

Report on the International Training Course on Frontiers in Animal Ecology and Conservation Biology, Beijing, China

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The Society of Conservation Biology (China Chapter) in association with International Society of Zoological Sciences (ISZS), Key Laboratory of Animal Ecology and Conservation Biology, Institute of Zoology (IOZ) and Chinese Academy of Sciences (CAS) organized the second International training course on frontiers in animal ecology and conservation biology in Beijing from 22 November - 1 December 2014. The training provided new theories, changes, and developments in methodology of animal ecology, in the field of conservation biology; enhanced the overall academic understandings and innovation of animal ecology and conservation biology and facilitates communication among animal ecologists and conservationists from developing countries. My participation as a sponsored candidate for the program as well as for the 6th international symposium of integrative zoology in the Institute of Zoology was supported by ISZS.

About eight Indian participants took part in the programme. Prof. Fumen Wei, Institute of Zoology gave the first plenary talk about the conservation of Giant pandas. He shared his two decades of research experiences on Giant Panda conservation research work. He said that 50 species of bamboo are ideal food plants for the pandas. He explained how the impact of climatic change on the bamboo flowering affect the Panda species directly; and explained how the research will help to link the fragmented populations in some parts of China. He spoke about some of the molecular scatology findings, the feeding biology of Panda, such as fecal DNA sample collection, DNA extraction, gene typing and population surveys.



Closing function and certificate distribution



A research student showing the skinned rock squirrel

Followed by this Zuoxing Wang delivered a talk on animal behavior and neurobiology. This was about the gene regulation in prairie voles in Central Illinois. Social behaviour such as pair binding and selective aggressive behaviour; gene behavior interaction were explained. Guiming Wang gave a talk on movement ecology. This focused on foraging behavior of various animals. After all these presentations a group discussion was conducted. Our team had 13 participants representing Pakistan, Mangolia, India and China. All of them shared their research work and discussed. I shared my experience of on going small

mammal research work of ZOO/ WILD, large rock rat project, Madras hedgehog community interaction and conservation outreach work with the team members..

On the second day an excellent talk was given by Patrick. A. Jansen (STRI) about 'seed dispersal by rodents'. He shared his research work at the Central American Agoutis on seed

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Group Photo

dispersal methodology. He used automated radio telemetry system and recorded 800 movements by rats. Seed dispersal from 150m to almost a kilometer was recorded during the study. Then, there was a talk about some of contributions from Charles Elton to population biology. We visited the National Zoological Museum of China. The museum visit was informative and interesting.

The third day started with plenary lecture by Dr. Xu Lei, on rodent vector plaque. This talk was about the vector systems to climate change aspects. Focused mainly about the treatment and molecular studies. Then an excellent talk was delivered by Dr. Raja Narayanan from India on the role of pheromones in conservation and management of Blackbuck in captive. The next talk was about the golden blind mole rats and their population abundance and conservation initiatives in South Africa. A session about the conservation genetics and genomics was lead by Mike Bruford, Cardiff University mainly about developing ideas for the Conservation Genetics Specialist Group (CGSP) of IUCN.

Dr. Charles J Krebs spoke about ecological studies and estimating abundance. Populations sizes measuring techniques, single marking, single recapture, multiple marking and recaptures were well explained. Also he explained the some rules to follow when you are studying the abundance.

The next session was on plant animal interactions. Dr. Raju Solomon from Andhra University India gave this talk. He talked about the various bee species, their pollen and honey collecting methodology. He showed a variety of bee species, wasps, ants and many mammals and their role in pollination and seed dispersal. The talk was impressive and very much informative. He also shared some of his field experiences in Eastern Ghats.

Other topics covered during the training programme are ecological adaptation and evolution, climate change ecology, data analysis methods and ecotoxicology, GIS technology in habitat assessment, infrared triggered camera technology, radio telemetry and molecular ecology.

At the end of the programme participants were given a chance to give their feedback about the training programme. A closing function as well as certificate distribution was done by Prof. Fumen Wei. The participants got ample opportunities to visit key labs in the Chinese Academy of Sciences and learned the ongoing research work. We also visited Red Deer (*Cervus elaphus*) forest park and we spend much time in this park and observed the populations of the *Cervus elaphus*.

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