

INDEX TO VOLUME 98

Compiled by Jean Ferner

This index is primarily one to new information. Previously published information referred to in this volume has not been indexed unless extensive comparisons or reinterpretations are involved. For some species, especially ones not in the A.O.U. Check-list, scientific names only have been entered, and in some instances entries under scientific names are more extensive than those under vernacular names. New generic, specific, and subspecific names are printed in **boldface** type.

- Abel, Lawrence G., review by, 201–202
Accipiter cooperii, 270–279
A. gentilis, 27
Adams, Raymond J., Jr., and Richard Brewer,
Autumn selection of breeding location by
Field Sparrows, 629–631
Aechmophorus occidentalis, 335–347
Aethia pygmaea, 451
Agelaius phoeniceus, 177, 185–187, 355–359, 457–
465, 659–667, 723, 725–726, 734, 778–783
A. tricolor, 457–465
Agriocharis ocellata, 396–398
Aimophila aestivalis, 247
A. cassinii, 245, 247, 254
Ainley, D. G., review by, 428–429
Akepa, 610–611
Akiapolaau, 610–611
Alabama, 744
Alaska, 145–156, 437–456
Albatross, Black-footed, 844–846; Laysan, 839–
841, 844–846
Albinism in *Sialia currucoides*, 181–182
Amadon, Dean, reviews by, 434, 655–656
Amandava amandava, 383–385
American Ornithologists' Union, Awards, 213–
214; Proceedings of the Ninety-eighth Stated
Meeting, 1AA–23AA
Ammodramus henslowii, 246–247
A. savannarum, 246
Amospiza leconteii, 245, 247
A. maritima, 246
Anas acuta, 115–124
A. clypeata, 115–124
A. discors, 115–124
A. platyrhynchos, 29–37, 115–124, 627–628
A. strepera, 115–124
Anatomy and morphology, feeding ecology, 176–
178; vocalizations, 299–305
Anatomy and morphology of *Agelaius phoeniceus*,
457–465; *A. tricolor*, 457–465; *Anous stolidus*,
844–846; *A. tenuirostris*, 844–846; *Archaeopteryx*,
689; *Aulacorhynchus prasinus*, 466–479; *Balaeniceps rex*, 687, 692–693; *Bo-
taurides parvus*, 491; *Campephilus magellanicus*,
466–479; *Capito maculicoronatus*, 466–
479; *C. niger*, 466–479; *Chelidoptera tenebro-
sa*, 466–479; *Chrysocolaptes lucidus*, 466–479;
Colaptes auratus, 466–479, 484, 486–490;
Cyanocorax affinis, 484, 488; *Diomedea im-
mutabilis*, 844–846; *D. nigripes*, 844–846;
Dryocopus javensis, 466–479; *D. lineatus*,
466–479; *D. pileatus*, 466–479; *Eobucco brod-
korbi*, 491; *Euphagus cyanocephalus*, 457–
465; *Galbula cyanescens*, 484–489; *G. galbula*,
466–479; *G. ruficauda*, 466–479, 487; *Gallus*
gallus, 299–305; *Gygis alba*, 844–846; *Hes-
perornis*, 688–689; *Icterus galbula bullockii*,
457–465; *I. g. galbula*, 457–465; *I. spurius*,
457–465; *Indicator exilis*, 466–479; *I. indi-
cator*, 466–479; *Jacamaralcyon tridactyla*,
466–479; *Jacamerops aurea*, 466–479; *Junci-
tarsus gracillimus*, 691–692; *Jynx torquilla*,
466–479; *Lybius torquatus*, 466–479; *Mala-
coptila fusca*, 466–479; *M. panamensis*, 466–
479; *Megalaima zeylanica*, 466–479; *Mela-
nerpes aurifrons*, 466–479; *M. carolinus*, 466–
479; *M. erythrocephalus*, 466–479; ***Metal-
lura theresiae parkeri***, 382; *Molothrus*
ater, 457–465; *Nesocites micromegas*, 466–
479; *Nonnula frontalis*, 466–479; *Notharchus*
macrorhynchos, 466–479; *N. pectoralis*, 466–
479; *Nystalus maculatus*, 466–479; *Oceanod-
roma markhami*, 844–846; *Opisthocomus*,
676, 700; *Otus barbarus*, 1; *O. clarkii*, 1; ***O.***
marshalli, 1–2, 6; *Passer domesticus*, 503–
510; *Pelecanoides*, 686–687; *Piciformes*, 466–
479, 481–493; *Picoides albolarvatus*, 466–479;
P. arcticus, 466–479; *P. pubescens*, 466–479;
Picumnis cirrhatius, 466–479; *P. temminckii*,
466–479; *Picus vittatus*, 466–479; *Pogonius*
bilineatus, 466–479; *Presbyornis pervetus*,
694–696; *Psilopogon pyrolophus*, 484, 488–
490; *Pterodroma hypoleuca*, 844–846; *Pter-
oglossus torquatus*, 466–479; *Puffinus pacifi-
cus*, 844–846; *Quiscalus mexicanus*, 457–465;
Q. quiscula, 457–465; *Ramphastos sulfuratus*,
466–479; *Sagittarius serpentarius*, 694; *Se-
lenidera maculirostris*, 485; *Semnormis ram-
phastinus*, 466–479; *Sphyrapicus varius*, 466–
479; *Sporophila angolensis*, 379–381; *Steator-
nis*, 700; *Stelgidopteryx ruficollis*, 282–289; *S.*
serripennis, 282–289; *Sterna fuscata*, 844–
846; *Struthio*, 688; *Sula leucogaster*, 844–846;
S. sula, 844–846; *Trachyphonus darnaudii*,

- 466-479; *Tricholaema diadematum*, 466-479; *T. lacrymosum*, 466-479; *Uintornis lucaris*, 491; *U. marionae*, 491; *Uria lomvia*, 263; *Xanthocephalus xanthocephalus*, 457-465; *Zygodactylus grivensis*, 491-492; *Z. ignatus*, 491-492
- Anderson, Bertin W., see Meents, Julie K., et al.
- Anhinga, 834
- Anhinga*, 687
- A. anhinga*, 834
- Anous stolidus*, 844-846
- A. tenuirostris*, 844-846
- Anseranas*, 695
- Antarctica, 398-399
- Apapane, 610-611
- Apel, Karen M., and Millicent S. Ficken, Predator alarm calls of young Black-capped Chickadees, 624
- Aquila chrysaetos*, 393-394
- Aracari, Collared, 91-93
- Aratinga guarouba*, 394-396
- Archaeopteryx*, 689
- Ardea herodias*, 589-595
- Arenaria interpres*, 215-227
- Arizona, 615-618, 619-621, 752-763, 766, 771, 818-827
- Atkins, Natasha, see Duffy, David C., et al.
- Atwood, Jonathan L., see Massey, Barbara W., and ———
- Auklet, Rhinoceros, 442-455; Whiskered, 451
- Aulacorhynchus prasinus*, 466-479
- Austin, George T., Emmet R. Blake, Pierce Brod-korb, M. Ralph Browning, W. Earl Godfrey, John P. Hubbard, Guy McCaskie, Joe T. Marshall, Gale Monson, Storrs L. Olson, Henri Ouellet, Ralph A. Palmer, Allan R. Phillips, Warren M. Pulich, Mario A. Ramos, Amadeo M. Rea, and Dale A. Zimmerman, Commentary: Ornithology as science, 636-637
- Avocet, American, 812, 814
- Bahama Islands, 294-297
- Bailey, Alfred M., Memorial of, 173-175
- Baker, Myron Charles, A muscle biopsy procedure for use in electrophoretic studies of birds, 392-393
- Balaban, Evan, see Searcy, William A., et al.
- Balaeniceps rex*, 687, 690, 692-693
- Balda, Russell P., Commentary: Sociobiology as learned from a drab, blue bird, 415-417; see Clark, L., and ———
- Bananaquit, 571-577
- Baptista, Luis F., and Martin L. Morton, Inter-specific song acquisition by a White-crowned Sparrow, 383-385
- Baptornis*, 686
- Barklow, William, Voices of the Loon (rev.), 434
- Baryphthengus martii*, 91-93
- Bayer, Range D., Arrival and departure frequencies of Great Blue Herons at two Oregon estuarine colonies, 589-595
- Behavior, activity patterns, 49-63, 115-124, 179-181, 535-543, 835-837; age-related, 571-577, 600-601; agonistic, 94-95, 101-103, 105, 127-132, 138-139, 179-181, 182, 185-187, 330, 385, 536-543; antipredator, 527-530, 624, 839; breeding, 101-106, 115-124, 134-143, 148-151, 335-347, 385-388, 522-530, 532-547, 600-601, 622-623, 625-626, 629, 631, 659-667, 828-831, 835-838; copulatory, 134-143, 148, 385, 538-539, 629; courtship, 118, 148, 335-347, 629; dominance, 139, 318-319, 330; effect of environment on, 49-63, 532-547, 562-569, 589-595; feeding, 49-63, 66, 88-97, 101-102, 115-124, 151, 192, 218-219, 221-222, 294-297, 307-319, 321-333, 350-353, 385-386, 396-398, 437-456, 539-543, 562-569, 573-575, 578-587, 589-595, 600-601, 623, 767-774, 778-783, 828-831, 839; feeding aggregations, 437-455, 589-595; forced copulation, 134-143, 537-539; homosexual, 139, 625-626; incubation, 140-143, 149-150, 386-388, 536-539, 622-623, 835-838; individual distance, 99-106, 142-143, 662-665; interspecific, 88-97, 307-319, 330, 383-385, 765-774; learning, 314-315, 345-346, 383-385, 778-783; maintenance, 118, 834, 839; movements in the home range, 571-577; nesting, 522-530, 536, 659-667; nest-site tenacity, 625-626; ontogeny of, 624; pair, 134-143, 150, 629; parental care, 101-106, 151, 385-386, 539-547, 600-601, 660, 666, 828-831, 835-836; predatory, 525-527; sexual differences in, 179-181, 310-317, 321-333, 397-398, 532-547, 615, 622-623; social, 778-783; sunbathing, 839; territorial, 53, 59-63, 101-106, 127-132, 179-181, 192, 385-386, 536-541, 625-626, 769-770; thermoregulatory, 183-184; vocal, 85-86, 101-102, 105, 127-132, 136-138, 141, 149-150, 179-181, 192, 335-347, 355-359, 383-385, 613-615, 623, 624
- Behavior of *Aechmophorus occidentalis*, 335-347; *Aethia pygmaea*, 437-455; *Agelaius phoeniceus*, 355-359, 659-667, 778-783; *Agriocharis ocellata*, 396-398; *Anas acuta*, 115-124; *A. clypeata*, 115-124; *A. discors*, 115-124; *A. platyrhynchos*, 115-124; *A. strepera*, 115-124; *Anhinga anhinga*, 834; *Ardea herodias*, 589-595; *Brachyramphus marmoratus*, 437-455; *Branta canadensis*, 66; *Bubulcus ibis*, 134-143; *Calidris alba*, 49-63; *Catharacta mac-cormicki*, 437-455; *Cephus columba*, 437-455; *Cerorhinca monocerata*, 437-455; *Charadrius wilsonia*, 835-838; *Coereba flaveola*, 571-577; *Coragyps atratus*, 182-184; *Corvus*

- caurinus*, 525-527; *Cyanocitta cristata*, 622-623; *Dendroica petechia*, 767-774; *D. pinus*, 294-297; *Diomedea immutabilis*, 839-841; *Dryocopus pileatus*, 562-569; *Eupetomena macroura*, 192; *Fratercula corniculata*, 437-455; *Fulmarus glacialis*, 437-455; *Gavia arctica*, 437-455; *G. immer*, 437-455; *G. stellata*, 437-455; *Geothlypis trichas*, 767-774; *Grus canadensis*, 631; *Larus argentatus*, 350-353; *L. californicus*, 437-455; *L. canus*, 437-455; *L. delawarensis*, 179-181, 625-626; *L. glaucescens*, 437-455, 525-527; *L. heermanni*, 437-455; *L. marinus*, 99-106; *L. occidentalis*, 437-455, 532-547; *L. philadelphia*, 437-455; *Lobipes lobatus*, 437-455; *Loriculus philippensis philippensis*, 629; *Lunda cirrhata*, 437-455; *Melospiza georgiana*, 613-615; *M. melodia*, 828-831; *Mimus polyglottos*, 385-386; *Myiozetetes similis*, 839; *Oceanodroma furcata*, 148-151, 437-455; *Oporornis tolmiei*, 578-587, 767-774; *Parus atricapillus*, 624; *P. bicolor*, 307-319; *P. carolinensis*, 307-319; *Phaethornis ruber*, 192; *Phalacrocorax auritus* 437-455, 527-530; *P. pelagicus*, 437-455, 527-530; *P. penicillatus*, 437-455; *P. urile*, 437-455; *Picoides borealis*, 321-333; *P. pubescens*, 307-319, 562-569; *P. villosus*, 562-569; *Pitangus sulphuratus*, 192; *Puffinus bulleri*, 437-455; *P. griseus*, 437-455; *P. puffinus*, 437-455; *P. tenuirostris*, 437-455; *Ramphastos swainsonii*, 94; *Rissa brevirostris*, 437-455; *R. tridactyla*, 437-455; *Sitta carolinensis*, 307-319; *Stercorarius parasiticus*, 437-455; *S. pomarinus*, 437-455; *Sterna albifrons*, 600-601; *S. paradisaea*, 437-455; *Sturnus vulgaris*, 386-388; *Synthliboramphus antiquus*, 437-455; *Thryothorus ludovicianus*, 127-132; *Tyrannus melancholicus*, 192; *Uria aalge*, 437-455; *U. lomvia*, 437-455; *Vermivora celata*, 578-587; *Vireo griseus*, 85-86; *Wilsonia pusilla*, 578-587, 767-774; *Xema sabini*, 437-455; *Zonotrichia leucophrys*, 383-385
- Benjamin, Roger, see Parrish, John, et al.
- Bergstrom, Peter W., Male incubation in Wilson's Plover (*Charadrius wilsonia*), 835-838
- Bernstein, Neil P., and Paul C. Tirrell, New southerly record for the Macaroni Penguin (*Eudyptes chrysolophus*) on the Antarctic Peninsula, 398-399
- Bertram, Brian C. R., Commentary: Sociobiology in relation to ornithology, 403-405
- Bierly, Michael Lee, Bird finding in Tennessee (rev.), 435
- Birkhead, T. R., and D. N. Nettleship, Reproductive biology of Thick-billed Murres (*Uria lomvia*): an inter-colony comparison, 258-269
- Bitterbaum, Erik J., review by, 434
- Blackbird, Brewer's, 245, 254, 457-465; Red-winged, 177, 185-187, 355-359, 457-465, 659-667, 723, 725-726, 734, 778-783; Rusty, 177; Tricolored, 457-465; Yellow-headed, 245, 249-250, 254-256, 457-465
- Blake, Emmet R., see Austin, George T., et al.
- Blondel, J., Biogéographie et écologie (rev.), 207-208
- Bluebird, Mountain, 28, 181-182
- Bock, Walter J., editor of Reviews, 199-212, 426-435, 641-657, 850-858; reviews by, 435, 644-646, 856-858; and John Farrand, Jr., The number of species and genera of Recent birds: a contribution to comparative systematics (rev.), 426-427
- Bohlen, H. David, An annotated check-list of the birds of Illinois (rev.), 435
- Bolen, Eric G., reviews by, 430-432, 855-856
- Bonasa umbellus*, 27
- Booby, Brown, 844-846; Red-footed, 844-846
- Botaurides parvus*, 491
- Brachyramphus marmoratus*, 442-443
- Bradley, Richard A., Song variation within a population of White-eyed Vireos (*Vireo griseus*), 80-87
- Branta canadensis*, 65-77
- Brazil, 191-192, 394-396, 619-621
- Breeding of *Accipiter cooperii*, 270-279; *Agelaius phoeniceus*, 659-667; *Anas acuta*, 115-124; *A. clypeata*, 115-124; *A. discors*, 115-124; *A. platyrhynchos*, 29-37, 115-124; *A. strepera*, 115-124; *Branta canadensis*, 76-77; *Bubulcus ibis*, 134-143; *Buteo jamaicensis*, 270-279; *B. lineatus*, 270-279; *B. platypterus*, 270-279; *Charadrius wilsonia*, 835-838; *Coragyps atratus*, 182-185; *Cyanocitta cristata*, 622-623; *Grus canadensis*, 631; hybrids of *Uria aalge* × *U. lomvia*, 847; *Larus argentatus*, 550-559; *L. atricilla*, 550-559; *L. delawarensis*, 625-626; *L. marinus*, 99-106; *L. occidentalis*, 532-547; *Loriculus philippensis philippensis*, 629; *Melospiza melodia*, 828-831; *Mimus polyglottos*, 385-386; *Oceanodroma furcata*, 145-156; ***Otus marshalli***, 5; *Passerculus sandwichensis*, 495-502; *Phalacrocorax auritus*, 522-530; *P. pelagicus*, 522-530; *Piezorhina cinerea*, 187-189; *Rynchops niger*, 550-559; *Spizella pusilla*, 629-630; *Sterna albifrons*, 596-604; *S. forsteri*, 550-559; *S. fuscata*, 361-377; *S. hirundo*, 361-377, 550-559; *Sturnus vulgaris*, 39-47, 386-388; *Uria aalge*, 847; *U. lomvia*, 258-269, 847; *Zenaidra macroura*, 389-391
- Breeding season of *Anas platyrhynchos*, 29-37; *Coragyps atratus*, 182; *Oceanodroma furcata*, 147; ***Otus marshalli***, 5; *Piezorhina cinerea*, 189; *Sterna albifrons*, 596-604; *Uria lomvia*, 261-267

