



**Project Report**

# **Building a network for conservation of marine turtles in India**

Submitted to the US Fish and Wildlife Service under the Marine  
Turtle Conservation Act Fund

**2009 – 2010**



Copyright © 2010 Ashoka Trust for Research in Ecology and the Environment, Bangalore.

**Authors:**

Seema Shenoy

Ashoka Trust for Research in Ecology and the Environment  
Royal Enclave, Srirampura, Jakkur Post,  
Bangalore 560 064, India  
Email: seemashenoy83@gmail.com

Terenia Berlie

Ashoka Trust for Research in Ecology and the Environment  
Royal Enclave, Srirampura, Jakkur Post,  
Bangalore 560 064, India  
Email: tberlie@gmail.com

Naveen Namboothri

Dakshin Foundation  
Flat No 8, Dwarkamai Residency,  
#2278, C-Block, Railway Parallel Road,  
Sahakaranagar, Bangalore - 560092, India  
Email: naveen.namboothri@gmail.com

Kartik Shanker

Adjunct Fellow, Ashoka Trust for Research in Ecology and the Environment,  
Chairperson, Dakshin Foundation, &  
Assistant Professor, Centre for Ecological Sciences  
Indian Institute of Science, Bangalore, India  
Email: kshanker@ces.iisc.ernet.in

**Citation:**

Shenoy, S., T. Berlie, N. Namboothri and K. Shanker. 2010. Building a network for conservation of marine turtles in India. Project report submitted to the USFWS. Ashoka Trust for Research in Ecology and the Environment, Bangalore. 57 pages.

*Disclaimer: This report is an independent publication and does not necessarily reflect the views of ATREE or the USFWS.*

# Contents

1. Executive Summary.....	1
2. Introduction to TAG.....	4
3. Project objectives.....	10
4. Project activities and outcomes.....	11
5. Future activities of TAG.....	17
6. Recommendations.....	21
7. Acknowledgments.....	23
8. Appendices:.....	25
Appendix I: List of member organisations of TAG.....	25
Appendix II: Summary Report – 2 <sup>nd</sup> Annual TAG Workshop..	26
Appendix III: TAG Member Organisation Profiles.....	33



# 1.

## Executive Summary

The Turtle Action Group or TAG is a network of NGOs (Non Governmental Organisations) and other organisations dedicated to the cause of sea turtle conservation and coastal protection in India, including the mainland and islands of Andaman & Nicobar and Lakshadweep. Over the years 2008 – 2009 and 2009 - 2010, the network's activities have been supported through grants from the Marine Turtle Conservation Act Fund of the US Fish & Wildlife Service. The project funds have been administered, and project activities executed through the Ashoka Trust for Research in Ecology and the Environment in Bangalore, India. The Dakshin Foundation, Bangalore was a key partner in the execution of the activities of the project and assisted with the formulation of appropriate action plans and programme design.

### **2008 – 2009:**

Formation of a national level network: The first grant of USD 5000 helped facilitate the formation of a network of committed groups and organisations from across the country's coastline through a workshop, and in the initiation of activities that were undertaken by the network.

### **2009 – 2010:**

Strengthening of the network and expansion of scope: The second grant of USD 30,500 provided support to expand membership of the network to include local, community based organisations and strengthen the activities and broaden the scope of TAG.

The primary aim of the project was to provide a platform for the exchange of information, knowledge and experiences amongst various groups and individuals working along the coast. In addition, the initiative sought to strengthen community based NGOs in the various coastal states through capacity building by providing grants,

training and technical assistance. The project also sought effective engagement of network members with other stakeholder groups, research institutions and government agencies in order to better inform conservation actions.

The grant provided by the funding agency for the period 2009 – 2010 was utilised towards conducting the 2nd annual TAG workshop, supporting travel and accommodation expenses of participants to the 30th Annual Symposium on Sea Turtle Biology and Conservation in Goa, and towards supporting the production of outreach and educational material including the setting up of a website, publication of relevant reports and manuals and partial support towards the production of the Indian Ocean Turtle Newsletter. A portion of the grant was also disbursed to member groups of the network to carry out specific activities towards the goal of collecting and disseminating information through standardised monitoring and data collection methods.

TAG is now a well established network of over 25 organisations from across the country. Its members have committed to meeting annually to take the activities of the network forward. In addition to annual meetings, members regularly communicate with each other, and share relevant reports and materials.

The network has established a set of goals in the form of action plans to address sea turtle conservation effectively through cooperative and collaborative action and efforts. Research and monitoring capacities of the member organisations in collecting uniform and reliable data is being developed through monitoring protocols, training programmes and workshop sessions. This will lead to standardisation of data collected on the number of nests, eggs and hatchlings during the nesting season at key sites along the mainland coast as well as the Lakshadweep and Andaman & Nicobar Islands. The annual workshops that are held serve as a platform for the member organisations to showcase their activities, share their experiences, voice their concerns and network not just with individuals/ organisations with similar interests, but also with a wide array of sea turtle conservationists from diverse socio-cultural backgrounds and to develop their capacities in conservation methods. The current project seeks to build and strengthen this network, by continuing to support and coordinate sea turtle conservation activities along the Indian coast, and to undertake collaborative actions that can lead to better coastal and marine conservation.

This report provides details about the functioning of the network and its member organisations; project goals and objectives; activities carried out during the two funding cycles and the outcomes and outputs from the project. It also outlines the lessons learned from the collective experience of member groups and lists recommendations and future plans for further strengthening the network towards more effective communication and conservation action.



