UNITED STATES Statement of	O۷	vne	ers	hip	, I	lar	ag			t, and Circulation
1.Publication Title	2. Publication Number						3. Filing Date			
The Condor	0	'n	1	0	-	5	4	2	2	9-20-99
4. Issue Frequency	15. N	UIND	c1 18	SSUC	s P	ublis	red /	innu	diy	6. Annual Subscription Price
Counterry	4								\$90.00	
7. Complete Mailing Address of Known Office of Publication (Not printer) (	Contact Person									
Cooper Ornithological Society, 810 East 10th St., Lawrence KS 66044										Theresa Pickel
										Telephone 785-843-1235
Full names and Complete Mailing Addresses of Publisher, Edito     Publisher (Name and complete mailing address)     Cooper Omithological Society, 810 East 10th St., Lawr.					tor	(Оо п	ol le	ive b	lank)	-7-7-1
Editor (Name and complete mailing address)				_	-					
Dr. Walter D. Koenig Editor, The Condor, Hastings Nat Carmel Valley, CA 93924	ional	l His	toric	al R	es	ervat	on,	3860	E.	Carmel Valley Road,
Managing Editor (Name and complete mailing address)					_					
David J Gubernick, Condor Editorial Office, Hastings N	atura	al Hi	stor	/ Re	sei	vatio	n, 3	8601	I E.	Carmel Valley Road,
Carmel Valley CA 93924										
10. Owner (Do not leave blank. If the publication is owned by a corporation, give names and addresses of all stockholders owning or holding 1 percent or mo names and addresses of the individual owners. If owned by a partnership or sech individual owner. If the publication is published by a margrofit organizar	re of th other	ne tota uninc	é arno orpora	unt of sted ()	stor	sk. If no give its	d own	ed by	8 00F	poration, give the
Full Name	Cor	nple	e Me	iling	Ade	iress				

Ft 810 East 10th St., Lawrence KS 66044 Cooper Ornithological Society Known Bondholders, Mortgages, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities, If none, check box None Complete Mailing Address

12. Tax Ballus (For completion by neoprofit organizations authorized to mail at special retras) (Check one)
The purpose, function, and oneporth status of this organization and the sample status for federal riccone tas purpor
Jean Not Compared During Proceding 12 Months
Jean Compared During Proceding 12 Months (Publisher must submit explanation of change with this statement)

The Industrians on Recentary of Recentary of Recentary

The Industrians on Recentary

13. Publication with 14. Issue Date for Circulation Data Below August-99 The Condor Extent and Nature of Circulation Published Nearest to Filing Date x Total Number of Copies (Net press rus) 3129 0 b. Paid and/or Requested Circulation 0 6 5 c. Total Paid and/or Requested Circulation (Sum of 15b(1), (2),(3), and (4)) 2975 3134 d. Free Distribution by Mail (Samples, complim entary, and other free) (1) Outside-County as Stated on Form 3541 im (2) In-County as Stated on Form 3541 7 (3) Other Classes Mailed Through the USPS 47 70 e. Free Distribution Outside the Mail (Carriers or other means) 3 3 1. Total Free Distribution (Sum of 15d and 15e) 56 81 g. Total Distribution (Sum of 15c and 15f) ▶ 485 667 I Total (Sum of 15g and h.)

Percent Paid and/or Respected Circulation
(1) See Models for 15 from 150)

Debugger of the see 150

Debugger of the 150

Debugg 3700 3700 98.1 97.5 Publication r 14 Sept. 1999 Walter D Koenia/

l certify that all deformation furnished on the fight is true and complete. I understand that anyone also furnishes bles or mislegating information on this form or ratio certain or table and implicationally information impossible on the form may be subject to orbinal sandbors (including feets and implicationally and/or chile sandbors (including data per sandbors).

- 1. Compose and the other copy of the form with your personate arounds on a femon cooker 1. Neals a copy of the composed form to be a Copy of the Copy

Failure to file or publish a statement of ownership may lead to suspension of second-class authorization.
PS Form 3526, September 1998(Reverse)

# 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 8MHz 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 8MHz

wide segment in the

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.