- Breeding success of *Charadrius wilsonia*, 835–838; *Coragyps atratus*, 182; *Diomedea immutabilis*, 840; *Larus marinus*, 99–106; *L. occidentalis*, 542–543; *Mimus polyglottos*, 385–386; *Passerculus sandwichensis*, 495–502; *Sialia currucoides*, 181–182; *Sterna albifrons*, 601–602; *Uria lomvia*, 263–267; *Zenaida macroura*, 389–391
- Brenowitz, Eliot A., The effect of stimulus presentation sequence on the response of Red-winged Blackbirds in playback studies, 355–360
- Brewer, Richard, see Adams, Raymond J., Jr., and ———
- British Columbia, 512–520, 522–530
- Brodkorb, Pierce, see Austin, George T., et al.
- Brotogeris jugularis*, 841–844
- Brown, Jerram L., Commentary: On socio-ornithology, 417–418; review by, 650
- Brown, L. H., and P. L. Britton, The breeding seasons of East African birds (rev.), 433
- Browning, M. Ralph, see Austin, George T., et al.
- Bubo virginianus*, 27, 734
- Bubulcus ibis*, 134–143
- Bunting, Blue, 621–622; Indigo, 246, 253, 255–256; Lark, 245; Lazuli, 28; Painted, 245, 247, 255
- Burger, Joanna, see Erwin, R. Michael, et al.; B. L. Olla, and H. E. Winn (Eds.), Behavior of marine animals. Current perspectives in research. Vol. 4: marine birds (rev.), 651–653
- Burr, Elisha W., Courtship display and copulation observed in a pair of Philippine Hanging Parrots (*Loriculus philippensis philippensis*), 629
- Buteo jamaicensis*, 27, 270–279
- B. lineatus*, 246, 270–279
- B. platypterus*, 270–279
- B. swainsoni*, 245–246
- Butler, Ronald G., and Wayne Trivelpiece, Nest spacing, reproductive success, and behavior of the Great Black-backed Gull (*Larus marinus*), 99–107
- Cactospiza pallida*, 230–240
- Cairns, D. K., and Brad deYoung, Back-crossing of a Common Murre (*Uria aalge*) and a Common Murre-Thick-billed Murre hybrid (*U. aalge* × *U. lomvia*), 847
- Calamospiza melanocorys*, 245
- Calcarius ornatus*, 245, 248, 254
- Calidris alba*, 49–63, 215–227, 801–810
- C. alpina*, 812, 814
- C. canutus*, 220, 806
- C. mauri*, 215–227, 812, 814
- C. pusilla*, 215–227, 801–810
- California, 49–63, 335–347, 383–385, 532–547, 596–604, 669–679, 752–763, 766, 771, 812–817, 818–827
- Callichelidon cyaneoviridis*, 247
- Callin, E. Manley, Birds of the Qu'Appelle, 1857–1979 (rev.), 657
- Camarhynchus parvulus*, 230–240
- C. pauper*, 230–240
- Campophilus magellanicus*, 466–479
- Canady, Richard A., see Searcy, William A., et al.
- Capito maculicoronatus*, 466–479
- C. niger*, 466–479
- Caprimulgus carolinensis*, 245
- Cardiff, Steven W., and J. V. Remsen, Jr., A Blue Bunting [*Passerina (Cyanocampsa) parrellina*] record for the United States from Louisiana, 621–622
- Cardinal, 177, 246
- Cardinalis cardinalis*, 177, 246
- Carduelis pinus*, 28
- C. tristis*, 177, 723, 726, 734
- Carpodacus cassinii*, 28
- Catbird, Gray, 177, 734
- Catharacta macconnicki*, 450
- Cathartes aura*, 246
- Catharus guttatus*, 28, 177
- C. minimus*, 177
- C. ustulatus*, 91–93, 177, 734
- Cătuneanu, I. I. (Ed.), I. Koródi Gál, D. Munteanu, S. Paşcovschi, and E. Vespremeanu, Fauna republicii socialiste România. Aves (Păsări) (rev.), 209–210
- Census methods, 610–612, 785–798, 812–816
- Cepphus columba*, 443
- Cerorhinca monocerata*, 442–455
- Certhia familiaris*, 27
- Certhidea olivacea*, 230–240
- Charadrius semipalmatus*, 215–227
- C. wilsonia*, 835–838
- Chat, Yellow-breasted, 246, 256
- Chelidoptera tenebrosa*, 466–479
- Chickadee, Black-capped, 177, 624, 734; Carolina, 307–319; Mountain, 27
- Chicken, 299–305
- Chionis*, 698
- Chondestes grammacus*, 246, 734
- Chordeiles acutipennis acutipennis*, 619–621
- C. a. aequatorialis*, 619–621
- C. a. exilis*, 619–621
- C. a. littoralis*, 619–621
- C. a. micromeris*, 619–621
- C. a. texensis*, 619–621
- C. minor*, 734
- Chrysocolaptes lucidus*, 466–479
- Chuck-will's-Widow, 245
- Cistothorus palustris*, 246
- C. platensis*, 246
- Cladorhynchus leucocephalus*, 691–692
- Clark, George A., Jr., review by, 429
- Clark, L., and Russell P. Balda, The development of effective endothermy and homeothermy in nestling Piñon Jays, 615–619

- Clark, Stephen J., see Searcy, William A., et al.
- Clark, Taylor, and Lois Elmer Bannon, A handbook of Audubon prints (rev.), 211
- Clutch size of *Anas platyrhynchos*, 34, 36-37; *Branta canadensis*, 69, 71, 75; *Coragyps atratus*, 182; *Larus occidentalis*, 542-543; *Passerculus sandwichensis*, 497; *Sialia currucoides*, 181; *Sterna albifrons*, 600
- Coccyzus americanus*, 246, 256
- C. erythrophthalmus*, 723, 726, 734
- C. minor*, 247
- Coereba flaveola*, 571-577
- Coffey, Ben B., Jr., and Lula C. Coffey, Bird songs and calls from southeast Peru (rev.), 656-657
- Colaptes auratus*, 27, 177, 189-191, 466-479, 484, 486-490, 723, 725-726, 734
- Collias, Elsie C., Coues Award, 214
- Collias, Nicholas E., Coues Award, 214
- Colombia, 379-381, 619-621
- Columba fasciata*, 245-246, 255
- Commentaries, Demography is a cornerstone of sociobiology, see Fitzpatrick, John W., and Glen E. Woolfenden; Electrophoresis and avian genealogical analyses, see Sherman, Paul W.; Freedom and responsibility: the International Ornithological Congress, see Mueller, Helmut C.; Old specimens and new directions: a comment, see McKittrick, Mary C.; On experimental tests of sociobiological theory, see Pulliam, H. Ronald; On socio-ornithology, see Brown, Jerram L.; Ornithology and sociobiology: a forum, 400-425; Ornithology as science, see Austin, George T., et al.; Response: in the eye of the beholder, see Tramer, Elliot J.; Response: it's time for museums and biology departments to get back together, see Ricklefs, Robert E.; Response: ornithology and ecology as sciences, see MacMahon, James A., and Peter B. Landres; Response: ornithology as science, see Whitmore, Robert C.; Searching for altruism in birds, see Power, Harry W.; Sociobiology as learned from a drab, blue bird, see Balda, Russell P.; Sociobiology in relation to ornithology, see Bertram, Brian C. R.; Sociobiology is for the birds, see Ligon, J. David; Some comments on sociobiology, see Zahavi, Amotz; The Condor case: an uphill struggle in a downhill crush, see Pitelka, Frank A.; The International Ornithological Congress: a counter view, see Farner, Donald S.; The museum tradition in ornithology—a response to Ricklefs, see Olson, Storrs L.; The ornithological roots of sociobiology, see Emlen, Stephen T.
- Confer, John L., and Kristine Knapp, Golden-winged Warblers and Blue-winged Warblers: the relative success of a habitat specialist and a generalist, 108-114
- Conner, Richard N., Seasonal changes in woodpecker foraging patterns, 562-570
- Connors, Carolyn S. W., see Connors, Peter G., et al.
- Connors, Peter G., J. P. Myers, Carolyn S. W. Connors, and F. A. Pitelka, Interhabitat movements by Sanderlings in relation to foraging profitability and the tidal cycle, 49-64
- Contopus sordidulus*, 27
- C. virens*, 723, 725-727, 734
- Coon, Richard A., James D. Nichols, and H. Franklin Percival, Importance of structural stability to success of Mourning Dove nests, 389-391
- Coragyps atratus*, 182-185, 247
- Corbin, Kendall W., Genic heterozygosity in the White-crowned Sparrow: a potential index to boundaries between subspecies, 669-680
- Cormorant, Brandt's, 442-455; Double-crested, 442-455, 522-530; Pelagic, 442-455, 522-530; Red-faced, 442-455
- Corvus caurinus*, 522-530
- C. ossifragus*, 245
- Costa Rica, 282-293, 841-844
- Cotinga, Blue, 94
- Cotinga nattererii*, 94
- Cowbird, Brown-headed, 113, 457-465, 723, 726, 734; Shiny, 188
- Cracraft, Joel, see Simpson, Sharon F., and ———; Towards a phylogenetic classification of the Recent birds of the world (Class Aves), 681-714
- Crane, Sandhill, 631; Whooping, 393-394
- Creeper, Brown, 27; Hawaii, 610-611
- Crossbill, Red, 28; White-winged, 28
- Crow, Fish, 245; Northwestern, 522-530
- Cuckoo, Black-billed, 723, 726, 734; Mangrove, 247; Yellow-billed, 246, 256
- Cyanocitta cristata*, 177, 622-623, 723, 726, 734
- C. stelleri*, 27
- Cyanocorax affinis*, 484, 488
- Cyrus, Digby, and Nigel Robson, Bird atlas of Natal (rev.), 211-212
- Day, Robert A., How to write and publish a scientific paper (rev.), 212
- DeJong, Michael J., see Emlen, John T., and ———
- Delaware, 550-559
- Dendroica caerulescens*, 177
- D. cerulea*, 245
- D. coronata*, 28, 177, 245, 254, 748
- D. discolor*, 246-247, 255-256, 748-749
- D. dominica*, 245, 247, 250, 255
- D. fusca*, 748