*Tens of thousands of olive ridley turtles come to nest on the coast of Orissa during the annual arribada. This coastline face several serious conservation issues that need to be addressed urgently. Local conservation groups in Orissa that work independently also undertake collective action through networks at the state level, and now through TAG at the national level.*

*Photo: B. Pandav*

# 2.

# Introduction to TAG

## **Background**

Four species of marine turtles have significant nesting/feeding grounds along the Indian coastline. They include the leatherback sea turtle (*Dermochelys coriacea*), green turtle (*Chelonia mydas*), hawksbill turtle (*Eretmochelys imbricata*) and olive ridley (*Lepidochelys olivacea*). There are several important nesting sites and populations in India and other parts of south Asia, including the mass nesting beaches of olive ridley turtles in Orissa, feeding and nesting grounds for green and hawksbill turtles in the Andaman and Nicobar Islands and the Lakshadweep islands, and a significant nesting population of leatherback turtles in the Little Andaman and Nicobar Islands. Sporadic nesting sites occur throughout the coastline of the mainland. Though all four species are listed as endangered under Schedule I of the Indian Wild Life (Protection) Act, 1972 their populations in the coastal waters of India are seriously threatened due to unplanned coastal development and incidental catch in fisheries. The olive ridley (*Lepidochelys olivacea*) population in Orissa is particularly at risk where over 100,000 turtles have drowned as incidental catch in the last ten years.

Sea turtles play an important role as flagship species for the diverse habitats they occupy. These habitats include coral reef ecosystems, sea grass meadows, open seas and sandy beaches. The threats that sea turtle populations face are representative of threats that impact other marine and coastal flora and fauna as well. In the Indian subcontinent, coastal and ocean resources play an important role in the economy of fishing and other coastal communities.

Sea turtles have also been part of legend and culture in the region for more than a thousand years. Some of the oldest sea turtle conservation movements were started in the subcontinent. Current models of community based and participatory conservation in many states in India

can serve as excellent models for conservation which can be replicated elsewhere. Sea turtles transcend socio-political boundaries and therefore their effective conservation requires several factors to coalesce, foremost amongst which is collaboration between agencies and cooperation between the political states whose habitats the turtles utilise. There are a number of small to medium sized non-governmental organisations located along the coast that carry out community-based conservation and outreach. These organisations have established themselves in the field and are quite cost effective, but may not have the necessary resources or technical knowledge that is required to carry out effective conservation actions. Many of these organisations often work in isolation and a lot of their activities and contributions towards sea turtle conservation do not get the recognition they deserve. Some also hold a wealth of knowledge and understanding of locally effective conservation interventions and there is a need to facilitate the exchange and flow of such experiential knowledge systems. Although there is a high level of sustained interest in turtle conservation, there is little opportunity to know how similar issues are handled elsewhere in the country. There is also a need for the groups to visit each others' work sites to share their knowledge and experience.

### **The Turtle Action Group**

The Turtle Action Group (TAG) is a network of over twenty non-governmental organisations from around India, working towards sea turtle conservation and coastal protection. These groups initially came together in January 2009 at a workshop held in Chennai, where it was felt that there has long been a need for a national level network to address how effectively various groups can work together, and in collaboration with each other towards more effective sea turtle conservation. Worldwide, it is acknowledged that effective sea turtle conservation requires collaboration between agencies and various stakeholders to ensure long term survival of the species and sustainable use of the resources of the habitats they represent. The numerous small and medium sized organisations that work along various stretches of the coastline in India often work in isolation. Their efforts usually do not get the recognition they merit, and the successes of their interventions do not find a common platform to be shared with others that might benefit from this knowledge.

Such a collaborative effort has not been undertaken before at the national level. TAG thus seeks to benefit from the pooling of resources and knowledge and to bridge the gap between conservation measures that are effective at local, state and the national levels.



Map showing locations of core member organisations of TAG

The coastal states currently represented by TAG include:

- Andhra Pradesh
- Gujarat
- Karnataka
- Kerala
- Lakshadweep Islands
- Maharashtra
- Orissa
- Puducherry
- Tamil Nadu
- Union Territory of Andaman and Nicobar Islands

In the near future, we hope to include representation from the coastal states of Goa and West Bengal.

## **Functioning of TAG**

### **Executing organisation**

Funding for the network's activities is channeled through the executing organisation (the Ashoka Trust for Research in Ecology and the Environment). Under the programme, a policy team oversees the agenda of the network's activities and the utilisation of funds, guides the disbursement of funds to member organisations to carry out specific activities and provides inputs to the core committee of the network when they seek assistance to initiate projects or activities that can be carried out collectively by all members. The administrative team under the programme at ATREE carries out specific administrative tasks that are required and undertakes the organisation and coordination of logistics for annual workshops. It also facilitates training programmes and compiles information from member groups and the core committee of TAG and disseminates the same to network members. It is responsible for compiling reports at the end of the project term. Periodic updates are also made available on the website [www.seaturtlesofindia.org](http://www.seaturtlesofindia.org) (an initiative also supported

by the MTCA grant) and circulated through an email listserv: tag-india@googlegroups.com.

### **Members of TAG**

The TAG network comprises of a core group of community based and local NGOs from across the country. (A list of current members of TAG is provided in Appendix I). Currently, its membership includes 20 organisations from the mainland and one each from the Andaman and Nicobar Islands and Lakshadweep. Detailed profiles of core member organisations is provided in Appendix III.

Seven large organisations including national level NGOs and research institutions are also part of the network. These organisations do not receive funding support for their activities from TAG, but contribute by way of resource personnel and providing inputs at annual workshops, and are represented on the advisory board of TAG.