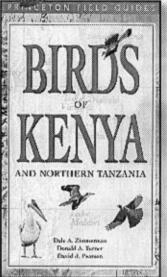




426 West Taft Avenue • Orange, CA 92865-4296 • 1-714-998-3021 • Fax 1-714-974-3420 Entire U.S.A. (800) 854-0547 • Fax (800) 850-0547 • http://www.com-spec.com



# Princeton Guides



New Field Guide Edition

## Birds of Kenva

and Northern Tanzania

Field Guide Edition

Dale A. Zimmerman, Donald A. Turner, David J. Pearson

With its modest price, small trim size and sturdy, weatherresistant binding, this field guide is the one volume that every traveler to Kenya and northern Tanzania must have. The guide features 124 color plates, depicting all 1,114 species in the area, and over 800 range maps.

Specially designed for use in the field, it is a compact version of the widely acclaimed Birds of Kenyo and Northern Tanzania, hailed as the most comprehensive, accurate, and beautiful guide ever produced for the region.

Paper \$29.95 ISBN 0-691-01022-6 Cloth \$39.50 ISBN 0-691-01021-8



Princeton Science Library Edition With a new preface and afterword

## Ecology and Evolution of Darwin's Finches Peter R. Grant

With a new foreword by Jonathan Weiner, author of the Pulitzer Prize-winning Beak of the Finch

"If you somehow fell into the minority who didn't read the first edition, here is your chance to reform!"

-lared Diamond, author of the Pulitzer Prize-winning Guns, Germs and Steel

"[This] is the best long-term, fine-scale study of speciation ever conducted. . . . The science Peter Grant presents here is more interesting and important than ever."-From the foreword by Jonathan Weiner

117 halfrones, 100 line illustrations, 20 color illustrations Paper \$22.95 ISBN 0-691-04866-5 Cloth \$69.50 ISBN 0-691-04865-7 Due December



Based on the PBS TV series

### The Life of Birds David Attenborough

Based on the spectacular ten-part TV program that has been airing on PBS, The Life of Birds is David Attenborough at his best. Beautifully illustrated with nearly 200 color photographs, this book will delight and inform all bird lovers.

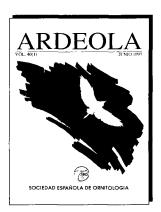
Cloth \$29.95 ISBN 0-691-01633-X

# Princeton University Press

AT FINE BOOKSTORES OR CALL 800-777-4726 • WWW.PUP.PRINCETON.EDU

# ARDEOLA

THE OFFICIAL JOURNAL OF THE SPANISH ORNITHOLOGICAL SOCIETY



### An Invitation to Contribute!

ARDEOLA has recently expanded its scope to provide a renewed forum for publication of ornithological studies, both empirical and experimental, carried out both in Spain and elsewhere. Papers dealing with ornithology in the areas of Mediterranean climate and in the Neotropics, as well as with the conservation of birds and their habitats, are especially acknowledged. The Editorial staff encourages the use of English to prospective authors, and will promote rapid publication of peer-reviewed manuscripst.

Please address manuscript submissions, editorial queries and comments to:

Dr. Mario Díaz
Departamento de Ciencias Medioambientales
Facultad de Ciencias del Medio Ambiente. Universidad de Castilla-La Mancha
E-45071 Toledo (Spain)
e-mail mariod@amb-to.uclm.es

#### Subscription rates to ARDEOLA:

Annual subscription for SEO members: 2.000 pesetas + 5.000 pesetas of membership fee  $(US\ \$15+45)$ 

Annual subscription for non-members: 10.000 pesetas (US \$95)

For more information about SEO memebership, subcribing to ARDEOLA or receiving other SEO publications please contact the Society's headquarters:

#### www.seo.org

SEO/BirdLife, Ctra. de Húmera, 63-1, 28224 Pozuelo de Alarcón, Madrid (Spain). Fax: 34 1 351 1386. e-mail bmdina@seo.org

## **Studies in Avian Biology**

Recent Issues



The Northern Goshawk: Ecology and Management

Edited by William M. Block, Michael L. Morrison, and M. Hildegard Reiser

No. 16

1994

\$16

#### Demography of the Northern Spotted Owl

Edited by Eric D. Forsman, Stephen DeStefano, Martin G. Raphael, and R.J. Gutiérrez

No. 17

1996

\$20

Won The Wildlife Society's Award for outstanding publication in wildlife ecology and management for an edited monograph, 1997.



