IBIS

Journal of the British Ornithologists' Union Edited by **Dr Peter Jones** Department of Forestry and Natural Resources, University of Edinburgh, King's Buildings, Edinburgh EH9 3JU, UK

One of the most prestigious bird journals in the world, *Ibis* has been in existence since 1859. It publishes papers from both professionals and amateurs on all aspects of ornithology ranging from geographical distribution to bird behaviour, covering topics such as kin selection, altruism and breeding systems. Reviews of the ornithological literature have always been an important feature of the journal. Although it is published for the British Omithologists' Union it is by no means exclusively British, and less than half the papers deal with British birds.

Subscription Information

Ibis is published quarterly. Subscription rates for 1990 are £80.00 (UK), £96.00 (overseas) and US\$159.50 (USA & Canada) post free.

Order Form	
Please tick the	appropriate box and return to:
Blackwell Scie	entific Publications Ltd, P.O. Box 88, Oxford, England.
🗌 I would like	e to subscribe to <i>Ibis</i>
🗌 I wish to pa	y by cheque and enclose the sum of £US\$
🗌 I wish to pa	y by Access/American Express/Barclaycard/Diners Card/
VISA/Mast	ercard (delete as neccessary)
Please debit m	y credit card no.
Expiry date	with the sum of £ US\$
Signature	Date
Please send	me a specimen copy of <i>Ibis</i>
Name	
Address	

AMERICAN ORNITHOLOGISTS' UNION MEMBERSHIP INVITATION

The American Ornithologists' Union is the oldest and largest organization in the New World devoted to the scientific study of birds. Although the A.O.U. is primarily a professional organization, its 4,000 members include many amateurs dedicated to the advancement of ornithology.



The Auk, a quarterly journal published for more than 100 years, reports original scientific research. Supplements provide summaries of worldwide ornithological literature.

The bimonthly Ornithological Newsletter reports information about organizational activities, job opportunities, research granting agencies, requests for assistance with special projects, etc.

Additional Publications

Ornithological Monographs Ten-year Indexes to The Auk Back Issues for The Auk and Ornithological Monographs Anatomical and Egg Inventory Series Research and Membership Directories Check-Lists (and updates) for North American Birds

Activities Supported by Membership

Annual Meetings, which include reports of scientific research, plenary lectures, films, workshops, exhibits, field trips, and social events Ornithological Research Graduate Student Travel to Annual Meetings Annual Awards for Excellence in Research Committee Projects on Conservation Issues

Membership Application

Regular Member, @ \$35.00 Life Member, @ \$1,050.00 Life Installments, @ 4 annual payments of \$262.00 Student Member, @ \$18.00

_____ NAME_____ _____ ADDRESS ______ \$ _____ CITY ____STATE(PROVINCE) _ \$ _____ ZIP CODE ____COUNTRY _____ TELEPHONE ____HOME ____WO WORK

Make check or money order (in U.S. dollars) payable to OSNA. All memberships are for a calendar year. Payments received after Sept 1 will begin membership the following year.

Write to OSNA for further information about library or institution subscriptions.

PHOTOCOPY THIS FORM AND SEND WITH DUES TO: Ornithological Societies of North America (OSNA) P.O. Box 21618 Columbus, Ohio 43221-0618 USA

T & AD Poyser Titles Now Published by Academic Press



Including These New 1990 Titles...

The Kestrel Andrew Village illustrated by Keith Brockie

This is a valuable monograph on one of the most common European birds of prey, about which surprisingly little is generally known.

June 1990, c. 352 pages \$32.50 (tentative)/Order Code: 784654

The Manx Shearwater Michael Brooke

For the better part of 17 years Michael Brooke has studied Manx Shearwaters and now presents his first-hand investigations and research in great detail. June 1990, 264 pages, \$32.50 Order Code: 784657

Man and Wildfowl

Janet Kear lacket illustrations by Joe Blossom

Dr. Kear covers a wide range of topics, from a history of domestication, to wildfowling, decoys, conservation and captive breeding, conflicts with agriculture, and wildlowl in legend and literature. August 1990, c. 268 pages \$35.00/Order Code: 784655

Birds by Night Graham Martin

The study of nocturnality in birds encompasses field ornithology, sensory science, ecology, and physics, and involves comparisons of the sensory capacities of other animal species, including man, to respond to the night world. The author weaves together the relevance of these various discipline in this valuable resource. November 1990, c. 286 pages \$35.00/Order Code: 784659

Call for a FREE Brochure 1-619-699-6400



Quote this reference number for free postage and handling on your prepaid order - 22080 Prices subject to sharpy without rotice IC1990 by Academic Press, Inc. All Rights Reserved IKS/NJD - 22080.

