







Title: Conserving the endangered and endemic Chamba Sacred Langur – native food plants preference study to devise crop-raiding mitigation strategies.

Objectives:

- I. Understand native vegetation composition in and around Khajjiar-Kalatop Wildlife Sanctuary
- 2. Understand langur dietary preferences

Plans:

- 1. Surveys to identify plants.
- 2. Maintain herbarium and identification.
- 3. Study of feeding ecology of Langurs and collect the data on native food plant preferences.
- 4. Build a network of volunteers to help with raider data collection from the study area
- 5. Work extensively with selected villages on developing conflict mitigation strategies, and implement the strategies as pilot studies for emulation throughout the district

Progress:

- 1. Collection and identification of 264 species of plants.
- 2. Observed Langurs have been found feeding upon 20 plants species out of 264 plants

Partners: Zoo Outreach Organization

PI: Vishal Ahuja

<mark>صندوق محمد بن زايد</mark> للمحامظة على الكائنات الحية

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CONSERVATION PLANNING SPECIALIST GROUP [CPSG] WORKSHOPS AND MEETINGS

Objectives:

I. Save threatened species by increasing the effectiveness of conservation efforts. 2. Provide species conservation planning expertise.

Activities:

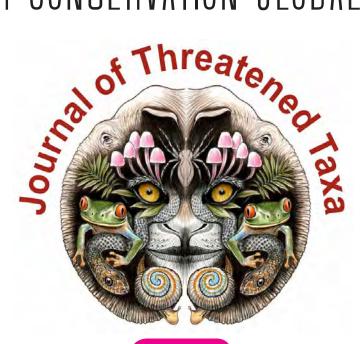
- IUCN PSG Madgascar Red Listing workshop, May'18 Sanjay Molur represented as IUCN Redlist advisor. Compiled assessment of 112 species of Madagascar Lemurs
- 2. CPSG Regional Resource Centres Meeting, Jun'18, Minneapolis, USA Sanjay Molur represented South Asian regional resource center. Identified strategies to build regional resource center in terms of capacity, resources and develop action plan
- 3. National Consultation workshop for recommending the future status of Sea Cucumber conservation in India, Sep'18 Meeting on policy on Sea Cucumber trade called by MoEF CC on the insistence of this meeting host completing baseline data on Sea Cucumber & community livelihoods by Sanjay Molur. It was decided Sea Cucumber can not be allowed to be harvested and not to be remove from the protection schedule of Wildlife Act.
- 4. International Biodiversity Congress (IBC 2018), Oct'18 Sanjay Molure represented ZOO and gave a talk on importance of speceis conservation & policy in the country.
- 5. CPSG-South Asia Regional Resource Centre Strategy Meeting, Oct'18 Made a list of strategies, to save species and habitats for the CPSG-SA RRC for the next 2-6 years
- 6. Pygmy Hog Species action planning workshop, Nov 2018 -- Completed 3 day workshop on conservation planning of the pigmy hog reintroduction programme in Guwahati. The draft action plan is in the process of finalising.
- 7. International Mahseer Conference Paro, Bhutan, Dec'18 Sanjay Molur represented CPSG, SA RRC to present about importance of conservation planning of Mahseer species.

Partners: Conservation Planning Specialist Group, South Asia.

Pl: Sanjay Molur, BA Daniel, R Marimuthu



BUILDING EVIDENCE FOR CONSERVATION GLOBALLY!



15

issues published

1935

pages published

246

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 taxonamy. 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.









The Mohamed bin Zayed SPECIES CONSERVATION FUND



PLANNING



RISK ASSESSMENT OF SOUTH ASIAN REPTILES

Title: IUCN South Asian Reptile Assessments

Objectives:

I. Compile information on South Asian reptiles other than the peninsular India endemics for risk assessments.

Plans:

- I. Create reptile species list for all South Asian countries and compile information on species from literature.
- 2. Compile distribution data and map localities and polygons.
- 3. Compile a list of national and regional reptile experts. and identify prospective experts to attend the regional assessment workshop.

