

# ZOO OUTREACH ORGANISATION ACTIVITY REPORT

APR 2022 TO  
MAR 2023







# EDUCATION OUTREACH

# RAM HATTIKUDUR ADVANCED TRAINING IN CONSERVATION (RHATC)

## Guiding Young Leaders in Conservation for the Future

The second edition of the Ram Hattikudur Advanced Training in Conservation (RHATC) 2022-23 concluded successfully with the graduation of 10 Fellows. This programme works as a bridge between the theory and on-ground conservation by including aspects of research, policy matters, scientific temperament, outreach and awareness.

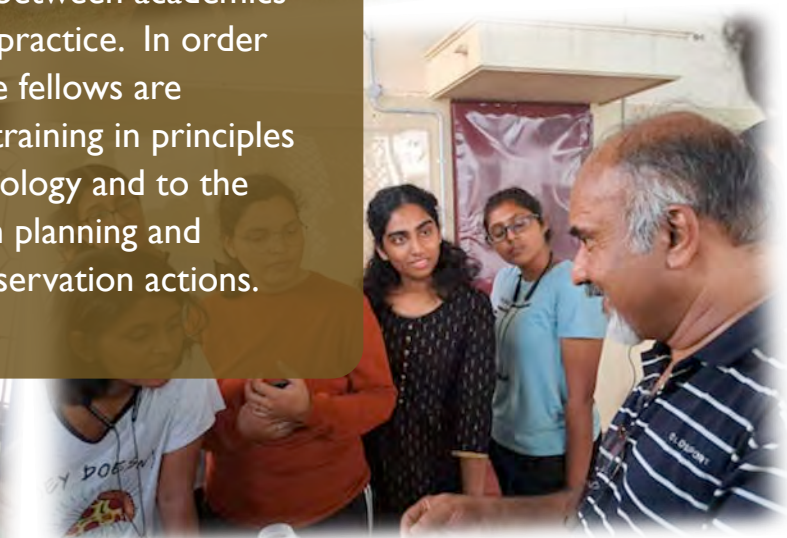
This year's participants were chosen from across the country: Bengaluru, Chikmagalur, Thane, Delhi, Pune, Nagpur, Chennai, West Bengal and Assam.

Over the course of the four-month programme, which laid special emphasis on marine conservation, they got to meet about 55 resource people, 13 leaders and 15 field researchers and/or naturalist from different areas of study and levels of expertise.



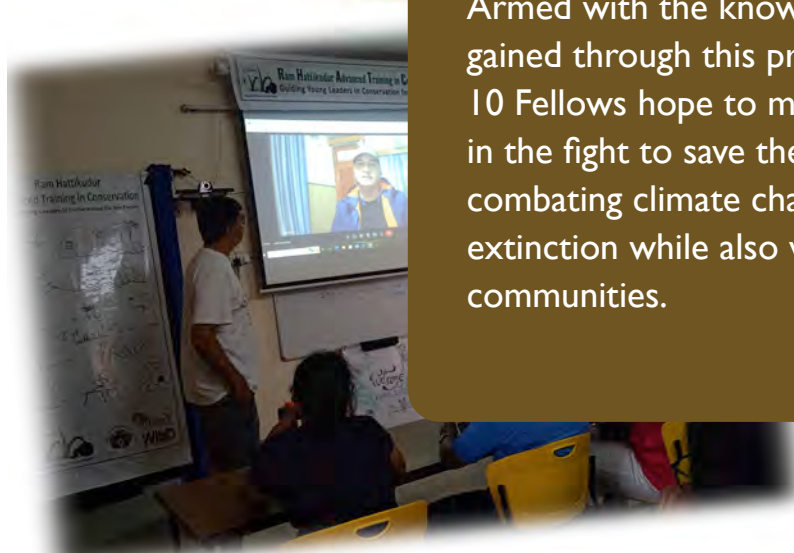


The biggest objective of the course is to bridge the gap between academics and conservation practice. In order to achieve that the fellows are exposed to basic training in principles of conservation biology and to the challenges faced in planning and implementing conservation actions.





The Fellows have the scientific knowledge, objectivity, and drive to save Planet Earth, the only known living system and our only home. Armed with the knowledge and skills gained through this programme, the 10 Fellows hope to make a difference in the fight to save the planet by combating climate change and species extinction while also working with communities.





