APPLICATION FOR FFI MEMBERSHIP Please complete in block letters				
Name Title				
Address	****			
Membership categories (tick appropriate box) Standard £27 $\square$ Concessionary (senior citizen, unwaged, student*) £15 $\square$ Sponsor £50 $\square$ Supporter (no $Oryx$ ) £12 $\square$ Life £1000 $\square$ Airmail despatch (see inside cover for standard despatch details) £8.00 $\square$ If student please give date you expect to finish studies				
METHODS OF PAYMENT				
. CHEQUE/ POSTAL OR MONEY ORDER/ GIRO CREDIT (Currency: £ sterling only)				
enclose £				
2. CREDIT CARD (American Express, Visa, Delta, Switch, Mastercard, Access, Eurocard)				
Name of card holder				
Card No. Expiry date				
B. BANKER'S ORDER Please send to the FFI, not to your bank.				
Name Account No. Bank Sort Code				
Name and address of bank or building society  Please pay Fauna & Flora International, Account No. 10012167, Royal Bank of Scotland (16–15–19), 82–88 Hills Road, Cambridge CB2 1LG  my subscription of $\pounds$ due on and the same amount on the same day each year until further notice.  Signature				
This cancels any previous order in favour of FFI (formerly FFPS).				
<b>DEED OF COVENANT</b> If you pay income tax in the UK you can greatly increase the value of your subscription to the FFI, at no additional cost to yourself, by signing this Deed of Covenant.				
(full name) of				
hereby covenant with the Fauna and Flora Preservation Society, whose office is Great Eastern House Tenison Road, Cambridge CB1 2DT, that for a period of four years from the date hereof, or until my leath (whichever shall be the shorter period) I will pay annually to the said Society from the lay of this date should be later than the date of the signature) in every year such a sure, after deduction of income tax at the standard rate for the time being in force, amounts of $\mathcal{E}$ (please insert the actual amount of your subscription), such a sum to be paid from the general fund of taxed income.	y m			
ignature In the presence of Occupation (signature of witness, who should not be your spouse)				
Address				
The first payment must be received within 1 year from this date.  3/95	5			

Biodiversity

Letters

A young but alert journal

### **CALL FOR PAPERS**

The diversity of life on earth - biodiversity - is under threat. Life has existed and evolved on the earth for over 3 million years and now, because of the rapidly growing need of many and the recklessness of a few, we are endangering it at a fundamental level. We all know that we have to arrest these changes, but how?

Policy makers, conservationists and scientists alike are struggling to find ways to stop, or at least slow down, this destruction of life. Each group has developed its own ideas and is pursuing its own agenda - and the absence of a unified approach is threatening to undermine their efforts.

Biodiversity Letters seeks to identify and develop a unifying theory that will underpin future conservation strategies. The

Journal aims to publish papers that seek effective answers to fundamental questions - making scientists aware of the versatility of scientific means of dealing with practical problems on a large, even global, scale. It does not focus on ecological processes or criteria alone, but takes into account genetic, taxonomic, evolutionary and agricultural aspects. It examines the relevance of each approach and asks how a particular aspect of biodiversity is to be measured.

Biodiversity Letters now invites papers that indicate how the present crisis of biodiversity can be alleviated through scientifically based measurements. Only sound theory can give rise to sound practice.

*Biodiversity Letters* is still a fledgling journal, but could become an important influence by providing practical conservation tools for tackling the global problem of biodiversity loss.

Manuscripts should be submitted to the Editor:

Rob Hengeveld, Institute for Forest and Nature Research (IBN-DLO) PO Box 23, NL-6700 AA Wageningen, The Netherlands Tel: +31 26 3546884 Fax: +31 26 422175

Contact the Editor or Publisher for full instructions for authors, or find them at the Journal's WWW site:

### http://www.blacksci.co.uk/products/journals/biod.htm

For a free sample copy and subscription information contact: Anna Rivers, Blackwell Science, Osney Mead, Oxford OX2 0EL, UK. Tel: +44 1865 206206; Fax: +44 1865 206096