Progress:

- 1. Compilations work completed for ~700 reptile species.
- 2. Species information entered into the Species Information System database of IUCN Red List.
- 3. Expert lists for Pakistan, Nepal, Bhutan, and Bangladesh completed.
- 4. Maps for reptiles of Pakistan, Nepal, Bhutan, and Bangladesh completed.
- 5. Planning to conduct the two assessment workshop, India & Sri Lanka, in Sep'2019

Impact:

Redlist Assessments & Conservation Needs Assessments

Partners: Conservation Planning Specialist Group, South Asia, IUCN, Conservation International's Biodiversity Assessment Unit

PI: Neil Cox, Sanjay Molur







RISK ASSESMENT ON SOUTH ASIAN THERAPOSID SPIDERS

Title: IUCN South Asian Theraphosid Spider Assessments

Objectives:

1. Compile information on South Asian theraphosid spiders for risk assessments.

Plans:

- 1. Create theraphosid spider species list for all South Asian countries.
- 2. Compile information on species from literature.
- 3. Compile new information for not assessed species.
- 4. Update information for already assessed species.
- 5. Compile distribution data and map localities and polygons.

Progress:

I. Compilations ongoing.

Partner: Conservation Planning Specialist Group - South Asia, South Asian Invertebrate Specialist Group, IUCN, Invertebrate Conservation Subcommittee

PI: B.A. Daniel, Sanjay Molur







MOSI PROJECT IN INDIA

Production of Mosquito monitoring and identification guidenace materails and in relation to MOSI project initiative

ZOO / ICINSA and SAsISG joined this global project in mid 2015 and started data collection from November 2015. Since then the PI has been fully involved in the collection and monitoring of mosquitoes VOC park zoo at Coimbatore.

Biogent mosquito trap has been used to for the surveillance project. The mosquitoes were collected on 24 hours basis twice a week. From April 2018 until March 2019 a total of 12,133 mosquitoes were collected belong to genus Aedes, Anophelus, Armigeres and Culex. Of these Culex quinquefasciatus dominated most with a highest number of collection of 1944 mosquitoes during the month of May 2018.

The following are the list of 15 mosquito species collected.