The network also liaises with state level government organisations, primarily forest departments of coastal states within whose jurisdiction the protection of sea turtles and their nesting habitats falls. TAG also seeks regular inputs from other stakeholder groups and organisations working with fishing communities and coastal development to better inform conservation interventions that the network adopts. The International Collective in Support of Fishworkers based in Chennai has been an important presence in both annual workshops.

### **Core Committee**

Elected representatives from amongst member groups of TAG constitute a Core Committee. The main responsibilities of the Core Committee are to coordinate the activities of the network that are decided at annual workshops, and over the course of the following year through sustained communication with all members of the network. The Core Committee also reports to the team at the executing organisation regarding the progress of activities that the network has set out to do, and identifies areas where a particular group, or the network as a whole, requires support in terms of inputs, resource material, or funds. Individual members of the network approach the core committee with suggestions or queries. The Core Committee makes decisions based on a consultative process and approaches the project team at the executing agency when required. The present constitution of the Core Committee ensures representation across

the geographical scope of the network and its members belong to groups from the west coast, east coast, Orissa and the islands.

### **Advisory Board**

The network seeks inputs on its activities and agenda from an Advisory Board that is constituted of various individuals from diverse backgrounds and fields of expertise, affiliated to research organisations such as the Wildlife Institute of India and other organisations such as the Madras Crocodile Bank Trust.

### **Network Volunteers**

At each annual workshop, specific tasks that are decided are assigned to volunteers from within the network who take on the responsibility of coordination and ensuring completion. These volunteers communicate with and seek inputs from the Core Committee.

# 3.

## Project Objectives

The objectives of the project are:

1. To support the Turtle Action Group in India for improved and dynamic approaches to sea turtle monitoring and conservation and ensure inclusion of all community based groups from around the country working on sea turtle conservation.
2. To establish appropriate channels of communication between partner organisations for the effective sharing of information.
3. To build capacity and interest of local communities and students in coastal conservation through their involvement in monitoring programmes and training workshops.
4. To monitor the status of marine turtles at key sites along the Indian mainland coast and islands with the involvement of local communities.
5. To provide local context and synthesis that can support individual institutions in planning their own programmes.
6. To facilitate interaction of groups with a primary focus on sea turtle conservation with coastal communities, law enforcement agencies, academic institutions and the private sector.

# 4.

## Project Activities and Outcomes

To achieve the objectives laid out, the following activities were carried out:

### **1. 2<sup>nd</sup> Annual TAG Workshop**

The second national workshop of TAG was conducted on 12 and 13 February 2010 in Bhubaneswar, Orissa. A summary report of the workshop and its outcomes is provided in Appendix II. The workshop brought together groups and individuals from various parts of the coast. One of the main outcomes of the workshop was the need, as expressed by participants, for strengthening and expanding the network, providing structure to its framework, and initiating activities that could be undertaken collectively.

### **2. Strengthening and expansion of the conservation and monitoring network on sea turtles**

In recognition of the need to promote scientifically appropriate conservation approaches and robust monitoring programmes, 11 member organisations were involved in an initiative to examine the influence of incubation temperature on hatchling mortality and predicted sex ratios in the context of changing climatic profiles in the region, to study the effects of temperature in determining egg mortality and to examine the relationship between various aspects of temperature on mortality of eggs and hatchlings. This will help monitor changes along the coast and predict population trends in the future. Standardised monitoring and data collection techniques have facilitated more precise data collection enabling the monitoring of such changes at a larger scale with a finer resolution.



*Bivash Pandav of the  
WWF-Nepal addresses  
participants at the 2nd  
Annual Workshop.  
Photo: T. Berlie 2010*

### **3. TAG's involvement at the International Sea Turtle Symposium**

The 30<sup>th</sup> Annual Symposium on Sea Turtle Biology and Conservation was held between the 24<sup>th</sup> and 30<sup>th</sup> of April 2010 in Goa. This year marked the first time that the annual symposium was held in India, and indeed the South Asia region. Individuals and organisations that belonged to the Turtle Action Group (TAG) had the opportunity to showcase their efforts as individual members and the network as a single entity to the global conservation community through presentations and exhibition displays, particularly highlighting the efforts of community based conservation in order to suggest models of intervention and advocacy that may be replicated elsewhere. This also gave them the opportunity to meet and interact with groups and individuals and identify potential collaborations, within the region and globally.

Funding support through the project was provided to members of TAG towards travel and accommodation at the symposium.

### **4. Small grants**

Grants were given to members of TAG to support their data

collection, monitoring and conservation activities. The amounts disbursed are provided in the table below.

<b>Name of the organisation*</b>	<b>Grant amount (INR)**</b>
Action for Protection of Wild Animals (Orissa)	20,000
Andaman and Nicobar Environment Team (Andaman & Nicobar Islands)	48,000
Canara Green Academy (Karnataka)	25,000
Green Life Rural Association (Orissa)	20,000
Lakshadweep Marine Research and Conservation Centre (Lakshadweep)	20,000
Rushikulya Sea Turtle Protection Committee (Orissa)	20,000
Sahyadri Nisarga Mitra (Maharashtra)	25,000
Sea Turtle Action Programme (Orissa)	20,000
Students' Sea Turtle Conservation Network (Tamil Nadu)	25,000
TREE Foundation (Tamil Nadu)	25,000
Visakha Society for Protection and Care of Animals (Andhra Pradesh)	25,000

\*See Appendix III for profiles of member organisations and their activities.