- D. kirtlandii*, 113
D. magnolia, 177
D. nigrescens, 245, 247, 254
D. occidentalis, 245, 247
D. pensylvanica, 177, 743–750
D. petechia, 253, 734, 748, 765–775
D. pinus, 246–247, 294–297
D. striata, 247
D. townsendi, 245, 247
D. virens, 177, 748–749
Dickcissel, 246, 255–256, 734
Dickerman, Robert W., Geographic variation in the juvenal plumage of the Lesser Nighthawk (*Chordeiles acutipennis*), 619–621
Diomedea immutabilis, 839–841, 844–846
D. nigripes, 844–846
Distribution of *Aimophila aestivalis*, 247; *A. castanii*, 245, 247, 254; *Ammodramus heslowii*, 246–247; *A. savannarum*, 246; *Amospiza leconteii*, 245, 247; *A. maritima*, 246; *Aratinga guarouba*, 394–396; *Buteo lineatus*, 246; *B. swainsoni*, 245–246; *Calamospiza melanocorys*, 245; *Calcarius ornatus*, 245, 248, 254; *Callichelidon cyaneoviridis*, 247; *Caprimulgus carolinensis*, 245; *Cardinalis cardinalis*, 246; *Cathartes aura*, 246; *Chondestes grammacus*, 246; *Cistothorus palustris*, 246; *C. platensis*, 246; *Coccyzus americanus*, 246, 256; *C. minor*, 247; *Coereba flaveola*, 571–577; *Columba fasciata*, 245–246, 255; *Coragyps atratus*, 247; *Corvus ossifragus*, 245; *Dendroica cerulea*, 245; *D. coronata*, 245, 254; *D. discolor*, 246–247, 255–256; *D. dominica*, 245, 247, 250, 255; *D. nigrescens*, 245, 247, 254; *D. occidentalis*, 245, 247; *D. petechia*, 253; *D. pinus*, 246–247; *D. townsendi*, 245, 247; *Empidonax virens*, 246; *Eudyptes chrysolophus*, 398–399; *Euphagus cyanocephalus*, 245, 254; *Guiraca caerulea*, 245, 250, 253; *Helmitheros vermivorus*, 246–247; *Hyalocichla mustelina*, 246, 253; *Icteria virens*, 246, 256; *Icterus dominicensis*, 245, 247, 253; *I. galbula*, 245; *I. spurius*, 246, 256; *Ixoreus naevius*, 245, 256; *Junco hyemalis*, 245; *Limnothlypis swainsonii*, 245–247; *Melanerpes carolinus*, 245; *M. erythrocephalus*, 246; ***Metallura theresiae parkeri***, 382; *Muscivora forficata*, 247–248; *M. tyrannus*, 245; *Oporornis formosus*, 245; *Otus albobularis*, 4; *O. barbarus*, 6–7; *O. choliba*, 5; *O. clarkii*, 6–7; *O. guatemalae*, 4–5; *O. ingens*, 4; ***O. marshalli***, 2, 4–7; *O. watsonii*, 4; *Passerina ciris*, 245, 247, 255; *P. cyanea*, 246, 253, 255–256; *P. parellina*, 621–622; *Petrochelidon fulva*, 245–246, 250, 253; *Pheucticus melanocephalus*, 245; *Pica pica*, 245–246; *Pipilo chlorurus*, 245, 254; *P. erythrophthalmus*, 246, 250, 253, 256; *Piranga ludoviciana*, 245; *P. oliveacea*, 246, 256; *P. rubra*, 245; *Poliophtila caerulea*, 245–246, 250; *Protonotaria citrea*, 245–246, 250, 253, 255–256; *Pyrocephalus rubinus*, 247; *Quiscalus major*, 245; *Sayornis saya*, 245; *Seiurus aurocapillus*, 253; *S. motacilla*, 246–247; *Spiza americana*, 246, 255–256; *Spizella pallida*, 245, 247–249, 254–255; *S. pusilla*, 246–247, 253; *Sporophila angolensis*, 379–381; *Stelgidopteryx ruficollis*, 246, 290–291; *S. serripennis*, 290–291; *Thryothorus ludovicianus*, 246; *Toxostoma rufum*, 246, 253, 255–256; *Troglodytes aedon*, 246; *Tyrannus dominicensis*, 245–246; *T. verticalis*, 245, 248, 250, 254; *Vermivora chrysoptera*, 108–114, 246; *V. pinus*, 108–114, 245, 247, 253; *Vireo flavifrons*, 246; *V. gilvus*, 246; *V. griseus*, 245, 250; *Wilsonia citrina*, 245, 250, 253, 255; *W. pusilla*, 253; *Xanthocephalus xanthocephalus*, 245, 249–250, 254–256; *Zenaidura asiatica*, 245–246, 255; *Zonotrichia atricapilla*, 245, 247; *Z. querula*, 245, 247
Distribution, spatial, 84, 99–106, 135, 662–663
Dixon, Keith, review by, 852–855
Dove, Mourning, 389–391, 723, 725, 734; White-winged, 245–246, 255
Dowitcher, Long-billed, 812, 814; Short-billed, 215–227, 801–810, 812, 814
Drewien, Roderick C., see Windingstad, Ronald M., et al.
Dryocopus javensis, 466–479
D. lineatus, 466–479
D. pileatus, 466–479, 562–569
Duffy, David C., Natasha Atkins, and David C. Schneider, Do shorebirds compete on their wintering grounds?, 215–229
Dulus, 703
Dumetella carolinensis, 177, 734
Dunlin, 812, 814
Dunn, Jon, review by, 641–644
Eagle, Golden, 393–394
Ecology, commensal feeding, 176–178, 437–455, 589–595; community energetics, 8–28; community structure, 8–28, 437–455, 715–734, 765–774, 785–798, 812–816; competition, 94–95, 110, 215–227, 536, 567–569, 586–587, 659–661, 666–667, 722–727, 730–731, 765–774, 801–810, 812–816; dispersal, 571–577; feeding, 88–97, 562–569; habitat partitioning, 99–106, 108–114, 270–279, 294–297, 307–319, 321–333, 335–347, 451–455, 522–530, 550–559, 564–569, 578–587, 715–734, 765–777; habitat selection, 49–63, 108–114, 115–124, 215–227, 270–279, 294–297, 307–319, 321–333, 522–530, 550–559, 567–569, 571–577, 578–587, 629–630, 715–734, 821–827; morphology, 176–178, 571–577, 772–774; population structure, 518–520, 571–577, 818–827; predator-prey relationships, 49–63, 222–

- 225, 454, 522-530, 556, 559, 801-810, 812-816; seasonal variation, 215-227, 562-569, 573-574, 765-774, 801-810, 819-820; succession, 8-28; territoriality, 49-63, 99-106, 534, 536, 629-630, 722-723, 769-770
- Ecology of *Accipiter cooperii*, 270-279; *A. gentilis*, 8-28; *Aechmophorus occidentalis*, 335-347; *Aethia pygmaea*, 437-455; *Agelaius phoeniceus*, 176-178, 659-667, 723, 725-726, 734; *Anas acuta*, 115-124; *A. clypeata*, 115-124; *A. discors*, 115-124; *A. platyrhynchos*, 115-124; *A. strepera*, 115-124; *Ardea herodias*, 589-595; *Arenaria interpres*, 215-227; *Baryphthengus martii*, 88-97; *Bonasa umbellus*, 8-28; *Brachyramphus marmoratus*, 437-455; *Bubo virginianus*, 8-28, 734; *Buteo jamaicensis*, 8-28, 270-279; *B. lineatus*, 270-279; *B. platypterus*, 270-279; *Calidris alba*, 49-63, 215-227, 801-810; *C. canutus*, 220; *C. mauri*, 215-227; *C. pusilla*, 215-227, 801-810; *Cardinalis cardinalis*, 176-178; *Carduelis pinus*, 8-28; *C. tristis*, 176-178, 723, 726, 734; *Carpodacus cassinii*, 8-28; *Catharacta maccomicki*, 437-455; *Catharus guttatus*, 8-28, 176-178; *C. minimus*, 176-178; *C. ustulatus*, 88-97, 176-178, 734; *Cepphus columba*, 437-455; *Cerorhinca monocerata*, 437-455; *Certhia familiaris*, 8-28; *Charadrius semipalmatus*, 215-227; *Chondestes grammacus*, 734; *Chordeiles minor*, 734; *Coccyzus erythrophthalmus*, 723, 726, 734; *Coereba flaveola*, 571-577; *Colaptes auratus*, 8-28, 176-178, 723, 725-726, 734; *Contopus sordidulus*, 8-28; *C. virens*, 723, 725-727, 734; *Cyanocitta cristata*, 176-178, 723, 726, 734; *C. stelleri*, 8-28; *Dendroica caerulescens*, 176-178; *D. coronata*, 8-28, 176-178; *D. kirtlandii*, 113; *D. magna*, 176-178; *D. pensylvanica*, 176-178; *D. petechia*, 734, 765-777; *D. pinus*, 294-297; *D. virens*, 176-178; *Dryocopus pileatus*, 562-569; *Dumetella carolinensis*, 176-178, 734; *Empidonax oberholseri*, 8-28; *E. spp.*, 176-178; *Euphagus carolinus*, 176-178; *Falco sparverius*, 8-28; *Fratercula corniculata*, 437-455; *Fulmarus glacialis*, 437-455; *Gavia arctica*, 437-455; *G. immer*, 437-455; *G. stellata*, 437-455; *Geothlypis trichas*, 176-178, 723, 725-726, 734, 765-777; *Glauucidium gnoma*, 8-28; *Guiraca caerulea*, 734; *Hylodichla mustelina*, 176-178; *Icterus galbula*, 723, 734; *I. spurius*, 723, 725-726, 734; *Iridoprocne bicolor*, 8-28; *Junco hyemalis*, 8-28, 176-178; *Larus argentatus*, 550-559; *L. atricilla*, 550-559; *L. californicus*, 437-455; *L. canus*, 437-455; *L. glaucescens*, 437-455; *L. heermanni*, 437-455; *L. marinus*, 99-106; *L. occidentalis*, 437-455, 532-547; *L. philadelphia*, 437-455; *Limnodromus griseus*, 215-227, 801-810; *Lobipes lobatus*, 437-455; *Loxia curvirostra*, 8-28; *L. leucoptera*, 8-28; *Lunda cirrhata*, 437-455; *Melanerpes erythrocephalus*, 734; *Melospiza georgiana*, 176-178; *M. lincolni*, 176-178; *M. melodia*, 176-178, 723, 725-726, 734; *Molothrus ater*, 113, 723, 726, 734; *Nuttallornis borealis*, 8-28; *Oceanodroma furcata*, 437-455; *Oporornis agilis*, 176-178; *O. tolmiei*, 578-587, 765-777; *Parus atricapillus*, 176-178, 734; *P. bicolor*, 176-178, 307-319; *P. carolinensis*, 307-319; *P. gambeli*, 8-28; *Passer domesticus*, 721, 723, 725, 734; *Passerella iliaca*, 176-178; *Passerina amoena*, 8-28; *Phalacrocorax auritus*, 437-455, 522-530; *P. pelagicus*, 437-455, 522-530; *P. penicillatus*, 437-455; *P. urile*, 437-455; *Phasianus colchicus*, 734; *Pheucticus ludovicianus*, 176-178, 734; *P. melanocephalus*, 734; *Pica pica*, 734; *Picoides borealis*, 321-333; *P. pubescens*, 8-28, 176-178, 307-319, 562-569, 734; *P. tridactylus*, 8-28; *P. villosus*, 8-28, 176-178, 562-569; *Pinicola enucleator*, 8-28; *Pipilo aberti*, 818-827; *P. erythrophthalmus*, 176-178; *Piranga ludoviciana*, 8-28; *Pluvialis squatarola*, 215-227, 801-810; *Poocetes gramineus*, 8-28, 734; *Pteroglossus torquatus*, 88-97; *Puffinus bulleri*, 437-455; *P. griseus*, 437-455; *P. puffinus*, 437-455; *P. tenuirostris*, 437-455; *Quiscalus quiscula*, 721, 723, 725, 734; *Ramphastos sulfuratus*, 88-97; *R. swainsonii*, 88-97; *Regulus calendula*, 8-28, 176-178; *R. satrapa*, 8-28, 176-178; *Rissa brevirostris*, 437-455; *R. tridactyla*, 437-455; *Rynchops niger*, 550-559; *Sayornis phoebe*, 176-178; *Seiurus aurocapillus*, 176-178; *Selasphorus platycercus*, 8-28; *Setophaga ruticilla*, 176-178; *Sialia currucoides*, 8-28; *Sitta canadensis*, 8-28; *S. carolinensis*, 8-28, 307-319; *Sphyrapicus thyroideus*, 8-28; *S. varius*, 8-28; *Spiza americana*, 734; *Spizella arborea*, 176-178; *S. breweri*, 8-28; *S. pallida*, 734; *S. passerina*, 8-28, 734; *S. pusilla*, 176-178, 629-630; *Stercorarius parasiticus*, 437-455; *S. pomarinus*, 437-455; *Sterna forsteri*, 550-559; *S. hirundo*, 550-559; *S. paradisaea*, 437-455; *Sturnus vulgaris*, 734; *Synthliboramphus antiquus*, 437-455; *Tityra semifasciata*, 88-97; *Toxostoma rufum*, 176-178, 723, 725-726, 734; *Tringa melanoleuca*, 215-227; *Troglodytes aedon*, 8-28, 723, 725-726, 734; *T. troglodytes*, 176-178; *Trogon massena*, 88-97; *Turdus migratorius*, 8-28, 176-178, 721, 723, 725, 734; *Tyrannus tyrannus*, 723, 725-726, 734; *T. verticalis*, 723, 725-727, 734; *Uria aalge*, 437-455; *U. lomvia*, 437-455; *Vermivora celata*, 8-28, 578-587; *V. chrysoptera*, 108-114; *V. peregrina*, 176-178; *V. pinus*, 108-114; *V.*

