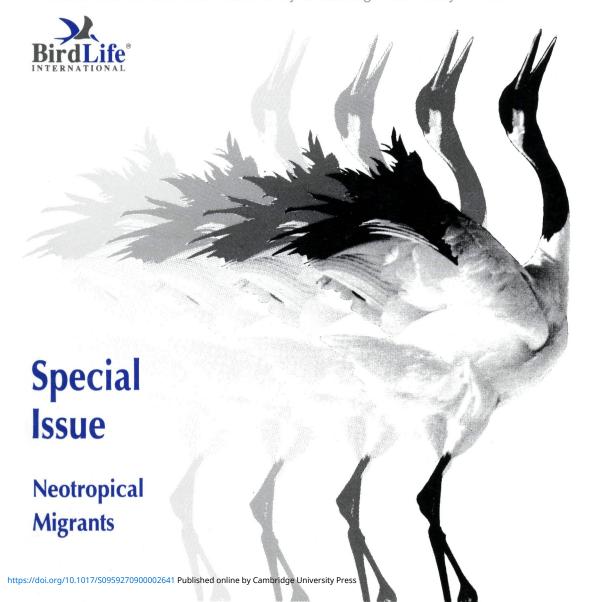
Birc Volume 4 Numbers 2/3 June/September 1994

Conservation International

Published for BirdLife International by Cambridge University Press



Bird Conservation International

Editor:

N. I. Collar

BirdLife International, Wellbrook Court, Girton Road, Cambridge CB3 0NA

Editorial Board:

A. B. van den Berg, The Netherlands A. C. Kemp, South Africa E. H. Bucher, Argentina M. Louette, Belgium R. B. Cavalcanti, Brazil P. J. Moors, Australia J. P. Croxall, UK A. R. Rahmani, India A. W. Diamond, Canada M. A. Ramos, Mexico M. S. Foster, USA M. R. W. Rands, UK L. A. P. Gonzaga, Brazil R. D. Ranft, UK J. Haffer, Germany R. S. Ridgely, USA D. A. Holmes, Indonesia T. S. Schulenberg, USA S. A. Hussain, India J.-C. Thibault, France P. J. Jones, UK D. R. Wells, Malaysia

© INTERNATIONAL COUNCIL FOR BIRD PRESERVATION 1994

Subscriptions: Bird Conservation International (ISSN: 0959-2709) is published quarterly in March, June, September and December. The subscription price (excluding VAT) of Volume 4, 1994, is £64 (USA, Canada and Mexico US \$109) for institutions; £32 (USA, Canada and Mexico US \$57) for individuals, post free. Single parts cost £18 (USA, Canada and Mexico US \$29) plus postage. EU subscribers (outside the UK) who are not registered for VAT should add VAT at their country's rate. VAT registered subscribers should provide their VAT registration number. Four parts form a volume. Orders, which must be accompanied by payment, may be sent to any bookseller, subscription agent or to the publisher: Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, or in the USA, Canada and Mexico to Cambridge University Press, The Journals Department, 40 West 20th Street, New York, NY 10011–4211, USA. Copies of the journal for subscribers in the USA, Canada and Mexico are sent by air to New York to arrive with minimum delay. Japanese prices for institutions (including ASP delivery) are available from Kinokuniya Company Ltd, P.O. Box 55, Chitose, Tokyo. Second class postage is paid at New York, NY, and at additional mailing offices.

POSTMASTER: send address changes in USA and Canada to *Bird Conservation International*, Cambridge University Press, 110 Midland Avenue, Port Chester, New York, NY 10573–4930. Claims for missing issues should be made immediately on receipt of the subsequent issue.

Copying: This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. Organizations in the USA who are also registered with the C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to C.C.C. of the per-copy fee of \$5.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0959-2709/94 \$5.00 + .00.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

ISI Tear Sheet Service, 3501 Market Street, Philadelphia, Pennsylvania 19104, USA, is authorized to supply single copies of separate articles for private use only.

For all other use, permission should be sought from Cambridge or the American branch of Cambridge University Press.

ISBN 0 521 47876 6

Growing Points in Neotropical Migratory Bird Conservation

Editors: Eugene S. Morton, Kimberley Young and Mario A. Ramos

CONTENTS

| Journal editor's note | iii |
|---|-----|
| Growing points in Neotropical migratory bird conservation EUGENE S. MORTON, KIMBERLEY YOUNG AND MARIO A. RAMOS | 69 |
| A study of fall migration of Nearctic-breeding landbirds in central Costa Rica F. GARY STILES | 71 |
| Migration in South America: an overview of the austral system R. TERRY CHESSER | 91 |
| Variabilidad de recursos, habitat y movimientos estacionales en aves neotropicales: implicaciones para la evolución de la migración a larga distancia D. J. LEVEY AND F. GARY STILES | 109 |
| Aggressive competition for critical resources among migratory birds in the Neotropics RUSSELL GREENBERG, JAVIER SALGADO ORTIZ AND CLAUDIA MACIAS CABALLERO | 115 |
| Local migrations of insectivorous birds in western Mexico: implications for the protection and conservation of their habitats JORGE NOCEDAL | 129 |
| The annual cycle of the White-ruffed Manakin Corapipo leucorrhoa, a tropical frugivorous altitudinal migrant, and its food plants LORETA ROSSELLI | 143 |
| Implications of altitudinal migration for conservation strategies to protect tropical biodiversity: a case study of the Resplendent Quetzal <i>Pharomacrus mocinno</i> at Monteverde, Costa Rica GEORGE V. N. POWELL AND ROBIN D. BJORK | 161 |
| Local movements and translocation experiments of resident and migratory birds in southern Veracruz, Mexico MARIO A. RAMOS AND JOHN H. RAPPOLE | 175 |
| Migration and other movements among the lower Paraná river valley wetlands, Argentina, and the south Brazil/Pantanal wetlands PAULO DE TARSO ZUQUIM ANTAS | 181 |
| Future prospects for Nearctic migrants wintering in Caribbean forests JOSEPH M. WUNDERLE, JR AND ROBERT B. WAIDE | 191 |

| Contents | ii |
|--|-----|
| Nearctic avian migrants in coffee plantations and forest fragments of south-western Guatemala JAY P. VANNINI | 209 |
| Forest fragmentation in the temperate zone and its effects on migrat- ory songbirds SCOTT K. ROBINSON AND DAVID S. WILCOVE | 233 |
| Factors affecting migratory bird routes over the Gulf of Mexico | 251 |