\*\*1 USD ~ 46 INR

## **5. Publications**

### **i. Newsletter**

#### *Indian Ocean Turtle Newsletter*

The 10th and 11th issues of the Indian Ocean Turtle Newsletter were published in July 2009 and January 2010 respectively, with partial funding support from the MTCA. The IOTN was initiated to provide a forum for exchange of information on sea turtle biology and conservation, management and education and awareness activities in the Indian subcontinent, Indian Ocean region, and south/southeast Asia. The newsletter also covers related aspects such as coastal zone management, fisheries and marine biology.

The newsletter aims to reach and serve:

- Central government agencies (Ministry of Wildlife, Fisheries and Environment)
- Coastal government agencies (local Forest Departments, Fisheries Departments)
- Coastal enforcement agencies (Navy, Coast Guard)
- Non-governmental organisations involved in environment and conservation
- Non government organisations involved in social work in coastal areas
- Academic institutions
- Conservationist organisations
- Community-based conservation organisations

## **ii. Report**

*Impact of Casuarina Plantations on Olive Ridley Turtle Nesting in Tamil Nadu*

*Authors: Swapnil A. Chaudhari, K.V. Devi Prasad & Kartik Shanker*

A report titled 'Impact of Casuarina Plantations on Olive Ridley Turtle Nesting along the Northern Tamil Nadu Coast, India' was published in July 2009. Plantations of the exotic species, *Casuarina equisetifolia*, were introduced along the coastline as a measure to check beach erosion and mitigate effects of wind and cyclonic action in the wake of the December 2004 tsunami that had severely affected parts of the Tamil Nadu coast. This report summarises a study that was conducted to examine the possible impacts of these plantations on olive ridley nesting beaches in northern Tamil Nadu. Copies of the report were distributed to all members of the network to spread awareness on the use of exotic species as bioshields and their effects on the native flora and fauna of the coast.

## **iii. Manual**

*Census Technique for Arribadas – Monitoring olive ridley sea turtles in Orissa*

*Authors: Kartik Shanker, B.C. Choudhury & C.S. Kar*

The manual, originally published in 2007, was produced as part of a collaborative initiative on censusing arribada nesting beaches of the olive ridley turtles in Orissa. The intention of producing the manual was to enable the systematic collection of data using standardised protocol in order assess population trends. To do this, the manual

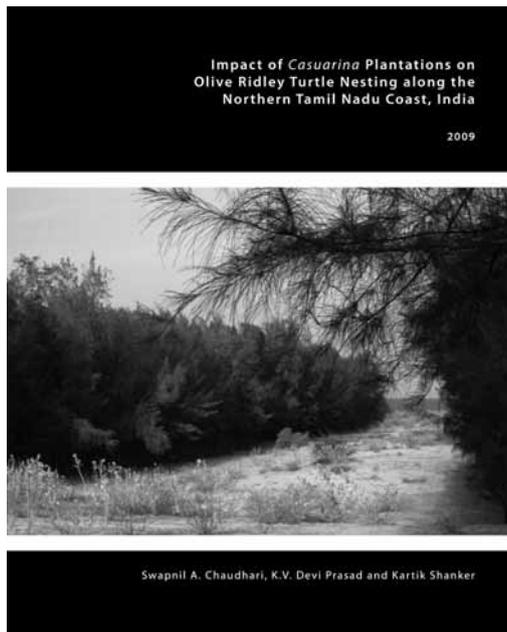
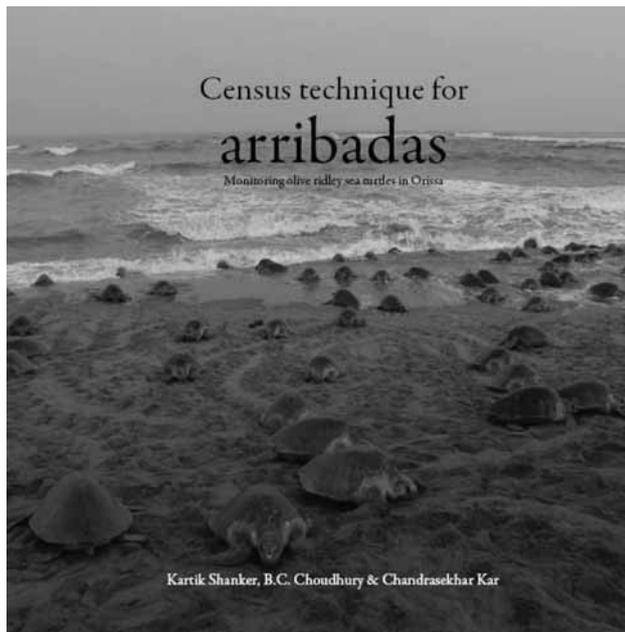
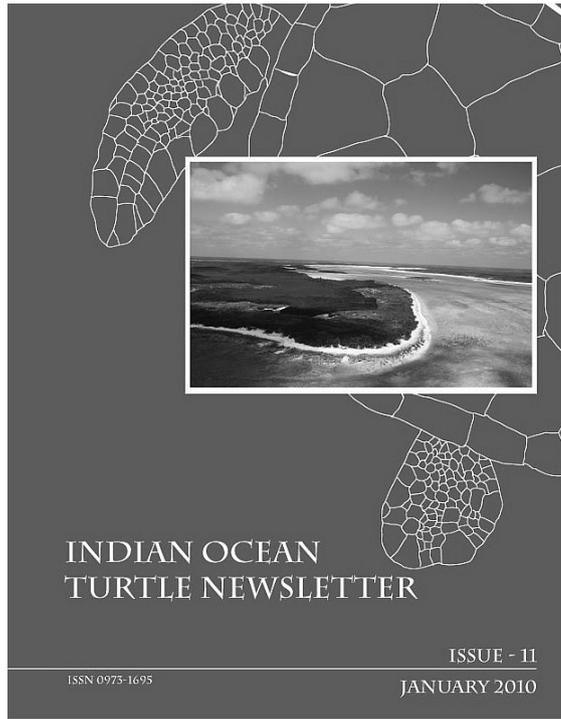
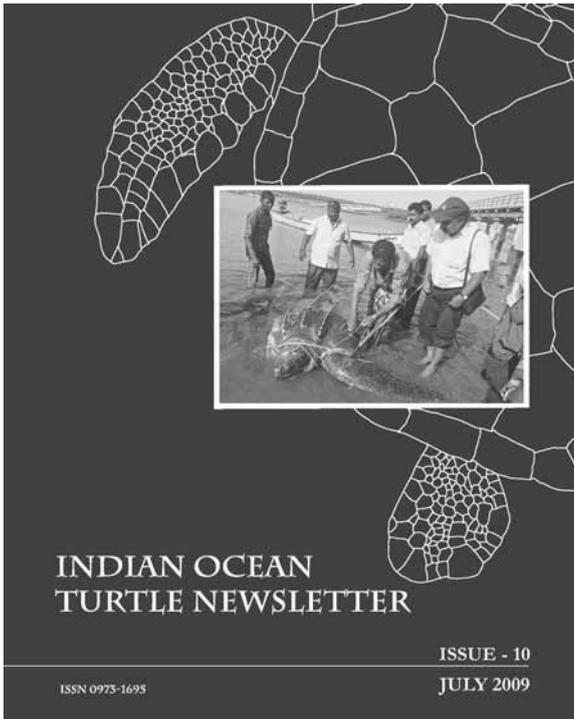
provides a simple method to count the numbers of turtles during arribadas. It was reprinted in 2009 and copies of the manual were distributed to the local groups and Forest Department officials undertaking monitoring and data collection in Orissa.

