

THE JOURNAL OF RAPTOR RESEARCH

A QUARTERLY PUBLICATION OF THE RAPTOR RESEARCH FOUNDATION, INC.
(FOUNDED 1966)



EDITOR IN CHIEF
MARC J. BECHARD

ASSOCIATE EDITORS

GARY R. BORTOLOTTI
ALLEN M. FISH
CHARLES J. HENNY
JUAN JOSÉ NEGRO
IAN G. WARRENTIN

FABIAN JAKSIĆ
DANIEL E. VARLAND
COLE CROCKER-BEDFORD
JAMES C. BEDNARZ
MARCO RESTANI

BOOK REVIEW EDITOR
JEFFREY S. MARKS

CONTENTS FOR VOLUME 34, 2000

NUMBER 1

FIRST-YEAR MOVEMENTS BY JUVENILE MEXICAN SPOTTED OWLS IN THE CANYONLANDS OF UTAH. David W. Willey and Charles van Riper III	1
DISTRIBUTION, POPULATION SIZE AND HABITAT USE OF THE RÉUNION MARSH HARRIER, <i>CIRCUS M. MAILLARDI</i> . Vincent Bretagnolle, Thomas Ghestemme, Jean-Marc Thiollay and Carole Attié	8
NEST-SITE SELECTION AND REPRODUCTIVE SUCCESS OF URBAN RED-SHOULDERED HAWKS IN CENTRAL CALIFORNIA. Stephen C. Rottenborn	18
HABITAT USE BY RED-TAILED HAWKS WINTERING IN THE DELTA REGION OF ARKANSAS. Heath D. Garner and James C. Bednarz	26
AN EVALUATION OF THE ANDEAN CONDOR POPULATION IN NORTHERN ECUADOR. Marcus T. Koenen, Sarah Gale Koenen and Norma Yanez	33
SHORT COMMUNICATIONS	
SUMMARY OF PHILIPPINE EAGLE REPRODUCTIVE SUCCESS, 1978–98. Hector C. Miranda, Jr., Dennis I. Salvador, Jayson C. Ibañez and Glicería A. Balaquit-Ibañez	37
DIET OF AUTUMN MIGRATING NORTHERN SAW-WHET OWLS ON THE EASTERN SHORE OF VIRGINIA. David M. Whalen, Bryan D. Watts and David W. Johnston	42
BREEDING BIOLOGY OF THE EURASIAN KESTREL IN THE STEPPES OF SOUTHWESTERN SPAIN. J.M. Avilés, J.M. Sánchez and A. Sánchez	45
BREEDING DENSITIES AND HABITAT ATTRIBUTES OF GOLDEN EAGLES IN SOUTHEASTERN SPAIN. Martina Carrete, José Antonio Sánchez-Zapata and José Francisco Calvo	48
TRAPPING ESTIMATES FOR SAKER AND PEREGRINE FALCONS USED FOR FALCONRY IN THE UNITED ARAB EMIRATES. Nigel W.H. Barton	53
FIRST CONFIRMED BREEDING RECORDS AND OTHER INCIDENTAL SIGHTINGS OF NORTHERN HARRIERS IN LABRADOR. Tony E. Chubbs, Bruce Mactavish, Keith Oram and Perry G. Trimper	56
LETTERS	58
COMMENTARY	62

NUMBER 2

NESTING, POPULATION TREND AND BREEDING SUCCESS OF PEREGRINE FALCONS ON THE WASHINGTON OUTER COAST, 1980–98. Ulrich W. Wilson, Anita McMillan and Frederick C. Dobler	67
--	----

