

Falco



Middle East Falcon Research Group

National Avian Research Centre

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Newsletter No. 6. July 1996

Letter from the Chairman's Office

Report by Jaime Samour, Head of Veterinary Science, National Avian Research Centre,
P.O. Box 45553, Abu Dhabi, United Arab Emirates.

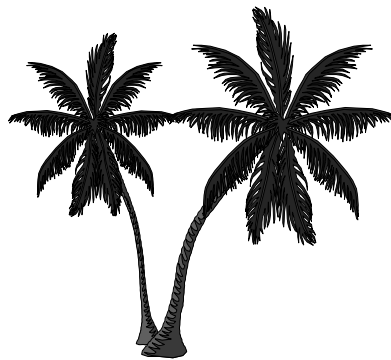
The falconry season is finally over. The rush to get falcons ready for hunting and the frenzy of feather repair and the fitting of tail mounts has died down. Falcons are now in moulting rooms, falconers have gone to live their normal lives and most veterinarians have now migrated from the scorching heat of the Gulf to enjoy abroad their well-deserved holidays. This is a time for reflection.

This season, we saw many exciting developments including a revived involvement of veterinarians working with hunting parties in several countries and the opening of new falcon hospitals in the Kingdom of Saudi Arabia and the United Arab Emirates. Major research projects were also generated to a level never seen before in the Middle East. Mohammed Ismael, a Dubai resident and an MSc student at the UAE University conducted parasitological surveys in captive falcons with the support of the Abu Dhabi Falcon Research Hospital, the Dubai Falcon Hospital and the Veterinary Hospital in Dubai. The study included the incidence and taxonomy of ectoparasites, endoparasites and

haematozoa. Members of the Group in the UAE helped in the production of a leaflet on aspergillosis that will soon be available for all falcon hospitals in the region. Moreover, a major study on the taxonomy and life cycle of *Serratospiculum* sp is currently in full swing with the active participation of several veterinarians and falconers from three different countries. This is the only way to achieve major scientific goals... by bringing all our resources together and working united towards the same objectives.

The last quarter of the present year promises to be an exciting time for us all in the UAE. We are planning a series of local workshops on falcon medicine topics. The first workshop, *Cytology as a Diagnostic Tool in Falcon Medicine*, will be conducted by Professor J. E. Cooper, Programme Manager at the National Avian Research Centre. This workshop will take place in September and will comprise a theoretical and a practical laboratory session.

Your comments and suggestions for future workshops will be greatly appreciated



“If you are tempted to reveal a tale to you someone has told you about another, make it pass, before you speak, three gates of gold. These narrow gates: First, is it true? then, is it needful? In your mind give truthful answer. And the next is last and narrowest, is it kind? and if to reach your lips at last it passes through these gateways three, then you may tell the tale, nor fear what the result of speech may be”.

Admonition from Arabian lore

Newcastle disease in falcons

Report by Dr. Dr. Habil Ulrich Wernery, Scientific Director, Central Veterinary Research Laboratory, P.O. Box 597, Dubai, United Arab Emirates.

As mentioned in the last newsletter, the Central Veterinary Research Laboratory (CVRL) in Dubai has isolated nearly 100 Newcastle virus strains from many different avian species in the United Arab Emirates, the last one being from stone curlews (*Burhinus oedicanus*). All these strains have been identified as PMV-1. On further analysis by Professor Alexander in England, the world leading authority on Newcastle disease (ND), all strains have been categorised into 5 groups (previously 3 groups). During the virus study, we found that falcons isolates belong to all 5 groups, whereas virus strains from other avian species (e.g. houbara bustard [*Chlamydotis undulata*], quail [*Coturnix* sp] and pigeon [*Columba livia*]) belong to one or two groups only. This finding indicates that falcons might get ND from many different avian species. Therefore it is essential that the forthcoming

ND vaccine prepared by Professor O.R. Kaaden at Munich University must contain isolates from all 5 groups to ensure that our falcon population is protected against ND to the maximum possible extent. To break the circle of an ND infection, Dr Nigel Barton from the Dubai Falcon Hospital started to vaccinate quails with a commercial ND vaccine. The quails are one of the major food source of captive falcons. Follow up tests at the CVRL on vaccinated quails indicate a reasonable immunity in the quail population even in non-vaccinated quail chicks (maternal derived antibodies).