- ruficapilla*, 176–178; *Vireo gilvus*, 8–28, 723, 726, 734; *V. olivaceus*, 176–178; *V. philadelphicus*, 176–178; *V. solitarius*, 734; *Wilsonia pusilla*, 176–178, 578–587, 765–777; *Xema sabini*, 437–455; *Zenaidra macroura*, 723, 725, 734; *Zonotrichia albicollis*, 176–178; *Z. leucophrys*, 8–28, 176–178, 518–520; *Z. querula*, 734
- Editorial, see Wiens, John A.
- Eggs, density, specific gravity, and volume of, 260–263; fertility of, 181–182; laying, 147–148, 261–267, 598–599, 631
- Eggs, descriptions and measurements, *Branta canadensis*, 74; *Grus canadensis*, 631; *Molothrus bonariensis*, 189; *Piezorhina cinerea*, 188–189; *Sialia currucoides*, 181–182; *Uria lomvia*, 260–261
- Egret, Cattle, 134–143; Snowy, 808
- Egretta thula*, 808
- Ehrenfeld, David, review by, 199–200
- Eider, Common, 102
- Emlen, John T., and Michael J. DeJong, Intrinsic factors in the selection of foraging substrates by Pine Warblers: a test of an hypothesis, 294–298
- Emlen, Stephen T., In Memoriam: William T. Keeton, 167–172; Commentary: The ornithological roots of sociobiology, 400–403
- Empidonax oberholseri*, 27
- E. spp.*, 177
- E. virescens*, 246
- Enaliornis*, 686
- Environment, influence on *Aimophila aestivalis*, 251–256; *A. cassinii*, 251–256; *Ammodramus henlowii*, 251–256; *A. savannarum*, 251–256; *Ammospiza leconteii*, 251–256; *A. maritima*, 251–256; *Buteo lineatus*, 251–256; *B. swainsoni*, 251–256; *Calamospiza melanocorys*, 251–256; *Calcarius ornatus*, 251–256; *Calidris alba*, 49–63; *Callichelidon cyaneoviridis*, 251–256; *Caprimulgus carolinensis*, 251–256; *Cardinalis cardinalis*, 251–256; *Cathartes aura*, 251–256; *Chondestes grammacus*, 251–256; *Cistothorus palustris*, 251–256; *C. platensis*, 251–256; *Coccyzus americanus*, 251–256; *C. minor*, 251–256; *Columba fasciata*, 251–256; *Coragyps atratus*, 251–256; *Corvus ossifragus*, 251–256; *Dendroica cerulea*, 251–256; *D. coronata*, 251–256; *D. discolor*, 251–256; *D. dominica*, 251–256; *D. nigrescens*, 251–256; *D. occidentalis*, 251–256; *D. petechia*, 251–256; *D. pinus*, 251–256; *D. townsendi*, 251–256; *Dryocopus pileatus*, 562–569; *Empidonax virescens*, 251–256; *Euphagus cyanocephalus*, 251–256; *Guiraca caerulea*, 251–256; *Helmitheros vermivorus*, 251–256; *Hylocichla mustelina*, 251–256; *Icteria virens*, 251–256; *Icterus dominicensis*, 251–256; *I. galbula*, 251–256; *I. spurius*, 251–256; *Ixoreus naevius*, 251–256; *Junco hyemalis*, 251–256; *Larus argentatus*, 550–559; *L. atricilla*, 550–559; *L. occidentalis*, 532–547; *Limnolypis swainsonii*, 251–256; *Melanerpes carolinus*, 251–256; *M. erythrocephalus*, 251–256; *Muscivora forficata*, 251–256; *M. tyrannus*, 251–256; *Oceanodroma furcata*, 155–156; *Oporornis formosus*, 251–256; *Passerina ciris*, 251–256; *P. cyanea*, 251–256; *Petrochelidon fulva*, 251–256; *Pheucticus melanocephalus*, 251–256; *Pica pica*, 251–256; *Picoides pubescens*, 562–569; *P. villosus*, 562–569; *Pipilo aberti*, 824–826; *P. chlorurus*, 251–256; *P. erythrophthalmus*, 251–256; *Piranga ludoviciana*, 251–256; *P. olivacea*, 251–256; *P. rubra*, 251–256; *Poliophtila caerulea*, 251–256; *Protonotaria citrea*, 251–256; *Pyrocephalus rubinus*, 251–256; *Quiscalus major*, 251–256; *Rynchops niger*, 550–559; *Sayornis saya*, 251–256; *Seiurus aurocapillus*, 251–256; *S. motacilla*, 251–256; *Spiza americana*, 251–256; *Spizella pallida*, 251–256; *S. pusilla*, 251–256; *Stelgidopteryx ruficollis*, 251–256; *Sterna forsteri*, 550–559; *S. hirundo*, 550–559; *Sturnus vulgaris*, 39–47; *Thryothorus ludovicianus*, 251–256; *Toxostoma rufum*, 251–256; *Troglodytes aedon*, 251–256; *Tyrannus dominicensis*, 251–256; *T. verticalis*, 251–256; *Uria lomvia*, 263, 265–267; *Vermivora chrysoptera*, 108–114, 251–256; *V. pinus*, 108–114, 251–256; *Vireo flavifrons*, 251–256; *V. gilvus*, 251–256; *V. griseus*, 251–256; *Wilsonia citrina*, 251–256; *W. pusilla*, 251–256; *Xanthocephalus xanthocephalus*, 251–256; *Zenaidra asiatica*, 251–256; *Zonotrichia atricapilla*, 251–256; *Z. querula*, 251–256; *Z. leucophrys*, 752–763
- Eobucco brodkorbi*, 491
- Eocathartes grallator*, 690
- Eppler, August, and Milton H. Stetson (Eds.), Avian endocrinology (rev.), 850–852
- Erwin, R. Michael, Joan Galli, and Joanna Burger, Colony site dynamics and habitat use in Atlantic coast seabirds, 550–561
- Ettinger, Amelia O., and James R. King, Consumption of green wheat enhances photostimulated ovarian growth in White-crowned Sparrows, 832–834
- Eudypetes chrysolophus*, 398–399
- Eupetomena macroura*, 192
- Euphagus carolinus*, 177
- E. cyanocephalus*, 245, 254, 457–465
- Evolution of foraging behavior, 586–587; migration, 809–810; mutualism, 95–97; plumage coloration, 453–454; polyandry, 838; polygyny, 666–667; reproductive isolation, 335–347; song dialects, 749–750

- Evolution of *Oporornis tolmiei*, 586–587; *Vermivora celata*, 586–587; *Wilsonia pusilla*, 586–587
- Falco sparverius*, 27
- Farner, Donald S., Commentary: The International Ornithological Congress: a counter view, 633
- Feduccia, Alan, The age of birds (rev.), 429
- Ficken, Millicent S., see Apel, Karen M., and ———
- Finch, Cassin's, 28; Cinereous, 187–189; Strawberry, 383–385; Warbler, 230–240; Woodpecker, 230–240
- Fitzpatrick, John W., and Glen E. Woolfenden, Commentary: Demography is a cornerstone of sociobiology, 406–407
- Fleischer, Robert C., see Johnston, Richard F., and ———
- Flicker, Common, 177, 189–191, 723, 725–726, 734; Red-shafted, 27
- Florida, 80–86, 350–353, 361–377, 834
- Flycatcher, Acadian, 246; Dusky, 27; Fork-tailed, 245; Olive-sided, 27; Scissor-tailed, 247–248; Vermilion, 247; Vermilion-crowned, 839
- Food and feeding habits of *Aethia pygmaea*, 437–456; *Agelaius phoeniceus*, 177, 778–783; *Agriocharis ocellata*, 396–398; *Anas acuta*, 115–124; *A. clypeata*, 115–124; *A. discors*, 115–124; *A. platyrhynchos*, 36, 115–124; *A. strepera*, 115–124; *Ardea herodias*, 589–595; *Ardenaria interpres*, 220–225; *Baryphthengus martii*, 88–97; *Brachyrhamphus marmoratus*, 437–456; *Branta canadensis*, 67–68; *Brotozeris jugularis*, 841–844; *Calidris alba*, 49–63, 220–225, 801–810; *C. canutus*, 806; *C. mauri*, 220–225; *C. pusilla*, 220–225, 801–810; *Cardinalis cardinalis*, 177; *Carduelis tristis*, 177; *Catharacta maccormicki*, 437–456; *Catharus guttatus*, 177; *C. minimus*, 177; *C. ustulatus*, 88–97, 177; *Cephus columba*, 437–456; *Cerorhinca monocerata*, 437–456; *Charadrius semipalmatus*, 220–225; *Coereba flaveola*, 573–575; *Colaptes auratus*, 177, 189–191; *Coragyps atratus*, 185; *Corvus caurinus*, 522–530; *Cotinga nattererii*, 94; *Cyanocitta cristata*, 177; *Dendroica caerulescens*, 177; *D. coronata*, 177; *D. magnolia*, 177; *D. pensylvanica*, 177; *D. petechia*, 765–777; *D. pinus*, 294–297; *D. virens*, 177; *Diomedea immutabilis*, 839–841; *Dryocopus pileatus*, 562–569; *Dumetella carolinensis*, 177; *Egretta thula*, 808; *Empidonax* spp., 177; *Eudyptes chrysolophus*, 398–399; *Eupetomena macroura*, 192; *Euphagus carolinus*, 177; *Fratercula corniculata*, 437–456; *Fulmarus glacialis*, 437–456; *Gavia arctica*, 437–456; *G. immer*, 437–456; *G. stellata*, 437–456; *Geothlypis trichas*, 177, 765–777; *Hylocichla mustelina*, 177; *Junco hyemalis*, 177; *Larus argentatus*, 350–353, 808; *L. californicus*, 437–456; *L. canus*, 437–456; *L. delawarensis*, 808; *L. glaucescens*, 437–456, 522–530; *L. heermanni*, 437–456; *L. marinus*, 808; *L. occidentalis*, 437–456, 540–543; *L. philadelphia*, 437–456; *Limnodromus griseus*, 801–810; *Lobipes lobatus*, 437–456; *Lunda cirrhata*, 437–456; *Melospiza georgiana*, 177; *M. lincolni*, 177; *M. melodia*, 177; *Oceanodroma furcata*, 151–152, 155–156, 437–456; *Oporornis agilis*, 177; *O. tolmiei*, 578–587, 765–777; *Parus atricapillus*, 177; *P. bicolor*, 177, 307–319; *P. carolinensis*, 307–319; *Passerella iliaca*, 177; *Penelope purpurascens*, 94; *Phaethornis ruber*, 192; *Phalacrocorax auritus*, 437–456; *P. pelagicus*, 437–456; *P. penicillatus*, 437–456; *P. urile*, 437–456; *Pheucticus ludovicianus*, 177; *Picoides borealis*, 321–333; *P. pubescens*, 177, 307–319, 562–569; *P. villosus*, 177, 562–569; *Pipilo erythrophthalmus*, 177; *Pitangus sulphuratus*, 192; *Pluvialis squatarola*, 220–225, 801–810; *Pteroglossus torquatus*, 88–97; *Puffinus bulleri*, 437–456; *P. griseus*, 437–456; *P. puffinus*, 437–456; *P. tenuirostris*, 437–456; *Querula purpurata*, 94; *Ramphastos sulfuratus*, 88–97; *R. swainsonii*, 88–97; *Regulus calendula*, 177; *R. satrapa*, 177; *Rissa brevirostris*, 437–456; *R. tridactyla*, 437–456; *Sayornis phoebe*, 177; *Seiurus aurocapillus*, 177; *Setophaga ruticilla*, 177; *Sitta carolinensis*, 307–319; *Spizella arborea*, 177; *S. pusilla*, 177; *Stercorarius parasiticus*, 437–456; *S. pomarinus*, 437–456; *Sterna paradisaea*, 437–456; *Synthliboramphus antiquus*, 437–456; *Tityra semifasciata*, 88–97; *Toxostoma rufum*, 177; *Tringa melanoleuca*, 220–225; *Troglodytes troglodytes*, 177; *Trogon massena*, 88–97; *Turdus migratorius*, 177; *Tyrannus melancholicus*, 192; *Uria aalge*, 437–456; *U. lomvia*, 263, 265, 269, 437–456; *Vermivora celata*, 578–587; *V. peregrina*, 177; *V. ruficapilla*, 177; *Vireo olivaceus*, 177; *V. philadelphicus*, 177; *Wilsonia pusilla*, 177, 578–587, 765–777; *Xema sabini*, 437–456; *Zonotrichia albicollis*, 177; *Z. leucophrys*, 177, 832–833
- Forsman, Eric D., Molt of the Spotted Owl, 735–742
- Francis, Ann M., Wing- and tail-flapping in Anhingas: a possible method for drying in the absence of sun, 834
- Fratercula corniculata*, 443–455
- Fruitcrow, Purple-throated, 94
- Fujioka, Masahiro, and Satoshi Yamagishi, Extramarital and pair copulations in the Cattle Egret, 134–144

- Fulmar, 443
Fulmarus glacialis, 443
- Gadwall, 115–124
 Galápagos Islands, 230–240
Galbula cyanescens, 484–489
G. galbula, 466–479
G. ruficauda, 466–479, 487
- Gallagher, Michael, and Martin W. Woodcock,
 The birds of Oman (rev.), 648
- Galli, Joan, see Erwin, R. Michael, et al.
- Gallus gallus*, 299–305
- Garrido, Orlando H., and Florentino Garcia Montaña, Catálogo de las aves de Cuba (rev.), 209
- Gauthreaux, Sidney A., Jr., review by, 204–205
- Gavia arctica*, 442–443
G. immer, 442–443
G. stellata, 442–443
- Genetics, gene flow, 235–237, 669–679; genetic variation, 230–240, 669–679; muscle biopsy procedure, 392–393
- Genetics of *Cactospiza pallida*, 230–240; *Camarhynchus parvulus*, 230–240; *C. pauper*, 230–240; *Certhidea olivacea*, 230–240; *Geospiza conirostris*, 230–240; *G. difficilis*, 230–240; *G. fortis*, 230–240; *G. fuliginosa*, 230–240; *G. magnirostris*, 230–240; *G. scandens*, 230–240; *Platyspiza crassirostris*, 230–240; *Sturnus vulgaris*, 39–47; *Zonotrichia leucophrys*, 669–679
- Geographical variation in body weight, 752–763; molts and plumages, 571–577, 619–621; pre-migratory fattening, 752–763; vocalizations, 341, 512–520, 743–750
- Geographical variation in *Chordeiles acutipennis*, 619–621; *Coereba flaveola*, 571–577; *Dendroica pensylvanica*, 743–750; *Stelgidopteryx ruficollis*, 292; *S. serripennis*, 292; *Vermivora pinus*, 743–750; *Zonotrichia leucophrys*, 512–520, 669–679, 752–763
- Geospiza conirostris*, 230–240
G. difficilis, 230–240
G. fortis, 230–240
G. fuliginosa, 230–240
G. magnirostris, 230–240
G. scandens, 230–240
- Geothlypis trichas*, 177, 723, 725–726, 734, 765–775
- Glaucidium gnoma*, 27
G. jardinii, 4
- Gnatcatcher, Blue-gray, 245–246, 250
- Godfrey, W. Earl, see Austin, George T., et al.
- Goldfinch, American, 177, 723, 726, 734
- Goose, Giant Canada, 65–77
- Gore, M. E. J., Birds of The Gambia (rev.), 656
- Goshawk, 27
- Grackle, Boat-tailed, 245; Common, 457–465, 721, 723, 725, 734; Great-tailed, 457–465
- Granda, A. M., and J. H. Maxwell (Eds.), Neural mechanisms of behavior in the pigeon (rev.), 208–209
- Grant, Gilbert S., see Petit, Ted N., et al.
- Graves, Gary R., A new subspecies of Coppery Metallail (*Metallura theresiae*) from northern Peru, 382
- Grebe, Western, 335–347
- Grenada, 571–577
- Grosbeak, Black-headed, 245, 734; Blue, 245, 250, 253, 734; Pine, 28; Rose-breasted, 177, 734
- Ground-Finch, Cactus, 230–240; Large, 230–240; Large Cactus, 230–240; Medium, 230–240; Sharp-beaked, 230–240; Small, 230–240
- Grouse, Ruffed, 27
- Growth and development of *Coragyps atratus*, 182–185; *Oceanodroma furcata*, 152–154; *Sterna fuscata*, 361–377; *S. hirundo*, 361–377; *Strix occidentalis*, 736–737; *Sturnus vulgaris*, 39–47; *Uria lomvia*, 261–264
- Grubb, Thomas C., see Pierce, Virginia, and ———
- Grus americana*, 393–394
G. canadensis, 631
- Guan, Crested, 94
- Guatemala, 396–398, 839
- Guillemot, Pigeon, 443
- Guiraca caerulea*, 245, 250, 253, 734
- Gull, Bonaparte's, 442; California, 442; Glaucous, 263–264; Glaucous-winged, 442–455, 522–530; Great Black-backed, 99–106, 808; Heermann's, 442–455; Herring, 102, 350–353, 550–559, 808; Laughing, 550–559; Mew, 443; Ring-billed, 179–181, 625–626, 808; Sabine's, 442; Western, 442–455, 532–547
- Guyana, 619–621
- Gygis alba*, 844–846
- Gymnorhinus cyanocephalus*, 615–618
- Habitat of *Accipiter cooperii*, 270–279; *A. gentilis*, 27; *Agelaius phoeniceus*, 723, 725–726, 734; *Anas acuta*, 116–117; *A. clypeata*, 116–117; *A. discors*, 116–117; *A. platyrhynchos*, 116–117; *A. strepera*, 116–117; *Arenaria interpres*, 216–219; *Bonasa umbellus*, 27; *Bubo virginianus*, 27, 734; *Buteo jamaicensis*, 27, 270–279; *B. lineatus*, 270–279; *B. platypterus*, 270–279; *Calidris alba*, 216–219; *C. canutus*, 216–219; *C. mauri*, 216–219; *C. pusilla*, 216–219; *Carduelis pinus*, 28; *C. tristis*, 723, 726, 734; *Carpodacus cassinii*, 28; *Catharus guttatus*, 28; *C. ustulatus*, 734; *Certhia familiaris*, 27; *Charadrius semipalmatus*, 216–219; *Chondestes grammacus*, 734; *Chordeiles minor*, 734; *Coccyzus erythrophthalmus*, 723, 726, 734; *Coereba flaveola*, 571–577; *Colaptes auratus*, 27, 723, 725–726, 734; *Contopus sordidulus*, 27; *C. virens*, 723, 725–727, 734;

