INDEX TO VOLUME 52

The index includes references to general topics, common names, keywords, and authors. Reference is also made to book reviews and letters. Taxa other than raptors are included where referenced by authors.

A
Abernathy, Emily V., Joshua M. Hull, Allen M. Fish, and Christopher W. Briggs, Secondary anticoagulant rodenticide exposure in migrating juvenile Red-tailed Hawks (Buteo jamaicensis) in relationship to body condition, 225–230
Accipiter melanoleucus, 19–30
Accipiter nisus, 245–249
Aegolius funereus, 42–55
Africa, 491–499
Age effects, 379–388
Aggregation, 500–502
Agriculture, 250–256
Aguiar-Silva, F. Helena, see Zuluaga, Santiago
Airport, 282–290
Alborz Mountains, 530–533
Alligator mississippiensis, 516–518
Alligator, American, 516–518
Altitudinal movements, 519–521
Amar, Arjun, see Krüger, Sonja C.
Amar, Arjun, see Sumasgutner, Petra
Ammunition, 491–499
Anodon, José D., see Subedi, Tulsi R.
Analysis, compositional, 158–166
Andes foothills, 89–93
Aves, 89–93
Annapurna Himalaya Range, 443–453
Anticoagulant rodenticides, 225–230
Aquila chrysaetos, 82–88, 261–262
A. nipalensis, 530–533
Argentina, 316–325, 400–402, 420–430
Aristizabal, Daniel F., see Zuluaga, Santiago
Artificial burrow, 167–177
nest, 454–470
perch, 250–256
structure, 108–111
Asia flammeus, 282–290
Atacama Desert, 89–93
Athene brama, 338–348
cunicularia hypugaea, 454–470
Atlantic forest, 56–65, 115–117

Audio lure, 245–249
Austral migration, 89–93
Autonomous recording units, 42–55
Avinet, Inc., 66–71
Avoidance, 1–18

B
Baladrón, Alejandro V., Matías G. Pretelli, Matilde Cavalli, and María S. Bó, Activity budgets, foraging behavior, and diet of White-tailed Kites (Elanus leucurus) during breeding and non-breeding seasons in the Argentine Pampas, 420–430
Banasch, Ursula, see Watson, James W.
Band, color, 66–71
recovery, 102–103
Bandung, bird, 100–101
stations, 245–249
Baral, Hem S., see Subedi, Tulsi R.
Bayne, Erin M., see Shonfield, Julia
Bécares, Juan, see Rodríguez, Beneharo
Behavior, 112–114, 291–308
social, 500–502
Behavioral patterns, 420–430
Bell, Douglas A., see Katzner, Todd E.
Belthoff, James R., see Riding, Corey S.
Belthoff, James R., see Stuber, Matthew J.
Benson, Robert H., see Crouch, Carter G.
Benson, Thomas J., see Wingert, Amber K.
Berger, Daniel D., In Memoriam, 120–121
Bertucci, Emily M., see Neri, Chris M.
Bibliography, 207–224
Bibliometrics, 207–224
Bildstein, Keith L., see Medel Hidalgo, Javier
Bildstein, Keith L., see Reeves, Mickey
Biochemistry, 72–81
Bird banding, 100–101
strike, 282–290
Bloom, Peter H., see Katzner, Todd E.
Bó, María S., see Baladrón, Alejandro V.
Bowden, Christopher G. R., see Maggioranak, Irrvatee
Breeding Bird Survey, 129–142
dispersal, 143–157
pair density, 454–470