Their goal is to create a sustainable future for all living beings by promoting conservation, educating the public, and advocating for policy changes. With their diverse backgrounds and expertise, the Fellows are poised to make a significant contribution towards protecting our planet.



**Donor:** Sanjay Manohar, Bangalore, India



# HOOLOCK GIBBON CONSERVATION

**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:**

The trainings were successfully conducted in March 2022. The follow up was done in October 2023.

**Impacts:** Sixty (60) forest frontline staff and Sixty (60) educators were trained through the project and follow up was done to understand the success of the project. We had a very positive results as the participants form both trainings utilised the techniques learned in the field very well.

**Partner:** Tripura Forest Department

**PI:** R. Marimuthu





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.

12

issues

586

pages

142

articles

Reptile Rap # 14 (47pp)

Bugs R All # 30 (115pp)

SMM # 2 (6pp)

Plantasia # 10 (31pp)

Mammal Tales # 5 (14pp)

Bird-o-soar # 40 (147pp)

General Articles # 4 (34pp)

Funguy # 1 (3pp)

RHATC course # 27 (170p)

Report # 1 (3pp)

Frogleg # 3 (9pp)

Announcements# 5 (7pp)

**ZOO'S PRINT**  
COMMUNICATING SCIENCE FOR CONSERVATION



COMMUNITY





# JOINT FOREST MANAGEMENT TO PROMOTE AND SUSTAIN LIVELIHOODS IN SRIVILLIPUTHUR – MEGAMALAI TIGER RESERVE TAMIL NADU, INDIA

The project is intended to support the newly declared Srivilliputhur-Megamalai Tiger Reserve (SMTR)

## **Objectives**

- i) Forming Joint Forest Management (JFM) & Village Forest Committee (VFC)
- ii) Capacity building for forest personnel and VFC
- iii) Providing training and alternate livelihood support for communities
- iv) Designing and developing education modules for educators
- v) Conducting trainers training programs and awareness programs for educators
- vi) Facilitating and preparing a working plan for JFM
- vii) Creating a network of VFC and forest personnel
- viii) Setting up a foundation for research and providing facilities in the TR

The main target groups are 50+ village communities around the proposed Tiger Reserve and the forest personnel.

## **Activities:**

- i) Socio-economic survey of villages adjoining the Srivilliputhur forest division and mapping has been done
- ii) Village entry programs in seven tribal settlements in SMTR have been completed
- iii) Families who require livelihood support have been identified
- iv) Field equipment has been issued
- v) Education programs have been developed, and awareness activities have been initiated.

PI: B.A. Daniel

# HUMAN-ELEPHANT COEXISTENCE

**Title:** Inspiring Human Elephant Coexistence HECx among community through street theatre

## Objectives

Conducting Human Elephant Coexistence Street Plays and educate the community living near elephant habitat of Anamalai Tiger Reserve to improve their attitudes towards elephants so as to avoid confrontation and conflict whenever possible.

Promoting Human Elephant Coexistence to School Children.

## Activities:

Eight (8) street plays will be conducted in the villages adjacent to Anamalai Tiger Reserve

A one-day training program for the journalists, lawyers, police and other line departmental people.

Five (5) HECx school awareness programmes will be conducted.

## Progress:

Eight (8) street plays were conducted in March 2023 and the school awareness programmes will be conducted in June 2023.

## Results/Impacts:

One thousand five hundred (1500) villagers were reached out through the Human Elephant Coexistence street plays and taught them to change their attitudes toward elephants.

**PI:** R. Marimuthu



ASIAN ELEPHANT  
SUPPORT

# ASIAN ELEPHANT CONSERVATION

**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:**

A preliminary visit was made to one of the project areas, the Srivilliputhur Megamalai Tiger Reserve (SMTR). The other project site visits and project activities will begin soon.

## **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, Udhamandalam, Indo-American Wildlife Society, Chennai, Wildlife Association of Rajapalayam WAR, Vanam, NGO, Theni & Sathyamangalam Environment and Wildlife Association (SEWA) & others.