- Cyanocitta cristata*, 723, 726, 734; *C. stelleri*, 27; *Dendroica coronata*, 28; *D. petechia*, 734, 765-767, 769; *Dryocopus pileatus*, 562-569; *Dumetella carolinensis*, 734; *Empidonax oberholseri*, 27; *Falco sparverius*, 27; *Geothlypis trichas*, 723, 725-726, 734, 765-767, 769; *Glaucidium gnoma*, 27; *Guiraca caerulea*, 734; *Icterus galbula*, 723, 734; *I. spurius*, 723, 725-726, 734; *Iridoprocne bicolor*, 27; *Junco hyemalis*, 28; *Larus argentatus*, 550-559; *L. atricilla*, 550-559; *L. occidentalis*, 533-534; *Limnodromus griseus*, 216-219; *Loxia curvirostra*, 28; *L. leucoptera*, 28; *Melanerpes erythrocephalus*, 734; *Melospiza melodia*, 723, 725-726, 734; **Metallura theresiae parkeri**, 382; *Molothrus ater*, 723, 726, 734; *Nuttallornis borealis*, 27; *Oporornis tolmiei*, 578-587, 765-767, 769; **Otus marshalli**, 3-4; *Parus atricapillus*, 734; *P. gambeli*, 27; *Passer domesticus*, 721, 723, 725, 734; *Passerina amoena*, 28; *Phalacrocorax auritus*, 524, 528-530; *P. pelagicus*, 524, 528-530; *Phasianus colchicus*, 734; *Pheucticus ludovicianus*, 734; *P. melanocephalus*, 734; *Pica pica*, 734; *Picoides pubescens*, 27, 562-569, 734; *P. tridactylus*, 27; *P. villosus*, 27, 562-569; *Piezorhina cinerea*, 187; *Pinicola enucleator*, 28; *Pipilo aberti*, 818-827; *Piranga ludoviciana*, 28; *Pluvialis squatarola*, 216-219; *Poocetes gramineus*, 28, 734; *Quiscalus quiscula*, 721, 723, 725, 734; *Regulus calendula*, 28; *R. satrapa*, 28; *Rynchops niger*, 550-559; *Selasphorus platycercus*, 27; *Sialia currucoides*, 28; *Sitta canadensis*, 27; *S. carolinensis*, 27; *Sphyrapicus thyroideus*, 27; *S. varius*, 27; *Spiza americana*, 734; *Spizella breweri*, 28; *S. pallida*, 734; *S. passerina*, 28, 734; *Sterna forsteri*, 550-559; *S. hirundo*, 550-559; *Sturnus vulgaris*, 734; *Toxostoma rufum*, 723, 725-726, 734; *Tringa melanoleuca*, 216-219; *Troglodytes aedon*, 27, 723, 725-726, 734; *Turdus migratorius*, 27, 721, 723, 725, 734; *Tyrannus tyrannus*, 723, 725-726, 734; *T. verticalis*, 723, 725-727, 734; *Uria lomvia*, 259-260; *Vermivora celata*, 28, 578-587; *V. chrysoptera*, 108-114; *V. pinus*, 108-114; *Vireo gilvus*, 28, 723, 726, 734; *V. solitarius*, 734; *Wilsonia pusilla*, 578-587, 765-767, 769; *Zenaidra macroura*, 723, 725, 734; *Zonotrichia leucophrys*, 28; *Z. querula*, 734
- Hardy, John William, review by, 656-657
- Harrington, Brian A., see Schneider, David C., and ———
- Harrison, C. J. O., and C. A. Walker, Birds of the British Lower Eocene (rev.), 205-207; Birds of the British Upper Eocene (rev.), 205-207
- Hatching, timing of, 267
- Hawaii, 610-612, 844-846
- Hawk, Broad-winged, 270-279; Cooper's, 270-279; Red-shouldered, 246, 270-279; Red-tailed, 27, 270-279; Swainson's, 245-246
- Heinemann, Dennis, see Hoffman, Wayne, et al.; Song dialects, migration, and population structure of Puget Sound White-crowned Sparrows, 512-521
- Helmitheros vermivorus*, 246-247
- Hemignathus obscurus*, 610-611
- Hermit, Reddish, 192
- Heron, Great Blue, 589-595
- Hesperornis*, 686, 688-689
- Heston, Katherine, see Sugihara, George, and ———
- Himantopus*, 691-692
- Himatione sanguinea*, 610-611
- Hoffman, Wayne, Dennis Heinemann, and John A. Wiens, The ecology of seabird feeding flocks in Alaska, 437-456
- Hooper, Robert G., and Michael R. Lennartz, Foraging behavior of the Red-cockaded Woodpecker in South Carolina, 321-334
- Howe, Henry, Dispersal of a neotropical nutmeg (*Virola sebifera*) by birds, 88-98
- Howell, Thomas R., Breeding biology of the Egyptian Plover, *Pluvialis aegyptius* (rev.), 646-648; and John P. O'Neill, In Memoriam: George H. Lowery, Jr., 159-166
- Hubbard, John P., see Austin, George T., et al.
- Hummingbird, Broad-tailed, 27; Swallow-tailed, 192
- Hunt, George L., Jr., see Siegel-Causey, Douglas, and ———
- Hutto, Richard L., Seasonal variation in the foraging behavior of some migratory western wood warblers, 765-777
- Hybridization of *Uria aalge* × *U. lomvia*, 847
- Hyde, A. S., Birds of Colorado's Gunnison Country (rev.), 657
- Hylocichla mustelina*, 177, 246, 253, 356
- Hypocolius*, 703-704
- Icteria virens*, 246, 256
- Icterus dominicensis*, 245, 247, 253
- I. galbula*, 245, 457-465, 723, 734
- I. g. bullockii*, 457-465
- I. spurius*, 246, 256, 457-465, 723, 725-726, 734
- Idaho, 8-23
- Iiwi, 610-611
- Incubation in *Charadrius wilsonia*, 835-838; *Coragyps atratus*, 182; *Cyanocitta cristata*, 622-623; *Larus occidentalis*, 536-539; *Oceanodroma furcata*, 148-149; *Sturnus vulgaris*, 44-47, 386-387
- Indiana, 659-667
- Indicator exilis*, 466-479
- I. indicator*, 466-479

- Iridoprocne bicolor*, 27
 Islands, biogeography, 294–297, 715–734
Ixoreus naevius, 245, 256
- Jacamaralcyon tridactyla*, 466–479
Jacamerops aurea, 466–479
 Jaeger, Parasitic, 443; Pomarine, 450
 James, Frances C., and Stephen Rathbun, Rarefaction, relative abundance, and diversity of avian communities, 785–800
 Janzen, Daniel, *Ficus ovalis* seed predation by an Orange-chinned Parakeet (*Brotogeris jugularis*) in Costa Rica, 841–844
 Japan, 134–143
 Jay, Blue, 177, 622–623, 723, 726, 734; Piñon, 615–618; Steller's, 27
 Jensen, Jørn Vestergaard, and Jens Kirkeby, The birds of The Gambia (rev.), 212
 Johnsgard, Paul A., review by, 429–430
 Johnson, Ned K., Character variation and evolution of sibling species in the *Empidonax difficilis-flavescens* complex (Aves: Tyrannidae) (rev.), 202–204
 Johnston, Richard F., and Robert C. Fleischer, Overwinter mortality and sexual size dimorphism in the House Sparrow, 503–511
- Juncitarsus gracillimus*, 691–692
 Junco, Dark-eyed, 177, 245; Pink-sided, 28
Junco hyemalis, 28, 177, 245
Jynx torquilla, 466–479
- Kaminski, Richard M., and Harold H. Prince, Dabbling duck activity and foraging response to aquatic macroinvertebrates, 115–126
 Kansas, 503–510
 Karr, James R., review by, 653–654
 Kear, Janet, and A. J. Berger, The Hawaiian Goose (rev.), 430–432
 Keeton, William T., Memorial of, 167–172
 Keith, Stuart, review by, 433
 Keller, C. E., S. A. Keller, and T. C. Keller, Indiana birds and their haunts (rev.), 435
 Kent, Bretton W., Prey dropped by Herring Gulls (*Larus argentatus*) on soft sediments, 350–354
 Kestrel, American, 27
 Killham, Lawrence, Sunbathing Vermilion-crowned Flycatchers repulse mates, 839
 King, A. S., and J. McLelland (Eds.), Form and function in birds (rev.), 856–858
 King, James R., and L. Richard Mewaldt, Variation of body weight in Gambel's White-crowned Sparrows in winter and spring: latitudinal and photoperiodic correlates, 752–764; see Ettinger, Amelia O., and ———
- Kingbird, Eastern, 723, 725–726, 734; Gray, 245, 246; Tropical, 192; Western, 245, 248, 250, 254, 723, 725–727, 734
 Kinglet, Golden-crowned, 28, 177; Ruby-crowned, 28, 177
 Kiskadee, Great, 192
 Kittiwake, Black-legged, 442–455; Red-legged, 442–455
 Kleptoparasitism, 441–442, 448–455, 540–543
 Knapp, Kristine, see Confer, John L., and ———
- Knot, 220, 806
 Kovacs, Kit M., and John P. Ryder, Nest-site tenacity and mate fidelity in female-female pairs of Ring-billed Gulls, 625–627
 Krapu, Gary L., The role of nutrient reserves in Mallard reproduction, 29–38
 Kroodsmma, Donald E., Geographical variation and functions of song types in warblers (Parulidae), 743–751
- Laine, Harriet, Male participation in incubation and brooding in the Blue Jay, 622–623
 Lake Superior, 625–626
 Landres, Peter B., see MacMahon, James A., and ———
- Larus argentatus*, 102, 350–353, 550–559, 808
L. atricilla, 550–559
L. californicus, 442–455
L. canus, 443
L. delawarensis, 179–181, 625–626, 808
L. glaucescens, 442–455, 522–530
L. heermanni, 442–455
L. hyperboreus, 263–264
L. marinus, 99–106, 808
L. occidentalis, 442–455, 532–547
L. philadelphia, 442
 LeGrande, Harry E., Jr., review by, 648–650
 Leiothrix, Red-billed, 610–611
Leiothrix lutea, 610–611
 Lennartz, Michael R., see Hooper, Robert G., and ———
- Leptosomus*, 702
 Ligon, J. David, Commentary: Sociobiology is for the birds, 409–412
Limnodromus griseus, 215–227, 801–810, 812, 814
L. scolopaceus, 812, 814
Limnithlypis swainsonii, 245, 247
 Litovich, Elizabeth, see Power, Harry W., et al.
 Littlefield, Carroll D., A probable record of intra-specific egg dumping for Sandhill Cranes, 631
Lobipes lobatus, 450
 Logan, Cheryl A., and Mary Rulli, Bigamy in a male Mockingbird, 385–386
 Lombardo, Michael P., see Power, Harry W., et al.