Both procedures, vaccination of all falcons with a CVRL made ND vaccine and vaccination of quails; should ensure that our falcon population should not contract ND in the future.

Falconry in Spain

Report by Luis Miguel Padierna Carcedo, Spanish Union for the Defence of Falconry and Birds of Prey, P.O. Box 150101, Madrid, Spain.

Falconry in Spain has experienced a deep transformation throughout this century. During the Middle Ages, the practice of falconry was very popular in Spain. We can not forget that the Spanish and the Arabs were living together during eight centuries in the Iberian Peninsula. Sadly, Spanish falconry disappeared by the end of the last century.

In the 50's, Dr. Felix Rodriguez de la Fuente re-introduced falconry back into Spain. This type of falconry was very similar to the kind of sport practised in ancient times. Its practice was based in the use of birds legally taken from the wild through the Department of Environment (DOE) and the Falconry Associations. During this time, there were just a few people practising falconry and there was no real union or cooperation between them.

In 1989, the DOE, under pressure from radical conservation groups, prohibited falconry practices in Spain. They argued that this hunting method was "massive and not selective". It was time to join forces and bring all falconers together.

Spanish falconers answered quickly. At first, a committee was created to fight against this decision and after just few years, the ruling was reversed.

The Spanish Union for the Defence of Falconry and Birds of Prey (UEDECA) was created in

the Spring of 1995 to unify all the falconers in Spain. In addition to the different committees, the UEDECA has an office of legal and scientific consultants which consists of a group of lawyers, biologists and veterinarians prepared to help members of UEDECA whenever this is necessary. The UEDECA is planning in the near future to publish a Journal for all its members with features and information for the modern falconer in Spain.

Raptor studies discussed at international seminar in India

Report by Professor J. E. Cooper, Programme Manager, National Avian Research Centre,
P. O. Box 45553, Abu Dhabi, United Arab Emirates.

From 12-15 February 1996 the Bombay Natural History Society organised and hosted the Salim Ali Centenary Seminar on the Conservation of Avifauna of Wetlands and Grasslands. The Seminar commemorated the life and work of Dr Salim Ali, the famous Indian ornithologist who was born in 1896 and died in 1987.

One of the sessions at the seminar was devoted to raptors (birds of prey) and this attracted a good audience of delegates from many parts of the world. The session was chaired by Mr William Clark (USA) and Professor Vladimir Galushin (Russia), both recognised authorities on raptor biology. Ten papers were given and are listed at the end of this report. John and Margaret Cooper (UAE) discussed the impact of CITES on raptor research and suggested that the Regulations concerning "recognisable derivatives" could be detrimental and inhibitory when scientists needed to send specimens, such as small samples of blood, from one country to another.

William Clark drew attention to the need for improved field identification of Indian raptors and the paucity of relevant publications. Using museum material and working closely in the field with Indian ornithologists and a talented artist, he had been able to help to rectify this omission. His talk was illustrated with magnificent slides of birds and coloured plates.

Three Russian-speaking scientists then presented papers, each in English. Nataly Kubareva (Russia) discussed the results of her work on nesting raptors in Northern steppe areas. Sergei Skiyarenko

(Kazakhstan) described aspects of illegal trade in raptors in his country and the successful arrest of those involved in illicit capture and movement of raptors, *Falco cherrug*. Vladimir Balushin's paper on the status of raptors in India drew attention to the very large numbers of birds of prey, particularly the Indian white-backed vulture, *Gyps bengalensis* and pariah kite, *Milvus migrans govinda*, that now live and breed around New Delhi: the speaker attributed this largely to the tolerance shown by Indians to birds in their midst.

There followed three papers by Indian ornithologists on the status of various species, including harriers *Circus* spp. A lecture by Abrar Ahmed highlighted the illegal trade in raptors that still takes place in India. Mr Ahmed outlined recommendations for remedying the situation: these included closer checks on airports and appropriate legal action but also the rehabilitation and re-employment of traditional trappers. The final paper was presented on behalf of Roger Clarke (UK) who was unable to attend: His work in the Velavadar National Park, the largest winter harrier roost in the world has been linked with studies in England and important information has been gained on the habitat requirements of raptors, especially harriers.