**PI:** R.Marimuthu





# WETLAND RESTORATION IN THE BOSCH NEIGHBOURHOOD (KEERANATHAM)

## Objectives

- Site survey to collect data for rapid biodiversity assessments
- Develop master plan with guidelines for restoration
- Network with local community members and conduct informal surveys to understand perception towards the waterbody
- Develop education materials based on the needs of the communities and the biodiversity recorded
- Three field visits and one online series for Bosch employees
- Conduct workshops and outreach programs for local community members and school/college students

## Activities

- Wetland restoration literatures were reviewed.
- Collated the existing materials from Zooreach repository regarding restoration works from past
- Initial biodiversity checklist was produced.
- Compiled the list of experts required to conduct the rapid biodiversity assessments and set the dates for the birds, plant, invertebrate, reptile surveys.
- Volunteer engagements in clean-up drives, field trips and surveys were planned.
- Two of Dr. Sanjay Molur's 12 online series were over.
- Conducted community perception studies to understand their connection with the wetland and if they feel a sense of ownership or pride towards the wetland. It also aims to involve the local communities in the wetland restoration activities such as clean up drives.
- The process of developing educational materials has begun.

## Ongoing

Three training workshops (SS Kulam and Bosch)

Species survey by the experts (Birds, Plant, invertebrate, reptile, fish surveys and community perception surveys)

**BOSCH**





CONSERVATION



ARTICLES  
8 (122pp)

COMMUNICATIONS  
138 (1458pp)

REVIEW  
9 (133pp)

SHORT COMMUNICATION  
44 (224pp)

NOTES  
48 (165pp)

BOOK REVIEW  
3 (7pp)

VIEW POINT  
1 (3pp)

RESPONSES AND REPLY  
2 (4pp)

# BUILDING EVIDENCE FOR CONSERVATION GLOBALLY!



12

issues published

2116

pages published

253

publications

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.**

# ELASMOBRANCH BYCATCH STUDY LEADING TO CITIZEN SCIENCE INITIATIVE IN INDIA

**Purpose:** Sharks & Rays conservation

**Methodology:**

1. Setting up a website that has information on sharks and rays of India including a portal for uploading data collected by citizens
2. Conducting a two day workshop for educators, fisherfolk and undergraduate and postgraduate students on elasmobranchs of India
3. Develop a manual for the workshop.

**Results and Achievements:**

1. Initial site surveys to gain a preliminary understanding of the species caught as bycatch including but not limited to elasmobranchs.
2. Questionnaire surveys and informal discussions were conducted with fisherfolk to understand their fishing practices and their perspective towards sustainable fisheries.
3. Different species caught as catch and/or bycatch were documented at the major fish landing centres in Kanyakumari District.

**PI:** Priyanka Iyer & Usha Ravindra





# CONSERVATION OF WESTERN GHATS ENIGMATIC AQUIFER-DWELLING FISHES

## Objectives

- i) determining species-specific and location-specific threats
- ii) developing a citizen-science based network to generate information and monitor the health of habitats
- iii) creating awareness to reduce human-subterranean fish conflicts
- iv) supporting a community-based conservation and monitoring plan for critical subterranean fish habitats.

## Activities

- Field surveys: Kerala's laterite zones, where subterranean fishes have been found, were surveyed.
- Citizen-science surveys: Citizen science-based information sharing on social media, closed social media groups, and networks involving government local bodies, primary health centres, nature clubs, and public libraries.
- To educate the public about rare, enigmatic subterranean fishes, posters were widely distributed.
- Awareness and education: College and school awareness programmes reduced human-subterranean fish conflicts and protected habitats and species.

## Results

- i) collecting specimens of poorly-known species
- ii) creating GIS-based maps
- iii) discovering two new species, and catalyzing long-term conservation actions.
- iv) Regular communication of the project activities and results through mainstream media and social media has improved appreciation and recognition of the species.
- v) established a network of citizen-scientists across the species' known range to provide the project team with vital information on the species' occurrence and distribution.

PI: Arya Sidharthan

# CHAMBA RESTORATION FOR CONSERVATION OF SPECIES AND LIVELIHOODS

The Wildlife Department issued a five-year permit to continue the Himalayan Langur project.