#### **iv. Website**

The website [www.seaturtlesofindia.org](http://www.seaturtlesofindia.org) was developed to collate information that currently exists on sea turtles and their habitats not just in India but in neighbouring South Asian countries as well. Numerous community based groups, conservation non-governmental organisations (NGOs) - local, national and international, academic institutions and government departments have contributed to studies and surveys. There has long been a need to make available this information that can be easily accessed by students, researchers and interested persons. This site is an attempt to create an online repository where distribution data, bibliographies, research findings, notes, historical records, photos and the various conservation activities across the region may be made available to sea turtle conservationists, biologists and the public.

The website also carries content dedicated to the Turtle Action Group [www.seaturtlesofindia.org/tag](http://www.seaturtlesofindia.org/tag). Information on the network's activities, workshop reports, member organisations and their detailed profiles is currently made available here. Through this interface, member organisations will have access to the latest relevant reports and research findings. The online system also aims to serve as a repository for information and data collected throughout the coast, through the individual efforts of members.

An e-group, [TAG-india@googlegroups.com](mailto:TAG-india@googlegroups.com), serves as a forum for the exchange of information on coastal environmental issues, including biology, law, policy, management and education and awareness activities in India.



*Publications produced during 2009-2010*

# 5.

## Future activities of TAG

Having acknowledged the necessity for continuing the activities of the network, members of TAG have committed to sustaining interactions through annual meetings and workshops in addition to individually carrying out activities towards meeting the larger objectives laid out by TAG. The specific activities laid out for the year 2010 – 2011 include:

### **1. To expand membership of TAG**

In addition to inviting other groups along the coast, the network also seeks to strengthen partnerships with other organisations such as those working with fishworker communities and coastal development and with local forest department officials in all the coastal states.

### **2. To collectively address issues of common concern**

Throughout the coastline, a variety of threats and issues form the basis of conservation action undertaken by different groups. There do exist however, issues that are common through most of the coastline. TAG has identified specific issues that the network as a collective of individual organisations intends to examine and address. These include:

- i. Casuarina plantations: Extensive planting of Casuarina as bioshields for coastal protection is promoted in many states across India. Using the example of the Students' Sea Turtle Conservation Network and TREE Foundation's success in bringing about policy change with respect to

these plantations on olive ridley nesting beaches in Tamil Nadu, members of the network aim to address the issue within their own states under the collective banner of a national network.

- ii. **Permits:** In order to carry out studies or collect data on sea turtles, organisations are required to obtain permission from the State Forest Department. This process is often time consuming and delays in issuing permits has often resulted in the inability to collect data at the start of the nesting season. To facilitate the process, TAG will circulate a letter signed by all of its members to each of the states where permits are being individually sought. The letter will endorse the application of the members for permits to carry out conservation activities and monitoring programmes.
- iii. **Fishing related mortality:** Trawl fishing has been identified to be a major threat to sea turtles along the east coast. Often, isolated efforts to address the issue have not resulted in an adequate response either from the government or from fisheries organisations. A collective effort to address the issue therefore holds better promise of effective and sustained engagement with the government at the level of policy and decision making and law enforcement. This may also serve to engage with fishing communities and other stakeholders on the impacts of conservation interventions directed at fishing activities on livelihoods.
- iv. **Coastal development:** Unplanned and unsustainable coastal development along the country's coastline has threatened sea turtle nesting habitats. The impacts of such developmental activities (such as construction of sea walls, urbanisation, development of ports, etc.) vary from one location to the next, and members of TAG are individually contesting decisions made at the local scale. Common themes of the development agenda across sites and across states can be collectively addressed and brought to the notice of higher authorities, including the central ministry, to demand more transparent decision making procedures, greater participation of local communities and stakeholders, and the development of sustainable and responsible coastal zone management plans by state governments.