- Longspur, Chestnut-collared, 245, 248, 254
 Loon, Arctic, 442; Common, 442; Red-throated, 442
Loriculus philippensis philippensis, 629
 Louisiana, 621-622
 Lowery, George H., Jr., Memorial of, 159-166
Loxia curvirostra, 28
L. leucoptera, 28
Loxops coccinea, 610-611
L. maculata, 610-611
Lunda cirrhata, 442
Lybius torquatus, 476-479
- MacMahon, James A., see Smith, Kimberly G., and ———; and Peter B. Landres, Commentary: Response: ornithology and ecology as sciences, 639-640
- Magpie, Black-billed, 245-246, 734
 Maine, 99-106, 744
Malacoptila fusca, 466-479
M. panamensis, 466-479
 Mallard, 29-37, 115-124, 627-628
 Manitoba, 115-124, 181-182
 Marsh Wren, Long-billed, 246; Short-billed, 246
 Marshall, Joe T., see Austin, George T., et al.
 Martin, Thomas E., Limitation in small habitat islands: chance or competition?, 715-734
 Maryland, 270-279, 389-391, 550-559, 746
 Mason, J. Russell, and Russell F. Reidinger, Jr., Effects of social facilitation and observational learning on feeding behavior of the Red-winged Blackbird (*Agelaius phoeniceus*), 778-784
 Massachusetts, 801-810
 Massey, Barbara W., and Jonathan L. Atwood, Second-wave nesting of the California Least Tern: age composition and reproductive success, 596-605
 Mating systems of *Agelaius phoeniceus*, 659-667; *Bubulcus ibis*, 134-143; *Charadrius wilsonia*, 835-838; *Larus delawarensis*, 625-626; *L. occidentalis*, 532-547; *Mimus polyglottos*, 385-386; *Sturnus vulgaris*, 386-388
 Matvejev, S. D., Survey of the Balkan Peninsula bird fauna (rev.), 210-211
 Mayr, Ernst, and William B. Provine (Eds.), The evolutionary synthesis: perspectives on the unification of biology (rev.), 644-646
 McCaskie, Guy, see Austin, George T., et al.
 McHargue, Laurie A., Black Vulture nesting, behavior, and growth, 182-185
 McKittrick, Mary C., Old specimens and new directions: a comment, 196
 McLandress, M. Robert, and Dennis G. Raveling, Changes in diet and body composition of Canada Geese before spring migration, 65-79
 McLaren, Ian A., Incidence of vagrant landbirds on Nova Scotian islands, 243-257; see Ross, Howard A., and ———
 Meents, Julie K., Bertin W. Anderson, and Robert D. Ohmart, Vegetation characteristics associated with Abert's Towhee numbers in riparian habitats, 818-827
Megalaima zeylanica, 466-479
 Meier, Albert H., review by, 850-852
Melanerpes aurifrons, 466-479
M. carolinus, 245, 330, 466-479
M. erythrocephalus, 246, 330, 466-479, 734
Melospiza georgiana, 177, 613-615
M. lincolni, 177
M. melodia, 177, 613-615, 723, 725-726, 734, 828-831
 Memorials of (see also Obituaries), Bailey, Alfred M., 173-175; Keeton, William T., 167-172; Lowery, George H., Jr., 159-166; Tuck, Leslie Mills, 606-609
 Metabolism of *Sterna fuscata*, 366, 368-371; *S. hirundo*, 366, 368-371
Metallura theresiae parkeri, 382
 Metaltail, Coppery, 382
 Mewaldt, L. Richard, see King, James R., and ———
 México, 619-621, 765-775
 Michigan, 179-181, 629-630, 747
 Midway Islands, 839-841, 844-846
 Migration and orientation of *Aimophila aestivalis*, 243-256; *A. cassinii*, 243-256; *Ammodramus henslowii*, 243-256; *A. savannarum*, 243-256; *Ammospiza leconteii*, 243-256; *A. maritima*, 243-256; *Buteo lineatus*, 243-256; *B. swainsoni*, 243-256; *Calamospiza melanocorys*, 243-256; *Calcarius ornatus*, 243-256; *Calidris alba*, 801-810; *C. pusilla*, 801-810; *Callichelidon cyaneoviridis*, 243-256; *Caprimulgus carolinensis*, 243-256; *Cardinalis cardinalis*, 243-256; *Cathartes aura*, 243-256; *Chondestes grammacus*, 243-256; *Cistothorus palustris*, 243-256; *C. platensis*, 243-256; *Coccyzus americanus*, 243-256; *C. minor*, 243-256; *Columba fasciata*, 243-256; *Coragyps atratus*, 243-256; *Corvus ossifragus*, 243-256; *Dendroica cerulea*, 243-256; *D. coronata*, 243-256; *D. discolor*, 243-256; *D. dominica*, 243-256; *D. nigrescens*, 243-256; *D. occidentalis*, 243-256; *D. petechia*, 243-256; *D. pinus*, 243-256; *D. townsendi*, 243-256; *Empidonax virescens*, 243-256; *Euphagus cyanocephalus*, 243-256; *Guiraca caerulea*, 243-256; *Helminthos vermivorus*, 243-256; *Hylocichla mustelina*, 243-256; *Icteria virens*, 243-256; *Icterus dominicensis*, 243-256; *I. galbula*, 243-256; *I. spurius*, 243-256; *Ixoreus naevius*, 243-256; *Junco hyemalis*, 243-256; *Limnodromus griseus*, 801-810; *Limnothlypis swainsonii*, 243-256; *Mel-*

- anerpes carolinus*, 243–256; *M. erythrocephalus*, 243–256; *Muscivora forficata*, 243–256; *M. tyrannus*, 243–256; *Oporornis formosus*, 243–256; *Passerina ciris*, 243–256; *P. cyanea*, 243–256; *Petrochelidon fulva*, 243–256; *Pheucticus melanocephalus*, 243–256; *Pica pica*, 243–256; *Pipilo chlorurus*, 243–256; *P. erythrophthalmus*, 243–256; *Piranga ludoviciana*, 243–256; *P. olivacea*, 243–256; *P. rubra*, 243–256; *Pluvialis squatarola*, 801–810; *Poliophtila caerulea*, 243–256; *Protonotaria citrea*, 243–256; *Pyrocephalus rubinus*, 243–256; *Quiscalus major*, 243–256; *Sayornis saya*, 243–256; *Seiurus aurocapillus*, 243–256; *S. motacilla*, 243–256; *Spiza americana*, 243–256; *Spizella pallida*, 243–256; *S. pusilla*, 243–256; *Stelgidopteryx ruficollis*, 243–256; *Thryothorus ludovicianus*, 243–256; *Toxostoma rufum*, 243–256; *Troglodytes aedon*, 243–256; *Tyrannus dominicensis*, 243–256; *T. verticalis*, 243–256; *Vermivora chrysoptera*, 243–256; *V. pinus*, 243–256; *Vireo flavifrons*, 243–256; *V. gilvus*, 243–256; *V. griseus*, 243–256; *Wilsonia citrina*, 243–256; *W. pusilla*, 243–256; *Xanthocephalus xanthocephalus*, 243–256; *Zenaida asiatica*, 243–256; *Zonotrichia atricapilla*, 243–256; *Z. leucophrys*, 512–520; *Z. querula*, 243–256
- Mimus polyglottos*, 385–386
- Minnesota, 65–77, 748
- Mniotilta varia*, 748–749
- Mockingbird, 385–386
- Molothrus ater*, 113, 457–465, 723, 726, 734
- M. bonariensis*, 188
- Molts and plumages of *Chordeiles acutipennis*, 619–621; hybrids of *Uria aalge* × *U. lomvia*, 847; *Otus barbarus*, 5–6; *O. clarkii*, 6; **O. marshalli**, 3, 5–6; *Piezorhina cinerea*, 189; *Sporophila angolensis*, 379–381; *Stelgidopteryx ruficollis*, 284–288; *S. serripennis*, 284–288; *Strix occidentalis*, 735–741; *Uria aalge*, 847; *U. lomvia*, 847
- Monson, Gale, see Austin, George T., et al.
- Montevicchi, W. A., In memoriam: Leslie Mills Tuck, 606–609
- Morrison, Michael L., The structure of western warbler assemblages: analysis of foraging behavior and habitat selection in Oregon, 578–588
- Morse, Douglass H., Behavioral mechanisms in ecology (rev.), 650
- Mortality and survival of *Agelaius phoeniceus*, 457–465; *A. tricolor*, 457–465; *Diomedea immutabilis*, 839–841; *Euphagus cyanocephalus*, 457–465; *Icterus galbula bullockii*, 457–465; *I. g. galbula*, 457–465; *I. spurius*, 457–465; *Molothrus ater*, 457–465; *Oceanodroma furcata*, 152; *Passer domesticus*, 503–510; *Pserculus sandwichensis*, 495–502; *Quiscalus mexicanus*, 457–465; *Q. quiscula*, 457–465; sexual differences in, 457–465, 503–510; *Uria lomvia*, 263–265; *Xanthocephalus xanthocephalus*, 457–465
- Morton, Martin L., see Baptista, Luis F., and _____
- Mosher, James A., see Titus, Kimberly, and _____
- Motmot, Rufous, 91–93
- Mueller, Helmut C., Commentary: Freedom and responsibility: the International Ornithological Congress, 632
- Munro, Donita H., see Munro, Hugh L., et al.
- Munro, Hugh L., Donita H. Munro, and Richard C. Rounds, Fertility of albinistic eggs of Mountain Bluebirds, 181–182
- Muntaner, J., and J. Congost, Avifauna de Menorca (birds of Minorca) (rev.), 435
- Murre, Common, 442–455, 847; Thick-billed, 258–269, 443, 847
- Murrelet, Ancient, 450; Marbled, 442–443
- Mury Meyer, Elizabeth J., The capture efficiency of flickers preying on larval tiger beetles, 189–191
- Muscivora forficata*, 247–248
- M. tyrannus*, 245
- Muscle biopsy procedure, 392–393
- Myadestes*, 704
- Myers, J. P., see Connors, Peter G., et al.
- Myers, Norman, The sinking ark: a new look at the problem of disappearing species (rev.), 199–200
- Myiozetetes similis*, 839
- Nelson, Bryan, Seabirds—their biology and ecology (rev.), 428–429
- Neogaeornis*, 686
- Nero, Robert W., The Great Gray Owl: phantom of the northern forest (rev.), 654–655
- Nesotites micromegas*, 466–479
- Nest and nest site of *Accipiter cooperii*, 270–279; *Agelaius phoeniceus*, 659–667; *Buteo jamaicensis*, 270–279; *B. lineatus*, 270–279; *B. platypterus*, 270–279; hybrids of *Uria aalge* × *U. lomvia*, 847; *Larus delawarensis*, 625–626; *L. marinus*, 99–106; *L. occidentalis*, 536; *Phalacrocorax auritus*, 522–530; *P. pelagicus*, 522–530; *Piezorhina cinerea*, 187–189; *Uria aalge*, 847; *U. lomvia*, 847; *Zenaida macroura*, 389–391
- Nestling of *Coragyps atratus*, 182–185; *Gymnorhinus cyanocephalus*, 615–618; *Oceanodroma furcata*, 150–154; *Sterna fuscata*, 361–377; *S. hirundo*, 361–377; *Sturnus vulgaris*, 39–47; *Uria lomvia*, 261–264
- Nettleship, D. N., see Birkhead, T. R., and _____

- Nevada, 818-827
 Newfoundland, 847
 New Hampshire, 746-748
 New Jersey, 386-388, 550-559
 New Mexico, 619-621
 New York, 108-114, 176-178, 185-187, 355-359, 361-377, 613-615, 622-623, 743-750
 Nichols, James D., see Coon, Richard A., et al.
 Nighthawk, Common, 734; Lesser, 619-621
 Noddy, Brown, 844-846; White-capped, 844-846
Nonnula frontalis, 466-479
 North Carolina, 127-132, 385-386, 746
 North Dakota, 29-37
 Northwest Territories, 258-269
Notharchus macrorhynchos, 466-479
N. pectoralis, 466-479
 Nova Scotia, 243-256, 495-502
 Nuechterlein, Gary L., Courtship behavior and reproductive isolation between Western Grebe color morphs, 335-349
 Nuthatch, Brown-headed, 330; Red-breasted, 27; White-breasted, 27, 307-319
Nuttallornis borealis, 27
Nystalus maculatus, 466-479
- Oceanodroma furcata*, 145-156, 442
O. markhami, 844-846
 Ohio, 744, 746, 778-783
 Ohmart, Robert D., see Meents, Julie K., et al.
 Olson, Storrs L., The museum tradition in ornithology—a response to Ricklefs, 193-195; Interaction between the two subspecies groups of the seed-finch *Sporophila angolensis* in the Magdalena Valley, Colombia, 379-381; see Austin, George T., et al.
 Omao, 610
 O'Neill, John P., see Howell, Thomas R., and
-
- Ontario, 748
Opisthocomus, 696, 700
Oporornis agilis, 177
O. formosus, 245
O. tolmiei, 578-587, 765-775
 Oregon, 335-347, 512-520, 578-587, 589-595, 631, 669-679, 735-741
 Oren, David C., and Edwin O. Willis, New Brazilian records for the Golden Parakeet (*Ara-tinga guarouba*), 394-396
 Oriole, Baltimore, 457-465; Black-cowled, 245, 247, 253; Bullock's, 457-465; Northern, 245, 723, 734; Orchard, 246, 256, 457-465, 723, 725-726, 734
Otus albogularis, 4
O. barbarus, 1, 5-6
O. choliba, 5
O. clarkii, 1, 3, 5-6
O. guatemalae, 4-6
O. ingens, 4
- O. marshalli***, 1-7
O. watsonii, 4, 6
 Ouellet, Henri, see Austin, George T., et al.
 Ovenbird, 177, 253
 Owen, Myrfyn, Wild geese of the World (rev.), 855-856
 Owl, Great Horned, 27, 734; Pygmy, 27; Spotted, 735-741
- Palmer, Ralph S., see Austin, George T., et al.
 Panamá, 88-97, 182-185, 619-621
 Parakeet, Golden, 394-396, Orange-chinned, 841-844
 Parmelee, David F., review by, 654-655
 Parrish, John, Roger Benjamin, and Ricky Smith, Near-ultraviolet light reception in the Mallard, 627-628
 Parrot, Philippine Hanging, 629
Parus atricapillus, 177, 624, 734
P. bicolor, 177, 307-319
P. carolinensis, 307-319
P. gambeli, 27
Passer domesticus, 503-510, 721, 723, 725, 734
Passerculus sandwichensis, 495-502
Passerella iliaca, 177
Passerina amoena, 28
P. ciris, 245, 247, 255
P. cyanea, 246, 253, 255-256
P. parellina, 621-622
 Patton, James L., see Yang, Suh Y., and ———
Pelecanoides, 686-687
Penelope purpurascens, 94
 Penguin, Macaroni, 398-399
 Pennsylvania, 39-47, 189-191
 Percival, H. Franklin, see Coon, Richard A., et al.
 Perrins, C. M., British tits (rev.), 852-855
 Perú, 1-7, 187-189, 215-227, 382, 619-621
 Peters, Susan, see Ricklefs, Robert E., and
-
- Peterson, Roger Tory, A field guide to the birds (rev.), 641-644
 Petrel, Bonin, 844-846
Petrochelidon fulva, 245-246, 250, 253
 Pettit, Ted N., Gilbert S. Grant, and G. Causey Whittow, Ingestion of plastics by Laysan Albatross, 839-841; G. Causey Whittow, and Gilbert S. Grant, Rete mirabile ophthalmicum in Hawaiian seabirds, 844-846
 Pewee, Eastern Wood, 723, 725-727, 734; Western Wood, 27
Pezophaps, 699
Phaeornis obscurus, 610-611
Phaethornis ruber, 192
Phalacrocorax auritus, 442-455, 522-530
P. pelagicus, 442-455, 522-530
P. penicillatus, 442-455
P. urile, 442-455
 Phalarope, Northern, 450
Phasianus colchicus, 734

