

New FFPS Vice-Chairman

At its meeting on 20 March 1990 FFPS Council elected Dr David Chivers as its Vice-Chairman. David has been an FFPS Council Member since 1980 and was Chairman of its Grants Committee from 1986 to 1989.

He lectures in veterinary anatomy at Cambridge University where he is Fellow and Tutor of Selwyn College. He is Vice-President for Conservation of the International Primatological Society and Council Member (and former President) of the Primate Society of Great Britain. He is also currently Scientific Director of Project Barito Ulu, a joint University of Cambridge/Government of Indonesia (Ministry of Forestry) research programme, which is investigating the role of animals in seed dispersal in the natural regeneration of forests in relation to their long-term management for sustained yields of a wide variety of products.

The Oryx 100% Fund

Grants awarded

At its meeting on 20 March 1990, the FFPS Council agreed funding for the following projects:

£12,500 for a survey of the drill *Mandrillus leucocephalus* in Cameroon. The drill is highly endangered and one of only six African primates to receive IUCN's highest conservation priority rating. It now appears to be restricted to south-western Cameroon, being very scarce in Nigeria and on Bioko Island (Fernando Po). It is under intense hunting pressure and almost everything about the species is a mystery. The primary goal of this work is to survey all drill populations in continental Africa in order to define clearly their current distribution and demographic condition for conservation planning purposes. The population on Bioko Island is being studied concurrently.

Because drills are inconspicuous in their rain-forest habitat, traditional census techniques are unsuitable. Instead the researchers will use information available from the local human population, interviewing hunters in all

villages in or adjacent to potential drill habitat. Exploration to confirm the presence of drills, to estimate numbers and to assess habitat for conservation potential will follow positive identifications. If likely pockets of forest are found that are not regularly hunted, they will also be investigated.

The drill's presumed range, and thus the area covered by the survey, encompasses at least three of IUCN's highest priority survey and/or management project areas in Africa. It is one of the world's richest regions for primates and has a high level of endemism. It is also one of the least known biologically.

Along with the drill data, the researchers will be recording all primate sightings and signs and noting vegetation and land-use changes. All the results will be available immediately to the relevant government and conservation agencies. One of the fundamental goals is to identify key areas for conservation, of the drill in particular, and make recommendations for future use. The study is expected to start in November 1990 and will last for 16 months (Project No. 90/1/1).

£828 for a survey of bats in the Musanze Cave, Rwanda. This project is being carried out at the request of the Office Rwandais du Tourisme et Parcs Nationaux (ORTPN) and is a satellite project of the Mountain Gorilla Project. It involves a survey of the Musanze Cave near Ruhengeri, which is the best known, most accessible and most spectacular bat cave in Rwanda, containing tens of thousands of bats of several species. The exact species composition is unknown. There are proposals to incorporate visits to the cave in the standard tourist itinerary and ORTPN is seeking advice on the potential impacts of tourism on the cave's bats and on management measures that should be imposed in the interests of good conservation (Project No. 90/4/2).

£500 for a study of the Java hawk eagle *Spizaetus bartelsi*. The aims of this study are to determine the exact status and distribution of this critically endangered endemic species and to investigate its biology. The project will include observations on the threats to the bird and proposals to improve its situation.

Already designated as very rare before World War II, this raptor has disappeared from most of its range in the face of human population pressure and habitat destruction. The remaining natural forest on which the species depends occurs in small scattered patches and the few subpopulations so far located are completely isolated. There are believed to be fewer than 50 pairs left (Project No. 89/32/18).

Reports received

Gola Forest Project Bird Survey (Project No. 88/40/20). The six members of this team from the University of East Anglia studied the birds of Gola Forest in Sierra Leone from 8 October to 26 February 1989, working alongside Overseas Development Administration personnel studying mammals and the use of forest resources. Their report is published as *International Council for Bird Preservation Study Report No. 38*. The surveys concentrated on locating and studying threatened bird species known or believed to occur in the forest and comparing the bird communities of primary forest, logged forest, forestry plantation, coffee/cocoa plantation and farmbush.