- v. Standardisation of data collection and monitoring techniques: In order to be able to collate data and information collected individually by member organisations, TAG will develop standardised procedures for data collection and monitoring to enable this information to be shared. This would also allow for site-specific data to feed into distribution and abundance assessments at larger geographical scales. The collated data will be available on the [seaturtlesofindia.org](http://seaturtlesofindia.org) website which will also be used as a portal to upload/download data and will generate maps of distribution and temperature related data.

*Sea walls are a major threat to coastal habitats along the mainland and in offshore islands such as Lakshadweep*

*Photo: K. Shanker*

In addition to the four key issues that were identified, TAG will also address the impacts of ports and seawalls on beaches / nesting habitats and beach lighting. It aims to work towards developing effective tools for advocacy, increase visibility of individual and collective efforts through outreach programmes and encouraging media presence. It also aims to collate relevant information and provide guidance for hatchery management and for developing education and outreach programmes (such as the setting up of interpretation centres).

### **3. To increase responsibilities of Network Core Committee**

Once the constitution and primary responsibilities of the Core Committee have been established, the Committee will be involved in raising resources for the network and would provide direct support in the form of training inputs and designing conservation and monitoring programmes. It would also oversee the overall development of TAG. Additional funds raised by the Core Committee would be utilised towards the following activities:

- Feasibility studies and workshops on community based marine turtle eco-tourism (Orissa)
- Documentation of community based turtle conservation models and cases (films, booklet/ directory of turtle conservation groups)
- Review of threats to turtles nesting habitats and strategies for conservation (site-specific studies)
- Scholarships for research on sea turtle biology targeted towards students from Masters programmes in wildlife biology at the National Centre for Biological Sciences and the Wildlife Institute of India

### **4. To develop outreach and education material**

One of the focus areas of the network is to develop appropriate outreach and educational material designed for specific target groups. During the year 2010-2011, it is proposed that manuals and other educational materials will be prepared for identified key themes. This material will also be translated into local languages and distributed to target groups by (and for) members of respective coastal states. Local outreach and awareness programmes will be promoted for use by volunteers from the fishing and coastal communities such as the traditional media of street plays, folk songs and dances which are popular and effective means to carry forward conservation education on marine turtles.

# 6.

# Recommendations

Based on a qualitative assessment of the outcomes of the network and expectations of member organisations, the following recommendations are suggested to strengthen TAG and enable more coordinated and effective action:

- It will be useful for TAG to network with other regional and global networks and organisations in order to increase communication amongst groups and individuals that address similar conservation concerns in other parts of the world.
- Key issues that may be addressed directly to the central government through the nodal agency of the Ministry of Environment and Forests need to be identified and examples of successful conservation interventions that have effectively addressed threats to sea turtles and coastal habitats need to be showcased in an appropriate manner in order to solicit the inclusion of these concerns in policy making.
- There is a need to effectively pool knowledge and information. This collated information on sea turtles, their habitats, threats, biology, behaviour and protection efforts can be developed and made available to the public in a simple and easily accessible manner.
- Joint awareness programmes could also be initiated by network members, especially within each state by pooling resources and by drawing from individual strengths and areas of expertise of each organisation.
- Greater visibility of the network's activities and initiatives through media campaigns will enable not just recognition of TAG's efforts, but can also be used to highlight efforts of

individual organisations that are members of the network.

- It is important that while membership of the network is largely restricted to groups and individuals working specifically on sea turtles and sea turtle habitats, members engage and interact with representatives of other stakeholder and interest groups in order to develop holistic approaches to conservation.



*TAG members promote local community interest  
in sea turtle monitoring and research  
Photo: K. Shanker*

# 7.

# Acknowledgments

We are grateful to the US Fish & Wildlife Service for providing funding support under the Marine Turtle Conservation Act Fund. In particular, we would like to thank Earl Possardt at the USFWS for his constant support and encouragement.

We are also thankful to the staff at the Ashoka Trust for Research in Ecology and Environment (ATREE) and Dakshin Foundation for carrying out the administrative tasks under the project and for the coordination of logistics in organising the annual workshops.

The members of the Orissa Marine Resources Conservation Consortium were instrumental in coordinating the arrangements and logistics for the 2<sup>nd</sup> Annual TAG Workshop in January 2010 in Bhubaneswar, Orissa. In particular, we would like to thank Mr. Mangaraj Panda of the United Artists Association for overseeing the arrangements. We are also grateful to Dr. Sudarsanam of Loyola College, Chennai and Dr. Supraja Dharini, TREE Foundation for facilitating the 1<sup>st</sup> Annual TAG Workshop that was held in Chennai in January 2009.

B.C. Choudhury of the Wildlife Institute of India and Sejal Worah of WWF-India provided key inputs during the 1<sup>st</sup> Annual TAG Workshop that helped shape the structure of the network and lay out an action plan for conducting its activities. Varsha Patel and Ramya Rajagopalan of the International Collective in Support of Fishworkers provided insightful perspectives on aspects of turtle conservation and marine protected areas that impacted fishing communities across the coast, and Bivash Pandav's reflections on the past, present and future of turtle conservation in India was an inspiration to all at the 2<sup>nd</sup> Annual TAG Workshop. We are thankful to all of them for taking the time to attend the workshop and for their valuable inputs.

We are also thankful to the Ministry of Environment and Forests for endorsing the network. We are hopeful that representatives of the Ministry and coastal state government agencies will be actively involved in network activities in the future.

And finally, we would like to thank all our member organisations whose enthusiasm in sustaining the network and efforts in carrying out network activities has validated our efforts in initiating and facilitating the Turtle Action Group.

