

Think Rat! Report on Training in Field Techniques and Taxonomy for Conservation of Rodents and Insectivores, 22-26 July 02, Trichur

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A Training in Field Techniques and Taxonomy for Conservation of Rodents and Insectivores was held at the College of Veterinary Science, Kerala Agricultural University from 22-26 July 2002. The host/organizer at KAU was the College of Forestry. More than 56 biologists from 17 institutions and organizations participated in the workshop, 23 of which were zoology students and faculty from the College of Forestry, and 33 from various organizations in India, Bangladesh, and Sri Lanka.

The workshop was conceived and organized by the Rodent, Insectivore and Scandentia Conservation and Information Network of South Asia (RISCINSA) and Zoo Outreach Organisation. The following organizations were collaborators in the workshop: Conservation Breeding Specialist Group, South Asia, Wildlife Information Liaison Development (WILD), the IUCN SSC Rodent Specialist Group, South Asia, The IUCN SSC Insectivore Specialist Group, South Asia, and the IUCN SSC Small Mammal Subgroup, Reintroduction Specialist Group. The workshop was fully sponsored by Knowsley Safari Park, United Kingdom.



Mike Jordan, Resource Person from UK, both lectures and listens. There were many Resource Persons among participants. Photo by S. Walker

Background

There are about 140 species of rodents, insectivores, scandentia, and lagomorphs which are found in South Asia, approximately 120 in India alone, or about 30% of all mammals found in this region. Approximately 38 are endemic to the region, meaning that they are found in a one or more countries of South Asia and nowhere else. Of these numerous rodent species, only 10 are or have the potential to be economically destructive. Otherwise, rodents and insectivores play a vital role in the ecosystem by dispersing seeds, consuming vegetation, serving as prey for a large

variety of small carnivores, and consuming insects. Considering the size and importance of this group of small mammals, RISCINSA was initiated in 2000 as a network to provide a catalyst for communication, collaboration and cooperation of field biologists studying rodents and insectivores from the perspective of wildlife and biodiversity conservation. RISCINSA has more than 45 rodent specialists as members. RISCINSA had undertaken two major projects for the year, i.) to conduct a training workshop in field techniques for rodent field biologists, and ii.) to conduct a Conservation Assessment and Management Plan Workshop (CAMP) for Rodents, Insectivores, Scandentia and Lagomorphs. Now, the number of projects has increased to include the coordination of rapid, presence/absence surveys, absolute/relative density surveys and public education.



Kartik Shankar, Resource Person, shared his experience from surveying rodents in tropical ecosystems. Photo by S. Walker

Workshop

The training workshop covered a variety of conservation biology tools, including a great variety of field techniques for collection of populations and distribution information, preparation of specimen, elements of a CAMP workshop, to prepare participants for the upcoming exercise, the IUCN Red List.

RISCINSA's external advisor, Dr. Mike Jordan of Sparsholt College, U.K., has had direct, hands-on, successful experience in conservation action with rodents and insectivores in conservation action with rodents and insectivores and was the main resource person. Dr. Jordan covered a wide variety of topics having to do with almost every aspect of field work. Other resource persons from within India were Dr. M.S. Pradhan of Zoological Survey of India, Dr. Kartik Shankar, Madras Crocodile Bank, Dr. R.S. Tripathi of the Central Arid Zone Research Institute, Jodhpur

all of whom spoke on different aspects of Indian Rodents. Sally Walker, Sanjay Molur and B.A. Daniel from ZOO, WILD & RISCINSA coordinated and facilitated the workshop and introduced "BIO-NET" (an international institution which promotes taxonomy in developing countries), the CAMP process and IUCN Red List to participants.



animal welfare as well as safety perspective
 — Lab demonstration of cryopreservation, karyotyping and other procedures
 — and other topics

Several interactive sessions were conducted to discuss tasks which should be completed to prepare for the upcoming Conservation Assessment and Management Plan workshop and Global Mammal Assessment (Rodents and Insectivores). These included:

Data Deficient and Not Evaluated Species session – discussion of species which could not be assigned to an IUCN Red List Category at the 1997 Biodiversity Conservation Prioritisation Project (BCPP) CAMP for Indian Mammals workshop due to lack of information or problems of nomenclature. Sources, both human and published, were identified for all these species and participants volunteered to track down missing information for some.



Field surveys for non-protected forest and other forest grassland areas – strategies and protocol were established. Participants committed to conducting some surveys and individuals not present were identified to approach for possible collaboration in "presence/absence" and "absolute density" surveys. Examples of "other forested areas" are large college and university campuses, public parks, zoological parks, industrial complexes which are well vegetated with some undisturbed area.



