

Field techniques for Chiroptera & Rodentia and Zoo Management Training Short Report

Field Techniques for Volant and Non-Volant Small Mammals

When this training was originally conceived, it was to be a training on field techniques for Chiroptera to be held in Pakistan and Bangladesh. The inspiration for the workshop was a request by six field biologists from Pakistan at a C.A.M.P. Workshop for Pakistan Mammals where it became clear that there was no current information on bats and (mistakenly thought) little on rodents. It was thought at the time that getting resource persons from Pakistan to Bangladesh would be less problematical than getting them over to South Asia twice, hence the Pakistan/Bangladesh combination.

Logistical, temporal and financial constraints led to a decision to conduct the workshop in Pakistan only, but in three cities instead of one, it being easier and less expensive to move trainers to three cities than to bring field biologists to one city. More people could thus be exposed to the training. Also, as a result of discussions held at the C.A.M.P. for Non-volant Mammals and Training which followed, it was decided to combine training for Volant and Non-volant Mammals. The reasons for this decision also have to do with the massive volume of work which needs to be done on both groups and our observation that about $\frac{3}{4}$ of the field biologists specializing in Volant or Non-volant field researchers actually were working on both. We decided to try and evolve a perfect technique for studying both in the same field trip. In this way we get more field hours for both groups and also more field workers.

Thus the training in Pakistan was held in three cities and for both Volant and Non-volant mammals with two trainers, Dr. Paul Racey, Chair, Chiroptera Specialist Group and Regius Professor of Natural History, Aberdeen and Dr. Mike Jordan, Curator of Chester Zoo, Chair, Reintroduction Specialist Group for Europe and Central Asia, and noted field biologist formerly of Sparsholdt College, UK.

Please refer to attached Agendas. Generally the programme took up similar lectures each in turn for Chiroptera and Rodentia with some shared as common.

Karachi

In Karachi, the training workshop was conducted in the new Karachi Zoo Natural History Museum (which was also inaugurated on the same day for the occasion) and attended by a variegated mix of biologists from different institutes and universities, such as Zoological Survey Department, Sindh Wildlife Department, World Wide Fund for Nature, Pakistan, Karachi University and other institutions. Please refer to attached list. Of particular note was the attention of the Zoological Survey Department participants and the Sindh Wildlife Department participants. ZSD is the nodal agency for collecting and cataloguing species of animals in Pakistan, much like the Zoological Survey of India in India. The Sindh Wildlife Department was represented by two persons, one being the Director ? of the Department. His enthusiasm for the workshop was boundless. He stated that although he was familiar with field work, he learned a very large amount in a very short time and asked if it would be possible to organize the same workshop for all the people in his department. Also of note in Karachi, an elaborate Inaugural Ceremony was conducted and

attended by the Mayor of Karachi as Chief Guest with very good press coverage of the need for attention to studies of small mammals. Photographs of this and other features of the workshop are on the enclosed CD.

A zoo management training which was to have been held separately before these workshops had to be conducted simultaneously for various uncontrollable factors, but the audience for this workshop was different and it posed no problem. Zoo managers joined field biologists for some sessions such as animal handling and conservation. The whole senior staff of Karachi Zoo attended the zoo management training in Karachi including two vets, a curator, an educator and several other staff persons. The major topics and presentations of this training were Elephant Management, Population Management, Display of Rodents and Insectivores, Welfare measures for zoo animals, Environmental Enrichment, Collection Planning, Management of Captive Birds of Prey, Organising Zookeeper Training, Zoo Design and Education, Conservation and Education, the new World Zoo and Aquarium Conservation Strategy, Exhibiting bats in the zoo. Uzma Khan, Sally Walker, Mike Jordan and Paul Racey delivered these lectures.