Aedes aegypti

Aedes albopictus

Anopheles subpictus

Anopheles barbirostris

Anopheles vagus

Anopheles stephnsi

Armigeres subalbatus

Culex bitaeniorhynchus

Culex tritaeniorhyncus

Culex gelidus

Culex quinquefaciatus

Culex mimeticus

Culex sitiens

Culex whitmori

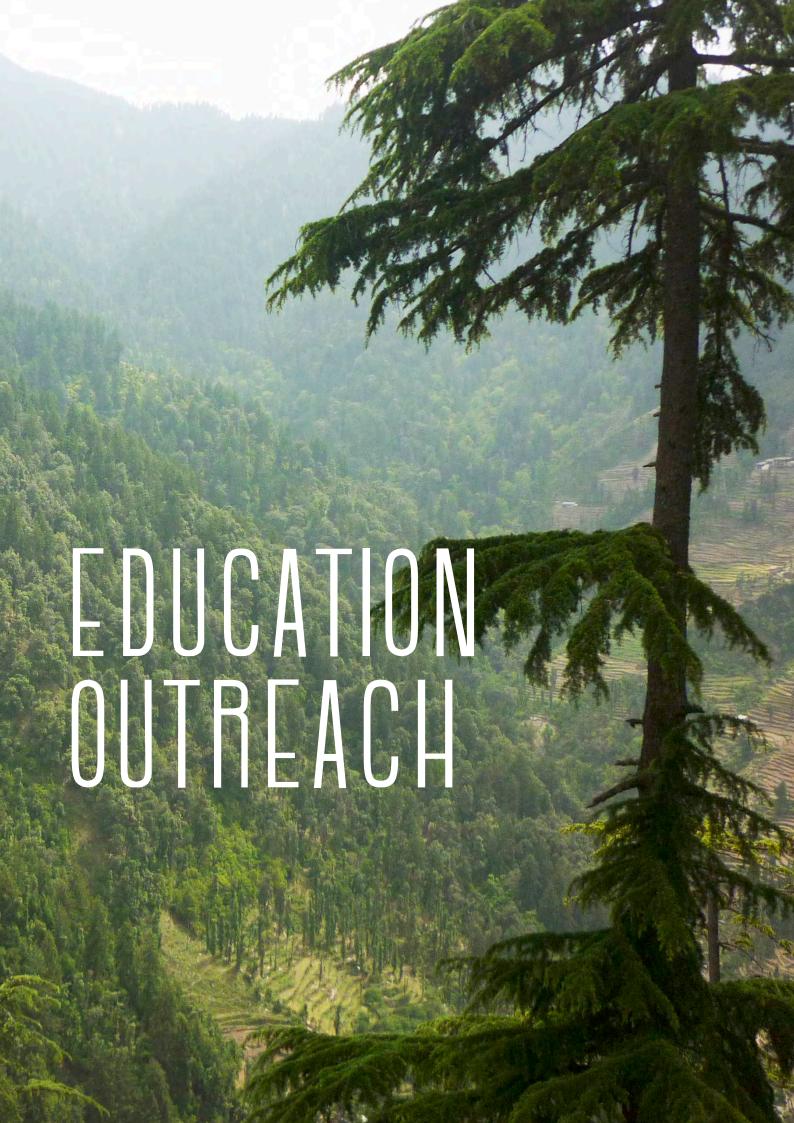
Culex vishnui



Collection and observations is in progress. In addition to species data various environmental parameters such as minimum and maximum temperature, rainfall, wind velocity, sun raise and sun set details are also noted.









Title: WILD School Outreach Program: LivelyWaters! @ Yellow Train year 3

Objectives: Third year of the program at YT has the following objectives. To initiate the new batch of grade 6 into the LivelyWaters! classroom. To understand wetland ecology, basic classification of animals, keeping journals, basic photography. Grade 7 to continue wetland ecology studies, learn landscape design to beautify the pond, water flow properties by building the water fall and how a pump works.

Activities: photography, pond ecology field notes, making of species using stones and cement for the pond after studying them in the wild, birds in my backyard course, using a microscope to study insects, how to conduct an interview, how to make an educational sign.

Achievements: completion of the pond landscape, first level photography complete, journals and field notes updated for the third year for the school. Abut 40 species of animals recorded by the kids.

Lively Waters

Impacts: 60 students directly reached, intangible 250 students indirectly and 50 teachers reached. Sensitivity towards wildlife and a better understanding of the surroundings.

PI: Payal Molur & Sanjay Molur,

CONFLICT BETWEEN HUMAN AND PACHYDERMS

Title: Prevention and Mitigation of Conflict between Humans and Pachyderms in Nepal through outreach programs

Objectives:

- I. Towards zero casualty of man and animal in human-elephant conflict areas and a community that appreciate and co-exist with elephants'.
- 2. To reduce human-elephant conflict by conveying positive attitudes and effective preventative and practical behavior
- 3. To reach out to wider target groups in three HEC areas (children, students, adults, village community, administrators, media reporters) and to create awareness about co-existence
- 4. to evaluate the impacts of the project and to continue creating awareness even after project period.

Activities:

- 1. Develop and print educational materials
- 2. Conduct 5 days training programme and 1 day awareness programmes using the trained educators
- 3. Conduct post program evaluation and create a network of educators to promote HECx in Nepal

Progress:

- 1. Visited the locations and met the collaborators and dicussed the plans
- 2. Previsit and assessment on status of HEC in high risk areas are completed.
- 3. Locations and local partners for the programme identified.
- 4. Developed the education materials, and ready to print.

Partners: National Trust for Nature Conservation, Nepal; Nepal Forest Department; Local governing bodies and NGOs.

PI: B.A. Daniel



MAHOUTS AND CONSERVATION WELFARE

Title: Elephant conservation welfare training for Mahouts and Cawadi in Tamil Nadu

Objectives:

- 1. Train elephant handlers about animal welfare.
- 2. Create a network of elephant handlers and find a way for the daily reporting system.