LANDSCAPE CHARACTERISTICS OF NORTHERN SPOTTED OWL NEST SITES IN MANAGED FORESTS OF NORTHWESTERN CALIFORNIA. Lee B. Folliard, Kerry P. Reese and Lowell V. Diller	75
IDENTIFICATION OF INDIVIDUAL BARRED OWLS USING SPECTROGRAM ANALYSIS AND AUDITORY CUES. Pamela L. Freeman	85
HOME RANGE AND HABITAT USE BY THE LONG-EARED OWL IN NORTHWESTERN SWITZERLAND. Fabienne Henrioux	93
HABITAT SELECTION BY TAWNY FISH-OWLS (<i>KETUPA FLAVIPES</i>) IN TAIWAN. Yuan-Hsun Sun, Ying Wang and Ching-Feng Lee	102
A REVIEW OF THE TROPHIC ECOLOGY OF THE BARN OWL IN ARGENTINA. M. Isabel Bellocq	108
NESTING BIOLOGY AND BEHAVIOR OF THE MADAGASCAR HARRIER-HAWK (<i>POLYBOROIDES RADIATUS</i>) IN NORTHEASTERN MADAGASCAR. Russell Thorstrom and Guiseppe La Marca	120
PROBABLE EFFECT OF DELISTING OF THE PEREGRINE FALCON ON AVAILABILITY OF URBAN NEST SITES. Mark S. Martell, Jennifer L. McNicoll and Patrick T. Redig	126
RAPTOR SURVEYS IN SOUTHCENTRAL NEVADA, 1991-95. Patrick E. Lederle, James M. Mueller and Eric A. Holt	133
HANDICAPPED AMERICAN KESTRELS: NEEDY OR PRUDENT FORAGERS? Gillian L. Murza, Gary R. Bortolotti and Russell D. Dawson	137
MIGRATORY MOVEMENTS OF THE WHITE-THROATED HAWK (<i>BUTEO ALBIGULA</i>) IN CHILE. Eduardo F. Pavez	143
SHORT COMMUNICATIONS	
FIRST NESTING RECORD OF THE NEST OF A SLATY-BACKED FOREST-FALCON (<i>MICRASTUR MIRANDOLLEI</i>) IN YASUNI NATIONAL PARK, ECUADORIAN AMAZON. Tjitte de Vries and Cristian Melo	148
LETTERS	151
BOOK REVIEWS. Edited by Jeffrey S. Marks	153

NUMBER 3

DIFFERENTIAL WINTER DISTRIBUTION OF ROUGH-LEGGED HAWKS (<i>BUTEO LAGOPUS</i>) BY SEX IN WESTERN NORTH AMERICA. Chad V. Olson and David P. Arsenault	157
AVAILABILITY AND INGESTION OF LEAD SHOTSHELL PELLETS BY MIGRANT BALD EAGLES IN SASKATCHEWAN. Michael J.R. Miller, Mark E. Wayland, Elston H. Dzus, and Gary R. Bortolotti	167
STAND STRUCTURES USED BY NORTHERN SPOTTED OWLS IN MANAGED FORESTS. Larry L. Irwin, Dennis F. Rock, and Gregory P. Miller	175
POPULATION FLUCTUATIONS OF THE HARRIS' HAWK (<i>PARABUTEO UNICINCTUS</i>) AND ITS REAPPEARANCE IN CALIFORNIA. Michael A. Patten and Richard A. Erickson	187
THE FOOD HABITS OF SYMPATRIC FOREST-FALCONS DURING THE BREEDING SEASON IN NORTHEASTERN GUATEMALA. Russell Thorstrom	196

A COMPARISON OF RAPTOR DENSITIES AND HABITAT USE IN KANSAS CROPLAND AND RANGELAND ECOSYSTEMS. Christopher K. Williams, Roger D. Applegate, R. Scott Lutz, and Donald H. Rusch	203
A REVIEW AND CHECKLIST OF THE PARASITIC MITES (ACARINA) OF THE FALCONIFORMES AND STRIGIFORMES. James R. Philips	210
SHORT COMMUNICATIONS	
DIURNAL VOCAL ACTIVITY OF YOUNG EAGLE OWLS AND ITS IMPLICATIONS IN DETECTING OCCUPIED NESTS. Vincenzo Penteriani, Max Gallardo, and H��l��ne Cazassus	232
FOOD HABITS OF THE STRIPED OWL (<i>ASIO CLAMATOR</i>) IN BUENOS AIRES PROVINCE, ARGENTINA. Juan P. Isacch, Mar��a S. B��, and Mariano M. Mart��nez	235
DIET OF BREEDING CINEREOUS HARRIERS (<i>CIRCUS CINEREUS</i>) IN SOUTHEASTERN BUENOS AIRES PROVINCE, ARGENTINA. Mar��a S. B��, Sandra M. Cicchino, and Mariano M. Mart��nez	237
ABUNDANCE OF THE OGASAWARA BUZZARD ON CHICHIJIMA, THE PACIFIC OCEAN. Tadashi Suzuki and Yuka Kato	241
LETTERS	244
BOOK REVIEW. Edited by Jeffrey S. Marks	247

