

PLEASE USE THIS FORM TO GET A NEW MEMBER



# Application for Membership

---

## The Fauna Preservation Society

c/o The Zoological Society of London, Regent's Park, London NW1

---

Please enrol me as a member of the Society

Name (BLOCK LETTERS) Please state Mr/Mrs/Miss or title

---

Address

---

I enclose £ : :  
being my subscription as a Life/Benefactor/Ordinary Member.

---

The minimum subscription for Ordinary Members is £3, US \$7.75, for Benefactors £10, US \$25, payable on January 1st. A Banker's Order saves time, expense and reminders. The value of any subscription is greatly increased if it is paid under a seven-year Deed of Covenant (UK standard-rate income taxpayers only) and this entails no extra cost whatever: write for Covenant forms to the Secretary.

---

Life membership fees:

Age: Under 41, £200, US \$485; age 41-60, £150, US \$365; age 61 and over, £75 US \$185.

## Banker's Order

---

Bank

---

Address of Bank

---

Please pay for the Credit of The Fauna Preservation Society, Barclays Bank Ltd., Camden Town, London NW1, my subscription of £..... due on 1st January, 19 , and a similar amount on 1st January each year until further notice.

Signature ..... Date .....

CUT ▲ HERE

**THE TRYON  
GALLERY**  
41/42 DOVER STREET,  
LONDON W.1.  
(01-493-1561)



**WILHELM KUHNERT**

**We wish to purchase pictures by  
Richard Friese, Carl Rungius, Wilhelm Kuhnert  
and Gerhard Lobenberg.**

# THE MOORLAND GALLERY

23 CORK STREET, BOND STREET  
LONDON W.1.



ARCHIBALD THORBURN

We wish to purchase pictures by  
Archibald Thorburn, George Lodge,  
Frank Wallace and Joseph Wolf.

(01-734-6961)

# Journal of Applied Ecology

Edited by

T.H. Coaker and H.W. Woolhouse

Volume 10, Number 1, April 1973 (Partial Contents)

*R. Knight*: The climatic adaption of populations of cocksfoot (*Dactylis glomerata* L.) from southern France *D.R. McQueen*: Changes in under storey vegetation and fine root quantity following thinning of 30-year *Pinus radiata* in central North Island, New Zealand *K.A. Haizel and John L. Harper*: The effects of density and the timing of removal on interference between barley, white mustard and wild oats *M.S. Davies and R.W. Snaydon*: Physiological differences among populations of *Anthoxanthum odoratum* L. collected from the Park Grass Experiment, Rothamsted. I. Response to calcium *M.S. Davies and R.W. Snaydon*: Physiological differences among populations of *Anthoxanthum odoratum* L. collected from the Park Grass Experiment, Rothampsted. II. Response to aluminium *J. Grace*: An apparatus for the study of leaf canopy optics *J. Grace and H.W. Woolhouse*: A physiological and mathematical study of the growth and productivity of a *Calluna-Sphagnum* community. II. Light interception and photosynthesis in *Calluna* *J. Grace and H.W. Woolhouse*: A physiological and mathematical study of the growth and productivity of a *Calluna-Sphagnum* community. III. Distribution of photosynthate in *Calluna vulgaris* L. Hull *M.J. Robson*: The effect of temperature on the growth of S.170 tall fescue (*Festuca arundinacea*). II. Independent variation of day and night temperature effects *R. Elfyng Hughes*: Studies in sheep population and environment in the mountains of north-west Wales. Introduction *R. Elfyng Hughes, J. Dale, I. Ellis Williams and D.I. Rees*: Studies in sheep population and environment in the mountains of north-west Wales. I. The status of the sheep in the mountains of north Wales since Mediaeval times *H.A. Roberts and Patricia M. Feast*: Emergence and longevity of seeds of annual weeds in cultivated and undisturbed soil *T.W. Hegarty*: Effects of total solar radiation and temperature on vegetative growth in the east of Scotland *Roderick Hunt*: A method of estimating root efficiency *Lena K. Ward*: The conservation of juniper. I. Present status of juniper in southern England *N. Waloff and M.G. Soloman*: Leafhoppers (Auchenorrhyncha: Homoptera) of acidic grassland *B.N.K. Davis*: The Hemiptera and Cleoptera of stinging nettle (*Urtica dioica* L.) in East Anglia