The session on raptors was one of the most successful at the Seminar. Birds of prey are important sentinel species and can serve as useful indicators of the health of ecosystems. Many raptors depend upon grassland or wetland and study of these birds, on an international basis, is essential if such habitats are to be managed and conserved.

"The more I advance in life, the more convinced I am of the necessity of that principle of wisdom which befits our nature: enjoy what lies in your own hands"

Eugene Delacroix

Conservation of Raptors

Margaret E. Cooper and John E. Cooper, Abu Dhabi, UAE.

The impact of CITES on research on raptors.

William S. Clark, USA.

Advances in field identification of Indian raptors.

Nataly Yu. Kubareva, Russia.

Unexpected paradox, negative consequences of protection of small forest spots for raptors nesting along a northern steppe limit in European Russia.

Sergei L. Sklyarenko, Kazakhstan.

Rare raptors of Kazakhstan, with comments on illegal trade in raptors.

Vladimir M. Galushin, Russia.

Birds of prey populations in grassland and agricultural habitats of northern-central India

Vibhu Prakash and Jay Samant, Bombay, India.

Status and distribution of resident raptors in India.

T. Ganesh and P. Kanniah, Pondicherry, India.

Preliminary analysis of changes in population of wintering harriers in Andhra Pradesh, India.

S. Asad Akhtar, Bombay, India.

Harriers of the Velavadar National Park, DT. Bhavnagar, Gujarat, India.

Abrar Ahmed, New Delhi and Asad R Rahmani, U. P., India.

Illegal trade of raptors in India.

Roger Clarke, UK.

The implications of cross-habitat use by grassland raptors.

Salmonella sp infection in captive falcons

Report by Mrs. Reena Zachariah, Central Veterinary Research Laboratory, P.O. Box 597, Dubai, United Arab Emirates.

During the Spring of 1995 and 1996, six falcon carcasses were received for examination at the Central Veterinary Research Laboratory. These included gyrfalcon (*Falco rusticolus*) saker (*Falco cherrug*) and peregrine (*Falco peregrinus*) falcons. The clinical history was characterised by anorexia, dehydration, green-coloured droppings and increased liver enzyme activity. Necropsy performed on these birds revealed different degrees of yellowish discoloration and slight enlargement of the liver which was accompanied by soft consistency and subcapsular haemorrhages. Histology revealed focal necrosis with little inflammatory response. Enlarged spleen, subcapsular and parenchymatous haemorrhages were seen in all cases.

Salmonella sp was isolated from liver, spleen and intestines from all six falcons. The *Salmonella* strain involved in 5 of the fatalities was *Salmonella typhimurium* and *Salmonella muester* was encountered in one fatal case.

Different *Salmonella* serotypes were also cultured from faecal swabs from 5 birds. The serotypes seen were: *Salmonella bredeney* (2x), *Salmonella tarshyne*, *Salmonella indiana*, *Salmonella monteideo*. The falcons were shedding the bacteria without showing any clinical signs.

It seems that *Salmonella typhimurium* is pathogenic for falcons and that exotic strains do not affect them.

“Nature is pleased with simplicity, and affects not the pomp of superfluous causes”

Isaac Newton (1642 - 1727)

English Scientist

Some observations on birds of prey in Tanzania

East Africa is renowned for its birds of prey (raptors) and Tanzania is no exception. Many raptor enthusiasts have worked and studied birds in East Africa: perhaps the most famous - and certainly the most prolific in terms of books and scientific papers - was the late Leslie (L.H.) Brown. I was privileged to know and to work with Leslie Brown in Kenya in the 1970s and his untiring enthusiasm for these birds continues to have an influence on me, as it does for many others.

My wife and I lived near Morogoro, in Central Tanzania, from 1991-93. We saw a good number of wild (free-living) birds of prey and, inevitably, I received sick, injured and dead specimens for investigation at the Faculty of Veterinary Medicine. Some of this work on raptors continues and is co-ordinated by colleagues at the Faculty - with whom I still collaborate (Cooper, 1995).