NUMBER 4

A PARTIAL POST-JUVENILE MOLT AND TRANSITIONAL PLUMAGE IN THE SHIKRA (<i>ACCIPITER BADIUS</i>) AND GREY FROG HAWK (<i>ACCIPITER SOLOENSIS</i>). Marc Herremans and Michel Louette ..	249
TURNOVER AND DISPERSAL OF PRAIRIE FALCONS IN SOUTHWESTERN IDAHO. Robert N. Lehman, Karen Steenhof, Leslie B. Carpenter, and Michael N. Kochert	262
ROOST SITES OF RADIO-MARKED MEXICAN SPOTTED OWLS IN ARIZONA AND NEW MEXICO: SOURCES OF VARIABILITY AND DESCRIPTIVE CHARACTERISTICS. Joseph L. Ganey, William M. Block, and Rudy M. King	270
BARRED OWL AND SPOTTED OWL POPULATIONS AND HABITAT IN THE CENTRAL CASCADE RANGE OF WASHINGTON. Dale R. Herter and Lorin L. Hicks	279
FOOD HABITS OF BALD EAGLES WINTERING IN NORTHERN ARIZONA. Teryl G. Grubb and Roy G. Lopez	287
NEST FEATURES AND NEST-TREE CHARACTERISTICS OF SHORT-TOED EAGLES (<i>CIRCAETUS GALLICUS</i>) IN THE DADIA-LEFKIMI-SOUFLI FOREST, NORTHEASTERN GREECE. Dimitris E. Bakaloudis, Christos G. Vlachos, and Graham J. Holloway	293
ARE NORTHERN SAW-WHET OWLS NOMADIC? Jeffrey S. Marks and John H. Doremus	299
RELATIONSHIP BETWEEN RAPTORS AND RABBITS IN THE DIET OF EAGLE OWLS IN SOUTHWESTERN EUROPE: COMPETITION REMOVAL OR FOOD STRESS? David Serrano	305

AN EVALUATION OF METHYL ANTHRANILATE, AMINOACETOPHENONE, AND UNFAMILIAR COLORATION AS FEEDING REPELLENTS TO AMERICAN KESTRELS. Michael K. Nicholls, Oliver P. Love, and David M. Bird	311
SHORT COMMUNICATIONS	
RESPONSIVENESS OF NESTING EURASIAN KESTRELS <i>FALCO TINNUNCULUS</i> TO CALL PLAYBACKS. Luca Salvati, Alberto Manganaro, and Simone Fattorini	319
THE BREEDING SUCCESS OF TAWNY OWLS (<i>STRIX ALUCO</i>) IN A MEDITERRANEAN AREA: A LONG- TERM STUDY IN URBAN ROME. Lamberto Ranazzi, Alberto Manganaro, and Luca Salvati	322
NOCTURNAL ACTIVITY OF LESSER KESTRELS UNDER ARTIFICIAL LIGHTING CONDITIONS IN SEVILLE, SPAIN. Juan José Negro, Javier Bustamante, Ciro Melguizo, José Luis Ruis, and Juan Manuel Grande	327
NEST-SITE CHARACTERISTICS OF CRESTED CARACARAS IN LA PAMPA, ARGENTINA. Michael I. Goldstein	330
DIET OF THE BARN OWL (<i>TYTO ALBA TUIDARA</i>) IN NORTHWESTERN ARGENTINE PATAGONIA. Maria S. Pillado and Ana Trejo	334
LETTERS	339
BOOK REVIEW. Edited by Jeffrey S. Marks	342