Islamabad

In Islamabad the training was hosted by the Pakistan Museum of Natural History in collaboration with the CDA, Capital Development Authority. The head of CDA graced the Inaugural function and gave a very meaningful address. The field techniques workshop was very well attended by scientists from the PMNH itself, WWF, Pakistan, IUCN Pakistan, Punjab Wildlife Department, and individuals from different universities and colleges (refer attached list). The training demonstrations were held close to the PMNH which is practically inside the Margalla Hills National Park and some of the areas in which the workshop practiced were indeed inside the NP. The Science Foundation of Islamabad was also a collaborator and the Director was Chief Guest at the Validictory. The same basic formula was followed in Islamabad for lectures and demonstrations with good result. Participants and host were very much satisfied with their experience and made recommendations for further work (see attached).

In Islamabad, the Punjab Wildlife Department officers who manage the numerous deer parks and breeding farms nearer to Islamabad in the Punjab as well as the senior staff of the Islamabad Zoo attended the zoo management sessions.

Lahore

The workshops in Lahore were conducted at the Lahore Zoo in collaboration with the Punjab Wildlife Department. We lost Paul Racey for Lahore as he had to get back to UK for a meeting so Mike Jordan carried on focusing on Non-volant Small Mammals. Sanjay Molur from Zoo Outreach Organisation, who facilitated the CAMP workshop on Pakistan Mammals and is currently doing field work on both Volant and Non-volant small mammals, linked the two in his lecture on Conservation and the Pakistan Mammal CAMP, as he had done for the other two workshops as well. Since Mike also had to leave we had a one-day field training in Lahore for the Punjab Wildlife Department officers with some of the zoo staff also in attendance.

In Lahore, the staff of the Lahore Zoo and the wildlife officers looking after captive animal facilities in or near Lahore attended the second day which focused on zoo management. In Lahore we also had a formal inaugural function and valedictory with some good press coverage. In Lahore also we had dinner on two occasions with the Director General Wildlife, both current and past, whom we knew, and the Secretary, Department of Environment which was useful.

Altogether these workshops made a serious conservation impact on Pakistan. Although organizing these workshops was very painful, due to the Pakistan tradition of doing every single event in a very formal style and inviting everyone in the country at the expense of the foreign collaborator. This generated some heated arguments with hosts due to financial and time arrangements but even this produced a very good result. ZOO stuck to its principle that such events should be more simple so that they could occur more frequently. A compromise was reached on the formality and complexity of the events with ZOO agreeing to spare time for these events, and the Pakistan hosts agreeing to bear the cost of inaugurals and valedictory ceremonies, production of certificates and such. In the end, the Pakistani hosts discovered that it was possible for them to raise funds for such things themselves instead of leaving it to the foreign collaborator and they ended up paying for lunch and tea in all but once case, providing domestic transport, Xeroxing resource materials, etc. In the end the amount we had covered travel, accommodation, food and visa fees of resource persons of which two additional had to be taken (Sanjay Molur and Uzma Khan) due to problems in the timing of the zoo management, some equipment which we left behind so that Pakistani biologists could get it copied, cell phone cards, etc. The costs of the Afghan trainees from Kabul Zoo were more than anticipated due to high cost of hotels for the western zoo personnel and our sentiment that they should not be separated from our group. The North Carolina Zoo is bailing us out of this difficulty.

Conclusion

For between \$7000 and \$8000 donation from western zoos and welfare organizations, about 50 persons in each of three cities were trained by knowledgeable and experienced specialists. It is likely that a similar amount was contributed in cash and in kind by the Pakistan collaborators. Hundreds or thousands of persons in Pakistan got some idea from the press coverage that conservation involves more than just large mammals. Government officials got a similar message loud and clear. Pakistan conservation community at large learned that they can take responsibility for some aspects of training with a foreign collaborator and opt for more training. ZOO specialist networks gained quite a few more members. Two other big events in Pakistan could be fine-tuned during the visit, the upcoming SAZARC meeting, an upcoming CBSG/RSG meeting and an upcoming CAMP for Freshwater Biodiversity in December 2004. Two new species of bats were noted and are being identified by specialists in U.K.