The team recorded nine species that are listed in the ICBP's *Red Data Book*, seven of them in the 'threatened' and two in the 'near-threatened' categories. Primary forest and logged forest were found to have similar bird communities, although 18 species (including two threatened species) were found only in primary forest and several species were less common in logged than in primary forest. Species in the insectivore/foilage gleaner guild were found to be particularly sensitive to logging. The two forest habitats were shown to be vital for 41 species and primary forest was shown to be especially important for the survival of four species.

The project confirmed that Gola Forest is a high-priority site for bird conservation in Africa and the team made a number of recommendations. These include support for the establishment of two Strict Nature Reserves already recommended in 1987; these should be legally designated, marked on the ground and patrolled to prevent hunting

or clearance. A Primary Forest Reserve, forming a buffer zone round the Strict Nature Reserves, should also be declared, where logging and clearance should be forbidden but hunting and other local exploitation should be allowed. The logged forest should be managed sustainably; a management plan is required and logging practices that reduce damage to residual timber during logging operations and that leave large fruiting trees and corridors of primary forests along rivers should be adopted. It is suggested that the best way to initiate the necessary management in Gola would be through a joint project involving the Government of Sierra Leone, its Forestry Department and international conservation agencies. Such a project should attempt to integrate the needs of local people, wildlife conservation and sustainable management of the logged forest for timber.

Threatened Endemic Jamaican Plants (Project No. 89/5/1). The Jamaican flora includes some 827 endemic species of flowering plants and many of these are rare or threatened; some may be extinct. The object of this study, by two botanists from Trinity College, Dublin, Ireland, was to obtain a clearer picture of the conservation status of the endemic flora, focusing on three genera, *Dendropanax* (Araliaceae), *Lisianthus* (Gentianaceae) and *Lobelia* (Campanulaceae), which are rich in rare endemics.

The work programme involved a search of the Jamaican herbaria to pinpoint the localities of rare endemics, a field survey of a range of known sites of rare endemics from April to July 1989, and the propagation of some of these. Of 19 sites assessed, 6 were found to be in good condition, 8 fair to poor, 2 poor and 3 destroyed. The forest vegetation in most areas still showed evidence of the passage of Hurricane Gilbert, which hit the island in September 1988, but in general there was no evidence of the populations of rare species having suffered significantly. The exceptions were epiphytic plants, and the apparent disappearance of *Dendropanax cordifolius* from one site could be a result of the hurricane. The most critical sites are the limestone hillsides in

the centre of the island; these support a rich flora with many highly localized endemics. Material for propagation was taken where it was unlikely to damage populations, but propagation proved difficult. A number of cuttings perished at Kingston due to problems with the water supply; others died in transit from Jamaica to Ireland. Many seeds had still not germinated by January 1990. The main success was with the genus *Dendropanax*; there are now healthy cuttings and seedlings of two species at Trinity College Botanic Gardens, Dublin.

As a result of this work the current status of the Jamaican endemic flora is evaluated as: 139 rare species, 142 vulnerable, 71 endangered and 50 indeterminate (apparently extinct). There is an urgent need to protect a good range of small to medium-sized sites, especially those that are under threat but are not yet 'lost causes'. There should also be a sustained effort to bring more Jamaican endemics into cultivation and Jamaica's four botanic gardens would be ideal for this purpose since between them they cover a wide range of climates. The authors of the report also support increased efforts in heightening public awareness of Jamaica's natural heritage as well as developing the tourist potential of conserved areas.

Cambridge Tarantula Project 88 (Project No. 87/59/25). Four undergraduates from Cambridge University visited Mexico to investigate the status of the red-kneed tarantula *Euathlus smithii*. The realization of the need for the project sprang from the concern at the growing numbers of this species being imported into Europe and North America to satisfy the demands of the exotic pet trade. This large black-and-red spider is popular as a pet, being striking in appearance, very docile and with a venom that is relatively harmless to humans.