Activities:

Identify mahouts and kavadis having private elephants
Visit their captive facilities and invite them for the mahouts training
Conduct two day mahouts training programme
Create a network of mahouts and follow up visits

Results:

Conducted two days mahouts training programmes at Alwarthirunagari , Rettai Thirupathi, Thirunelveli District

Twenty two participants took part in the training from five south Tamil Nadu districts

Created a network of mahouts

Impacts:

First training programme for Private elephant holders and mahouts Mahouts met each other during the training and created a network They shared their experience with other mahouts and also got an opportunity to see demonstration of keeping elephants conducted by the veterinarians Remain in network and continue to interact and avail assistance from the vets through the network

Partner: Srinivasan Social Network, Tholyilaimangalam

Pl: B.A. Daniel



CAPACITY BUILDING FOR TIGER CONSERVATION

Title: Conservation Education and Capacity Building for Tiger Conservation in the Protected Areas of Arunachal Pradesh

Objectives:

- I. Provide conservation education training to teachers, non-governmental organisations, and volunteers
- 2. Build capacity for forest front-line staff in Arunachal Pradesh.

Activities:

- 1. Develop a teaching manual and tiger tool kit packets.
- 2. Training of teachers from forest fringe areas.
- 3. Training of forest staff.
- 4. Field materials for forest staff sourced.

Results:

- 1. Forty frontline staff trained in modern practices of tiger conservation
- 2. Thirty five teachers were taught about the importance of tiger conservation by using active learning methods.
- 3. The trained teachers teach their wards about tiger conservation and importance of saving its habitat.

Impacts:

40 foresters, 35 teachers and ~3500 students benefited by these programmes

Partners: Namdapha Tiger Reserve, Arunchal Pradesh Forest Department.

PI:R. Marimuthu



FRAGMENTED RHINO POPULATIONS

Title: Safeguarding the Greater One-horned Rhino meta-population in North Bengal and Uttar Pradesh, India

Objectives:

- I. Educate educators and community members about the importance of rhinos and its conservation.
- 2. Reduce human-rhino conflict by conveying positive attitudes and effective preventative and practical behaviour.
- 3. Create a network of educators to help promote species conservation for rhino and other threatened species in this region.

Activities:

- I. Developed Rhino educational materials to train the educators and to provide them to conduct their own programmes.
- 2. Conduct taining workshops to train educators on Greater One-horned Rhino
- 3. Conduct awareness programmes for students and community using the trained educators
- 3. Provide do's and don'ts for the Target Group
- 4. Conduct a refresher course to follow up the training

Progress:

Visited three selected locations and consulted with the partners and collaborators

Identified educators for the workshop

Partners: I. Nature and Wildlife Conservation Society, Jalpaiguri, 2. Gorumara National Park and Jaldapara National Park, West Bengal Forest Department and 3. Dudhwa National Park, Uttar Pradesh Forest Department

Pl: B.A. Daniel



INSECT TAXONOMY COURSE AND AWARENESS PROGRAMS

ZOO in collaboration with local organizations conducted insect taxonomy course for the school students of age 13-15 with special reference to aquatic insects. As part of it, an introductory taxonomy course was conducted at ZOO premises. Twenty students are trained during this academic year by Daniel.

List of Conservation awareness training programs conducted during the academic year 2018-19: 28-29 January 2019 – Two-days workshop on Climate change, crisis management and Biodiversity SN College, Cherthala, Kerala. 13-14 Feb 2019 – Freshwater biodiversity

conservation workshop, Avinashilingam university, Coimbatore, Tamil Nadu

Invited Talks

Daniel delivered a series of lectures promoting Wildlife conservation promoting topics in University departments, colleges and research institutes for a variety of audiences.