BUTEO BOOKS



The following Birds of North America Species Accounts are available through Buteo Books, 3130 Laurel Road, Shipman, VA 22971. TOLL-FREE ORDERING: 1-800-722-2460; FAX: (804) 263-4842. E-mail: allen@buteobooks.com

- Bald Eagle (506). David A. Buehler. 2000. 40 pp.
Barn Owl (1). Carl D. Marti. 1992. 16 pp.
Barred Owl (508). Kurt M. Mazur and Paul C. James. 2000. 20 pp.
Black Vulture (411). Neil J. Buckley. 1999. 24 pp.
Boreal Owl (63). G.D. Hayward and P.H. Hayward. 1993. 20 pp.
Broad-winged Hawk. (218). L.J. Goodrich, S.C. Crocoll and S.E. Senner. 1996. 28 pp.
Burrowing Owl (61). E.A. Haug, B.A. Millsap and M.S. Martell. 1993. 20 pp.
Common Black-Hawk (122). Jay H. Schnell. 1994. 20 pp.
Cooper's Hawk (75). R.N. Rosenfield and J. Bielefeldt. 1993. 24 pp.
Crested Caracara (249). Joan L. Morrison. 1996. 28 pp.
Eastern Screech-owl (165). Frederick R. Gehlbach. 1995. 24 pp.
Elf Owl (413). Susanna G. Henry and Frederick R. Gehlbach. 1999. 20 pp.
Ferruginous Hawk (172). Marc J. Bechard and Josef K. Schmutz. 1995. 20 pp.
Ferruginous Pygmy-Owl (498). Glenn A. Proudfoot and R. Roy Johnson. 2000. 20 pp.
Flammulated Owl (93). D. Archibald McCallum. 1994. 24 pp.
Great Gray Owl (41). Evelyn L. Bull and James R. Duncan. 1993. 16 pp.
Great Horned Owl (372). C. Stuart Houston, Dwight G. Smith, and Christoph Rohner. 1998. 28 pp.
Gyr Falcon (114). Nancy J. Clum and Tom J. Cade. 1994. 28 pp.
Harris' Hawk (146). James C. Bednarz. 1995. 24 pp.
Hawaiian Hawk (523). Kenneth E. Clarkson and Leona P. Laniawe. 2000. 16 pp.
Long-eared Owl (133). J.S. Marks, D.L. Evans and D.W. Holt. 1994. 24 pp.
Merlin (44). N.S. Sodhi, L. Oliphant, P. James and I. Warkentin. 1993. 20 pp.
Mississippi Kite (402). James W. Parker. 1999. 28 pp.
Northern Saw-whet Owl (42). Richard J. Cannings. 1993. 20 pp.
Northern Goshawk (298). John R. Squires and Richard T. Reynolds. 1997. 32 pp.
Northern Harrier (210). R. Bruce MacWhirter and Keith L. Bildstein. 1996. 32 pp.
Northern Hawk Owl (356). James R. Duncan and Patricia A. Duncan. 1998. 28 pp.
Northern Pygmy-Owl (494). Denver W. Holt and Julie L. Petersen. 2000. 24 pp.
Red-shouldered Hawk (107). Scott T. Crocoll. 1994. 20 pp.
Red-tailed Hawk (52). C.R. Preston and R.D. Beane. 1993. 24 pp.
Sharp-shinned Hawk (482). Keith L. Bildstein and Ken Meyer. 2000. 28 pp.
Short-eared Owl (62). D.W. Holt and S.M. Leasure. 1993. 24 pp.
Snail Kite (171). P.W. Sykes, Jr., J.A. Rodgers, Jr. and R.E. Bennetts. 1995. 32 pp.
Snowy Owl (10). David F. Parmelee. 1992. 20 pp.
Spotted Owl (179). R.J. Gutiérrez, A.B. Franklin and W.S. Lahaye. 1995. 28 pp.
Swainson's Hawk (265). A. Sidney England, Marc J. Bechard and C. Stuart Houston. 1997. 28 pp.
Swallow-tailed Kite (138). Kenneth D. Meyer. 1995. 24 pp.
Turkey Vulture (339). David A. Kirk and Michael J. Mossman. 1998. 32 pp.
Whiskered Screech-Owl (507). Frederick R. Gehlbach and Nancy Y. Gehlbach. 2000. 24 pp.
White-tailed Hawk (30). C. Craig Farquhar. 1992. 20 pp.
White-tailed Kite (178). Jeffrey R. Dunk. 1995. 16 pp.