The *Journal of Applied Ecology* is published three times a year at £5.25 (\$17.00) per issue; subscription price £14.00 (\$47.00) per annum, post free. New subscriptions and requests for specimen copies should be addressed to Blackwell Scientific Publications Ltd, Osney Mead, Oxford OX2 0EL

**Blackwell Scientific Publications**

Oxford London Edinburgh Melbourne

# Mammal Review

Edited by John Clevedon Brown and Michael N. Dadd

Published quarterly at £6.00 (\$20.00) per annum, post free

*Recent issues already published or in production include:*

Volume 2, Number 1. The ecology of small rodents in tropical Africa *M. J. Delany*

Volume 2, Number 2. Possible health hazards associated with the collection and handling of post-mortem zoological material *A. D. Irvin, J. E. Cooper and S.R. Hedges*

The National Badger Survey *Ernest Neal*

Volume 2, Number 3. A review of mammalian age determination methods *P. Morris*

Volume 2, Number 4. Radioactive marking of small mammals *G.N.A. Bailey, I. J. Linn and P. J. Walker*

Volume 3, Number 1. The rodent preputial gland *J. Cleveland Brown and J. D. Williams*

# East African Wildlife Journal

Edited by J. B. Sale

Published quarterly at £8.00 (\$27.00) per annum, post free

*Contents of Volume 10, Number 3:*

Population structure of olive baboons (*Papio anubis* (J. P. Fischer)) in the Laikipia District of Kenya *Michael E. Berger*

Defaecation by African elephants (*Loxodonta africana* (Blumenbach)) *Malcolm Coe*

An investigation of some sources of bias in aerial transect sampling of large mammal populations *C. J. Pennycook and D. Western*

The use of drinking sites, wallows and salt licks by herbivores in the flooded Middle Zambezi Valley *P. J. Jarman*

The aardwolf (*Proteles cristatus* Sparrman-1783) as predator of termites *H. Kruuk and W. A. Sands*

Mineral content of elephant dung *J. S. Weir*

Observations on endoparasites of some East African vertebrates *M. A. Pierce*

Home range, movements and food of a buffalo herd in Tsavo National Park *Walter Leuthold*

Birds of the Cherangani Montane forests and their parasites *R. A. Cheke*

Subscriptions to either of these journals should be accompanied by the appropriate remittance and sent to Blackwell Scientific Publications Ltd., Osney Mead, Oxford OX2 0EL, England.

## Blackwell Scientific Publications

Oxford London Edinburgh Melbourne

# 1973/74 Special Interest Tours by PEREGRINE HOLIDAYS

## TURKEY - Autumn - EASTERN ANATOLIAN ADVENTURE

Now has an extra day at Lake Van and the 4 days here and 3 days on horse-back in the village of the Pontic Alps over Xenophon's route make this tour unique of its kind. Visits all the major sites en route to Trebizond including Ancient Ani and Palace of Ishak Pasha. Dr. Anthony Bryer will illumine and entertain as before with en route and on site talks. Occurs at time of maximum North to South migration of raptors in particular.

Depart 22 August 16 days £260.00

## SEYCHELLES - Summer - NATURAL HISTORY STUDY TOUR

Specialy prepared tour for University College, Cardiff now has a few places open for the general public. An unusual opportunity to extend or even begin an interest in nature with particularly compatible companions. Guest Lecturers. Dr. Mary Gilham, Senior Staff Tutor Biological Sciences. David White, M.Sc. of the Nature Conservancy.