- Pheasant, Ring-necked, 734
Pheucticus ludovicianus, 177, 734
P. melanocephalus, 245, 734
 Philippine Islands, 629
 Phillips, Allan R., In Memoriam: Alfred M. Bailey, 173–175; see Austin, George T., et al.
 Phillips, Richard E., and Orlan M. Youngren, Effects of denervation on the tracheo-syringeal muscles on frequency control in vocalizations in chicks, 299–306
 Phoebe, Eastern 177; Say's, 245
 Physiology, energy cost of activities, 30–37, 74–77, 371–377; growth, 361–377; incubation, 30–37; light reception, 627–628; maintenance, 372–377; metabolism, 366, 368–371; nutrient reserves, 29–37, 69–77; ovarian growth, 832–833; premigratory fattening, 752–763; temperature regulation, 366, 369, 371, 615–618, 844–846; thermal tolerance, 615–618; water balance, 368–371, 374–375
 Physiology of *Anas platyrhynchos*, 29–37, 627–628; *Anous stolidus*, 844–846; *A. tenuirostris*, 844–846; *Branta canadensis*, 69–77; *Diomedea immutabilis*, 844–846; *D. nigripes*, 844–846; *Gygis alba*, 844–846; *Gymnorhinus cyanocephalus*, 615–618; *Oceanodroma markhami*, 844–846; *Pterodroma hypoleuca*, 844–846; *Puffinus pacificus*, 844–846; *Sterna fuscata*, 361–377, 844–846; *S. hirundo*, 361–377; *Sula leucogaster*, 844–846; *S. sula*, 844–846; *Zonotrichia leucophrys*, 752–763, 832–833
Pica pica, 245–246, 734
Picoides albolarvatus, 466–479
P. arcticus, 466–479
P. borealis, 321–333
P. pubescens, 27, 177, 307–319, 330, 466–479, 562–569, 734
P. tridactylus, 27
P. villosus, 27, 177, 562–569
Picumnus cirrhatius, 466–479
P. temminckii, 466–479
Picus vittatus, 466–479
 Pierce, Virginia, and Thomas C. Grubb, Jr., Laboratory studies of foraging in four bird species of deciduous woodland, 307–320
 Pierotti, Raymond, Male and female parental roles in the Western Gull under different environmental conditions, 532–549
Piezorhina cinerea, 187–189
 Pigeon, Band-tailed, 245–246, 255
Pinicola enucleator, 28
 Pintail, 115–124
Pipilo aberti, 818–827
P. chlorurus, 245, 254
P. erythrophthalmus, 177, 246, 250, 253, 256
Piranga ludoviciana, 28, 245
P. olivacea, 246, 256
P. rubra, 245
Pitangus sulphuratus, 192
 Pitelka, F. A., Brewster Award, 213–214; see Connors, Peter G., et al.; Commentary: The Condor case: an uphill struggle in a downhill crush, 634–635
Pityriasis, 703
Platyspiza crassirostris, 230–240
 Plover, Black-bellied, 215–227, 801–810; Semipalmated, 215–227; Wilson's, 835–838
Pluvialis squatarola, 215–227, 801–810
Pluvianellus socialis, 698–699
Pogoniulus bilineatus, 466–479
Polioptila caerulea, 245–246, 250
 Pollutants, 545–546, 839–841
Pooecetes gramineus, 28, 734
 Potter, Eloise F., James F. Parnell, and Robert P. Teulings, Birds of the Carolinas (rev.), 648–650
 Power, Dennis M., review by, 202–204
 Power, Harry W., Elizabeth Litovich, and Michael P. Lombardo, Male Starlings delay incubation to avoid being cuckolded, 386–389; Commentary: Searching for altruism in birds, 422–425
 Predation by *Aquila chrysaetos*, 393–394; *Colaptes auratus*, 189–191; *Corvus caurinus*, 522–530; *Larus glaucescens*, 522–530; *L. hyperboreus*, 263–264; *L. marinus*, 102
 Predation on *Grus americana*, 393–394; *Larus argentatus*, 102; *Phalacrocorax auritus*, 522–530; *P. pelagicus*, 522–530; *Somateria mollissima*, 102; *Uria lomvia*, 263–264
Presbyornis pervetus, 691, 695–696
 Price, Peter W., Evolutionary biology of parasites (rev.), 653
 Prince, Harold H., see Kaminski, Richard M., and ———
Procellaria, 687
Protonotaria citrea, 245–246, 250, 253, 255–256
Psilopogon pyrolophus, 484, 488–490
Pterodroma hypoleuca, 844–846
Pteroglossus torquatus, 91–93, 466–479
 Puffin, Horned, 443–455; Tufted, 442
Puffinus, 687
P. bulleri, 442
P. griseus, 442–444
P. pacificus, 844–846
P. puffinus, 450
P. tenuirostris, 443–444
 Pulliam, H. Ronald, Commentary: On experimental tests of sociobiological theory, 419–422
 Pullich, Warren M., see Austin, George T., et al.
Pyrocephalus rubinus, 247
 Quammen, Millicent L., Use of exclosures in studies of predation by shorebirds on intertidal mudflats, 812–817
Querula purpurata, 94

- Quiscalus major*, 245
Q. mexicanus, 457-465
Q. quiscula, 457-465, 721, 723, 725, 734
- Raikow, Robert J., see Swierczewski, Edward V., and ———
- Ramos, Mario A., see Austin, George T., et al.
- Ramphastos sulfuratus*, 91-96, 466-479
R. swainsonii, 91-97
- Ramsey, Fred L., see Scott, J. Michael, and ———
- Raphus*, 699
- Ratcliffe, Derek, The Peregrine Falcon (rev.), 655-656
- Rathbun, Stephen, see James, Frances C., and ———
- Raveling, Dennis G., see McLandress, M. Robert, and ———
- Rea, Amadeo M., see Austin, George T., et al.
- Recurvirostra*, 691-692
R. americana, 812, 814
- Redstart, American, 177, 748-749
- Reed, Jonathan R., Song Sparrow "rules" for feeding nestlings, 828-831
- Regulus calendula*, 28, 177
R. satrapa, 28, 177
- Reidinger, Russell F., Jr., see Mason, J. Russell, and ———
- Remsen, J. V., Jr., see Cardiff, Steven W., and ———
- Rhea*, 688
- Richards, Douglas G., Estimation of distance of singing conspecifics by the Carolina Wren, 127-133
- Ricklefs, Robert E., Response: it's time for museums and biology departments to get back together, 196-198; and Susan Peters, Parental components of variance in growth rate and body size of nestling European Starlings (*Sturnus vulgaris*) in eastern Pennsylvania, 39-48; and Susan C. White, Growth and energetics of chicks of the Sooty Tern (*Sterna fuscata*) and the Common Tern (*S. hirundo*), 361-378
- Riker, Donald K., see Rybczynski, Robert, and ———
- Rissa brevirostris*, 442-455
R. tridactyla, 442-455
- Robin, American, 27, 177, 721, 723, 725, 734
- Ross, Howard A., and Ian A. McLaren, Lack of differential survival among young Ipswich Sparrows, 495-502
- Rounds, Richard C., see Munro, Hugh L., et al.
- Rulli, Mary, see Logan, Cheryl A., and ———
- Runfeldt, Steven, see Searcy, William A., et al.
- Rybczynski, Robert, and Donald K. Riker, A temperate species-rich assemblage of migrant frugivorous birds, 176-179
- Ryder, John P., see Kovacs, Kit M., and ———
- Rynchops niger*, 550-559
- Sagittarius serpentarius*, 694
- Sanderling, 49-63, 215-227, 801-810
- Sandpiper, Semipalmated, 215-227, 801-810; Western, 215-227, 812, 814
- Sapsucker, Williamson's, 27; Yellow-bellied, 27, 330
- Sayornis phoebe*, 177
S. saya, 245
- Schmidt-Koenig, Klaus, Avian orientation and navigation (rev.), 204-205
- Schneider, David C., see Duffy, David C., et al.; and Brian A. Harrington, Timing of shorebird migration in relation to prey depletion, 801-811
- Schreiber, Ralph W., review by, 651-653
- Scopus*, 692
- Scott, J. Michael, and Fred L. Ramsey, Effects of abundant species on the ability of observers to make accurate counts of birds, 610-613
- Scott, Peter, Observations of wildlife (rev.), 429-430
- Screech-Owl, Cloud-forest, 1-7
- Searcy, William A., and Ken Yasukawa, Sexual size dimorphism and survival of male and female blackbirds (Icteridae), 457-465; Evan Balaban, Richard A. Canady, Stephen J. Clark, Steven Runfeldt, and Heather Williams, Responsiveness of male Swamp Sparrows to temporal organization of song, 613-615; see Yasukawa, Ken, and ———
- Seed-Finch, Thick-billed, 379-381
- Seiurus aurocapillus*, 177, 253
S. motacilla, 246-247
- Selasphorus platycercus*, 27
Selenidera maculirostris, 485
Semnornis ramphastinus, 466-479
- Seton, Ernest Thompson, Ernest Thompson Seton in Manitoba, 1882-1892 (rev.), 433-434
- Setophaga ruticilla*, 177, 748-749
- Shearwater, Buller's, 442; Manx, 450; Short-tailed, 443-444; Sooty, 442-444; Wedge-tailed, 844-846
- Sherman, Paul W., Commentary: Electrophoresis and avian genealogical analyses, 419-422
- Shoveler, Northern, 115-124
- Sialia currucoides*, 28, 181-182
- Sibley, Charles G., review by, 426-427
- Sick, Helmut, and Dante Martins Teixeira, Nocturnal activities of Brazilian hummingbirds and flycatchers at artificial illumination, 191-192
- Siegel-Causey, Douglas, and George L. Hunt, Jr., Colonial defense behavior in Double-crested and Pelagic cormorants, 522-531

- Simons, Theodore R., Behavior and attendance patterns of the Fork-tailed Storm-Petrel, 145–158
- Simpson, Sharon F., and Joel Cracraft, The phylogenetic relationships of the Piciformes (Class Aves), 481–494
- Siskin, Pine, 28
- Sitta canadensis*, 27
- S. carolinensis*, 27, 307–319
- S. pusilla*, 330
- Skimmer, Black, 550–559
- Skua, Antarctic, 450
- Smith, Kimberly G., and James A. MacMahon, Bird communities along a montane sere: community structure and energetics, 8–28
- Smith, Ricky, see Parrish, John, et al.
- Somateria mollissima*, 102
- Sonograms of *Aechmophorus occidentalis*, 336; *Agelaius phoeniceus*, 356; *Amandava amandava*, 384; *Dendroica pensylvanica*, 746–749; *Gallus gallus*, 303; *Hylocichla mustelina*, 356; *Oceanodroma furcata*, 147; *Thryothorus ludovicianus*, 129; *Vermivora pinus*, 744–745; *Vireo griseus*, 83; *Zonotrichia leucophrys*, 384, 514–515
- Soulé, Michael E., and Bruce A. Wilcox (Eds.), Conservation biology: an evolutionary ecological perspective (rev.), 201–202
- South Carolina, 321–333
- South Dakota, 715–734
- Southern, Linda Kinkel, Sex-related differences in territorial aggression by Ring-billed Gulls, 179–181
- Sparrow, Bachman's, 247; Brewer's, 28; Cassin's, 245, 247, 254; Chipping, 28, 734; Clay-colored, 245, 247–249, 254, 734; Field, 177, 246–247, 253, 255, 629–630; Fox, 177; Golden-crowned, 245, 247; Grasshopper, 246; Harris', 245, 247, 734; Henslow's, 246–247; House, 503–510, 721, 723, 725, 734; Ipswich, 495–502; Lark, 246, 734; Le Conte's, 245, 247; Lincoln's, 177; Seaside, 246; Song, 177, 613–615, 723, 725–726, 734, 828–831; Swamp, 177, 613–615; Tree, 177; Vesper, 28, 734; White-crowned, 28, 177, 383–385, 392–393, 512–520, 669–679, 752–763, 832–833; White-throated, 177
- Sphyrapicus thyroideus*, 27
- S. varius*, 27, 330, 466–479
- Spiza americana*, 246, 255–256, 734
- Spizella arborea*, 177
- S. breweri*, 28
- S. pallida*, 245, 247–249, 254–255, 734
- S. passerina*, 28, 734
- S. pusilla*, 177, 246–247, 253, 629–630
- Sporophila angolensis*, 379–381
- Starling, Alfred, Enjoying Indiana birds (rev.), 435
- Starling, European, 39–47, 386–388, 734
- Steadman, David W., review by, 205–207
- Steatornis*, 700
- Stelgidopteryx ruficollis*, 246, 282–293
- S. serripennis*, 282–293
- Stercorarius parasiticus*, 443
- S. pomarinus*, 450
- Sterling, Keir B., reviews by, 211, 433–434
- Sterna albifrons*, 596–604
- S. forsteri*, 550–559
- S. fuscata*, 361–377, 844–846
- S. hirundo*, 361–377, 550–559
- S. paradisaea*, 450
- Stiles, F. Gary, The taxonomy of Rough-winged Swallows (*Stelgidopteryx*: Hirundinidae) in southern Central America, 282–293
- Stiles, Harry E., see Windingstad, Ronald M., et al.
- Storer, Robert W., review by, 657
- Storm-Petrel, Fork-tailed, 145–156, 442; Sooty, 844–846
- Strix occidentalis*, 735–741
- Struthio*, 688
- Sturnus vulgaris*, 39–47, 386–388, 734
- Sugihara, George, and Katherine Heston, Field notes on winter flocks of the Ocellated Turkey (*Agriocharis ocellata*), 396–398
- Sula leucogaster*, 844–846
- S. sula*, 844–846
- Sutton, George Miksch, Bird student. An autobiography (rev.), 650–651
- Swallow, Bahama, 247; Cave, 245–246, 250, 253; Northern Rough-winged, 282–293; Southern Rough-winged, 246, 282–293; Tree, 27
- Swierczewski, Edward V., and Robert J. Raikow, Hind limb morphology, phylogeny, and classification of the Piciformes, 466–480
- Swiss Ornithological Station, Verbreitungsatlas der Brutvögel der Schweiz [The atlas of breeding birds in Switzerland] (rev.), 211–212
- Synthliboramphus antiquus*, 450
- Szaro, Robert C., and Russell P. Balda, Bird community dynamics in a ponderosa pine forest (rev.), 653–654
- Tanabe, Yuichi, Katuhide Tamaka, and Takanori Ookawa (Eds.), Biological rhythms in birds (rev.), 850–852
- Tanager, Scarlet, 246, 256; Summer, 245; Western, 28, 245
- Taxonomy of *Anhinga*, 687; *Anseranas*, 695; *Archaeopteryx*, 689; *Aulacorhynchus prasinus*, 466–479; *Balaeniceps rex*, 687, 690, 692–693; *Baptornis*, 686; *Botaurides parvus*, 491; *Cactospiza pallida*, 237–240; *Camarhynchus parvulus*, 237–240; *C. pauper*, 237–240; *Campephilus magellanicus*, 466–479; *Capito maculicoronatus*, 466–479; *C. niger*, 466–479; *Certhidea olivacea*, 237–240; *Chelidoptera*