Buteo Books stocks all published species accounts, not only those covering raptors. The current list in taxonomic order may be viewed at: <http://www.buteobooks.com>

Buteo Books stocks the *Handbook of the Birds of the World*. The first five volumes of this projected 12-volume work have been published including: **Volume 2: New World Vultures to Guinea-fowl** (1994) covering the diurnal raptors and **Volume 5: Barn Owls to Hummingbirds** (1999) covering owls. These volumes are priced at \$185 each plus shipping and handling.

Usually available from Buteo Books, the classic reference on diurnal birds of prey: Brown, Leslie and Dean Amadon. *Eagles, Hawks and Falcons of the World*. Country Life Books, 1968. Two volumes. First English edition in brown cloth. Fine in slipcase. \$300.00 and other editions at lesser prices.

A Telemetry Receiver Designed with The Researcher in Mind

What you've been waiting for!

Finally, a highly sensitive 999 channel synthesized telemetry receiver that weighs less than 13 ounces, is completely user programmable and offers variable scan rates over all frequencies. For each animal being tracked, the large LCD display provides not only the frequency (to 100Hz) and channel number, but also a 7 character alphanumeric comment field and a digital signal strength meter. Stop carrying receivers that are the size of a lunch box or cost over \$1500. The features and performance of the new R-1000 pocket sized telemetry receiver will impress you, and the price will convince you.

Other Features Include:

- Factory tuned to any 4MHz wide segment in the 148-174MHz Band
- Very high sensitivity of -148dBm to -150dBm
- Illuminated display and keypad for use in low light or darkness
- User selectable scan rates from 1-30 seconds in 1 second steps
- Rechargeable batteries operate the receiver for 12 hours and can be replaced with standard AA Alkaline batteries in the field. Both 12vdc and 110vac chargers are included.

- 6.1" (15.5cm) high,
2.6" (6.6cm) wide,
1.5" (3.8cm) deep.

- 3 year warranty
- 1 day delivery

\$695.00

Please specify desired 4MHz
wide segment in the
148-174MHz band

Visit our
website for
complete
specifications,
operating
manual and
information
on the R-1000
or call our
toll-free number
to order your
receiver now.

**Try the
New R-1000
and You'll Be
Impressed!**

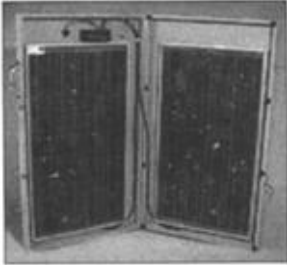


COMMUNICATIONS SPECIALISTS, INC.

426 West Taft Avenue • Orange, CA 92865-4296 • 1-714-998-3021 • Fax 1-714-974-3420
Entire U.S.A. (800) 854-0547 • Fax (800) 850-0547 • <http://www.com-spec.com>



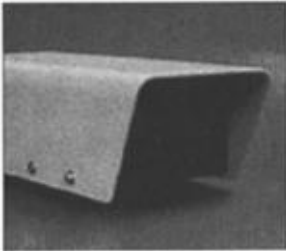
More than just Video Cameras



Solar cells



Parabolic mics



The auto-color camera includes IR and color cameras with an automatic light-sensitive switching device.



BURROWING OWL WITH EGGS
Image captured with the Peeper Video System
Copyright Dan Rosenberg 1999

Systems from Sandpiper Technologies

- **ELEVATED:** Pole-mounted video cameras extend up to 50 feet.
- **BURROW VIDEO PROBES:** 5/16" dia. fiber-optic sensors, 1" and 2.3" dia. goosenecks, and remote control systems. All systems include head mounted video display and are interchangeable with other probe extensions.
- **SURVEILLANCE:** Time-lapse, color, IR, digital, zoom, combination IR and color, nestbox cameras.
Note: Our ultra-lowlight camera is 0.00015 LUX and captures images in shadow or moonlit situations.
- **VOCALIZERS:** MP3 format reduces battery requirements.
- **SOLAR:** We offer multiple solar options and remote powered energy devices.