Around our home the most prevalent diurnal raptors were the black-shouldered kite (*Elanus caeruleus*) and black kite (*Milvus migrans*). The former was commonly to be seen hovering, like a (European) kestrel, over cultivated fields and rough ground. We saw two races of black kites - the indigenous (African) yellow-billed and the migratory (European) black-billed. At some times of the year these races mix and flocks of up to 200 kites would roost together in trees near our home. I was (and remain) interested in the extent to which bacteria, viruses and parasites might be transferred from one race to another and thus, possibly, be disseminated: we have a research project on this.

Other raptors that we saw regularly were long-crested hawk eagles (*Lophaelix occipitalis*) - we had a resident bird that hunted rodents within 100 metres of our house - bateleur eagles (*Terathopius ecaudatus*), which regularly soared overhead in the thermals - and African goshawks (*Accipiter tachiro*), which hunted in the trees in our garden. Insofar as the owls are concerned, barn owls (*Tyto alba*) were very common and woke us at night as they landed on the tin roof of our old farmhouse and called from the trees. Spotted eagle owls (*Bubo africanus*) were prevalent and we saw and heard a pearl-spotted owl (*Glaucidium perlatum*) in a jacaranda just opposite our veranda.

Many of the species that are seen frequently by visitors to Kenya and Northern Tanzania, especially in the Rift Valley, are not common in Morogoro. The augur buzzard (*Buteo rufofuscus*), for example, is observed mainly on safaris further afield. On some trips we were excited to see flocks of Eastern red-footed

falcons (*Falco amurensis*), hawking newly emerged (winged) termites, and (in Northern Tanzania) large numbers of lesser kestrels (*Falco naumanni*) on migration.

For us perhaps the most significant and memorable sighting was an African harrier hawk or gymnogene (*Polyboroides typus*) which we saw climbing a tree - literally - in our garden, only a few weeks after our arrival in Tanzania. This poignantly reminded us of our work with Leslie Brown on this species in Kenya: the captive pair that we studied then (Cooper, 1980) is still thriving at the London Zoo.

When we arrived in Tanzania, I started planning a new Avian Medicine course for the Faculty and publicised widely that I would welcome seeing sick and injured (and dead) free-living birds, as well as captive ones. As a result I received a number of dead specimens, including raptors, for post-mortem examination. Most of these had been killed on the roads or (regrettably and usually illegally) been shot. Nevertheless, they provided an opportunity to establish data on "normal" birds and the samples we removed from them were not only ideal for pathological examination and pesticide analysis but served as valuable teaching material.

We received relatively few raptor casualties for clinical attention compared with when we lived in Kenya but three cases were of particular interest. They were all eagles.

The first was a large female tawny eagle (*Aquila rapax*) which was hit by a car on the road near Mikumi National Park and brought to the Faculty Clinic. Examination revealed fractures of both wings and other injuries were detected when the eagle was anaesthetised and radiographed. The bird was treated and the fractures healed but its flight remained slightly impaired. It was therefore presented to a wildlife sanctuary near Arusha (where I had worked as a volunteer 27 years' earlier) and, housed in a spacious aviary, continues to serve a most important function in educating local people.

The second eagle, a Wahlberg's (*Aquila wahlbergi*), was brought into the Clinic with a fractured radius. It had been shot. Following therapy this bird made an excellent recovery and was released in a local national park.

The third case was a black-breasted snake eagle (*Circaetus gallicus*), which also had been shot. This bird had a fractured radius and ulna in one wing.

The wing was immobilised with external fixation. The injuries healed but whether the eagle was able to be released remained uncertain and so it, too, was passed on to the wildlife sanctuary. It was a splendid bird, with contrasting black upperparts and breast and white underside. As its name indicates, its preferred food consists of reptiles, especially snakes, and amphibians. In captivity it is not easy to feed - as a herpetologist I disliked having to provide snakes and toads - and rodents or meat are taken rather reluctantly. Tanzanians are very surprised to learn that some species of eagle eat snakes, which are almost universally disliked and feared; the automatic assumption amongst most Africans is that birds of prey spend their lives stealing domestic chickens!