In 1985 it was added to Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, requiring that its trade should be monitored. Little is known about its ecology, its status or its exact distribution, although it is believed to be confined to west of the Sierra Madre



Red-kneed tarantula spider (*IUCN Invertebrate Red Data Book*, 1983).

Occidental. The team spent two months in Mexico in 1988, interviewing people in government departments, universities and in villages to elicit information about the species. The team members spent most of their time in the field, travelling along the west coast from Barra de Navidad to Acapulco and spending four weeks at El Guayabillo, a village typical of the area, surrounded by maize fields and scrubland where cattle grazed.

They collected information on distribution, habitat requirements, food and behaviour and found that the spiders appeared to occur at relatively low densities and are not easy to find. Although most were discovered living in burrows, two specimens were discovered in bushes, having constructed a shallow, bowl-shaped nest from silk. These appear to be the first recorded sightings of this species in such a situation and it may either represent an unknown stage in the life-cycle, or it may be a new species.

The sale of red-kneed tarantulas is illegal, although the law is totally disregarded. The team found *E. smithii* on sale in a market in Mexico City, the vendor claiming that he had received his 20 individuals from a breeder, but he would not supply a contact name or address. Although there was no evidence of the collection of these spiders in the areas visited it could be occurring elsewhere, the most likely area being the inland region of the state of Guerrero where it borders the state of

Mexico and around Iguala. In many areas it seems that the killing of tarantulas by local people could be as big a threat as any collecting taking place, but there are still large expanses of uninhabited land on the western coast that appear to offer suitable habitat for tarantulas. The conclusion of the study is that *Euathlus smithii* is not yet threatened with extinction but that increasing demand for it makes it necessary to improve and increase captive-breeding programmes.

Turkish Ornithological Expedition 1987 (Project No. 87/24/7). This three-person team gathered up-to-date information on the state of wetland habitats in Turkey with especial reference to their use as breeding sites by white-headed duck *Oxyura leucocephala*. Twenty sites were surveyed, each of which is described in the 64-page report, giving details of dates visited, location, size, access, protected status if any, habitat and land use, survey limitations, ornithological data, future prospects and discussion of other relevant information.

Before the report was prepared the raw data were made available to the International Council for Bird Preservation and thus to the European Commission. Of particular importance were the records of breeding birds, including a large colony of Mediterranean gulls *Larus melanocephalus* at Kulu Golu and the observations of breeding white-headed duck at Kulu and at a number of small lagoons around the shores of Van Golu. Two of the team members made several return trips to Turkey in 1988 and 1989 and plan another for two months in 1990, hoping to gain ultimately a more direct involvement in conservation in Turkey.

Turks and Caicos Expedition (Project No. 87/22/5). A team of eight divers from the University of Hull carried out underwater survey work of the reefs of South Caicos island in September and October 1987. The work formed phase three of the Turks and Caicos Marine Parks Project and the specific targets were: to determine the occurrence and distribution of species that may be of conservation concern; to identify and map the occurrence and distri-

bution of coral reef habitats; to prepare a coastal management plan; to identify potential protected areas and to make recommendations for their establishment, management and operation.

Over 30 sites were surveyed using the Reefwatch format, which is co-ordinated by the Tropical Marine Research Unit at the University of York, and seven sites were studied in considerably more detail. The current report (Part 5) describes the distribution of coastal and marine habitats and species. The reefs in the survey area were found to be highly productive, providing food and shelter for many species of commercial fish. Scenically they were comparable with sites in other parts of the Caribbean that have been set aside for diving tourism.

The fish studies provided a first detailed account of the main components of the fish assemblage of the reefs of this area, while observations of echinoderms revealed that the populations of most species were small, including the needle spine urchin *Diadema antillarum*. This species can cause extensive damage to corals when present in excessive numbers. The data collected on this species indicate that some revival is taking place following a massive die-off that occurred in the Caribbean recently. The team found evidence of significant declines in numbers of the commercially important queen conch *Strombus gigas* and the lobster *Panulirus argus*.

