EDUCATION OUTREACH
**Title:** Hoolock Gibbon Conservation in the Protected Areas of Tripura, Northeast India through Training and Education.

**Objective:**
The primary objective is ensure long-term conservation of Hoolock Gibbon and its habitat by engendering well-trained, skilled and motivated frontline staff and conservation educators.

**Activities:**
- Two three-day capacity-building trainings were held for forest frontline staff.
- Two three-day training-of-trainers workshops using Hoolock Gibbon Conservation as a theme.

**Progress:**
Both capacity-building and teacher-training workshops were held, and a follow-up workshop will be held in the coming year.

**Impacts:** Through the course of the project, sixty (60) forest frontline staff members and sixty (60) educators were given training, and the educators would go on to educate many others.

**Partner:** Tripura Forest Department

**PI:** R. Marimuthu

**Donor:** US Fish & Wildlife Service
The Ram Hattikudur Advanced Training in Conservation (RHATC) was a four-month course started on 11 October 2021 aimed at bridging academic understanding of conservation and application on ground in India. The process began very early in June to work on the course goals, teaching philosophies, course content, teaching methods and course policies, logistics, as well as specific responsibilities for each mentor, resource person, and administrator, etc.

Out of 72 applications, 10 were shortlisted for the residential course through online application form and online interviews. Among the selected Fellows, five were from varied streams and five were from conservation/environmental science stream of study.

The biggest objective of the course is to bridge the gap between academics and conservation practice. In order to achieve that the fellows are exposed to basic training in principles of conservation biology and to the challenges faced in planning and implementing conservation actions.

The course has many modules related to understanding the principles of conservation biology; some of these are

1. Foundation of basic concepts such as taxonomy, evolution, research methods
2. IUCN red list assessments
3. Freshwater biodiversity conservation challenges and solutions
4. Wildlife policies in India
5. Many talks by leaders in the field of biodiversity conservation ranging from sustainable lifestyles and wildlife photography to taxonomic studies
6. Marine biodiversity conservation and its challenges including policy perspectives
7. Two long field trips and two-day trips to understand organic farming, restoration, importance of wildlife corridors, and citizen science
8. Conservation education through activities, games, plays and education materials.

Throughout the course (including the field trips) all Covid protocols were followed strictly.
The biggest objective of the course is to bridge the gap between academics and conservation practice. In order to achieve that the fellows are exposed to basic training in principles of conservation biology and to the challenges faced in planning and implementing conservation actions.
All the Fellows were given various assignments both individual, in pairs and in groups and these include writing articles for our in-house publications, developing a framework and designing education program and materials, and their mentorship report where they applied all that they learnt to understand and if possible resolve a conservation challenge presented by a mentor selected by each Fellow.
The course ended with a few quick doubt clearance sessions and a look at positive conservation stories taking place in India and around the world to build a sense of conservation optimism which is vital for those working in the field of wildlife conservation. The graduation ceremony was held on 15 February 2022 where all the fellows and the Zooreach team and the Conservation Supporter – Sanjay Manohar with his family were present, and their families and their mentors were present online owing to Covid restrictions.

Donor: Sanjay Manohar, Bangalore, India
Zoo's Print publishes simple natural history observations with the intention of putting out facts for the general public to understand and for scientists to build hypotheses and test them out.

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COMMUNITY
Title: Targeting to achieve zero mortality in Human Elephant Conflict (HEC) areas in partnership with Tamil Nadu Forest department.

Objectives:
1. To educate stakeholders to modify livelihood / lifestyle methods incompatible that are incompatible in HEC areas.
2. To educate local bodies representatives in developing safety protocols in conflict areas.
3. To plan and organize mass awareness programmes for the community in HECx in conflict prone areas of Coimbatore forest range.

Activities:
1. Eight (8) one-day training programmes
2. Twenty (20) Mass HECx awareness programmes were conducted.

Progress:
1. The programme for enhancing the stakeholders’ awareness was carried out.

Results/Impacts:
1. 5000 students, teachers and community people were benefitted by the mass awareness programmes.
2. About 2300 line department staff benefited from the one-day training. The training helped them understand HEC issues and the importance of HECx that eventually make them to help forest department activities.