One of the many attractions of East Africa is its bird life. For those interested in raptors it is particularly rewarding. Eagles, hawks, falcons and their allies are still persecuted in many areas and are often

adversely affected by habitat destruction and changes in land usage. However, their worth is increasingly being recognised in Tanzania and it is to be hoped that our veterinary work with birds of prey at Sokoine University and the continued interest by some of my colleagues and former students will play a substantial part in this process.

References

Cooper, J. E. (1980). Additional observations on the intertarsal joint of the African harrier hawk (*Polyboroides typus*). *Ibis* **122**, 94-98.

Cooper, J. E. (1995). Rehabilitation of wildlife in East Africa. *Journal of the British Veterinary Zoological Society* **1**, 18-21.

News and views

Kondulka, D. & Petro; R. (1994) : der Würgfalke (Falco cherrug) brütet in Schlesien (The Saker falcon (Falco cherrug) breeds in Silesia). *C'as. Slez.Muz. Opava (A)*, 43: 287 - 288.

Report by Dr. Wolfgang Baumgart, Grumbkowstr 2A, D-13156, Berlin, Germany.

This paper published in the Periodical of the Country Museum, Opava, presents the first breeding record of saker falcons in Czechien Silesia. A real sensation!

The population integrated by 3 - 4 pairs was found in 1990 and since then, the eyries in an area of bare ridges, in a low mountain range, are regularly occupied with good reproductive success. The falcons prey exclusively on feral pigeons (*Columbia livia* var. *domestica*) and wood pigeons (*C. palumbus*) as susliks (*Citellus citellus*), the main diet of European sakers, do not occur in this region during the breeding season

This new discovered isolated breeding population of saker falcons in Silesia (50° 15r North latitude, 17° 30r East longitude) follows a Westerly direction. This is similar to the former distribution in the first half of this century around Bohemia or near Vienna, but exceeds the distribution borders of susliks in Europe.

This might be the starting point of a new ecological development of the falcon in Central Europe and needs further investigation.

Tucker, G. M. & Heath, M. F. (1994) : Birds in Europe: their conservation status.

This reference book provides concise and reliable information (mainly 2 pages per species) about the distribution and population trends, ecology, threats and conservation measures as well as the status (secure, localised, declining, rare, vulnerable and endangered) of bird species in Europe, among them 30 species of birds of prey.

The European populations of large falcons are estimated as follows:

Lanner: 200 - 330 pairs / endangered
(M. Lamberti),

Saker: 370 - 610 pairs / endangered
(W. Baumgart),

Gyrfalcon: 1300 pairs/ vulnerable
(P. Lindberg),

Peregrine: 6200- 10000 pairs / rare
(D. Ratcliffe).

The lesser kestrel (*F. naumanni*) is defined as a global threatened species with a dramatic decline in the Western Palearctic.

For each species covered, a map is shown with population trends in the single countries of distribution. The information on ecology is of special interest and focus the discussion on population trends and in some cases on new ecological aspects.

This book is, at the same time, a progress report including a comprehensive bibliography, helpful for scientists interested in studies on raptor research and conservation.

Public Awareness Centre. An Appeal

The newly created Environment and Wildlife Research and Development Agency in the United Arab Emirates is planning to create a Public Awareness Centre attached to a new falcon hospital.

One of the main exhibits of the proposed Centre will be designed and built by The Middle East Falcon Research Group. The main themes of this exhibit will be on "Falconry as part of the Arab National Heritage", "Falconry Throughout the Ages", "Falconry and Islam", "Falconry from Around the World", "Falconry as a Sport", "Falcons, Falconry and Conservation" and many others.

We are appealing to members from around the world to donate books, videos, brochures, leaflets, stickers, posters and falconry furniture for some of this exhibits. Your contribution will be adequately acknowledged. Your organisation may even consider having a permanent exhibit within the Centre!

For further information please contact:

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Specialist Workshop of the Middle East Falcon Research Group

The Proceedings of the first Specialist Workshop is now ready for distribution. Extra copies or copies for members are available at \$ 10.00 USA dollars each. Please place your orders now. Cheques should be made payable to the ‘National Avian

Research Centre’ and sent together with your orders to the following address: “The Middle East Falcon Research Group, P.O. Box 45553, Abu Dhabi, United Arab Emirates”.