# 8.

# Appendices

## Appendix I: Member Organisations of TAG

Name of the organisation	State
Andaman and Nicobar Environment Team	Andaman & Nicobar Islands
Green Mercy	Andhra Pradesh
Visakha Society for Prevention of Cruelty to Animals (VSPCA)	Andhra Pradesh
Field Services and Intercultural Learning	Karnataka
Canara Green Academy	Karnataka
Naithal	Kerala
Lakshadweep Marine Research and Conservation Center (LMRCC)	Lakshadweep
Sea Turtle Action Programme (STAP)	Orissa
Green Life Rural Association (GLRA)	Orissa
Podampeta Ecotourism and Olive Ridley Protection Club	Orissa
Action for Protection of Wild Animals (APOWA)	Orissa
Rushikulya Sea Turtle Protection Committee (RSTPC)	Orissa
TREE Foundation	Tamil Nadu
Students Sea Turtle Conservation Network	Tamil Nadu
Prakruti Nature Club	Gujarat
Sahyadri Nisarga Mitra	Maharashtra

## Resource organisations

- Dakshin Foundation, Bangalore
- Madras Crocodile Bank Trust, Mamallapuram
- Wildlife Institute of India, Dehradun
- WWF-India, New Delhi
- Greenpeace, Bangalore
- International Collective in Support of Fishworkers, Chennai
- Orissa Marine Resources Conservation Consortium, Ganjam

## Appendix II: Workshop Summary Report: 2nd Annual TAG Workshop

Dates: 12th and 13th January 2010 , Venue: Bhubaneswar, Orissa

Following the 1st Annual TAG Workshop that was held in January 2009 in Chennai, the 2nd Annual TAG Workshop was held at the Red Cross Bhavan in Bhubaneswar, Orissa. This document outlines the outcomes of the workshop.

### Objectives of the workshop

1. To review activities carried out by individual members and the network during the previous year,
2. To design ways to standardise and coordinate research and monitoring methods between the organisations,
3. To design capacity building and training programmes on aspects of research and monitoring,
4. To plan for activities of TAG at the forthcoming International Sea Turtle Symposium, and
5. Plan and execute activities that were proposed during the previous workshop.

### Workshop agenda

<b>Day 1      12<sup>th</sup> January 2010</b>	
Session 1	Invited talk
Session 2	Group Presentations
<i>Tea break</i>	
	Session contd.
Session 3	Planning of advocacy activities that were proposed during the previous meeting
<i>Lunch break</i>	
Session 4	<ol style="list-style-type: none"><li>i.      Monitoring Programme coordination</li><li>ii.     Sea Turtles of India website - updates and discussion</li></ol>
<b>Day 2      13<sup>th</sup> January 2010</b>	
Session 1	Invited Talks
<i>Tea break</i>	
Session 2	Group presentations
<i>Lunch break</i>	
Session 3	Network activities for the future
Session 4	Planning for International Sea Turtle Symposium

## Day 1: 12<sup>th</sup> January, 2010

The workshop commenced with a brief outline of the forthcoming sessions and a presentation by Kartik Shanker (Centre for Ecological Sciences, IISc, ATREE and Dakshin Foundation Bangalore).

### *Session 1: Invited talk*

The sessions began with a presentation by Ramya Rajagopalan from the International Collective in Support of Fishworkers, Chennai who highlighted the impacts of marine protected areas and conservation interventions on fishing communities across the coast.

### *Session 2: Group presentations*

Following a round of brief introductions from the participants that represented each of the organisations under the TAG network, individual groups were invited to make presentations. The presenters highlighted the work that the organisations had carried out over the previous years. The aim of this session, in addition to introducing members to each others work and methods was to be able to identify issues of common concern and problems faced while carrying out activities that could be collectively addressed through discussion. The list of presenters for the session is provided below.

<b>Presenter</b>	<b>Organisation</b>
Soham Mukerjee	Madras Crocodile Bank Trust (MCBT), Tamil Nadu
Ravi Pandit	Canara Green Academy (CGA), Karnataka
Pradeep Kumar Nath	Visakha Society for Protection and Care of Animals (VSPCA), Andhra Pradesh
Bijaya Kumar Kabi	Action for Protection Of Wild Animals (APOWA), Orissa
Gopal Panda	United Artists Association (UAA), Orissa
Jignesh Gohil and Dinesh Goswami	Prakruti Nature Club, Gujarat
Stefanie Heinicke	Field Services and Intercultural Learning-India (FSL), Karnataka

### *Session 3: Planning advocacy activities that were proposed during the previous meeting*

The purpose of this session was to review the activities that had been proposed for the first two years of the network's operation. Participants acknowledged that only a few of the proposed activities had been carried out during the year. Below is a list of activities that have been carried out during 2009-2010 and a list of pending activities identified by the participants as relevant for the network to execute.

#### *Activities that have been executed/initiated by TAG during 2009-2010:*

- 1) Standardising data collection on turtle nests and mortality of hatchling data
- 2) Development of a database of NGOs and groups working on turtle conservation
- 3) Developing a website with information about member organisations and network activities

*Pending activities:*

- 1) Develop, collate and distribute educational and other relevant material.
- 2) Translation of an activity book titled 'Sand in my Hands!' on sandy beaches and sand dunes developed by the Coastal and Marine Programme at ATREE into local languages.
- 3) Reprints of previously published Sea Turtle Conservation and Management manuals and translation of the same into local languages.
- 4) Submitting a combined letter to the concerned authority/authorities requesting permission to conduct sea turtle research and conservation activities by members of TAG.
- 5) Conduct training on sterilisation programmes and share information with responsible local state agencies (for example, the state Prevention of Cruelty to Animals board).
- 6) Draft and send out periodic letters to relevant government agencies on instances of violations of fisheries laws.
- 7) Highlight issues related to threats to sea turtles and coastal habitats in the media through a holistic media strategy.