It became clear from the survey that tourism, and commercial and artisanal fishing were having detrimental effects on the reefs. A further report (Part 6) is expected, dealing with the management of the marine and coastal resources of South Caicos and the recommendations for protected areas.

Preliminary survey of black lemurs in north-west Madagascar (Project No. 88/52/24). Between October and December 1988 Josephine Andrews, assisted for part of the time by Chris Birkinshaw, conducted a preliminary survey of black lemurs *Lemur macaco macaco* and their habitats in order to collect information necessary for future long-term research on the ecology and behaviour of this subspecies. It has a



Female black lemur in north-west Madagascar (J. Andrews).

restricted range in north-west Madagascar and is currently listed as Vulnerable by IUCN. Comparative vegetation information was collected from a variety of habitats where black lemurs were found, and black lemur data were collected from 27 groups. Local people were interviewed to gain information on local agriculture, attitudes to wildlife and hunting. When possible information was also collected on sympatric lemur species.

Black lemur groups were found to consist of seven individuals on average and, contrary to previous reports, there was no bias in group sex ratio. Groups were found in a wide range of forest types, including relatively undisturbed primary rain forest, relatively disturbed secondary forest, food crop plantations and timber plantations. Group size was significantly larger in converted forest habitats, perhaps because these had concentrations of food, such as crops, upon which the lemurs readily feed. The lemur is obviously adaptable and can survive outside primary forest because of its opportunistic feeding habits, but this also makes it an object of persecution by local people. Hunting may become an important additional threat as more areas of habitat, and thus natural food sources, are destroyed.

Further detailed research on the species is urgently needed and this is being planned by the author of this 65-page illustrated report.

Cambridge Entomological Expedition to Nepal (Project No. 88/53/26). A four-person team from Cambridge University spent from 22 September to 29 December 1988 in eastern Nepal. Six weeks were taken up by a trek from Jiri to Kala Pattar and from Lukla to Dhankuta, during which a large collection of bumblebees was made across a wide altitudinal range. A study was also made of bee behaviour in relation to microclimate and nectar availability through the day. The Himalaya is a centre of bumblebee diversity and is of great importance in the study of their taxonomy.

A second objective was to search for *Epiophlebia laidlawi* in the Shivapuri Watershed and Wildlife Reserve. This species is one of only two belonging to the Anisozygoptera and is restricted to Nepal. This suborder of the Odonata is of outstanding interest because its members have features in common with both Zygoptera (damselflies) and Anisoptera (dragonflies), and it is believed to be near the evolutionary origin of the latter. *E. laidlawi* was known from only a few locations and its status was uncertain. The expedition's searches were successful in that many larvae of varying sizes were found near waterfalls and in the fastest stretches of the headwaters of the Bagmati, Kikhu and Dhobi rivers within an altitudinal range of 1860–2380 m in mature forest undisturbed by heavy cattle grazing or soil erosion. It appears that the species's status is secure in the reserve for the foreseeable future.

ICBP/FFPS Expedition Competition Winners

Bird category.

Winner (£1000) Cambridge Solomons Rain Forest Project. 1 July–29 September 1990. This expedition, of three Cambridge University undergraduates and two Solomon Islanders, aims to spend 13 weeks on four of the Solomon Islands in the south-west Pacific conducting an avifaunal survey and relating bird distribution to habitat type and altitude. The Solomon Islands have 72 endemic bird species, most of them poorly known, and many appear to be threatened. The urgent pri-

ority is to identify important areas for conservation and the results should enable the Solomon Islands Government to make informed decisions on areas to be scheduled as reserves.

Runner-Up (£800). Cambridge Tanzanian Rain Forest Survey 1990. This expedition intends to survey three evergreen forests in Tanzania, which are rich in endemic and threatened species and which are being depleted by logging and agriculture. The objectives of the team, which includes two Tanzanian scientists, are to produce new bird species lists, to attempt to locate populations of *Red Data Book* species, to estimate population densities of forest duikers, to measure the effect of deforestation on stream fish and ground beetle communities, and to gather behavioural and ecological data as well as new species lists in two of the forests for lizards and amphibians. The results will be used to press for improved protection of these areas.

