

Oryx

The International Journal of Conservation

www.oryxthejournal.org

Published for **Fauna & Flora International**

July 2009 · Volume 43 · Number 3

Critically Endangered northern bald ibis
Satellite tracking reveals migration route

Conservation success
Predicted by outcomes, not implementation

Ecotourism and conservation behaviours
A case study in Trinidad

Conservation volunteering
What does it contribute?

Governing bird-keeping
Evidence from a household survey

Hunting in Amazonia and Madagascar
Sustainability and livelihoods

Burning to fish in Madagascar
Local explanations for wetland burning

Endangered markhor in India
Through war and insurgency

Orang-utan nest surveys
The devil is in the details

Oryx

The International Journal of Conservation

ISSN 0030-6053 Fauna & Flora International
Patron Her Majesty The Queen
A company limited by guarantee registered in England 2677068
Registered Charity 1011102
A registered 501(c)(3) non-profit organization EIN #04-2730954 in
the United States of America

FFI, 4th Floor, Jupiter House, Station Road, Cambridge, CB1 2JD, UK.
Tel: +44 1223 571000; Fax: +44 1223 461481;
E-mail: info@fauna-flora.org <http://www.fauna-flora.org>

FFI, Inc., 1720 N Street, NW, Washington, DC 20036, USA
Tel: +1 202 375 7766; E-mail katie.frohhardt@fauna-flora.org

Editor

Dr Martin Fisher, *FFI, UK*

Editorial Assistant

Elizabeth Allen, *FFI, UK*

Senior Editors

Professor Bill Adams *University of
Cambridge, UK*
Professor Andrew Balmford *University of
Cambridge, UK*
Dr Porter P. Lowry II *Missouri Botanical
Garden, USA and France*
Dr Jeffrey A. McNeely *IUCN — The
World Conservation Union, Switzerland*
Dr Mike Maunder *Fairchild Tropical
Garden, USA*
Professor E. J. Milner-Gulland *Imperial
College London, UK*
Dr John G. Robinson *Wildlife
Conservation Society, USA*
Professor William Sutherland *University
of Cambridge, UK*

International Board of Editors

Dr Elizabeth L. Bennett *USA*
Dr Robert K. Bonde *USA*
Dr Katrina Brown *UK*
Dr Neil Burgess *UK*
Dr Thomas Butynski *Kenya*
Dr Robert H. Cowie *Hawaii*
Professor Richard M. Cowling *South Africa*
Dr Jenny Daltry *UK*
Professor Jon Fjeldså *Denmark*
Professor Ulf Gärdenfors *Sweden*
Dr Brendan J. Godley *UK*
Dr Rhys Green *UK*

Professor Colin Groves *Australia*
Dr K. Ullas Karanth *India*
Dr Sandra Knapp *UK*
Dr Kathy MacKinnon *USA*
Dr David Mallon *UK*
Dr Rodrigo A. Medellín *Mexico*
Professor John F. Oates *USA*
Sara Oldfield *UK*
Professor Hugh Possingham *Australia*
Dr Jon Paul Rodriguez *Venezuela*
Dr Kent H. Redford *USA*
Dr Anthony B. Rylands *USA*
Dr Philip Seddon *New Zealand*
Dr Paul Smith *UK*
Dr Matt Walpole *UK*

Fauna & Flora International President

Lindsay Bury

Vice Presidents

Sir David Attenborough, CH, CVO,
CBE, FRS
Professor David Bellamy, OBE
The Lord Browne of Madingley, FR Eng
Field Marshal Sir John Chapple GCB,
CBE, DL
Dr Lee Durrell
Edward Hoare
Professor Frederick Kayanja
Professor Jonathan Kingdon
HRH Princess Laurentien of the
Netherlands
Rove McManus
Dr Lisbet Rausing
Jon L. Stryker

Dr Charlotte Uhlenbroek
The Rt Hon Baroness Young of Old Scone

Council

Chairman Andrew Sykes
Vice Chairman Professor Paul Racey
Honorary Treasurer Philip Prettejohn
Chief Executive Officer Mark Rose

Professor Bill Adams
Virginia Drabbe-Seemann
Melanie Gee
Dr Sandra Knapp
Professor Nigel Leader-Williams
Philip Merricks, MBE, DL
Professor Callum Roberts
Diana van de Kamp
Charles Whitbread
John Wotton

US Board of Directors

Chair Melissa Shackleton Dann
Vice Chair Clea Newman Soderlund
Treasurer C. Jonathan Fischer
Secretary Victoria Stack

Virginia M. Busch
Marc J. Ebbin
Dorette Louise Fleischmann
Tom Foster
Blaine T. Phillips
Mark Rose
Beth Ann Ruoff
Charles C. Savitt
Anita Winsor-Edwards

Subscriptions *Oryx* (ISSN 0030-6053) is published four times a year (one volume per annum) in January, April, July, and October. The 2009 subscription price (excluding VAT) of a volume, which includes print and electronic access, is £380.00 (US \$690.00 in USA, Canada and Mexico). The electronic-only price available to institutional subscribers is £335.00 (US \$610.00 in USA, Canada and Mexico).

Orders, which must be accompanied by payment, may be sent to any bookseller, subscription agent or direct to the publisher: Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU, UK; or in the USA, Canada and Mexico: Journals Fulfillment Department, Cambridge University Press, 100 Brook Hill Drive, West Nyack, New York 10994-2133, USA. EU subscribers (outside the UK) who are not registered for VAT should add VAT at their country's rate. VAT registered members should provide their VAT registration number. Japanese prices for institutions (including ASP delivery) are available from Kinokuniya Company Ltd, P.O. Box 55, Chitose, Tokyo 156, Japan. Prices include delivery by air. Periodicals postage paid at New York, NY, and at additional mailing offices. *Postmaster*: send address changes in USA, Canada and Mexico to: *Oryx*, Cambridge University Press, 100 Brook Hill Drive, West Nyack, New York 10994-2133, USA. Claims for missing issues should be made immediately on receipt of the subsequent issues.

FFI Members Subscription Members of Fauna & Flora International receive the journal as part of their subscription to the society (Standard membership rate: £75; Concessionary membership rate: £40). A membership application form is printed at the back of this issue. Enquiries about back issues for members should be addressed to the Membership Secretary (members@fauna-flora.org) at FFI.

Back volumes Copies of the current volume and Volume 33 (1998) onwards can be obtained from Cambridge University Press at the above address. Requests for previous volumes should be directed to the Membership Secretary at FFI.

Copyright and Permissions This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Organizations in the USA who are also registered with C.C.C. may therefore photocopy material (beyond the limits permitted by Section 107 and 108 of U.S. Copyright law) subject to payment to C.C.C. of the per-copy fee of \$16.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0030-6053/2009 \$16.00. *ISI Tear Sheet Service*, 3501 Market Street, Philadelphia, PA 19104, USA, is authorized to supply single photocopies of separate articles for private use only. Organizations authorized by the UK Copyright Licensing Agency may also copy material subject to the usual conditions. For all other use, permission should be sought from Cambridge University Press.

No part of this publication may otherwise be reproduced, stored or distributed by any means without permission in writing from Cambridge University Press, acting for the copyright holder.

Internet Access This journal is included in the *Cambridge Journals Online* service which can be found at: <http://journals.cambridge.org> For further information on other Press titles access <http://uk.cambridge.org> or <http://us.cambridge.org>

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-government, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.