538
Brennan, Leonard A., see Crouch, Carter G.
Briggs, Christopher W., see Abernathy, Emily V.
Broadcast surveys, 361–369
Brood loss, 528–529
_Bubo blakistoni_, 31–41
_virginianus_, 42–55
Buchanan, Joseph B., see Varland, Daniel E.
Buechley, Evan R., see Subedi, Tuls R.
Buij, Ralph, see Subedi, Tuls R.
Burn, 100–101, 102–103
Burrow, 129–142
artificial, 167–177
Burrowing, 129–142
_Buteo albigula_, 89–93
_jejenaakensis_, 225–230
_regalis_, 267–281
_Buteogallus coronatus_, 108–111, 316–325
Buzzard-Eagle, Black-chested, 400–402
Byer, Timothy, see Watson, James W.
C
California, 167–177, 225–230
Canary Islands, 503–510
Cannibalism, 393–399
_Canis latrans_, 471–483
Captivity, 72–81
dye, 66–71
marking, 66–71
Cholinesterase, 191–206
Cicadas, 115–117
_Circus cyaneus_, 393–399
Citizen science, 326–337, 511–515
_Clanga clanga_, 484–490
_Daucina_, 484–490
Clark, Richard J., see Lincer, Jeffrey L.
Cleaning symbiosis, 104–107
Collision, 1–18
Colombia, 522–527
Color band, 66–71
dye, 66–71
marking, 66–71
Coloration, 19–30
Communal roost, 370–378
Compositional analysis, 158–166
Condor, Andean, 72–81, 231–239
Conservation, 250–256, 484–490
Contreras-Balderas, Armando J., see Valdez-Gómez, Hector E.
Conway, Courtney J., Spatial and temporal patterns in population trends and burrow usage of Burrowing Owls in North America, 129–142
Cooper, Jeff L., see Katzner, Todd E.
_Coragyps atratus_, 104–107
_Corvus constrictus_, 471–483
Coulson, Jennifer O., Emmanuel Rondeau, and Manuel Caravaca, Yellow-headed Caracara and Black Vulture cleaning Baird’s tapir, 104–107
Coyote, 471–483
Critically endangered, 431–442
Crofts, Sarah, see Reeves, Mickey
Crouch, Carter G., Robert H. Benson, and Leonard A. Brennan, Comparison of two color-marking techniques for American Kestrels in south Texas, 66–71
Crouch, Carter G., Robert H. Benson, and Leonard A. Brennan, American Kestrel nonbreeding roost use and behavior in south Texas, 370–378
Cruz, Michael A., see Watson, James W.
D
Daniel, Ian, see Stanback, Mark T.
DDT, 191–206
De Lucca, Eduardo R., see Saggese, Miguel D.
Density, breeding pair, 454–470
Deshpande, Prashant, see Pande, Satish
Desmond, Martha, see Griffin, Eboni
Detectability, 56–65
Direct-seeded rice, 326–337
Dispersal, 267–281, 503–510
breeding, 143–157
distance, 143–157
likelihood, 143–157
Displacement, 1–18
Distance, inter-individual, 500–502
Distribution, 94–99, 129–142
Diurnal raptors, 379–388
Diversity, genetic, 31–41
dos Santos-Filho, Manuel, see Oliveira, Camilo Viana
Doussang, Dalila, Cristina Palma, Lucila Moreno, Brayán Zambrano, Eduardo Pávez, Fabiola Cerda, and Daniel González-Acuña, Hematological and biochemical parameters of captive Andean Condors, 72–81
Doyle, Jacqueline M., see Katzner, Todd E.
Driscoll, Daniel, see Katzner, Todd E.
Dwyer, James F., James D. Fraser, and Joan L. Morrison, Evolution of communal roosting: a social refuge-territory prospecting hypothesis, 407–419
Dykema, Zachary A., see Neri, Chris M.
Chaco, 108–111, 316–325
Crowned Solitary, 316–325
Crowned, 316–325
Golden, 82–88, 261–262
Greater Spotted, 484–490
Harpy, 522–527
Lesser Spotted, 484–490
Southern Bald, 528–529
Steppe, 530–533
Ecology, urban, 19–30
winter, 267–281
Ecosystem services, 250–256
Ecuador, 522–527
Eggshell thickness, 191–206
*Elanus leucurus*, 420–430
Electric shock, 102–103
Electrocution, 102–103
Ellis, David H., see Saggese, Miguel D.
Ellis, Martha M., see Grubb, Teryl G.
Elsey, Ruth M., see Rainwater, Thomas R.
Endangered, critically, 431–442
species, 503–510
Energy, 1–18
renewable, 1–18
Environment, human-altered, 158–166
Exposure, secondary, 225–230
Facebook, 326–337
*Falco deiropleucus*, 519–521
*naumanni*, 511–515
*peregrinus*, 291–308, 500–502
*peregrinus pelegrinoides*, 503–510
*sparverius paulus*, 389–392
Falcon, Barbary, 503–510
Orange-breasted, 519–521
Peregrine, 291–308, 500–502, 503–510
Falkland Islands, 509–315
Fallon, Katie, 119
Farmer, Christopher J., see Watson, Richard T.
Feeding, 291–308
Fernández-Bellon, Dario, Mark W. Wilson, Sandra Irwin, Thomas C. Kelly, Barry O’Mahony, and John O’Halloran, Video evidence of siblicide and cannibalism, movement of nestlings by adults, and interactions with predators in nesting Hen Harriers, 393–399
Ferrer, Miguel, see Watson, Richard T.
Fish, Allen M., see Abernathy, Emily V.
Fishing, 112–114
Fish-Owl, Blakiston’s, 31–41
Flare, 100–101
Fleming, Tracy L., see Lincer, Jeffrey L.
Fleming, Tracy L., see Varland, Daniel E.
Floater, 407–419
Food cache, 257–260
Foothills, Andes, 89–93
Foraging, 291–308
areas, 231–239
range, 178–190
Forest, Atlantic, 56–65, 115–117
Fossorial, 129–142
Fraser, James D., see Dwyer, James F.
Frye, Graham G., see Jageman, Harry R.