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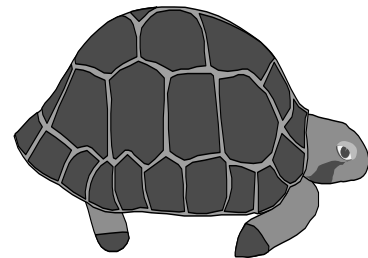
Announcements

**The Institute of Zoology
(Zoological Society of London)**

and

**The Royal Veterinary College
(The University of London)**

MSc in Wild Animal Health



This is a twelve month course for European and overseas graduates in veterinary and relevant sciences making a career in wild animal health. The course includes practical and theoretical instruction in the husbandry and nutrition of wild animals, taxonomy, population biology, conservation genetics, welfare and ethical aspects, epidemiology, immunology, infectious and non infectious diseases, disease investigation, restraint, preventive medicine and surgery, together with an individual research project. Training will be given by staff at the Institute of Zoology and the Royal Veterinary College, as well as invited speakers from

other veterinary and zoological centres. Applications are now invited for the 1996/97 or the 1997/98 courses starting in October 1996 and October 1997 respectively.

Full particulars and an application form are available from the Registrar, The Royal Veterinary College, Royal College Street, London NW1 OTU - U.K. Tel: 44 (0)171 468 5000 Fax: 44 (0)171 388 2342.

Dates for your diary

Raptor Research Foundation

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Second International Conference on Raptors

2 - 5 October 1996
Urbino, Italy

University of Urbino

For more information on all aspects of the conference (included suggestions or workshops and round tables)

Local committee chairperson

Dr. Massimo Pandolfi
Istituto di Scienze Morfologico Universita di Urbino,
Via M. Oddi 21 - 61029 Urbino, Italy.

For more information on the scientific programme contact

Scientific program organiser

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Box 191, Kempton, PA 19529 - 9449 U.S.A.

Phone: +1.610.756.6961
Fax +1.610.756.4468

Association of Avian Veterinarians

Annual Conference

27 to 31 August 1996
Tampa, Florida, USA

For information contact:

Sylvia J. Kornelsen
Director of Conferences
2121 S. Oneida St.
Suite 325
Denver, Co. USA
80224-2552
Fax: 303-7598861.

Ferreira's Falconry

An extreme rarity on falconry and ornithology now available in English in a fine limited edition

A translation from the Portuguese of D.F. Ferreira's *Arte de Caca de Altanaria* (1616) by Anthony Jack (President of the British Falconers' Club 1971 - 1994).

Summary of contents

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The Middle East Falcon Research Group

The Middle East Falcon Research Group (MEFRG) intends to bring together experts in falcons and falconry, veterinary surgeons, falcon biologists and conservationists working in the Middle East and other professionals interested in falcons and falconry from around the world.

The main objectives of the MEFRG are:

1.- To provide

- A central body for the coordination of research activities related to falcons and falconry.
- Improved management conditions of captive falcons through educational awareness programmes.
- A better understanding of falconry as part of the Arab cultural heritage.

3.- To hold

- Regional workshops on veterinary medical aspects, falcon biology topics, falconry and conservation issues.
- International Conference on veterinary medical aspects, falcon biology topics, falconry and conservation issues.
- It is envisaged to publish the papers and posters presented at the conference in the form of proceedings.

4.- To publish

- Joint papers on aspects concerning falcons and falconry.

- A common forum for exchange of information and for promoting collaborative research programmes.

2.- To promote

- Research on health and diseases in falcons, falcon moulting patterns in the Middle East and falcon nutrition, captive breeding programmes and semen cryopreservation and artificial insemination.
- Field studies on falcon migration, taxonomy, morphometrics, reproductive biology, nutritional ecology and behaviour.
- A quarterly newsletter containing contributions on medical, biological and conservation topics of common interest, new developments and recent medical advances.

- Membership

Any veterinary surgeon, biologist, conservationist or falconer working in the Middle East or any other person interested in medical, biological and conservation aspects of falcons and falconry from around the world

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