Depart 21 July 24 days £350.00

## GALAPAGOS - QUITO - UPPER AMAZON Summer 1974 NATURAL HISTORY

Air to QUITO; High Andes to Pacific Coast by one of the world's most exciting rail journeys; 11 days cruise to Darwin's GALAPAGOS with landings on all the islands of major interest, on board a well-appointed cruise ship refitted 1972 and specially chartered; sightseeing, bird watching, flower hunting around QUITO; finally a superb 4-5 day river and jungle expedition on the AMAZON. Unlimited optional extensions (e.g. Giant Trout fishing - up to 12 lbs.; Deep Sea Fishing - sailfish, swordfish, marlin, some of the best in the world; to Machu Picchu, Lake Titicaca and other sites). Three or four internationally famous guest lecturers for birds, flowers and zoology.

Depart 1 August 1974. 21 days £575.00 (Includes donation to Darwin Research Station Galapagos.)

## INDIA & NEPAL - Spring 1974 - BIRDS & LARGE MAMMALS

Delhi, Agra, Fatipur Sikri, Kathmandu, Bharatpur, Corbett and Kaziranga National Parks. John Gooders B.Sc. (guest Lecturer) who planned this tour after a recent visit\* says "we shall try to see our 300 birds species and many large animals (one-horned rhino, tiger, etc., which often remain unseen) along with superb flowers and butterflies." At Bharatpur accommodation is in a Maharajah's Palace and in Nepal you will ride through the jungle on elephants to stay at romantic Tiger Tops Jungle Lodge. Accompanied by Sue Gooders (photography) Patricia Hodgekins (Admin.)

\* a month gaining material and experience for a "SURVIVAL" TV programme  
Depart 16 February 1974. 20 days. £460.00

All by Scheduled Air Services and fully inclusive.  
Detailed brochures from

**Peregrine Holidays at Town and Gown Travel,  
41 South Parade, Summertown, Oxford.**

Tel. Oxford (0865) 54517 and 55345.



# SWANS BIG GAME & BIRDS SAFARIS

## VISITING THESE NATIONAL PARKS & GAME RESERVES

Nairobi, Lakes Naivasha and Nakuru, Samburu, Tsavo, Lake Manyara, Ngorongoro, Serengeti, and Mara in Kenya & Tanzania.

**21 DAYS £452**

## GUEST LECTURERS

accompany each Safari and their expert and personal knowledge of East Africa, its animals and birds, its history, peoples and customs highlight your enjoyment.

## DEPARTURES

June 27; July 18; Aug. 8, 29; Sept. 19; Oct. 10, 31.

## BEACH AND TREE-TOP SAFARIS

A great opportunity to combine the thrill of seeing East African wildlife with the enjoyment of beautiful beaches.

**21 days from £260**

# SWANS HELLENIC CRUISES

See the archaeological and architectural masterpieces of ancient lands and enjoy the pleasure of cruising to them on a well-found ship—to

**GREECE, TURKEY,  
SICILY, CYPRUS &  
THE MIDDLE EAST**

All cruises are arranged in conjunction with the **HELLENIC TRAVELLERS CLUB** and excursions are made ten times more fascinating by a team of historical, archaeological and botanical experts including Sir Mortimer Wheeler, Sir John Wolfenden and others.

## YOU FLY FROM LONDON

to Venice, Naples or Athens—cruise—and return from Venice, Naples or Athens. Three cruises in May/June and three in August/September. Prices range from

**£144 to £427**

including shore excursions

# SWANS ART TREASURES TOURS OF INDIA

## with KASHMIR, NEPAL & SIKKIM

Visiting Srinagar, Pahalgam, Gulmarg, Delhi, Agra, Kathmandu, Patan, Bhadgaon, Tiger Tops, Darjeeling, Gangtok.

**22 days £385**

## with CEYLON

Visiting Delhi, Agra, Fatehpur Sikri, Sikandra, Banaras, Sarnath, Bhubaneswar, Puri, Konarak, Hyderabad, Bangalore, Mysore, Somnathpur, Belur, Halebid, Madras, Kanchipuram, Mahabalipuram, Colombo, Kandy, Polonnaruwa, Sigiriya, Mihintale, Anuradhapura.