Met with Panchayat Pradhans from Rathiyar and the Government School to discuss the outreach programme that we are planning for ward members and farmers to educate them on the need for forest restoration and rewilding.

May: Zoo/Wild organised a workshop for women's self-help groups to educate them on the need for forest restoration and rewilding.

May: Vishal Ahuja visited Coimbatore to learn about setting up the nurseries. 1) attended a five-day training at the Nature Conservation Foundation in Valparai to learn about restoration and nursery-raising processes. 2) visited Nilgiri Biosphere Nature Park and learned about seed raising.

July: Neyi from the Sanctuary Asia Foundation visited the field site at Chamba and planned the collaboration work with the Zoo Outreach Organisation for a restoration project.

A 752-square-meter plot has been leased for seven months for constructing a native tree nursery, constructed the nursery, and planted around 800 seeds.

Two more research assistants have joined the team to assist with the restoration project and examine the behaviour of Himalayan langurs.

PI: Sanjay Molur & Vishal Ahuja

# STUDY OF MATERNAL / INFANT PERSONALITY IN BONNET MACAQUES

## **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. Over 23 months, we completed 3724 15-min focal (930.75 h of observations) of behavioural observations from 35 females of Dam group and 42 females of Eco group, focusing on mother-infant relationships and interactions with other group members.
3. The research findings have been published in the Journal Primates, DOI: <https://doi.org/10.1007/s10329-022-01017-w>

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

**PI:** Malgorzata Arlet

## DEVELOPMENT OF A CONSERVATION PLAN FOR MALABAR RIVER-LILY

### Purpose:

To know the current state of Malabar river-lily and develop a conservation monitoring plan

### Activities:

- Collected baseline data from three of four *C. malabaricum* supporting sites (Periya and Cheemeni in Kasaragod District and Embate and Avaranchal in Kannur District).
- Validate the Periya data set collected in 2017 and compare the results to a second set of data collected in 2022.
- Established a monitoring protocol for all populations of *C. malabaricum*.
- Raised awareness of the species and its role in the ecosystem with local people.
- Trained local students by involving them in monitoring baseline collection.
- Transcribed field data and produced the summary report on all four known populations
- Made a report available to the local government via the college to work towards the protection of the *C. malabaricum* populations.



## RED LIST ASSESSMENTS OF TARANTULA SPECIES OF INDIA

### Purpose:

To derive prioritization of species for conservation and achieving one of the quadrennium priorities of South Asian Invertebrate Specialist Group SSC, IUCN.

### Objectives

- Data collation for the Red List Assessments & Conservation Action Plan (CAP) via literature review and meet ups with experts
- Applying for grants to get the funds for Red Listing
- Network of Tarantula experts in India
- To develop Conservation Action Plan and to assess the species conservation status
- Training experts in the IUCN Red Listing process

### Activities:

Data collation via literature review on progress

A vibrant, stylized illustration of Sally Walker, a woman with long blonde hair and large black-rimmed glasses, wearing a green button-down shirt and a necklace with a green pendant. She is standing in a lush jungle with large green leaves and yellow flowers. In the background, a person is seen climbing a tree branch, and a tiger is visible on the right side. The scene is set against a bright blue sky with white clouds.

## THE SWCF & 3C PROGRAMME

Sally Walker, the founder of Zoo Outreach Organization, was a visionary and influencer in the field of zoos and wildlife conservation. Her contributions led to many radical changes to the way zoos are looked at. Her works on the good zoo - bad zoo partnership established guidelines the world over through the World Association of Zoos and Aquariums.

Sally worked tirelessly to promote wildlife conservation in the field establishing various taxonomic networks, assessing multiple species & ecosystems, and developing plans. Sally's contributions impacted the way education and outreach was looked at. She developed unique styles of communicating science for conservation and her legacy is still carried forward in varied programs in scientific publications, citizen science, human-wildlife coexistence, zoos, among others. She was an inspiration to the world, and promoted young talent constantly by providing facilities, support, and building capacity.

In honoring and carrying out Sally's vision, Zoo Outreach Organization has established the Sally Walker Conservation Fund. ZOO seeks your help and contribution to this Conservation Fund to continue her legacy.

If you would like to contribute to our capacity programmes [click here](#)  
To know more about Zooreach's history in building capacity [click here](#).