S PRINT Magazine of Zoo Outreach Organisation

12

460

125

issues

pages

articles

Bird-o-soar # 16 (104 pages)

Plantasia # 4 (18 pages)

Bugs R All # 2 (11 pages)

Reptile Rap # 11 (45 pages)

SMM # 5 (27 pages)

Fantastic Facts # 12 (71 pages)

Vet Brief # 3 (11 pages)

Travelogue # I (3 pages)

Field Report # 30 (67 pages)

ZOO activities # 8 (31 pages)

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Ex situ # 2 (8 pages)

Activity # 12 (14 pages)

Mammal Tales # 6 (22 pages)

Announcement # 4 (3 pages)

CPSG-SA #2 (4 pages)





PROJECT KAZHIRU

Title: USFWS Project Kazhiru (Elephant): Targeting to achieve zero mortality in HEC areas in partnership with Tamil Nadu Forest department.

Objectives:

- I. Educate stakeholders to modify livelihood / lifestyle incompatible in HEC areas
- 2. Educate local bodies in developing safety protocols in conflict areas;
- 3. Conduct mass awareness programmes for the community in HECx in Coimbatore forest range.

Plans:

- 1. 8 one-day training programmes
- 2. Mass HECx awareness programmes

Progress:

- 1. Education materials for education programmes developed and printed.
- 2. Programmes to be held starting in March 2019.

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

PI: R. Marimuthu



HUMAN-ELEPHANT COEXISTENCE

Title: Fostering Human Elephant Coexistence (HECx) awareness in Erode, Tamil Nadu, India

Objectives:

- I. Reach out to schools near northern Western Ghats (Sathyamangalam and Erode forest divisions)
- 2. Impart safety education in elephant areas to save lives and live harmoniously with elephants.

Activities:

- 1. Development of a teaching guide on elephants.
- 2. Preparation of ele-kit packets.
- 3. Teacher training workshop.
- 4. School outreach programmes.

Results:

- 1. Organized a 2-days teacher-training workshop.
- 2. Conducted 25 school awareness programmes.
- 3. Teachers and students in elephant areas addressed regarding humanelephant coexistence.

Impacts:

25 teachers, 25 schools, 4000 students impacted by these programmes Several thousand locals reached out

Partners: School Education Department, National Green Corps (NGC), Department of Environment and Forest Department.

Pl: R. Marimuthu



ONLINE CONSERVATION PLATFORM FOR CITIZEN

Title: Developing an online conservation platform for citizen participation in crop-raiding mitigation by the Chamba Sacred Langur (Seminopithecus ajax) in India

Objectives:

- I. To provide local people with information about the Chamba Sacred Langur and its habitat by developing an online educational platform that helps in building a database through the involvement of local citizens and students.
- 2. To make information easily accessible and people-friendly to use.
- 3. To develop positive attitudes towards conservation of the species by introducing the platform in schools with the aim to reach 1000 students in the area.
- 4. To encourage environment-friendly behaviour towards the species to mitigate any human-animal conflict that is a potential danger due to possible crop raiding.

Progress:

- 1. Started Himalayan Langur Face book page
- 2. Developed a brochure and printed 4000 copies for distribution
- 3. Compiling information on Himalayan Langur Project to develop a website

Pl: Vidya Mary George



LIVELYWATERS! CITIZEN SCIENCE PROGRAM

Objectives:

- I. Establish a scientific citizen-based wetland monitoring program in Coimbatore
- 2. Set up local community surveys to understand fishing pressures and threats
- 3. Build a citizen community that will help influence policy makers using scientific data
- 4. Use the Coimbatore chapter as a case study for other cities

Activities:

- I. Established a citizen community interested in understanding the water bodies
- 2. Trained citizens in water bird identification
- 3. Trained citizens in point count method for monitoring the water bodies
- 4. Questionnaire surveys of local communities to understand fishing pressures and threats

Achievements:

- I. Built a citizen science community
- 2. Collected data on species richness, threats and habitat modifications for a year from specific water bodies from Coimbatore

Impacts:

- 1. Empowered an urban community with data collection methods
- 2. Built a network of over 50 citiizen scientists
- 3. Created a larger community interested in wildlife

Pl: Sanjay Molur, Priyanka Iyer

