson, Gregory J., see Conrad, Kelvin F.
 see Mitchell, Jeremy S.
 see Watson, Michelle D.
 Robinson, Scott D., and Jeffrey D. Brawn, Pragmatic conservation biology. (Review of *Neotropical Wildlife Use and Conservation*, edited by J. G. Robinson and K. H. Redford), 1068–1069
 Rocky shoreline, 372–376
 Rodgers, James A., Jr., Stephen T. Schwikert, and Anne S. Wenner, The prevalence of abdominal lesions on Wood Stork nestlings in north and central Florida, 473–475
 Rodway, Michael S., Heidi M. Regehr, and Jean-Pierre L. Savard, Activity patterns of Marbled Murrelets in old-growth forest in the Queen Charlotte Islands, British Columbia, 831–848
 Rosenberg, Gary H., see Whitney, Bret M.
 Rosenberg, Ginny A., see Stern, Mark A.
 Rothstein, Stephen I., An experimental test of the Hamilton-Orians Hypothesis for the origin of avian brood parasitism, 1000–1005
- S**
- Sample, Bradley E., Robert J. Cooper, and Robert C. Whitmore, Dietary shifts among songbirds from a diflubenzuron-treated forest, 616–624
 Sandercock, Brett K., Free-living Willow Ptarmigan are determinate egg-layers, 554–558
 Sanderling, see *Calidris alba*
 Sandpiper, Semipalmated, see *Calidris pusilla*
 Savard, Jean-Pierre L., see Rodway, Michael S.

- Sayornis phoebe*, 57–62
 Scanes, Colin G., see Lacombe, Diane
 Schmutz, Joel A., Survival and pre-fledging body mass in juvenile Emperor Geese, 222–225
 Schwikert, Stephen T., see Rodgers, James A.
 Scientific collecting, 758–759, 759–760
 Scott, David M., Novel method for estimating hours of oviposition, illustrated by data on Gray Catbirds, 1048–1050
 Screech-Owl, Eastern, see *Otus asio*
 Sea of Cortez, 458–464
 Seabird, 458–464, 706–708, 708–711, 806–816
 Seals, Carol A., see Post, William
 Seamans, Thomas W., see Belant, Jerrold L.
 Seasonal distribution, 458–464, 896–903
 Segura, Enrique T., see Tubaro, Pablo L.
 Seitz, Linda C., and David A. Zegers, An experimental study of nest predation in adjacent deciduous, coniferous and successional habitats, 297–304
Seiurus aurocapillus, 968–979
 Selection, nest site, 139–144, 239–241
 sexual, 163–177
 Sex-related differences, 580–587
 Sexual dimorphism, 288–296, 652–661, 1034–1037
 Shealer, David A., and Joanna Burger, Effects of interference competition on the foraging activity of tropical Roseate Terns, 322–329
 Sheriff, Steven L., see Wenny, Daniel G.
 Shorebirds, 94–103, 104–114, 372–376, 694–705
 Shoreline, rocky, 372–376
 Shrike, Loggerhead, see *Lanius ludovicianus*
 Skagen, Susan K., Fritz L. Knopf, and Brian S. Cade, Estimation of lipids and lean mass of migrating sandpipers, 944–956
 Small, Michael F., Kelly M. Hogan, and James F. Scud-day, The karyotype of the White-winged Dove, 1051–1053
 Smith, Henrik G., and Torbjörn von Schantz, Extra-pair paternity in the European Starling: the effect of polygyny, 1006–1015
 Smith, Peter C., see Naugler, Christopher T.
 Social tutoring, 718–723, 723–728
 Sociality, 769–781
 Sockman, Keith W., see Morton, Martin L.
 Sodhi, Navjot S., Correlates of hunting range size in breeding Merlins, 316–322
Somateria mollissima, 869–878
 Song, 414–421, 718–723, 723–728, 1044–1048, 1057–1059
 cline, 588–595
 complexity, 1057–1059
 dialects, 414–421, 588–595, 718–723, 723–728, 889–895
 learning, 718–723, 723–728, 1044–1048
 similarity, 1057–1059
 structure, 1059–1060
 Songbird declines, 297–304
 Southern Ocean, 806–816
 Sparrow, Fox, see *Passerella iliaca*
 Rufous-collared, see *Zonotrichia capensis*
 Savannah, see *Passerculus sandwichensis*
 White-crowned, see *Zonotrichia leucophrys*
 Spatial scale, 33–44
 Spear, Larry B., see Ainley, David G.
 Speciation, 670–679
 Species diversity, 422–441
 richness, 422–441
 Sperm, 442–454
 competition, 442–454
 precedence, 442–454
 storage, 442–454
 storage tubules, 442–454
 Sproat, Thomas McKell, and Gary Ritchison, The nest defense behavior of Eastern Screech-Owls: effects of nest stage, sex, nest type and predator location, 288–296
 Stable-nitrogen isotope analysis, 388–394
 Starling, European, see *Sturnus vulgaris*
 Statistical analyses, 716–718
 Steele, Benjamin B., Selection of foraging and nesting sites by Black-throated Blue Warblers: their relative influence on habitat choice, 568–579
 Stern, Mark A., Joseph F. Morawski, and Ginny A. Rosenberg, Rediscovery and status of a disjunct population of breeding Yellow Rails in southern Oregon, 1024–1027
Sterna, 458–464
 dougallii, 322–329
 elegans, 706–708
 hirundo, 708–711
 maxima, 706–708
 Stiles, F. Gary, see Marin A., Manuel
 Stomach oil, 792–805
 Stopover biology, 694–705, 934–943
 Stork, Wood, see *Mycteria americana*
 Storm-Petrel, Wilson's, see *Oceanites oceanicus*
 Stouffer, Philip C., and Richard O. Bierregaard, Jr., Spatial and temporal abundance patterns of Ruddy Quail-Doves near Manaus, Brazil, 896–903
Strix occidentalis lucida, 1075–1083
Sturnus vulgaris, 485–488, 736–738, 1006–1015, 1031–1034
 Suhonen, Jukka, see Inki, Kimmo
Sula, 458–464
 Sunbathing, 728–730
 Sunbird, Orange-breasted, see *Nectarinia violacea*
 Supplemental feeding, 273–281
 Survival, 222–225
 in captivity, 211–217
 Swallow, Tree, see *Tachycineta bicolor*
 Violet-green, see *Tachycineta thalissina*
 Swifts, Vaux's, see *Chaetura vauxi*
 Syed, Tahniat, see Raikow, Robert J.
Synthliboramphus, 458–464
- T**
- Tacha, Thomas C., see Gates, Robert J.
Tachycineta bicolor, 546–553
 thalissina, 728–730
 Tan, Sen S., see Chavez-Ramirez, Felipe
 Tanager, Scarlet, see *Piranga olivacea*
 Tern, Common, see *Sterna hirundo*
 Elegant, see *Sterna elegans*
 Roseate, see *Sterna dougallii*
 Royal, see *Sterna maxima*
 Territoriality, 515–527, 782–791
 Tershy, Bernie R., Ellen Van Gelder, and Dawn Breese, Relative abundance and seasonal distribution