Other animals and plants.

Winner (£1000). Oxford University Expedition to Sabah 1990. This expedition follows a 1987 Oxford University Expedition by resurveying four ecologically sensitive areas of the Tunku Abdul Rahman National Park in Sabah, Malaysia. The results will be compared with the 1987 data in order to discover whether any changes have occurred over three years. By collecting local information on recent storms, on the location and frequency of illegal dynamite fishing and on the popular tourist areas it should be possible to determine whether any changes are due to natural cycles or whether the reefs have improved or deteriorated. The reefs are still threatened by dynamite fishing and tourism. All the results will be made available to the Sabah Park authorities and should contribute to the sound management of the park.

Runner-Up (£800). Cambridge Ethiopia Groundwater-Forest Expedition 1990. In eight weeks fieldwork within the Nechisar National Park in collaboration with Ethiopian counterparts, this team will conduct a wildlife survey, report on the state of the park and assess cur-

rent use of the park and surrounding habitat by local communities. The Ethiopian Wildlife Conservation Organization and WWF will use the research to assess future priorities in the area.

Oryx 100% Fund—new directions and new funds

The FFPS Oryx 100% Fund recently received a major boost when the Trustees of the Esmée Fairbairn Charitable Trust agreed in May to make an annual grant of £20,000 to the fund. This most welcome income will enable FFPS to expand the work of the Fund and at the Trustees' request the money will be channelled to conservation projects undertaken by experienced fieldworkers concerned with the conservation of threatened species and their habitats.

For many years the Society's Oryx 100% Fund has distributed about £10,000 per annum amongst 20–30 conservation projects focusing on threatened species. Many of the projects involve plants and lesser-known groups of animals—bats, amphibians, reptiles and invertebrates—and we have been careful not to duplicate efforts of the much larger funds that finance work on animals with a high profile—rhinos and elephants, for example.

The fund is unique in that all donations are passed on to the projects without any administrative charge being made by the Society. A voluntary 10-person Grants Committee meets four times a year to review applications to the fund and to make recommendations to Council.

While the Fund has been doing a worthwhile job it still has largely untapped potential. This year the FFPS has been taking steps to increase the size of the fund and to differentiate between three broad categories of work.

In the past most of the Fund's income has come directly from the Society's resources, while about one-third has come from donations and from fund-raising events. In the future the FFPS would like to see the Fund attracting more donations and offering a service to other charities that may wish to dis-

tribute sums of money to species conservation. Other charities could find it much more cost effective to use FFPS's existing experienced committee than to set up their own project review procedures.

The Fund will in future distinguish more clearly between three types of project in which FFPS takes an interest: 1) expeditions by undergraduates; 2) conservation projects undertaken by experienced fieldworkers; 3) projects on lesser-known groups of animals and plants. Expedition applications are all to be channelled towards the ICBP/FFPS Conservation Expedition Competition and the aim is to boost the activity by attracting industrial sponsorship. Funding for projects types 2 and 3 are also focuses for major new fund-raising efforts.

As well as the welcome grant from the Esmée Fairbairn Charitable Trust, the Royal Entomological Society had also agreed to distribute money for species conservation through the Oryx 100% Fund.

FFPS Great White Shark Project

As indicated on page 121 great white shark populations are believed to be declining in parts of their range and research is needed to determine how serious a threat this is and what the main causes are. The FFPS has committed £1000 for a preliminary desk study and the preparation of an up-to-date report on all known aspects of the biology of the species. The extent of the reported decline and its causes will be evaluated and if necessary proposals will be made to ensure its protection.