**25 days £465**

## with NEPAL & SIKKIM

Visiting Bombay, Udaipur, Jaipur, Amber, Delhi, Agra, Fatehpur Sikri, Sikandra, Khajuraho, Banaras, Sarnath, Kathmandu, Patan, Bhadgaon, Darjeeling, Gangtok.

**24 days £470**

*Each Tour is accompanied by a Guest Lecturer whose personal knowledge of this fascinating and colourful sub-continent will bring to life much of its historic past.*

DEPARTURES: Sept. 15; Oct. 6, 27; Nov. 15.

*Above are five Swans Specialised Cruises and Tours, in addition there are the following:*

Tours of Great Houses and Gardens in England & Wales.

Art Treasures Tours of Italy and Southern Italy; Sicily; Central

Asia & Transcaucasia; Persia; Far East; Leon & Castile; Moscow & Leningrad.

Archaeological Tours of Sicily; Mexico & Guatemala; Roman Britain.

Special Interest Tours of The Holy Land; Morocco; Ethiopia.

600-mile Nile Cruise.

*Special brochures on all Swans Specialised Cruises and Tours from:*

## W. F. & R. K. SWAN (Hellenic) LTD

237 (227) Tottenham Court Road, London W1P 0AL Tel. 01-636 8070

# Zambia



Where wild life  
stays that way

Nowhere else in Africa is conservation taken so seriously as in Zambia. To us, conservation means protecting our fauna from that most dangerous of predators—man—whilst preserving their natural habitat and maintaining the ecological balance.

Zambian wild life is completely free, uniquely unspoilt, staggeringly profuse and diverse. The vast game parks which keep it that way are a naturalist's paradise.

Come and see them.

**ZAMBIA NATIONAL TOURIST BUREAU** 163 Piccadilly, London W.1. Tel: 01-493 5552



# Birdwatcher's Paradise

## Ornithological Tours of Kenya.

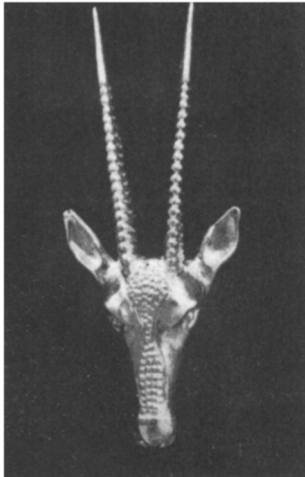
Explore the equatorial alpine moorlands of Mount Kenya for brilliant Sunbirds. Find Lily-trotters among the papyrus and blue water lilies of Lake Naivasha. Visit the Ark at night and hope to catch a glimpse of the rare and elusive Bongo amongst other animals at the waterhole. Visit a Masai warriors' village and witness war dances beneath giant acacias, still typical of unspoilt Africa.

All this accompanied by an expert on East African wildlife. Scheduled return jet flight London-Nairobi. Guaranteed window seat when in safari vehicle. Accommodation in excellent hotels and wildlife lodges.

**£425 for 16 days.**

## Simba Travel,

(Ref. 0), 4 St. Agness Well, Old Street Station, London EC1. 01-253 3525

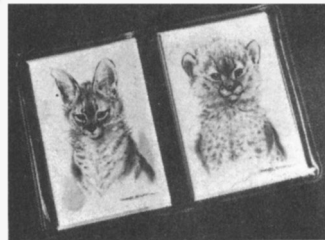


1



2

3



**1. Oryx brooch** in gold £9.75, or silver £4.55  
**2. Car badge** in midnight blue, cream, chrome and black. For grill and badge bar £1.55. **3. FPS notelets** — Ralph Thompson drawings, ten in wallet (five of each design) with envelopes 35p.

**FPS GIFTS** These and other Gifts obtainable from the FPS Office

## FPS Wildlife Film Library

Unless otherwise stated all films are 16 mm. in colour with sound track and cost £1 each to hire. To book a film please write to the Films Officer, Fauna Preservation Society, c/o Zoological Society, Regent's Park, London NW1 4RY. Tel: 01 586 0872.