SANDPIPER TECHNOLOGIES, INC. Formerly Christensen Designs

535 W. Yosemite Avenue, Manteca CA 95337

Call: (209) 239-7460 • Fax: (209) 239-1571 • e-mail: Ann@peeperpeople.com

Catalog: www.peeperpeople.com

2001 ANNUAL MEETING

The Raptor Research Foundation, Inc. 2001 annual meeting will be held on 25–30 October in Winnipeg, Manitoba, Canada. For information about the meeting contact Jim Duncan, Biodiversity program, Wildlife Branch, Manitoba Natural Resources, Box 24, 200 Saulteaux Crescent, Winnipeg, MB R3J 3W3 Canada. Email jduncan@nr.gov.mb.ca.

Persons interested in predatory birds are invited to join The Raptor Research Foundation, Inc. Send requests for information concerning membership, subscriptions, special publications, or change of address to OSNA, P.O. Box 1897, Lawrence, KS 66044-8897, U.S.A.

The Journal of Raptor Research (ISSN 0892-1016) is published quarterly and available to individuals for \$33.00 per year and to libraries and institutions for \$50.00 per year from The Raptor Research Foundation, Inc., 14377 117th Street South, Hastings, Minnesota 55033, U.S.A. (Add \$3 for destinations outside of the continental United States.) Periodicals postage paid at Hastings, Minnesota, and additional mailing offices. POSTMASTER: Send address changes to *The Journal of Raptor Research*, OSNA, P.O. Box 1897, Lawrence, KS 66044-8897, U.S.A.

Printed by Allen Press, Inc., Lawrence, Kansas, U.S.A.

Copyright 2000 by The Raptor Research Foundation, Inc. Printed in U.S.A.

⊗ This paper meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).

RAPTOR RESEARCH FOUNDATION, INC., AWARDS Recognition for Significant Contributions¹

The **Dean Amadon Award** recognizes an individual who has made significant contributions in the field of systematics or distribution of raptors. Contact: **Dr. Clayton White, 161 WIDB, Department of Zoology, Brigham Young University, Provo, UT 84602 U.S.A.** Deadline August 15.

The **Tom Cade Award** recognizes an individual who has made significant advances in the area of captive propagation and reintroduction of raptors. Contact: **Dr. Brian Walton, Predatory Bird Research Group, Lower Quarry, University of California, Santa Cruz, CA 95064 U.S.A.** Deadline: August 15.

The **Fran and Frederick Hamerstrom Award** recognizes an individual who has contributed significantly to the understanding of raptor ecology and natural history. Contact: **Dr. David E. Andersen, Department of Fisheries and Wildlife, 200 Hodson Hall, 1980 Folwell Avenue, University of Minnesota, St. Paul, MN 55108 U.S.A.** Deadline: August 15.

Recognition and Travel Assistance

The **James R. Koplín Travel Award** is given to a student who is the senior author of the paper to be presented at the meeting for which travel funds are requested. Contact: **Patricia A. Hall, 5937 E. Abbey Road, Flagstaff, AZ 86004 U.S.A.**

The **William C. Andersen Memorial Award** is given to the student who presents the best paper at the annual Raptor Research Foundation Meeting. Contact: **Ms. Laurie Goodrich, Hawk Mountain Sanctuary, Rural Route 2, Box 191, Kempton, PA 19529-9449 U.S.A.** Deadline: Deadline established for meeting paper abstracts.

Grants²

The **Stephen R. Tully Memorial Grant** for \$500 is given to support research, management and conservation of raptors, especially to students and amateurs with limited access to alternative funding. Contact: **Dr. Kimberly Titus, Alaska Division of Wildlife Conservation, P.O. Box 20, Douglas, AK 99824 U.S.A.** Deadline: September 10.