of seabirds in the Canal de Ballenas, Gulf of California, 458-464
 Thermal environment, 401-413
 Thermoregulation, 157-162, 744-747, 1034-1037
 Thompson, Andrew D., Jr., and Myron C. Baker, Song dialect recognition by male White-crowned Sparrows: effects of manipulated song components, 414-421
 Thrush, Gray-cheeked, see *Catharus minimus*
 Swainson's, see *Catharus ustulatus*
 Wood, see *Hylocichla mustelina*
 Thyroid function, 559-567
 Thyrotropin-releasing hormone, 559-567
 Tides, 104-114
 Time-activity budgets, 730-734
 Tit, Willow, see *Parus montanus*
 Titmouse, Tufted, see *Parus bicolor*
 TOBEC, 944-956
 Torpor, 157-162, 744-747
 Total body electrical conductivity, 944-956
 Toxicity, 625-640
 Trainer, Jill M., and David B. McDonald, Vocal repertoire of the Long-tailed Manakin and its relation to male-male cooperation, 769-781
 Trill variation, 588-595
 Trochilidae, 455-458
Troglodytes aedon, 1028-1030
 Trogonidae, 178-192
 Tropical dry forest, 422-441
 Tubaro, Pablo L., Enrique T. Segura, and Paul Handford, Geographic variation in the song of the Rufous-collared Sparrows in eastern Argentina, 588-595
 Turnstone, Black, see *Arenaria melanocephala*
 Ruddy, see *Arenaria interpres*

U

United States Fish and Wildlife Service, 758-759, 759-760
 Utah, 470-473

V

van Riper, Charles, III, Honorary Membership, 1082-1083
 Van Gelder, Ellen, see Tershy, Bernie R.
 VanderWerf, Eric A., Scales of habitat selection by foraging "Elepaio in undisturbed and human-altered forests in Hawaii, 980-989
 Variability profiles, 422-441
 Variation, geographic, 63-71
 individual, 233-239
 intersexual, 233-239
 Veery, see *Catharus fuscescens*
 Velarde, Enriqueta, Predation of nesting larids by Peregrine Falcons at Rasa Island, Gulf of California, Mexico, 706-708
 Venezuela, 739-741
 Venezuelan Llanos, 739-741
Vireo griseus, 990-999
olivaceus, 616-624
pallens, 990-999
 Vireo, Mangrove, see *Vireo pallens*
 Red-eyed, see *Vireo olivaceus*
 White-eyed, see *Vireo griseus*