- tenebrosa*, 466-479; *Chionis*, 698; *Chordeiles acutipennis*, 619-621; *Chrysocolaptes lucidus*, 466-479; *Cladorhynchus leucocephalus*, 691-692; *Colaptes auratus*, 466-479, 484, 486-490; *Cyanocorax affinis*, 484, 488; *Dryocopus javensis*, 466-479; *D. lineatus*, 466-479; *D. pileatus*, 466-479; *Dulus*, 703; *Enaliornis*, 686; *Eobucco brodkorbi*, 491; *Eocathartes grallator*, 690; *Galbula cyanescens*, 484-489; *G. galbula*, 466-479; *G. ruficauda*, 466-479, 487; *Geospiza conirostris*, 237-240; *G. difficilis*, 237-240; *G. fortis*, 237-240; *G. fuliginosa*, 237-240; *G. magnirostris*, 237-240; *G. scandens*, 237-240; *Hesperornis*, 686, 688-689; *Himantopus*, 691-692; *Hypocoliuis*, 703-704; *Indicator exilis*, 466-479; *I. indicator*, 466-479; *Jacamaralcyon tridactyla*, 466-479; *Jacamerops aurea*, 466-479; *Juncitarsus gracillimus*, 691-692; *Jynx torquilla*, 466-479; *Leptosomus*, 702; *Lybius torquatus*, 466-479; *Malacoptila fusca*, 466-479; *M. panamensis*, 466-479; *Megalaima zeylanica*, 466-479; *Melanerpes aurifrons*, 466-479; *M. carolinus*, 466-479; *M. erythrocephalus*, 466-479; *Myadestes*, 704; *Neogaeornis*, 686; *Nesocittes micromegas*, 466-479; *Nonnula frontalis*, 466-479; *Notharchus macrorhynchos*, 466-479; *N. pectoralis*, 466-479; *Nystalus maculatus*, 466-479; *Opisthocomus*, 696, 700; **Otus marshalli**, 5-7; *Pelecanoides*, 686-687; *Pezophaps*, 699; *Piciformes*, 466-479, 481-493; *Picoides albolaryvatus*, 466-479; *P. arcticus*, 466-479; *P. pubescens*, 466-479; *Picumnus cirrhatu*, 466-479; *P. temminckii*, 466-479; *Picus vittatus*, 466-479; *Piezorhina cinerea*, 189; *Pityriasis*, 703; *Platyspiza crassirostris*, 237-240; *Pluvianellus socialis*, 698-699; *Pogoniulus bilineatus*, 466-479; *Presbyornis pervetus*, 691, 694-696; *Procellaria*, 687; *Psilopogon pyrolophus*, 484, 488-490; *Pteroglossus torquatus*, 466-479; *Puffinus*, 687; *Ramphastos sulfuratus*, 466-479; *Raphus*, 699; *Recent birds*, 681-710; *Recurvirostra*, 691-692; *Rhea*, 688; *Sagittarius serpentarius*, 694; *Scopus*, 692; *Selenidera maculirostris*, 485; *Semnornis ramphastinus*, 466-479; *Sphyrapicus varius*, 466-479; *Sporophila angolensis*, 379-381; *Steatornis*, 700; *Stelgidopteryx ruficollis*, 282-293; *S. serripennis*, 282-293; *Struthio*, 688; *Trachyphonus darnaudii*, 466-479; *Tricholaema diadematum*, 466-479; *T. lacrymosum*, 466-479; *Turnagra*, 704; *Uintornis lucaris*, 491; *U. marionae*, 491; *Zonotrichia leucophrys*, 669-679; *Zygodactylus griven-sis*, 491-492; *Z. ignatus*, 491-492
- Teal, Blue-winged, 115-124
Teixeira, Dante Martins, see Sick, Helmut, and Tennessee, 746
Terborgh, John W., see Weske, John S., and Tern, Arctic, 450; Common, 361-377, 550-559; Forster's, 550-559; Least, 596-604; Sooty, 361-377, 844-846; White, 844-846
Territory of *Agelaius phoeniceus*, 185-187; *Calidris alba*, 49-63; *Larus delawarensis*, 179-181, 625-626; *L. marinus*, 99-106; *L. occidentalis*, 536-541; *Mimus polyglottos*, 385-386; *Spizella pusilla*, 629-630
Texas, 619-621, 835-838
Thrasher, Brown, 177, 246, 253, 255-256, 723, 725-726, 734
Thrush, Gray-cheeked, 177; Hawaiian, 610-611; Hermit, 28, 177; Swainson's, 91-93, 177, 734; Varied, 245, 256; Wood, 177, 246, 253, 356
Thryothorus ludovicianus, 127-132, 246
Tirrell, Paul C., see Bernstein, Neil P., and Titmouse, Tufted, 177, 307-319
Titus, Kimberly, and James A. Mosher, Nest-site habitat selected by woodland hawks in the central Appalachians, 270-281
Tityra, Masked, 91-96
Tityra semifasciata, 91-96
Toucan, Chestnut-mandibled, 91-97; Keel-billed, 91-97
Towhee, Abert's, 818-827; Green-tailed, 245, 254; Rufous-sided, 177, 246, 250, 253, 256
Toxostoma rufum, 177, 246, 253, 255-256, 723, 725-726, 734
Trachyphonus darnaudii, 466-479
Tramer, Elliot J., Commentary: Response: in the eye of the beholder, 638
Tree-Finch, Medium Insectivorous, 230-240; Small Insectivorous, 230-240; Vegetarian, 230-240
Tricholaema diadematum, 466-479
T. lacrymosum, 466-479
Tringa melanoleuca, 215-227
Trivelpiece, Wayne, see Butler, Ronald G., and Troglodytes *aedon*, 27, 246, 723, 725-726, 734
T. troglodytes, 177, 246
Trogon, Slaty-tailed, 91-93
Trogon massena, 91-93
Turdus migratorius, 27, 177, 721, 723, 725, 734
Turkey, Ocellated, 396-398
Turnagra, 704
Turnstone, Ruddy, 215-227
Tyrannus dominicensis, 245-246
T. melancholicus, 192
T. tyrannus, 723, 725-726, 734
T. verticalis, 245, 248, 250, 254, 723, 725-727, 734
Udvardy, Miklos D. F., reviews by, 209-211

- Uintornis lucaris*, 491
U. marionae, 491
Uria aalge, 442-455, 847
U. lomvia, 258-269, 443, 847
Utah, 8-23
- Venezuela, 619-621
Vermivora celata, 28, 578-587
V. chrysoptera, 108-114, 246, 740
V. peregrina, 177
V. pinus, 108-114, 245, 247, 253, 743-750
V. ruficapilla, 177
Vestiaria coccinea, 610-611
Vireo, Philadelphia, 177; Red-eyed, 177; Solitary, 734; Warbling, 28, 246, 723, 726, 734; White-eyed, 80-86, 245, 250; Yellow-throated, 246
Vireo flavifrons, 246
V. gilvus, 28, 246, 723, 726, 734
V. griseus, 80-86, 245, 250
V. olivaceus, 177
V. philadelphicus, 177
V. solitarius, 734
Virginia, 550-559, 562-569, 746
Vocalizations of *Aechmophorus occidentalis*, 335-347; *Agelaius phoeniceus*, 185-187, 355-359; *Amandava amandava*, 383-384; *Dendroica coronata*, 748; *D. discolor*, 748-749; *D. fusca*, 748; *D. pensylvanica*, 743-750; *D. petechia*, 748; *D. virens*, 748-749; *Gallus gallus*, 299-305; *Larus marinus*, 101-102, 105; *Melospiza georgiana*, 613-615; *Mniotilta varia*, 748-749; *Oceanodroma furcata*, 147-148; **Otus marshalli**, 4; *Parus atricapillus*, 624; *Setophaga ruticilla*, 748-749; *Stelgidopteryx ruficollis*, 292-293; *S. serripennis*, 292-293; *Thryothorus ludovicianus*, 127-132; *Vermivora chrysoptera*, 750; *V. pinus*, 743-750; *Vireo griseus*, 80-86; *Zonotrichia leucophrys*, 383-384, 512-520
- Vuilleumier, François, review by, 207-208
Vulture, Black, 182-185, 247; Turkey, 246
- Warbler, Audubon's, 28; Black-and-white, 748-749; Blackburnian, 748; Blackpoll, 247; Black-throated Blue, 177; Black-throated Gray, 245, 247, 254; Black-throated Green, 177, 748-749; Blue-winged, 108-114, 245, 247, 253, 743-750; Cerulean, 245; Chestnut-sided, 177, 743-750; Connecticut, 177; Golden-winged, 108-114, 246, 750; Hermit, 245, 247; Hooded, 245, 250, 253, 255; Kentucky, 245; Kirtland's, 113; MacGillivray's, 578-587, 765-775; Magnolia, 177; Nashville, 177; Orange-crowned, 28, 578-587; Pine, 246-247, 294-297; Prairie, 246-247, 255-256, 748-749; Prothonotary, 245-246, 250, 253, 255-256; Swainson's, 245, 247; Tennessee, 177; Townsend's, 245, 247; Wilson's, 177, 253, 578-587, 765-775; Worm-eating, 246-247; Yellow, 253, 734, 748, 765-776; Yellow-rumped, 177, 245, 254, 748; Yellow-throated, 245, 247, 250, 255
- Washington, 437-456, 512-520, 659-667, 752-763, 832-833
Waterthrush, Louisiana, 246-247
Weick, Friedhelm, in collaboration with L. H. Brown, Die Greifvögel der Welt (Birds of prey of the world) (rev.), 434
Weights and measurements of *Agelaius phoeniceus*, 461; *A. tricolor*, 461; *Anas platyrhynchos*, 30-35; *Branta canadensis*, 69-74; *Coragyps atratus*, 184; *Euphagus cyanocephalus*, 461; *Icterus galbula bullockii*, 461; *I. g. galbula*, 461; *I. spurius*, 461; *Larus occidentalis*, 534; **Metallura theresiae parkeri**, 382; *Molothrus ater*, 461; *Oceanodroma furcata*, 147, 153-154; *Otus barbarus*, 6; *O. clarkii*, 6; *O. guatemalae*, 6; **O. marshalli**, 2-6; *O. watsonii*, 6; *Passer domesticus*, 504; *Passerculus sandwichensis*, 500; *Passerina parellina*, 621; *Quiscalus mexicanus*, 461; *Q. quiscula*, 461; *Stelgidopteryx ruficollis*, 288-299; *S. serripennis*, 288-299; *Sterna fuscata*, 364-372; *S. hirundo*, 364-372; *Uria lomvia*, 263-266; *Xanthocephalus xanthocephalus*, 461; *Zonotrichia leucophrys*, 753-757, 833
- Weller, Milton W., The island waterfowl (rev.), 430-432
Weske, John S., and John W. Terborgh, *Otus marshalli*, a new species of screech-owl from Perú, 1-7
West Virginia, 747-748
White, Susan C., see Ricklefs, Robert E., and _____
Whitmore, Robert C., Commentary: Response: ornithology as science, 638-639
Whittow, G. Causey, review by, 646-648; see Pettit, Ted N., et al.
Wiens, John A., Editorial: On skepticism and criticism in ornithology, 848-849; see Hoffman, Wayne, et al.; reviews by, 211-212, 435, 648, 650-651, 653, 656, 657
Williams, Heather, see Searcy, William A., et al.
Williams, Morris D., Discovery of the nest and eggs of the Cinereous Finch (*Piezorhina cinerea*), a Peruvian endemic, 187-189
Willis, Edwin O., see Oren, David C., and _____
Wilsonia citrina, 245, 250, 253, 255
W. pusilla, 177, 253, 578-587, 765-775
Windingstad, Ronald M., Harry E. Stiles, and Roderick C. Drewien, Whooping Crane preyed upon by Golden Eagle, 393-394
Wisconsin, 624, 747-748, 828-831
Wood, Merrill, Birds of Pennsylvania (rev.), 435

- Woodpecker, Downy, 27, 177, 307-319, 330, 562-569, 734; Hairy, 27, 177, 562-569; Northern Three-toed, 27; Pileated, 562-569; Red-bellied, 245, 330; Red-cockaded, 321-333; Red-headed, 246, 330, 734
- Woolfenden, Glen E., see Fitzpatrick, John W., and ———
- Wren, Carolina, 127-132, 246; House, 27, 246, 723, 725-726, 734; Winter, 177, 246
- Wunderle, Joseph M., Jr., Movements of adult and juvenile Bananaquits within a morph-ratio cline, 571-577
- Wyoming, 765-775
- Xanthocephalus xanthocephalus*, 245, 249-250, 254-256, 457-465
- Xema sabini*, 442
- Yamagishi, Satoshi, see Fujioka, Masahiro, and ———
- Yang, Suh Y., and James L. Patton, Genic variability and differentiation in the Galapagos finches, 230-242
- Yasukawa, Ken, Song and territory defense in the Red-winged Blackbird, 185-187; see Searcy, William A., and ———; and William A. Searcy, Nesting synchrony and dispersion in Red-winged Blackbirds: is the harem competitive or cooperative?, 659-668
- Yellowlegs, Greater, 215-227
- Yellowthroat, 177, 723, 725-726, 734, 765-775
- deYoung, Brad, see Cairns, D. K., and ———
- Youngren, Orlan M., see Phillips, Richard E., and ———
- Zahavi, Amotz, Commentary: Some comments on sociobiology, 412-415
- Zeigler, H. Philip, review by, 208-209
- Zenaida asiatica*, 245-246, 255
- Z. macroura*, 389-391, 723, 725, 734
- Zimmerman, Dale A., see Austin, George T., et al.
- Zonotrichia albicollis*, 177
- Z. atricapilla*, 245, 247
- Z. leucophrys*, 28, 177, 383-385, 392-393, 512-520, 669-679, 752-763, 832-833
- Z. querula*, 245, 247, 734
- Zygodactylus grivensis*, 491-492
- Z. ignatus*, 491-492