The **Leslie Brown Memorial Grant** for \$500–\$1,000 is given to support research and/or the dissemination of information on raptors, especially to individuals carrying out work in Africa. Contact: **Dr. Jeffrey L. Lincer, 1220 Rosecrans St. #315, San Diego, CA 92106 U.S.A.** Deadline: September 15.

¹Nominations should include: (1) the name, title and address of both nominee and nominator, (2) the names of three persons qualified to evaluate the nominee's scientific contribution, (3) a brief (one page) summary of the scientific contribution of the nominee.

²Send 5 copies of a proposal (≤5 pages) describing the applicant's background, study goals and methods, anticipated budget, and other funding.

CONTENTS

A PARTIAL POST-JUVENILE MOLT AND TRANSITIONAL PLUMAGE IN THE SHIKRA (<i>ACCIPITER BADIUS</i>) AND GREY FROG HAWK (<i>ACCIPITER SOLOENSIS</i>). Marc Herremans and Michel Louette ..	249
TURNOVER AND DISPERSAL OF PRAIRIE FALCONS IN SOUTHWESTERN IDAHO. Robert N. Lehman, Karen Steenhof, Leslie B. Carpenter, and Michael N. Kochert	262
ROOST SITES OF RADIO-MARKED MEXICAN SPOTTED OWLS IN ARIZONA AND NEW MEXICO: SOURCES OF VARIABILITY AND DESCRIPTIVE CHARACTERISTICS. Joseph L. Ganey, William M. Block, and Rudy M. King	270
BARRED OWL AND SPOTTED OWL POPULATIONS AND HABITAT IN THE CENTRAL CASCADE RANGE OF WASHINGTON. Dale R. Herter and Lorin L. Hicks	279
FOOD HABITS OF BALD EAGLES WINTERING IN NORTHERN ARIZONA. Teryl G. Grubb and Roy G. Lopez	287
NEST FEATURES AND NEST-TREE CHARACTERISTICS OF SHORT-TOED EAGLES (<i>CIRCAETUS GALLICUS</i>) IN THE DADIA-LEFKIMI-SOULFI FOREST, NORTHEASTERN GREECE. Dimitris E. Bakaloudis, Christos G. Vlachos, and Graham J. Holloway	293
ARE NORTHERN SAW-WHET OWLS NOMADIC? Jeffrey S. Marks and John H. Doremus	299
RELATIONSHIP BETWEEN RAPTORS AND RABBITS IN THE DIET OF EAGLE OWLS IN SOUTHWESTERN EUROPE: COMPETITION REMOVAL OR FOOD STRESS? David Serrano	305
AN EVALUATION OF METHYL ANTHRANILATE, AMINOACETOPHENONE, AND UNFAMILIAR COLORATION AS FEEDING REPELLENTS TO AMERICAN KESTRELS. Michael K. Nicholls, Oliver P. Love, and David M. Bird	311
SHORT COMMUNICATIONS	
RESPONSIVENESS OF NESTING EURASIAN KESTRELS <i>FALCO TINNUNCULUS</i> TO CALL PLAYBACKS. Luca Salvati, Alberto Manganaro, and Simone Fattorini	319
THE BREEDING SUCCESS OF TAWNY OWLS (<i>STRIX ALUCO</i>) IN A MEDITERRANEAN AREA: A LONG-TERM STUDY IN URBAN ROME. Lamberto Ranazzi, Alberto Manganaro, and Luca Salvati	322
NOCTURNAL ACTIVITY OF LESSER KESTRELS UNDER ARTIFICIAL LIGHTING CONDITIONS IN SEVILLE, SPAIN. Juan José Negro, Javier Bustamante, Ciro Melguizo, José Luis Ruis, and Juan Manuel Grande	327
NEST-SITE CHARACTERISTICS OF CRESTED CARACARAS IN LA PAMPA, ARGENTINA. Michael I. Goldstein	330
DIET OF THE BARN OWL (<i>TYTO ALBA TUDARA</i>) IN NORTHWESTERN ARGENTINE PATAGONIA. Maria S. Pillado and Ana Trejo	334
LETTERS	339
BOOK REVIEW. Edited by Jeffrey S. Marks	342