

## THE INTERNATIONAL FUND FOR AVIAN RESEARCH

### What IFAR has achieved - what it still aims to achieve

by Brian Byles

Whether as individuals, whether we are connected with organisations that cater for the numerous branches of aviculture, or have an interest in wild birds, most of us are aware of problems which birdkeepers and ornithologists encounter. These problems need to be solved if we are to be successful and to make progress in what for some is a business but, for most, is a rewarding hobby. Avian management techniques need to be improved, a better understanding of nutrition is vital and, probably most of all, we all want to know how to deal more efficiently with avian health problems.

It is for these reasons that the International Fund for Avian Research (IFAR) was established. Administered by Professor John Cooper FRCVS (Chairman), Dr Francis Scullion MRCVS (Scientific Adviser) and myself, the former Editor of the magazine *Cage & Aviary Birds* (Secretary), the aim of IFAR is to provide grants to people who are undertaking avian research of various kinds.

#### **Mauritius Pink Pigeon *Columba mayeri***

Thanks to generous donations from individuals and interested companies, IFAR has been able to help important projects. During 1997 it gave £750 (approx. US\$1,200) to a group of specialist veterinarians and biologists - Andrew Greenwood, Mike Peirce and Kirsty Swinnerton - who are carrying out a study into Leucocytozoon infection in the Mauritius Pink Pigeon. The group had already established that the infection causes significant mortality in both wild and captive individuals, particularly juveniles of the species on Mauritius. The grant covered the cost of examining blood smears from Pink Pigeons and potential reservoir hosts by Dr Mike Peirce to establish the overall and seasonal prevalence of the parasite.

Others who have been supported by IFAR - and its predecessor - Cage & Aviary Birds Avian Research Fund - include: Philip McGowan BSc, who undertook field studies into tropical pheasants threatened with extinction; Neil Forbes FRCVS, working with Dr Hawkey at London Zoo, undertook research into detecting avian tuberculosis by haematological examination; and Mark Pilgrim, based at Liverpool's John Moores University, looked into the taxonomic status of *Amazona autumnalis*.



## Beak and Feather Disease

Also awarded grants: Dr Branson Ritchie, University of Georgia, USA, to assist research into psittacine beak and feather disease; Dr John Baker, now retired from Liverpool University, to research blood chemistry analysis regarding the premature death of Budgerigars *Melopsittacus undulatus*; and the University of California at Davis. The last named received a grant to build and equip aviaries for parrots being used as part of a research project.

Money has also been given to Dr Peter Robertson, Lowland Gamebird Unit, Game Conservancy, to take part in a five year joint study of pheasant ecology in China, and Philip Boydell MRCVS, of the Animal Medical Centre, Chorlton, Manchester, has been assessing the prevalence of ocular lesions in captive birds of prey in the UK. Over 5,000 birds have been examined. The results demonstrate that there is a high prevalence of ocular damage in rescued wild birds and a significant incidence of ocular disease in captive and working birds. A number of species appear to have a potential for certain conditions, possibly as a result of indiscriminate breeding.

Bernard Okech, of the Department of Zoology, University of Nairobi, has been given a grant to survey the blood parasites of free-living and captive non-domesticated birds in Kenya. The study is being conducted in collaboration with the Ornithological Department, National Museum of Kenya. Another veterinarian to receive help from IFAR is Dr Edith Singine, based in Dar es Salaam, Tanzania. She is undertaking research into comparative morphology of blood cells of free-range chickens and flamingos.

## Megabacteria

Megabacteria has become an avian problem in many parts of the world in recent years, but thanks to the work of Tom Pennycott, Senior Veterinary Investigation Officer, at SAC Veterinary Services Avian Health Unit, Auchincruive, Scotland - and a grant from IFAR - captive birds in many parts of the world could enjoy much better health.

First described in Canaries in Holland, megabacteriosis has been diagnosed in a number of species including Budgerigars, grass parakeets *Neophema* spp. and lovebirds *Agapornis* spp. Dr John Baker, while working for the Budgerigar Society in 1966, suggested that the condition was introduced to exhibition Budgerigars in the early 1980s, rapidly spreading as a result of widespread movement of birds kept by breeders.

The clinical signs of birds with megabacteriosis, according to Tom Pennycott, are not dramatic and fairly non-specific. Birds are seen to be 'soft' with a hunched appearance and fluffed-out feathers. Changes in droppings may be apparent, from a slight looseness to severe diarrhoea. Birds often appear to be feeding, but closer observation shows that they are grinding a lot of seed instead of eating it.