(Continued from outside back cover)

Water-Vapor Pressure in Nests of the San Miguel Island Song Sparrow MICHAEL D. KERN, MARK K. SOGGE, and CHARLES VAN RIPER III	761
	/01
SHORT COMMUNICATIONS	
Concentrations of Seabirds at Oil-Drilling Rigs PAT HERRON BAIRD	768
Egg Size and Laying Order of Snowy Egrets, Great Egrets, and Black-crowned Night-Herons THOMAS W. CUSTER and PETER C. FREDERICK	772
Infanticide in the Eurasian Dipper SONJA I. YOERG	775
Estimated Size of Black-capped Vireo Population in Northern Coahuila, Mexico ROBERT H. BENSON and KAREN L. P. BENSON	777
An Observation of Social Play in Bearded Vultures DANIEL T. BLUMSTEIN	779
A Foraging Association Between Two Kite Species (Ictinea plumbea and Leptodon cayanenis) and Buffy-headed Marmosets (Callithrix flaviceps) in Southeastern Brazil STEPHEN F. FERRARI	781
Survival of Breeders in Santa Cruz Island and Mainland California Scrub Jay Populations JONATHAN L. ATWOOD, MARY JO ELPERS, and CHARLES T. COLLINS	783
Red-bellied Woodpecker Predation on Nestling House Wrens ANDREW J. NEILL and R. GIVEN HARPER	789
Eggshell Conductance and Other Physical Characteristics of Avian Eggs Laid in the Peruvian Andes CYNTHIA CAREY, FABIOLA LEON-VELARDE, and CARLOS MONGE	790
Annual Changes in Gizzard Size and Function in a Frugivorous Bird GLENN E. WALSBERG and CHRISTOPHER W. THOMPSON	794
Communal Roosting in a Very Small Bird: Consequences for the Thermal and Respiratory Gas Environments	
GLENN E. WALSBERG	795
Carotenoids Produce Flush in the Elegant Tern Plumage JOCELYN HUDON and ALAN H. BRUSH	798
COMMENTARY	
Dispersal Terminology: Changing Definitions in Midflight? IAN G. WARKENTIN and PAUL C. JAMES	802
Natal Dispersal: Greenwood (1980) Revisited JAMES R. BELTHOFF and GARY RITCHISON	803
BOOK REVIEWS	805
NEWS AND NOTES	809

Editor: MARTIN L. MORTON

Assistant Editor:

GILLIAN S. STEPHENS

Book Review Editor: MARCY F. LAWTON

INFORMATION FOR CONTRIBUTORS. Instructions on the preparation and submission of articles and other materials for this journal are given in *The Condor* 92:275–276 (February 1990). Contributors are urged to follow these instructions and the niceties of the journal's style. Doing so will hasten publication, save money and effort, and gratify the editorial staff.

THIS PUBLICATION IS PRINTED ON ACID-FREE PAPER.

(Continued from front cover)	
Changes in Body Composition of American Black Ducks Wintering at Chin- coteague, Virginia	
JOHN M. MORTON, ROY L. KIRKPATRICK, and MICHAEL R. VAUGHAN	598
Hummingbird Sweetness Preferences: Taste or Viscosity? MARK R. STROMBERG and PETER B. JOHNSEN	606
Endocrine Response of Captive Male Brown-Headed Cowbirds to Intra- sexual Social Cues ALFRED M. DUFTY, JR. and JOHN C. WINGFIELD	613
Economics of Caching Versus Immediate Consumption by White-breasted Nuthatches: The Effect of Handling Time MARK S. WOODREY	
Heritability of Muscle Size in Eastern Kingbirds MARY C. McKITRICK	625
The Musculi Flexor Perforatus Digiti II and Flexor Digitorum Longus in Paridae	
EULALIA MORENO	634
BRADLEY C. LIVEZEY	639
Effects of Predation and Competitor Interference on Nesting Success of House Wrens and Tree Swallows DEBORAH M. FINCH	674
Nest-Site Habitat Selected by Merlins in Southeastern Montana CAROLYN HULL SIEG and DALE M. BECKER	688
Differential Predation on Eggs in Clutches of Northwestern Crows: The Importance of Egg Color NICOLAAS A. M. VERBEEK	695
Genetic Evidence of Mixed Reproductive Strategy in a Monogamous Bird STEPHANIE C. PETTER, DONALD B. MILES, and MATTHEW M. WHITE	702
The Importance of Subarctic Intertidal Habitats to Shorebirds: A Study of the Central Yukon-Kuskokwim Delta, Alaska ROBERT E. GILL, JR. and COLLEEN M. HANDEL	709
Influence of Parental Experience on the Growth of Wandering Albatross Chicks	
BENOÎT LEQUETTE and HENRI WEIMERSKIRCH	726
Growth Patterns of Two Races of California Gull Raised in a Common Environment JOSEPH R. JEHL, JR., JON FRANCINE, and SUZANNE I. BOND	732
Summer Habitat Ecology of Northern Spotted Owls in Northwestern Cali- fornia	
DAVID M. SOLIS, JR. and R. J. GUTIÉRREZ	739
Taxonomic Status of the Rufous-bellied Chachalaca (Ortalis wagleri) RICHARD C. BANKS	749
An Intergeneric Hybrid Hummingbird (<i>Heliodoxa leadbeateri</i> × <i>Helian- gelus amethysticollis</i>) from Northern Colombia GARY R. GRAVES and RICHARD L. ZUSI	754

(Continued on inside back cover)