Prices include postage and handling.

Order from:

Cooper Ornithological Society

c/o Western Foundation of Vertebrate Zoology

439 Calle San Pablo Camarillo, CA 93010

## Studies in Avian Biology

#### Recent Issues



Research and Management of the Brownheaded Cowbird in Western Landscapes

Edited by Michael L. Morrison, Linnea S. Hall, Scott K. Robinson, Stephen I. Rothstein, D. Caldwell Hahn, and Terrell D. Rich

No. 18

1999

\$18

Ecology and Conservation of Grassland Birds of the Western Hemisphere

Edited by Peter D. Vickery and James R. Herkert

No. 19

1999

\$25

Available in hardcover for \$39.50



Prices include postage and handling.

Order from: Cooper Ornithological Society

c/o Western Foundation of Vertebrate Zoology

439 Calle San Pablo Camarillo, CA 93010

#### (Continued from outside back cover)

The Proximate Effects of Rainfall on Clutch Size of the California Gnatcatcher MICHAEL A. PATTEN AND JOHN T. ROTENBERRY	876
Social Dominance and Energy Reserves in Wintering Woodland Birds VLADIMIR V. PRAVOSUDOV, THOMAS C. GRUBB JR., PAUL F. DOHERTY JR., C. L. BRONSON, ELENA V. PRAVOSUDOVA AND	
ANDREW S. DOLBY Plastic Color Bands Have No Detectable Short-term Effects on White-breasted	880
Nuthatch Behavior VALERIE A. WEISS AND DANIEL A. CRISTOL	884
Molecular vs. Phenotypic Sexing in Red Knots  ALLAN J. BAKER, THEUNIS PIERSMA AND ANNETTE D.	
GREENSLADE	887
S. KEITH McKNIGHT AND GARY HEPP  Trophic Relationships Among Six Species of Icelandic Seabirds as Determined	893
Through Stable Isotope Analysis  DAVID R. THOMPSON, KRISTJAN LILLIENDAHL, JON SOLMUNDSSON,	
ROBERT W. FURNESS, SUSAN WALDRON AND RICHARD A. PHILLIPS	898
Digestive Enzymes of a Small Avian Herbivore, the Rufous-tailed Plantcutter CHRISTINE MEYNARD, M. VICTORIA LÓPEZ-CALLEJA,	070
FRANCISCO BOZINOVIC AND PABLO SABAT	904
PIERRE DE MERCEY AND MARC THÉRY  A Late Tertiary Woodcock from Menorca, Balearic Islands, Western Mediterranean	907
BARTOMEU SEGUÍ	909
COMMENTARY AND REPLY	
Nest Placement and Mortality: Is Nest Predation a Random Event in Space and Time?  KENNETH A. SCHMIDT AND CHRISTOPHER J. WHELAN  Does Nonrandom Nest Placement Imply Nonrandom Nest Predation?—A Reply ROBERT J. COOPER, R. RANDY WILSON, GARY D. ZENITSKY,	916
STEPHEN J. MULLÍN, JENNIFER A. DEĆECCO, MATTHEW R. MARSHALL, DOROTHY J. WOLF AND LARS Y. POMARA	920
BOOK REVIEWS	
Sperm Competition and Sexual Selection, edited by T. R. Birkhead and A. P. Møller DAVID F. WESTNEAT	924
Population Limitation in Birds, by Ian Newton BRIAN A. MAURER	926
A Guide to the Birds of India, Pakistan, Nepal, Bangladesh, Bhutan, Sri Lanka, and the Maldives, by Richard Grimmett, Carol Inskipp, and Tim Inskipp RAGUPATHY KANNAN AND D. P. WIJESINGHE	927
The Birds of St. Helena, by Beau W. Rowlands, Trevor Trueman, Storrs L. Olson, M. Neil McCulloch, and Richard K. Brooke DAVID W. STEADMAN	928
NEWS AND NOTES	928
AWARD ANNOUNCEMENTS	934
REVIEWERS FOR VOLUME 101	935
INDEX TO VOLUME 101	937

**Cover:** A juvenile Eurasian Hobby (*Falco subbuteo*) of a local population studied along the Po River of northern Italy. The population appears to have adapted fairly well to an intensively managed agroforestry system (see article by Sergio and Bogliani, p. 806). Photograph by Fabrizio Sergio.