**G**
Gal, Adiv, and Reuven Yosef, The contribution of citizen science to the conservation of the Lesser Kestrel (*Falco naumanni*) in Israel, 511–515
Galmes, Maximiliano A., José H. Sarasola, Juan Manuel Grande, and F. Hernán Vargas, Parental care of the endangered Chaco Eagle (*Buteogallus coronatus*) in central Argentina, 316–325
Garton, Edward O., see Jageman, Harry R.
Generalized linear models, 231–239
Genetic diversity, 31–41
Genome, whole mitochondrial, 31–41
*Geranoaetus melanoleucus*, 400–402
*polyosoma*, 89–93
Gerhardt, Rick, see Watson, James W.
Ghafouri, Bahareh, see Panuccio, Michele
Glacial periods, 31–41
*Glaucidium gnoma*, 349–360
*nana*, 118
*radiatum*, 338–348
González-Acuña, Daniel, see Doussang, Daniela
Grande, Juan Manuel, Carlos Streikov, and Fernando Gabriel López, Records of Orange-breasted Falcons in urban and suburban areas of northwestern Argentina, 519–521
Grande, Juan Manuel, see Galmes, Maximiliano A.
Grande, Juan Manuel, see Zuluaga, Santiago
Grassland, 129–142
*puna*, 231–239
Griffin, Eboni, Martha Desmond, and Dawn VanLeeuwen, Juvenile Burrowing Owl nighttime space-use in southern New Mexico, 158–166
Ground squirrel, California, 454–470
Grubb, Teryl G., see Katzner, Todd E.
Grubb, Teryl G., Roy G. Lopez, and Martha M. Ellis, Winter scavenging of ungulate carcasses by Bald Eagles, Common Ravens, and coyotes in northern Arizona, 417–483
Grubb, Teryl G., see Katzner, Todd E.
Guild, 471–483
Gulf of Mexico, 500–502
Gurung, Sandesh, see Subedi, Tulsi R.
*Gypaetus barbatus*, 443–453, 491–499
*Gyps*, 431–442
*bengalensis*, 431–442