Project Mahogany

On 8 May 1990 the Society launched a new initiative aimed at conserving forests. Tropical forests containing the species traded as mahogany have suffered particularly badly, being the source of the premier tropical hardwood in international trade. The history of exploitation is centuries long and the damage done enormous. Despite attempts to grow

mahoganies on plantations and increased pressure for 'cropping' on a sustainable basis, the vast majority of mahogany timber and items made from mahogany wood come from primary forests, which are seriously damaged or totally destroyed by the extraction process. In 1989 the UK alone (which accounts for approximately 3 per cent of the international tropical timber trade) imported over 8 million cubic feet of mahogany.

Developing work initiated by the Society in the early 1980s (Knees & Gardner, 1983), Project Mahogany got officially under way at a press conference held at the Natural History Museum. This was attended by members of the press and media, representatives of the Society and other conservation organizations and coincided with the release of the Society's new publication *Mahogany—Forests or Furniture?* This booklet is the result of research carried out since the beginning of 1990 by the Society's botanical consultant, Mike Read. Drawing on this research and their own experience, the members of the Flora Committee, under the chairmanship of Dr Chris Humphries, have defined the three primary aims of Project Mahogany as:

- a) to draw attention to the plight of tropical mahoganies and increase public awareness of the issues involved;
- b) to work to improve the protection of

MAHOGANY Forests or Furniture?

Mike Read



FAUNA & FLORA PRESERVATION SOCIETY

Mahogany—Forests or Furniture? Available from the FFPS at £1.50 including postage and packing.

forests containing mahogany species, especially those in West Africa, which have suffered the greatest exploitation;

c) to promote the practice of truly sustainable forestry in the tropics, and the availability and selection by consumers of timbers produced in such a way.

Reference

Knees, S.G. and Gardner, M.F. 1983. Mahoganies: candidates for the Red Data Book. *Oryx* 17, 88–92.

Wild bulb update

The Society's research and work on the wild bulb trade is now in its third year and much progress has been made. On 28 March 1990 another meeting between the Society and representatives of the Dutch bulb trade, which was also attended by TRAFFIC USA, forged important agreements. All snowdrops *Galanthus* spp. in trade are to be monitored to species level; all wild-collected bulbs are to be labelled as such by Autumn 1990; and there is to be an investigation to determine which species of *Narcissus* are entering the trade in large quantities from wild sources. It is intended that the agreed details and timetable for introduction of comprehensive labelling will form the basis of a European Community resolution.

Exhibition of wildlife photographs

Winning and commended entries in the Wildlife Photographer of the Year Competition 1989 are still touring Britain and can be seen at:

8 July–12 August: Oxford University Museum and Devises Museum;

19 August–23 September: Yorkshire Museum and Aberystwyth Arts Centre;

30 September–4 November: Nottingham Natural History Museum;

11 November–16 December: Museum of St Albans;

23 December–27 January 1991: Buxton Museum and Art Gallery and Cornwall County Museum, Truro.

Members' meetings

London Meetings

Will members please note that the FFPS Annual General Meeting will be held on Wednesday 21 November 1990. Further details will be given in the October issue of *Oryx* which will also contain the Annual Report and Accounts for 1989.

Our annual joint meeting with the British Ornithologists' Union will be held on Monday 1 October when Dr David Houston will talk about that fascinating group of birds, the vultures. Details of this and other London meetings are given in the insert of this issue of *Oryx*.

Both meetings will be held in the meeting rooms of the Zoological Society of London.

For information about local group meetings, please write to the appropriate address given below, enclosing a stamped, self-addressed envelope.

Bristol and the West of England Group

Ian Redmond, c/o BBC Wildlife Magazine, Broadcasting House, Whiteladies Road, Bristol BS8 2LR

Cambridge Group

Dr C. Harcourt, 70 Victoria Road, Cambridge CB4 3DU.

Edinburgh Group

Roger Wheeler, Edinburgh Zoo, Murrayfield, Edinburgh EH12 6TS.

North-West Group

Nick Ellerton, Chester Zoo, Caughall Road, Upton, Chester CH2 1LH.

Oxford Group

David McDonald, Department of Zoology, University of Oxford, South Parks Road, Oxford OX1 3PS.