Vocal dialects, 889-895
 imitation, 1044-1048
 Vocalizations, 227-231, 233-239, 414-421, 588-595, 769-781
 von Bloeker, Jack C., Jr., Who were Harry R. Painton, A. Brazier Howell, and Frances F. Roberts?, 1061-1063
 von Schantz, Torbjörn, see Smith, Henrik G.
 Vyatkin, P. S., Nesting of the Northern Fulmar on the western Bering Sea coast, 226-227

W

Waide, Robert B., see Wunderle, Joseph M., Jr.
 Wakkinen, Wayne L., see Connelly, John W.
 see Fischer, Richard A.
 Walsberg, Glenn E., History of *The Condor*, 748-757
 The time course for publishing a paper in *The Condor*, 767
 The treatment of biologists by the U.S. Fish and Wildlife Service, 758-769
 Walter, C. B., see Adams, N. J.
 Warbler, Kentucky, *Oporornis formosus*
 Pine, see *Dendroica pinus*
 Willow, see *Phylloscopus trochilus*
 Worm-eating, see *Helminthos vermivorus*
 Yellow, see *Dendroica petechia*
 Water, doubly labeled, 115-126
 Water flux, 115-126
 Watson, Michelle D., Gregory J. Robertson, and Fred Cooke, Egg-laying time and laying interval in the Common Eider, 869-878
 Weather, 72-82, 343-361
 Weatherhead, Patrick J., see Mallory, Mark L.
 see Metz, Karen J.
 Webb, D. R., see With, Kimberly A.
 Wellicome, Troy I., 1075-1083
 Wenner, Anne S., see Rodgers, James A.
 Wenny, Daniel G., Richard L. Clawson, John Faaborg, and Steven L. Sheriff, Population density, habitat selection and minimum area requirements of three forest-interior warblers in central Missouri, 968-979
 Westerman, Michael, see Leeton, Peter
 Western Foundation of Vertebrate Zoology, 495-496
 Whip-poor-will, see *Caprimulgus vociferus*
 Whitney, Bret M., and Gary H. Rosenberg, Behavior, vocalizations and possible relationships of *Xenornis setifrons* (Formicariidae), a little-known Chocó endemic, 227-231
 Whittingham, Linda A., Effects of nestling provisioning on the time-activity budgets of male Red-winged Blackbirds, 730-734
 Williams, Joseph B., Energetics of incubation in free-living Orange-breasted Sunbirds in South Africa, 115-126
 Willson, Mary F., and TallChief A. Comet, Food choices by Northwestern Crows: experiments with captive, free-ranging and hand-raised birds, 596-615
 Wind breaks, 401-413
 Wing raggedness, 305-315
 Winter distribution, 372-376
 ecology, 515-527
 foraging, 528-535
 With, Kimberly A., and D. R. Webb, Microclimate of

- ground nests: the relative importance of radiative cover and wind breaks for three grassland species, 401-413
- Witter, Mark S., Motivation and measures of accessibility, 485-488
see Bonser, Richard H.
- Wood-Pewee, Eastern, see *Contopus virens*
- Woodpecker, Acorn, see *Melanerpes formicivorus*
- Wright, Cynthia A., see Martin, Kathy
- Wunderle, Joseph M., Jr., and Robert B. Waide, Distribution of overwintering Nearctic migrants in the Bahamas and Greater Antilles, 904-933
- X**
- Xenobiotic metabolism, 625-640
- Xenornis setifrons*, 227-231
- Xiphorhynchus flavigaster*, 497-506
- Y**
- Yahner, Richard H., Old nests as cues for nest-site selection by birds: an experimental test in small even-aged forest plots, 239-241
- Yom-Tov, Yoram, and Amos Ar, Incubation and fledging durations of woodpeckers, 282-287
- Yong, Wang, and Frank R. Moore, Relation between migratory activity and energetic condition among thrushes (Turdinae) following passage across the Gulf of Mexico, 934-943
- Yosef, Reuven, Prey transport by Loggerhead Shrikes, 231-233
- Yosef, Reuven, and Thomas C. Grubb, Jr., Effects of vegetation height on hunting behavior and diet of Loggerhead Shrikes, 127-131
- Young, Andrew D., Intraspecific variation in the use of nutrient reserves by breeding female Mallards, 45-56
- Yucatan, 990-999
- Z**
- Zegers, David A., see Seitz, Linda C.
- Zenaida asiatica*, 1051-1053
- Zonotrichia capensis*, 588-595, 889-895
leucophrys, 72-82, 414-421, 718-723, 723-728
- Zugunruhe*, 580-587