**H**
Habitat, 178–190, 250–256
limitation, 407–419
models, 231–239
selection, 349–360
Haliaeetus leucocephalus, 471–483, 516–518, 528–529
leucocephalus leucocephalus, 528–529
Hallingstad, Eric, see Harrison, Jordan T.
Hanni, David, see Watson, James W.
Hardie, Ben, see Stanback, Mark T.
Harpia harpyja, 522–527
Harrier, Hen, 393–399
Harrison, Jordan T., and Eric Hallingstad, Direct observation of insectivory by a Golden Eagle, 261–262
Hawk, Ferruginous, 267–281
Red-tailed, 225–230
Variable, 89–93
White-throated, 89–93
Heemskerk, Sarah, see Shonfield, Julia
Hematology, 72–81
Hernandez, Cecilia L., Seth C. Oster, and Jennifer L. Newbrey, Retrospective study of raptors treated at the Southeastern Raptor Center in Auburn, Alabama, 379–388
Heteroglaux blewitti, 338–348
Holroyd, Geoffrey L., see Valdez-Gómez, Hector E.
Hong, Shiao-Yu, Hui-Shan Lin, Bruno A. Walther, Ji-En Shie, and Yuan-Hsun Sun, Recent avian poisonings suggest a secondary poisoning crisis of Black Kites during the 1980s in Taiwan, 326–337
Hooper, Michael J., see Stuber, Matthew J.
Hope, Charlotte P., see Rainwater, Thomas R.
Hull, Joshua M., see Abernathy, Emily V.
Human-altered environments, 158–166
Human–raptor conflict, 282–290
Hunt, W. Grainger, see Watson, Richard T.
Hunting mode, 420–430
Huso, Manuela, see Watson, Richard T.
Hybrid, 484–490
Idaho, 143–157, 191–206
Illinois, 361–369
In Memoriam: Daniel D. Berger, 1932–2016, 120–121
Incubation period, 118
India, 240–244, 338–348, 431–442
Information center hypothesis, 407–419
Insect, 261–262
Insecticide, 191–206
Insectivory, 261–262
Inter-individual distance, 500–502
Iran, 530–533
Irwin, Sandra, see Fernández-Bellon, Darío
Islands, Canary, 503–510
Israel, 511–515
Islas Malvinas, 399–315
J
Jackman, Ronald E., see Katzner, Todd E.
Jageman, Harry R., Graham G. Frye, and Edward O. Garton, Habitat selection by Northern Pygmy-Owls in the Rocky Mountains, 349–360
Johnson, Naira, see Watson, Richard T.
Juvenile, 158–166, 503–510
K
Katzner, Todd, E., Daniel Driscoll, Ronald E. Jackman, Peter H. Bloom, Scott Thomas, Jeff L. Cooper, Stephen Living, Teryl G. Grubb, Jacqueline M. Doyle, Douglas A. Bell, Joseph E. Didonato, and J. Andrew DeWoody, Non-anthropogenic diet-based oiling of predatory birds, 82–88
Kelly, Thomas C., see Fernández-Bellon, Darío
Kenney, Mary Kay, see Varland, Daniel E.
Kéry, Marc, see Paganini, Silvan T.
Kestrel, American, 66–71, 100–101, 102–103, 370–378
Lesser, 511–515
Southeastern American, 389–392
Kite, Black, 326–337
White-tailed, 420–430
Koeslag, Ann, see Sumasgutner, Petra
Kohyama, Tetsuo I., see Omote, Keita
Kolar, Patrick S., see Watson, Richard T.
Krol, Wojciech, Successful renesting after brood loss by Southern Bald Eagles (Haliaeetus leucocephalus leucocephalus), 528–529
Kross, Sara M., see Wong, Emily L.
Krüger, Sonja C., and Arjun Amar, Lead exposure in the critically endangered Bearded Vulture (Gypaetus barbatus) population in southern Africa, 491–499
Kulkarni, Jayant, see Mehta, Prachi
L
Lafoñ, Alberto, see Watson, James W.
Lead poisoning, 491–499
Lin, Hui-Shan, see Hong, Shiao-Yu
Linzer, Jeffrey L., Richard J. Clark, Tracy L. Fleming, and Alan Sieradzki, A review of Burrowing Owl (Athene cunicularia) literature using bibliometric comparisons: topical bibliographies and online databases, 207–224
Lindsay, Alec R., see Neri, Chris M.
Line-transect distance sampling, 443–453
Literature, 207–224
Living, Stephen, see Katzner, Todd E.
Long-term occupancy, 400–402
López, Fernando Gabriel, see Grande, Juan Manuel
M

Maciorowski, Grzegorz, Reuven Yosef, Úlo Váli, and Piotr Tryjansonki, Nutritional condition of hybrid nestlings is similar to that of pure-species offspring of spotted eagles (Clanga clanga × C. pomarinia), 484–490

Mackentley, Nova, see Neri, Chris M.