Editor: WALTER D. KOENIG

Managing Editor: DAVID J. GUBERNICK

Editorial Assistant: RICKEY WOLFE

Book Review Editor: KIMBERLY G. SMITH

Associate Book Review Editors: LAURA NAGY, MIKE POWERS,

WAYNE THOGMARTIN, JEANETTE BIDER, AND

DON CATANZARO

SI

## CONTENTS

The Effect of Aggregated Nesting on Red-winged Blackbird Nest Success and	
Brood Parasitism by Brown-headed Cowbirds ETHAN D. CLOTFELTER AND KEN YASUKAWA	720
Costs of Coloniality and the Effect of Colony Size on Reproductive Success in	129
Purple Martins	
JEFFREY A. DAVIS AND CHARLES R. BROWN	737
Replacement Clutches by Kentish Plovers	
JUAN A. AMAT, ROSENDO M. FRAGA AND GONZALO M. ARROYO	746
Variation in the Onset of Incubation in a Neotropical Parrot	
J. LETITIA GRENIER AND STEVEN R. BEISSINGER	752
Winter Ecology of the Endangered Golden-cheeked Warbler	
JOHN H. RAPPOLE, DAVID I. KING AND WYLIE C. BARROW JR	762
Habitat Associations of Migrating and Overwintering Grassland Birds in Southern	
Texas	
LAWRENCE D. IGL AND BART M. BALLARD	771
Interaction Between Magellanic Penquins and Shrimp Fisheries in Patagonia,	
Argentina PATRICIA A. GANDINI, ESTABAN FRERE, ALEJANDRO D.	
PETTO-VELLO AND PAULA V. CEDROLA	783
Spatial and Temporal Patterns in the Diet of the Kelp Gull in Patagonia	
MARCELO BERTELLOTTI AND PABLO YORIO	790
Stable-Carbon and Nitrogen Isotope Ratios of Songbird Feathers Grown in Two	
Terrestrial Biomes: Implications for Evaluating Trophic Relationships	
and Breeding Origins	-
KEITH A. HOBSON	799
Eurasian Hobby Density, Nest Area Occupancy, Diet, and Productivity in Relation	
to Intensive Agriculture	806
FABRIZIO SERGIO AND GIUSEPPE BOGLIANI	000
Factors Affecting Prey Preparation by Adult Magpies Feeding Nestlings ADRIÁN PONZ, JOSÉ A. GIL-DELGADO AND EMILIO BARBA	818
Using Radio-Transmitters to Improve Estimates of Gull Predation on Common	010
Eider Ducklings	
K. MAWHINNEY AND A. W. DIAMOND	824
The Development of Endothermy in American White Pelicans	
CHRISTINE L. ABRAHAM AND ROGER M. EVANS	832
ORT COMMUNICATIONS	
Tan and White Color Morphs of White-throated Sparrows Differ in Their Non-	
song Vocal Responses to Territorial Intrusion	
CHRISTINE E. COLLINS AND ANNE M. HOUTMAN	842
Microgeographic Song Discrimination in a Nonterritorial Passerine, the Boat-	
tailed Grackle	
DAVID S. MELMAN AND WILLIAM A. SEARCY	845
Sperm Competition and Sperm Length in Shorebirds	040
DOMINIC D. P. JOHNSON AND JAMES V. BRISKIE	848
Genetic Monogamy in Long-eared Owls JEFFREY S. MARKS, JANIS L. DICKINSON AND JOSEPH HAYDOCK	954
Brown Thrasher Nest Reuse: A Time Saving Resource, Protection from Search-	054
Strategy Predators, or Cues for Nest-Site Selection?	
JOHN F. CAVITT, AARON T. PEARSE AND TODD A. MILLER	859
The Thermal and Energetic Significance of Cavity Roosting in Mountain Chicka-	
dees and Juniper Titmice	
SHELDON J. COOPER	863
Ruddy Duck Nesting Success: Do Nest Characteristics Deter Nest Predation?	
ROBERT B. BRUA	867
Predation on Rhinoceros Auklet Eggs by a Native Population of Peromyscus	Section 1
LOUISE K. BLIGHT, JOHN L. RYDER AND DOUGLAS F. BERTRAM	871

(Continued on inside back cover)