### b

# AFRICAN JOURNAL OF ECOLOGY

Blackwell Science

Osney Mead, Oxford OX2 0EL, UK

Telephone (0865) 206206

Fax (0865) 206096 Published for the East African Wildlife Society

Editor: F I B Kayanja, Makerere University, Kampala

Associate Editor: K Eltringham, University of Cambridge, UK

African Journal of Ecology (formerly East African Wildlife Journal) publishes original scientific research into the ecology of the animals and plants of Africa. It has a wide circulation both within and outside Africa and is the foremost research journal on the ecology of the continent. In addition to original articles, the Journal publishes comprehensive reviews on topical subjects and brief communications of preliminary results.

### **Subscription Information**

African Journal of Ecology is published quarterly. Subscription rates for 1996 are £179.50 (Europe), £198.00 (overseas), US\$319.00 (USA & Canada), post free.

African Journal of Ecology is available on CD-ROM through EcoFile.

Order Form					
Please return to Karen Edge at the address opposite:					
I would like to subscribe to African Journal of Ecology					
☐ I wish to pay by cheque and enclose the sum of £	_US\$				
I wish to pay by Access/American Express/Barclaycard/Din necessary). Please debit my credit card number:	ers Card/VISA/Mastercard (delete as				
	Expiry date				
with the sum of £US\$Signature	Date				
VAT-registered. Subscribers in the following countries who VAT to the subscription price at the appropriate rate: Belgis TVA); Germany (7% MwSt); Spain (4% IVA); The Netherl All subscribers in Canada must add 7% to allow for GST.	um (6% TVA/BTW); France (2.1%				
VAT registration number	I am not registered for VAT				
Please send me a specimen copy of African Journal of Ecology					
Please send me more information about EcoFile					
Name					
Address					
worldwide web: http://www.blacksci.co.uk					

### b

### Blackwell Science

Osney Mead. Oxford OX2 0EL. UK

Telephone (01865) 206206

Fax (01865) 206096

## JOURNAL OF ANIMAL ECOLOGY

A Journal of the British Ecological Society

Editors: Bryan Shorrocks, University of Leeds & Steve Albon, Zoological Society of London

The Journal of Animal Ecology first appeared in 1932. It publishes the best in original research on any aspect of animal ecology. Recently it has published papers on population ecology, behavioural ecology, community ecology, physiological ecology and evolutionary ecology. Field, laboratory and theoretical studies based upon terrestrial, freshwater or marine systems are all published. The editors are keen to promote all these traditional areas and in addition would like to see an increasing number of papers in the field of molecular ecology.

The journal presently uses a data-base of 280 international referees to review manuscripts and has an average time to first decision of 6 weeks, and an average of 8 months between revision and publication.

### **Subscription Information**

Journal of Animal Ecology is published bimonthly. Subscription prices for 1996 are £215.00 (Europe), £236.00 (Overseas) and US\$380.00 (North America). Members of the British Ecological Society can receive the journal at a greatly reduced rate, and should contact the Society for details.

Journal of Animal Ecology is available on CD-ROM through EcoFile.

	Order Form			
Pleas	se tick the appropriate box and return to Karen Edge at the addres I would like to subscribe to Journal of Animal Ecology I wish to pay by cheque and enclose the sum of £ US\$_ I wish to pay by Access/American Express/Barclaycard/Diners C necessary). Please debit my credit card number:			
		Expiry date		
with t	the sum of £ US\$ Signature	Date		
ado (2.1 All	T-registered. Subscribers in the following countries who and VAT to the subscription price at the appropriate rate: Belgiu I% TVA); Germany (7% MwSt); Spain (4% IVA); The Nether subscribers in Canada must add 7% to allow for GST.	ım (6% TVA/BTW); France lands (6% BTW).		
VAT	registration numberI	am not registered for VAT		
Please send me a specimen copy of Journal of Animal Ecology				
	Please send me more information about EcoFile			
Name	e			
Addr				
worldwide web: http://www.blacksci.co.uk				

### **ORYX: NOTES FOR CONTRIBUTORS**

General *Oryx* publishes original articles and reports dealing with the conservation of species and habitats world-wide, with particular emphasis on those that are endangered. All submissions are reviewed by at least two referees. It is helpful if authors suggest at least one referee who is qualified to judge the work objectively.