Majgaonkar, Iravatee, Christopher G. R. Bowden, and Suhel Quader, Nesting success and nest-site selection of White-rumped Vultures (Gyps bengalensis) in western Maharashtra, India, 431–442

Marks, Jeffrey S., Miguel Á. Santillán, Diego E. Procopio, and Alejandro Travaini, Incubation period of the Austral Pygmy-Owl (Glaucidium nana): a correction, 118

Masuda, Ryuichi, see Omote, Keita

McCready, Robert, see Watson, James W.

Medel Hidalgo, Javier, Keith L. Bildstein, Roberto P. Schlatter, and Juan G. Navedo, Discovery of an austral migratory corridor for raptors in South America, 89–93

Medina, Juan Pablo, Jessica M. Sánchez-Jasso, Spencer G. Scaly, Celene Salgado-Miranda, and Edgardo Soriano-Vargas, Highest elevational records for Northern Saw-whet Owls (Aegolius acadicus), 94–99

Megascops asio, 257–260

sacraecatarinae, 115–117

Mehta, Prachi, Jayant Kulkarni, Shyamakant Talmale, and Ridhi Chandarana, Diets of sympatric Forest Owlets, Spotted Owlets, and Jungle Owlets in East Kalibhit forests, Madhya Pradesh, India, 338–348

Menzel, Sandra, Artificial burrow use by Burrowing Owls in northern California, 167–177

Mérho, Thomas Oliver, see Mester, Béla

Mester, Béla, and Thomas Oliver Mérho, Unusual fishing behavior of the Eurasian Sparrowhawk (Accipiter nisus), 112–114

Methane, 100–101

Mexico, 94–99, 178–190, 263–265

Meyer, Tom, see Robichaud, William


raptor, 530–533

spring, 263–265

watchsites, 89–93

Miller, Karl. E., see Tracy, Ken F.

Milvago chimachima, 104–107

Milvus migrans, 326–337

Mitigation, 1–18, 167–177

Molecular phylogeny, 31–41

Moreno, Lucila, see Doussang, Daniela

Morph, 19–30

Morrison, Joan L., see Dwyer, James F.

Morrison, Michael L., see Smallwood, K. Shawn

Morrow, Jill, see Morrow, Lance

Morrow, Lance, and Jill Morrow, A burned American Kestrel breeding in Virginia's Shenandoah Valley, 100–101

Morrow, Lance, and Jill Morrow, American Kestrel surviving with electric shock injuries, 102–103

Mortality, 1–18

Mountains, Andes, 89–93

Movement, altitudinal, 519–521

Murphy, Thomas M., see Rainwater, Thomas R.

Mylitta monachus, 389–392

N

Natal philopatry, 167–177

Navedo, Juan G., see Medel Hidalgo, Javier

Nelson, R. Wayne, In Memoriam, 122–125

Nelson, R. Wayne, see Saggese, Miguel D.

Neotropical raptors, 519–521

Nepal, 443–453

Neri, Chris M., Nova Mackentley, Zachary A. Dykema, Emily M. Bertucci, and Alec R. Lindsay, Different audio-lures lead to different sex-biases in capture of Northern Saw-whet Owls (Aegolius acadicus), 245–249

Nest, 316–325, 522–540

artificial, 454–470

camera, 393–399

defense, 393–399

site, 400–402


association, 389–392

success, 431–442

territory, 400–402

Nesting moving, 395–399

Nest-site fidelity, 167–177

limitation, 389–392

reuse, 454–470

New Mexico, 158–166

Newbrey, Jennifer L., see Hernandez, Cecilia L.

Nijman, Vincent, Observations of spring raptor migration at Palenque, Mexico, 263–265

Nishida, Chizuko, see Omote, Keita

Nocturnal raptors, 379–388

Nonbreeding, 407–419

Nourani, Elham, see Panuccio, Michele

Nygård, Torger, see Watson, Richard T.