The Peace Game—The wildlife of South Africa. South African Tourist Corporation. 25 mins. £2.

The Uganda Kob—Territorial and mating behaviour, by H. K. and J. H. Buechner. Presented by the Smithsonian Institution. 20 mins. £2.

The Last of the Wild, by Eugen Schuhmacher. 110 mins. £10.

Wildlife for the Future, by Gordon Maclean. 20 mins. £2. New film on work of a county naturalists' trust.

Saiga Saga. Life history and conservation of the saiga antelope, Russian commentary with English titles. 16 minutes. Presented by the Soviet Peace Committee. £2.

Koala, by H. J. Pollock. Complete life history. 24 minutes. £2.

Marloo, The Red Kangaroo, by H. J. Pollock. 25 minutes. £2.

The Seals of Macquarie Island. Elephant and fur seals. 12 minutes.

Penguins of Macquarie Island. King, gentoo, rockhopper and royal penguins. 13 minutes.

The Mallee Fowl. The remarkable nesting story of a 'mound-builder'. 11 minutes.

Le Aye Aye de Madagascar, by J. J. Petter. Black and white, French commentary, 22 minutes. Presented by the Service du Film de Recherche Scientifique.

The Silent Watcher, by Eric Ashby, commentary by Peter Scott. Badgers, deer and foxes in the New Forest. Black and white, 35 minutes. £1.50.

To Catch a Rhino. 20 minutes; South African Tourist Corporation.

The African Lion, by A. I. M. Hepburn. Taken in the Kruger National Park. *Magnetic sound track*. 12 minutes.

The Swallowtail Butterfly. The complete life story. 25 minutes.

Wildlife in Trust, by Gordon Maclean. The work of a Naturalists' Trust (Berks, Bucks and Oxon). 25 minutes.

South Africa's Animal Kingdom. 20 minutes. S.A. Tourist Corp.

Down in the Forest. Kangaroos. 6 minutes. (For children).

Kaziranga Sanctuary, Assam. Two films, each 11 minutes; similar material.

### Silent Films with Captions

Ceylon Wildlife, by C. E. Norris. Written commentary. 50 minutes.

Operation Oryx, by Michael Woodford. The FPS expedition. Black and white, 30 minutes.

The African Elephant. 10 minutes.

# Contents

	Page
Notes and News	3
FPS Tour to Botswana and Zambia <i>David Jenkins</i>	15
Oryx 100% Fund	18
IUCN General Assembly	20
National Parks: a Conference Report	21
Protection in Surinam	23
<hr/>	
The Lamai Wedge in Tanzania <i>John S. Owen</i>	24
Briefly. . . <i>Richard Fitter</i>	25
Spotted Cats in Latin America	37
The Swamp Deer in Kanha	40
Swamp Deer in Uttar Pradesh <i>Colin Holloway</i>	41
<hr/>	
Developments in the Sudan Parks <i>J. L. Cloudsley Thompson</i>	49
Wildlife and Land Use in Scotland <i>James Lockie</i>	53
Pygmy Hog and Hispid Hare <i>Guy Mountfort</i>	64
The Yeti: No Snowman <i>J. A. McNeely, E. W. Cronin &amp; Howard B. Emery</i>	65
<hr/>	
Tunisia's Wildlife <i>R. G. M. Willan</i>	74
The Persecuted Black Lechwe of Zambia <i>R. H. W. Bell and J. J. R. Grimsdell</i>	77
Saving the Hawksbill Turtle <i>Robert Bustard</i>	93
Hartebeests in Ethiopia <i>Melvin Bolton</i>	99
<hr/>	
Saving the Tiger <i>Guy Mountfort</i>	109
Colobus Monkeys and the Tourist Trade <i>Russell A. Mittermeier</i>	113
Book Reviews	118
Annual Report	134
Auditors' Report and Accounts	137

**Printed in Great Britain by  
Alden & Mowbray Ltd  
at the Alden Press, Oxford**