Megabacteriosis, Mr Pennycott reports, is usually confirmed by post mortem examination. The birds are thin, with wasting of the breast muscles. The feathers around the head may be covered in dried regurgitated material and the feathers around the vent often stained with faeces. Changes are found in the glandular and muscular stomachs of the birds, which is where the megabacteria can be found. The lining of the glandular stomach becomes rough, raised and discoloured. Megabacteria can be readily found at post mortem examination when scrapings from the glandular stomach are examined under a microscope. These organisms are very large - ten to 20 times the length of the bacterium *E. coli*. However, although megabacteria are instantly recognisable, their true identity remains unknown and efforts to culture the organisms have given ambiguous results.

It is even unclear whether megabacteria have actually caused damage to a stomach, seen during post mortem, or whether they are organisms found in normal birds, but which have multiplied to an excessive extent. Tom Pennycott suggests that observations in an infected aviary indicate that, after reaching a peak of mortality, losses then decline to a low level, possibly after the development of some degree of immunity. Post mortem examinations of Zebra Finches *Taeniopygia guttata* and Budgerigars have revealed that megabacteria can be detected in young, unweaned birds, suggesting one route by which infection spreads within an aviary. The effective treatment, Mr Pennycott suggests, is unclear. Amphotericin B at 1g per litre of drinking water is said to be effective, but when used at a lower dose in a small number of birds was unsuccessful, as was enrofloxacin (Baytril 10% Oral Solution) at 5ml per litre of drinking water.

### **Quail Research**

During 1997 IFAR gave a grant to Reuben Girling, a York-based aviculturist, to undertake an investigation into the breeding periodicity, early mortality and close ringing age of Chinese Painted Quail *Excalfactoria chinensis* reared by members of the Foreign Bird League. A grant has also been given to Robert Whale, of the Pakistan Galliformes Project, to help finance his involvement in a programme of observing pheasant populations in Pakistan, recording other factors, such as disturbance and habitat removal, and the estimation of tolerance levels that a local population will sustain before becoming affected. The programme includes the collection of information about species in areas not surveyed before.

### **Vets at 'The National'**

Since being appointed as the official veterinarian at the National Exhibition of Cage & Aviary Birds, Professor Cooper has built up a team to look after the show's bird hospital. They include Mark Evans MRCVS, Siuna Whitehead MRCVS, and Dr Francis Scullion MRCVS. In addition,



as IFAR's Chairman, Professor Cooper, has encouraged a number of under graduates and postgraduate veterinary students from several parts of the world to help run the bird hospital at the National Exhibition to gain avian experience. Up to 1997 IFAR paid their expenses to attend. This year sponsorship from Vydex Animal Health funded their travelling costs.

### **Expanding its role**

IFAR has been expanding its activities. In addition to awarding grants to suitable research projects concerning both captive and free-living birds, it has introduced two new ways of providing assistance. In future, IFAR will consider the loan, or donation, of equipment which is necessary to complete various projects that will help those concerned with avian problems. In addition, professional and/or technical help - which could include visits to the project, by an expert in the field under study - will be made available.

'This is an exciting new venture,' says IFAR Chairman, Professor Cooper. 'It should prove of practical value to aviculturists, field ornithologists and veterinarians.' Already one of two incubators donated by Gary Robbins, of AB Incubators, of Stowmarket, has been sent on loan to Mauritius where it is helping to maximise the number of young Pink Pigeons being raised in captivity by Kirsty Swinnerton and the resident team. A further top-of-the-range incubator is available on loan to a suitable research project.

A network of specialists is being established. Those involved will be experts in specific fields who are willing to give advice on behalf of IFAR. In some cases they may travel in order to provide that advice.

### **IFAR Needs your sponsorship**

The success or failure of important research projects could depend upon your support. IFAR receives numerous requests for assistance - both financial and material - but the extent to which it can help is dependent upon IFAR, in turn, receiving financial backing, equipment and/or product from those with an interest in the well-being of both captive-bred and wild species.

IFAR is looking for new sponsors. Current backers include John E. Haith Ltd, of Cleethorpes, Vydex Animal Health Ltd (Cardiff), AB Incubators Ltd, of Stowmarket and Harlow-based Rhone Merieux. The Beryl Thomas Animal Welfare Trust, in South Wales, is another very generous contributor to IFAR funds.