Partners: Nature Conservation Society, Tamil Nadu Forest Department, District Administration, School Education Department and Department of Environment

PI: R. Marimuthu

Supported by: U.S. Fish & Wildlife Service, USA
Title: Human Elephant Coexistence HECx - Advocating through awareness programmes in Tamil Nadu

Objectives: To bring the attitudinal change among the community and school children.

Activities:
• Street plays themed on Human Elephant Coexistence performed in Burgur hills of Erode Forest Division.
• Five school awareness programmes on HECx

Progress:
During the month of March 2021, a total of sixteen street plays were performed, and during Wildlife Week in October 2021, school awareness programmes were carried out in a total of ten schools.

Impacts:
• About three thousand (3,000) villagers were reached out to through the use of street plays in order to educate them on the significance of human and elephant coexistence.
• During school awareness programmes, about 1000 students and 100 teachers were taught about HECx. The teachers would continue to teach more and more students.

Partners: Tamil Nadu Forest Department, Chief Education Officer, Erode Dist., District Co-ordinator, National Green Corps, Erode Dist., District Eco-club Coordinator, Erode, District Education Officer, Gobichettipalayam.

PI: R. Marimuthu

Donor: International Elephant Foundation, USA
Title: Amplifying Asian Elephant conservation through capacity building and sensitization programs in Tamil Nadu, India

Objectives
1. Capacity building for frontline staff of forest department.
2. Sensitizing journalists, lawyers, police and other line departmental staff about human elephant conflict and promote Human elephant Coexistence.
3. Evaluating the impact of the above training programs.

Activities:
1. To conduct training programs for forest frontline staff of Sathyamangalam, Srivilliputhur and Megamalai Tiger Reserves, Tamil Nadu.
2. A one-day training program for the journalists, lawyers, police and other line departmental people.

Progress: Recently funded project. The activities are yet to start.

Results/Impacts:
1. Sixty (60) frontline staff of forest department will be trained.
2. Fifty (50) journalists, lawyers, police and other departmental staff will be sensitized about the importance of Human Elephant Coexistence HECx.

Partners: Tamil Nadu Forest Department, District Administration of Erode and Virudhunagar districts, Press Council, Police Department and Bar Councils, Government Arts College, Udhagamandalam, Indo-American Wildlife Society, Chennai, Wildlife Association of Rajapalayam WAR, Vanam, NGO, Theni & Sathyamangalam Environment and Wildlife Association (SEWA) & others.

PI: Rengasamy Marimuthu

Donor: U.S. Fish & Wildlife Service, USA
CONSERVATION
The Journal of Threatened Taxa (JoTT) is an open access and print, peer reviewed monthly (not including special edition, supplementary and monographs), rapid, international journal for conservation and taxonomy. JoTT is a platform for quick and timely publication of research findings, reviews and other aspects of science related to conservation and taxonomy including subject areas like ecology, behavior, physiology, methodology, veterinary, diseases, management, and models among others. JoTT encourages professional and amateur upcoming scientists from around the world to publish. The journal provides assistance and mentors first time writers, or writers of non-native English language countries in presenting science to the world. Wildlife Information Liaison Development publishes JoTT, and Zoo Outreach Organization hosts and supports the journal.
Objectives:
1. Investigate the impact of becoming a mother on female personality in bonnet macaques.
2. Explore determinants of variation in maternal care in wild population of bonnet macaques.
3. Test for links between maternal behaviour and infant personality development.

Activities:
1. The birth season in bonnet macaques typically lasts from January to May, and last year, 21 infants were born in two groups, with 16 dying before reaching their first year of life.
2. In 2021, we collected 2673 minutes of behavioural observations from 33 females, focusing on mother-infant relationships and interactions with other group members.
3. The data collection in Thenmala is still ongoing in 2022, and we are currently working on the manuscripts.
4. We also began collecting faecal samples for genetic analysis in order to investigate the kinship ties with our study group.

Partners: Prof. Mewa Singh (Mysore University, India), Prof. Lynne Isbell (University of California Davis, US), Zoo Outreach Organisation

PI: Malgorzata Arlet

Donor: Adam Mickiewicz University in Poznan