ZOO, SAZARC, and CBSG South Asia would again like to thank the local hosts, organizers and their collaborators, resource persons and foreign sponsors. The significance of the collaboration can be appreciated by the list of same on the following page :

Thanks to all :

Local hosts, organisers and sponsors :

Karachi Zoo & Safari Park
Karachi Municipality Corporation
Pakistan Museum of Natural History
Capital Development Authority (CDA), Islamabad
Punjab Wildlife Department, Lahore
Lahore Zoological Gardens, Lahore

Local collaborators

Zoological Survey of Pakistan ZSD
IUCN Pakistan
WWF Pakistan

Resource persons

Dr. Paul Racey, Regius Professor, Aberdeen University; Chair, IUCN SSC CSG
Dr. Mike Jordan, Curator, Chester Zoo, Chair, IUCN SSC RSG Europe & C. Asia
Ms. Uzma Khan, Conservation Biologist, WWF, Pakistan
Sanjay Molur, Deputy Director, ZOO & Chair, IUCN SSC RSG, S & SE Asia
Sally Walker, Founder ZOO & Convenor, CBSG, South Asia

Foreign Sponsors

Chester Zoo / North of England Zoological Society, UK
Bat Conservation International, BCI, USA
Universities Federation for Animal Welfare, UFAW, UK
North Carolina Zoological Park, USA

RECOMMENDATIONS

All human life depends on the sustainable management of biodiversity. Pakistan's development will continue to depend on the foundation provided by living resources, and conserving the nation's biodiversity will ensure that this foundation is strong.

Our present knowledge of this economically important natural resource is highly inadequate and fragmentary. Hardly 10-15% of the biodiversity has yet been known in Pakistan. The species that have high biological value and are potential candidates for conservation on account of their degree of endemism, rareness or risk of extinction are not yet clearly known. In this regard, some recommendations are being made:

- **Captive Building:** Although Pakistan has some excellent taxonomists involved in research of different biodiversity groups, yet their number is insufficient to address the gigantic task in hand. There are no degree programmes in biodiversity management, bio-systematics, biodiversity conservation or community based conservation of natural resources. For capacity building, degree programmes, symposia, seminars and frequent training workshops in different animal group are required.
- **Integration and coordination:** Although some organizations are involved in biodiversity research and conservation, however their efforts are quite in isolation. Hence, there is a strong need to develop close linkage and coordination among researchers, institutions both governmental and non-governmental and the donor agencies. The capacity of these institutions to manipulate the data also requires strengthening.
- **Research:** There are relatively few organizations, which are involved in the exploration, collection, preservation, identification and carrying out research on the biodiversity of this country. A shortage of funds and lack of trained staff have also limited the amount of research on the identification, conservation and sustainable use of biodiversity in Pakistan.
- **Education & Awareness:** Being low literacy rate in Pakistan, there is a dire need to develop a comprehensive strategy for formal and informal public education and awareness about the importance of this natural resources.

KARACHI



Bat demonstration in class by Paul Racey



Captive management of bats in zoo class by Paul Racey



Participants of zoommanagement training in Karachi Zoo



Paul Racy gives certificate to Director, Karachi Zoo



Group photo of field techniques training and zoo management training at Karachi Zoo. Bat demonstration in class by Paul Racey

ISLAMABAD



1



2



3



4

1. Bat demonstration in Margalla Hills by Paul Racey
2. Inaugural Audience
3. Bat identification techniques class - Paul
4. Rodent handling techniques - Mike Jordan
5. Group photo in front of Pakistan Nat Hist Museum



5

LAHORE



1. Inaugural dignitaries at Lahore
2. Inaugural attendees at Lahore
3. Participants (same for field and zoo management - Punjab wildlife dept) at Lahore
4. M. Fazil receives certificate at Validictory
5. Sally's Walker's security guards (protecting Pakistan from Sally not the other way around).
6. Kabul Zoo participants with Lahore Zoo staff who took them on a special tour
7. Validictory Lunch