O

Observations, 56–65

Occupancy, long-term, 400–402

O’Halloran, John, see Fernández-Bellon, Dario

Oiling of wildlife, natural, 82–88

Oliveira, Camilo Viana, Fabio Olmos, Manuel dos Santos-Filho, and Christine Steiner São Bernardo, Observation of diurnal soaring raptors in northeastern Brazil depends on weather conditions and time of day, 56–65

Olmos, Fabio, see Oliveira, Camilo Viana

O’Mahony, Barry, see Fernández-Bellon, Dario
anticoagulant, 225–230
Rodríguez, Airam, see Rodríguez, Beneharo
Rodríguez, Beneharo, Juan Bécares, Juan Antonio Lorenzo, and Airam Rodríguez, Inter-island movements of two Barbary Falcon (Falco peregrinus pelegrinoides) juveniles in the Canary Islands, 503–510
Rondeau, Emmanuel, see Coulson, Jennifer O.
Roost, 178–190, 370–378
site use, 370–378
Roosting, 257–260
sites, 231–239
Rose, Sanjo, see Sumasgutner, Petra
S
Sah, Shahrul A. M., see Subedi, Tulsi R.
Sale, Richard, 403–405
Salgado-Miranda, Celene, see Medina, Juan Pablo
Sánchez-Jasso, Jessica M., see Medina, Juan Pablo
Santillán, Miguel Á., see Marks, Jeffrey S.
São Bernardo, Christine Steiner, see Oliveira, Camilo Viana
Sarasola, José H., see Galmes, Maximiliano A.
Sarasola, José Hernán, Nesting of the endangered Chaco Eagle (Buteogallus coronatus) on a human-made structure, 108–111
Satellite telemetry, 267–281
Scavenger, 326–337
Scavenging, 291–308
winter, 471–483
Scheibler, Daniel R., see Zilio, Felipe
Schlatter, Roberto P., see Medel Hidalgo, Javier
Schulze, Michael, see Zuluaga, Santiago
Sciuridae, 82–88
Screech-Owl, Eastern, 257–260
Long-tufted, 115–117
Sealy, Spencer G., see Medina, Juan Pablo
Search, active, 420–430
passive, 420–430
Secondary exposure, 225–230
Shie, Ji-En, see Hong, Shiao-Yu
Shonfield, Julia, Sarah Heemskerk, and Erin M. Bayne, Utility of automated species recognition for acoustic monitoring of owls, 42–55
Siblicide, 393–399
Sibling aggression, 393–399
Sieradzki, Alan, see Lincer, Jeffrey L.
Sighting probability, 56–65
Small mammals, 420–430
Smallwood, K. Shawn, and Michael L. Morrison, Nest-site density in a high-density colony of Burrowing Owls, 454–470
Smit-Robinson, Hanneline A., see Watson, Richard T.
Social behavior, 500–502
Soriano-Vargas, Edgardo, see Medina, Juan Pablo
South Africa, 19–30
South Carolina, 516–518
Space use, 158–166, 349–360
Sparrowhawk, Black, 19–30
Eurasian, 112–114
Spermophilus beecheyi, 454–470
Spizaetus isidori, 522–527
Stafford, Amanda, see Paganini, Silvan T.
Stanback, Mark T., Ian Daniel, and Ben Hardie, Eastern Screech-Owls neither guard nor avoid food caches in cavities, 257–260
Strelkov, Carlos, see Grande, Juan Manuel
Strix occelata, 240–244
varia, 42–55
Structure, artificial, 108–111
Suburban raptor, 519–521
Sumasgutner, Petra, Sanjo Rose, Ann Koeslag, and Arjun Amar, Exploring the influence of urbanization on morph distribution and morph-specific breeding performance in a polymorphic African raptor, 19–30
Sun, Yuan-Hsun, see Hong, Shiao-Yu
Surmach, Sergeí G., see Omote, Keita
Survey(s), 56–65
broadcast, 361–369
population, 309–315
Swingen, Daniel N., see Watson, James W.
Symbiosis, cleaning, 104–107
Synoptic model, 349–360
T
Takenaka, Takeshi, see Omote, Keita
Talmale, Shyamakant, see Mehta, Prachi
Tapir, Baird’s, 104–107
Tapirus bairdii, 104–107
Telemetry, radio, 158–166
satellite, 267–281
Thomas, Scott, see Katzner, Todd E.
Threat, 491–499
Time-activity budget, 420–430
Tracy, Ken F., and Karl E. Miller, Monk Parakeets provide nesting opportunities for the threatened Southeastern American Kestrel, 389–392
Travaini, Alejandro, see Marks, Jeffrey S.
Trefry, Helen E., see Valdez-Gómez, Hector E.
Trend, population, 129–142