IFAR has also received support in the past from H. & S. Clark, London seed suppliers, Johnson's Veterinary Products of Sutton Coldfield, Pet Chef Parrot Foods, Haines Aviary Economy, Southern Aviaries (Uckfield),



Merehurst Books, Scotia Pharmaceuticals, the British Veterinary Zoological Society, the Australian Finch Society and magazine *Cage & Aviary Birds*. Without generous sponsorship from these companies and organisations - and welcome donations from individuals - IFAR could not function.

### **IFAR Needs your help**

Supporting avian research takes money. As a result we hope that you will support IFAR by becoming a sponsor or by sending a donation to The International Fund for Avian Research, c/o The British Veterinary Association, 7 Mansfield Street, London W1M 0AT. All contributions will be acknowledged in writing and every individual and company which supports the fund, will receive a newsletter/report at the end of the year giving details of grant it has made, and the work carried out during the previous 12 months.

\* \* \*

### **NATIONAL INCREASE**

The Society had a small stand at the 1997 National Exhibition of Cage and Aviary Birds held at the NEC (National Exhibition Centre) Birmingham, Saturday - Sunday 6th - 7th December. Fourteen new members were enrolled and a number of subscriptions were renewed. The stand (part of which was loaned to us by the Bristol Zoological Gardens) was designed by Council Member, Rosemary Wiseman, who was also the Stand Manager. The display included enlargements of photographs used to illustrate articles in recent issues of the *Avicultural Magazine*. It is the second year that the Society has been present at this event. At the 1996 exhibition we also enrolled a number of new members and answered numerous enquiries about the Society. The space for the stand was provided free by the exhibition organisers, to whom we are most grateful, and we very much hope that we will be invited back for the 1998 exhibition.



## BREEDING THE LESSER FLAMINGO *Phoeniconaias minor*

by Roman Alraun and Nigel Hewston

### Introduction

The Lesser Flamingo *Phoeniconaias minor* is the smallest of the six kinds of flamingo. It is the most numerous in the wild, probably outnumbering the populations of all the other five forms added together. It is fairly widely kept in captivity but seems more reluctant to breed than the larger flamingos for reasons which are not entirely clear, but may be linked to Lesser Flamingos being less hardy, or to their much larger colonies in the wild. This article describes the successful nesting of Lesser Flamingos in a private collection in Germany in 1992, which is believed to be the first breeding of this species in Europe, and summarises more recent successes in other German collections. The species is believed to have bred at least occasionally at zoos in the USA and several times eggs have been laid at the Wildfowl & Wetlands Trust, Slimbridge, UK.

### The colony

Four juvenile Lesser Flamingos were obtained in April 1986. By 1992 there were 33 birds (18.15) in the group. Also in the enclosure were 2.3 Chilean Flamingos *Phoenicopterus chilensis* a variety of ducks and some Red-breasted Geese *Branta ruficollis*. The ducks and geese initially caused no problems for the flamingos, except for Canvasbacks *Aythya valisineria* damaging nests by digging at the base, but the geese eventually proved to be aggressive so the flamingos now share the enclosure only with small ducks. Most of the flamingos are full-winged, which seems to make mating easier for the males. A pinioned male Chilean Flamingo obtained late in 1992 to make the flock up to 3.3 has failed to mate successfully, while a full-winged male has fertilised two females. A pinioned female Lesser Flamingo however, which came from Tanzania in 1960, laid in 1995 and is still in excellent condition.

### Housing

The birds are kept in an enclosure of approximately 800sq m (approx. 8,600sq ft), with a pond measuring about 20sq m (just under 215sq ft) and 50cm (approx. 1ft 10in) deep which is allowed to overflow to cover another 10sq m (approx. 108sq ft) in the breeding season. Part of the pen is planted with conifers. The birds stay in this enclosure all year round and have a lined house which is 80% transparent and which they use readily.

Food includes Mazuri Waterfowl Maintenance, Waterfowl Breeder and Flamingo (E), Kasper Faunafood Seaduck Diet and Floating Duck Diet,



Byles, Brian. 1997. "The International Fund For Avian Research." *The Avicultural magazine* 103(4), 170–175.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/253468>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/315045>

**Holding Institution**

Smithsonian Libraries and Archives

**Sponsored by**

Biodiversity Heritage Library

**Copyright & Reuse**

Copyright Status: In Copyright. Digitized with the permission of the rights holder

Rights Holder: Avicultural Society

License: <https://creativecommons.org/licenses/by-nc-sa/4.0/>

Rights: <http://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.