Nearly all participants committed to complete some task for the upcoming CAMP, whether individually or in an institutional effort.



Radio collars for tiny animals
 Photo by S. Walker

The workshop covered:
 — Introduction to field techniques: Field trapping and monitoring techniques
 — Case studies from United Kingdom and India
 — Small mammal diversity and conservation
 — Practical workshop session on different techniques and equipment for handling and restraint, sexing of animals, and welfare issues
 — Reintroduction planning and monitoring of small mammals – long term
 — Field visits to nearby forested areas of Kerala Agricultural University
 — Demonstration of animal handling from



Chelmala Srinivasulu watches Mike Jordan weighing a rodent in the field
 Photo by S. Walker



Sanjay Molur, RISCINSA Red List Advisor teaches about IUCN Red List Criteria. Photo by S. Walker

A small meeting was held of experienced participants involved in the technical planning of the CAMP and GMA to review the list of species of rodents (rats, mice, squirrels, porcupines), insectivores (hedgehogs, shrews), scandentia (trees shrews) and lagomorphs (hares) and then shortlist items of uncertainty to be researched. All items were tasked.

A CAMP workshop calls field



biologists, taxonomists, foresters and other wildlife workers together to share their knowledge on a particular animal or plant group. The CAMP Workshop process uses the IUCN SSC Red List Criteria to assess species and subspecies and assign them to an IUCN SSC Red List Category. The categories decided by the group are communicated to the IUCN SSC Red List Authority. CAMP workshops provide a means for field biologists from range countries of the species to participate in the IUCN SSC Red Listing process directly. The IUCN SSC Red List of Threatened Species, which is accessible by anyone on the Internet, has replaced the old IUCN Red Data Books. The information collected and the categorization will be collected into a Report which will be widely circulated to policy makers, forest and wildlife officials, academic institutions studying wildlife, non-governmental organizations, and others with an interest in wildlife.

4. *Assessments*: CAMP workshops for each group
5. *Education*: follow up CAMP workshops using most current information



V.C., Mr. K.V. Peter, of Kerala Agricultural University signs a "thanks" banner while Dean of the College of Forestry, Dr. Lucken C. Babu, and Asst. Professor and Organiser P. O. Nameer, look on. Photo by Padma Priya.



Lab session included karyotyping. Photo by Padma Priya

Zoo Outreach Organisation and CBSG, South Asia, with technical help from the IUCN SSC Conservation Breeding Specialist Group has evolved a 5 point conservation action "formula" for dealing with non-charismatic organisms. While animals like tigers and elephants get the "lion's share" of money, human resources, and press coverage, these animals are very few compared to the smaller creatures. Tigers are "felids" of which there are only 30 odd species in all South Asia. Elephants belong to Proboscidea of which there is only one species in South Asia. By comparison, there are 131 species and 143 subspecies of bats, 140 species of rodent and insectivores, 330 species of amphibians, 600 species of reptiles and a staggering number of more than 80,000 known species of invertebrates. ZOO and WILD have created networks for these taxon groups and are pursuing a systematic conservation action strategy for them. It is

1. *Network*: network taxon specialists for each group through South Asia
2. *Training*: Field tech management for ex
3. *Field studies*: Coord pick up DD and NE spp



During the months between now and the Rodent CAMP Workshop, participants and other RISCINSA network members will search for information about the 140 odd species of rodents, insectivores, tree shrews, and lagomorphs in literature, museums and in the field.

RISCINSA welcomes members from the following: field biologists specializing in rodents and insectivores who have an interest in biodiversity conservation, students with an interest in rodents, rodent taxonomists, and wildlife researchers studying other species for which rodents are prey. RISCINSA is searching for all field biologists with hard data (published and unpublished) on the distribution, status, threats, etc. of rodents, insectivores. Think Rat! and contact us!

List of Participating Institution

- College of Forestry, Kerala Agricultural University, Thrissur
- Regional Research Station, VC farm, Mandya
- Central Arid Zone Research Institute, Jodhpur
- Department of Zoology, University of Colombo, Sri Lanka
- Department of Zoology, University of Dhaka, Bangladesh
- Sparsholt College, Aparsholt, Hampshire, UK
- Bombay Natural History Society, Mumbai, Maharashtra
- Wildlife Institute of India, Dehra Dun, Uttaranchal
- Thrissur Zoo, Thrissur
- Nehru Memorial College, Puthanampatti
- Madras Crocodile Bank, Chennai
- C.S. Azad University of Agriculture and Technology, Kanpur
- Department of Zoology, Osmania University, Hyderabad
- Wildlife Information Liaison Development (WILD), Cbe
- Zoological Survey of India, Pune
- Zoo Outreach Organisation, Coimbatore