Submissions should be sent to the Editor, FFI, Great Eastern House, Tenison Road, Cambridge CB1 2DT, UK.

After acceptance papers may be edited to enhance clarity. Where major changes have been made edited manuscripts are returned to authors before type-setting. Page proofs are sent to all authors for approval before going to press. Contributors receive two free copies of the journal and will be entitled to buy additional copies at £2.00 each, post free. Offprints may be ordered at cost price.

Contributions should be concise but informative, normally in English. Articles should be as short as possible, preferably under 3000 words, and very short articles are acceptable.

Manuscripts should be typed on one side only and double-spaced on A4 paper (208×298 mm). The left-hand margin must be at least 40 mm wide. Two copies should be submitted and authors are also invited to submit papers on disk (IBM compatible or Apple format).

Footnotes should be avoided but, if necessary, should be indicated with asterisks in the text. The author's name and postal address should follow any acknowledgements and references at the end of the article.

**References** in the text should give the author's name with the year of publication in parentheses. The reference list should be in alphabetical

order and include the full article title.

References should be given according to the abbreviations in the *World List of Scientific Periodicals*. Thus:

Aveling, C. and Harcourt, A.H. 1984. A census of the Virunga gorillas. *Oryx*, **18**, 8–13.

Hartshorn, M.G. 1983. Wildlife conservation in Central America. In *Tropical Rain Forest:* Ecology and Management (eds S. L. Sutton, T. C. Whitmore and A. C. Chadwick), pp. 421–423. Blackwell Scientific Publications, Oxford.

Illustrations are welcomed and ideally should be glossy, black-and-white whole-plate prints. Good colour slides are acceptable if black-andwhite photographs are not available.

Line drawings and maps should be in black ink on strong white or translucent paper. Lettering on maps and figures should be sent on a separate copy of the figure along with the unlabelled original.

Captions for figures should be typed consecutively on a separate sheet.

**Tables.** Each table should be self-explanatory and typed on a separate sheet with an appropriate caption.

**Scientific names** should be underlined and not placed in parentheses. Species' names should follow a checklist, which should be mentioned in a covering letter where there is a risk of confusion.

The first time a species is mentioned its scientific name should be given. English names should be in lower case throughout except where they incorporate a proper name.



Volume 30 Number 4 October 1996



### **Contents**

Cover

Giraffe Giraffa camelopardalis Natal, South Africa Trevor Barrett/Bruce Coleman Ltd 225 Editorial

• A conservation success • In this issue

226 Savannah Perspective

• Conservation science - a creative tension

228 News and Views

• Realistic 'game laws' • Realistic 'game laws' – a reply • Commercial whaling sanctioned • Recovery programme for hog • Conservation of Indian Ocean invertebrates • Mervyn Cowie: 1909–1996

236 Briefly

**251** The Mednyi Arctic foxes: treating a population imperilled by disease

M. Goltsman, E. P. Kruchenkova and D. W. Macdonald

**259** A high mountain population of the ring-tailed lemur *Lemur catta* on the Andringitra Massif, Madagascar *Steven M. Goodman and Olivier Langrand* 

**269** Status of Tibet red deer George B. Schaller, Wulin Liu and Xiaoming Wang

**275** Threats to Brazilian crocodilian populations *P. Brazaitis, George H. Rebêlo, Carlos Yamashita, Elizabeth O. Odierna and Myrna E. Watanabe* 

285 Conservation status of primates in Trinidad, West Indies

M. J. Hsu and G. Agoramoorthy

292 Acknowledgements

293 Index

CODEN ORYXAM ISSN 0030-6053



FFI is grateful to ICI for its financial support of *Oryx* 

Typesetting and composition by J. Morris

b

Blackwell Science



ØØ3Ø-6Ø53(19961Ø)30:4:1-G

Printed by Thanet Press, Margate