*Session 4:*

*i. Monitoring Programme coordination*

Kartik Shanker commenced this session with a presentation on sea turtle biology and elaborated on methods to monitor hatchling data. This data that is collected will help inform studies which investigate the impacts of climate change on sex determination. Eight organisations are currently a part of this initiative, and are in their second year of data collection. The list of involved organisations is given below:

<b>State</b>	<b>Organisation</b>
Karnataka	Canara Green Academy (CGA)
Kerala	Naithal
Maharashtra	Sahyadri Nisarga Mitra (SNM)
Orissa	Rushikulya Sea Turtle Protection Committee (RSTPC)
Tamil Nadu	Students Sea Turtle Conservation Network (SSTCN)
Tamil Nadu	TREE Foundation
Andhra Pradesh	Green Mercy
Andhra Pradesh	TREE Foundation
Andaman & Nicobar Islands	Andaman and Nicobar Environmental Team (ANET)

The objectives of the study are 1) to examine the influence of incubation temperature on hatchling mortality and predicted sex ratios in the context of changing climatic profiles in the region, 2) to study the effects of temperature in determining egg mortality and 3) to examine the relationship between various aspects of temperature (mean, variance and maximum) on mortality of eggs and hatchlings. This will help monitor changes along the coast and predict population trends in the future.

## *ii. Sea Turtles of India website – updates and discussion*

The website Sea Turtles of India ([www.seaturtlesofindia.org](http://www.seaturtlesofindia.org)) was developed and launched in 2009. The website aims to include information about TAG. The interactive session provided a platform for members to express their views and expectations of the website. Information about each of the organisations was solicited to be included as profiles on the website. In addition, a discussion regarding making data available concluded with the participants acknowledging the importance of making information and data accessible to the public, especially to research students and other NGOs working along other parts of the coast, and requested a forum where members of TAG could post important announcements, share experiences and conduct debates on relevant topics.

### **Day 2: 13<sup>th</sup> January, 2010**

#### *Session 1 - Invited talks*

The first session of the second day began with the following invited talks:

Coralie D’Lima (James Cook University, Australia) talked briefly about her work on the Irrawady Dolphins in Chilka Lake, Orissa. The presentation was a welcome diversion from network related discussions and included a photo slide show of dolphins and birds in the area.

Sudarshan Rodriquez (Dakshin Foundation, Bangalore) made a presentation about shoreline changes along the east coast of India (and in Tamil Nadu and Puducherry in particular) brought about by construction activities such as sea walls, ports and groynes.

Bivash Pandav (WWF-Nepal) addressed mortality of turtles due to trawling activities and other threats along the coast of Orissa. He also highlighted the importance of local community participation to help tackle these issues.

Naveen Namboothri (Dakshin Foundation) made a presentation on the socio-ecological impacts of marine invasive species. This was highlighted through a case study of *Kappaphycus alvarezii* invasion and its impacts on the coral reef ecosystems of the Gulf of Mannar Biosphere Reserve.

#### *Session 2 – Group Presentations*

The group presentations continued in this session. The list of the presenters is given below:

<b>Presenter</b>	<b>Organisation</b>
Adhith Swaminthan	Students’ Sea Turtle Conservation Network (SSTCN), Tamil Nadu
Sudheer Kumar	Naithal, Kerala
Rameshwar Fugare	Sahyadri Nisarga Mitra (SNM), Maharashtra
Sovakar Behera	Green Life Rural Association (GLRA), Orissa

Rabindranath Sahu	Rushikulya Sea Turtle Protection Committee (RSTPC), Orissa
Jafer Hisham	Lakshadweep Marine Research and Conservation Centre (LMRCC), Lakshadweep
P. Balachandran	Bombay Natural History Society (BNHS), Point Calimere Field Station, Tamil Nadu
Arun Krishnamurthy	TREE Foundation, Tamil Nadu

### *Session 3 – Network activities for the future*

The following were the outcomes of the session on deciding future activities for the network:

A focus of discussions during the session on deciding future activities of the network was strengthening network identity. Many participants expressed the need for an official identity of TAG through the process of registration as an organisation. They felt that formalizing the network would ensure proper functioning and timely completion of activities. Further, committed individuals would be required to execute the administrative and coordinating tasks of running the network. Others however, felt that the network would function more effectively as an informal association of independent members. This would allow for an equal distribution of responsibility and decisions could be made in a more democratic manner. It was decided that the decision to formalise the network would be addressed at the next annual workshop by which time the potential of the network to sustain itself would have shown through the outcomes of the activities initiated. The other issues that were brought up in this regard included laying down the procedure for accepting new members and defining the roles of individual members as well as Core Committee members.

The members of Canara Green Academy, Karnataka; N.D Bhat, Ravi Pandit and Shankar Hedge volunteered to organise the TAG workshop the following year.

A Core Committee was constituted of representatives from different states/regions. The functions of the core committee were briefly outlined, primarily pertaining to coordinating between members and ensuring communication and timely reporting to the executing organisation. The responsibility to assign voluntary tasks in the execution of collective activities was also decided to rest with the Core Committee.

The members of the core committee are as follows:

East coast: Mangaraj Panda (Orissa), Pradeep Kumar Nath (Andhra Pradesh), Arun Krishnamurthy/  
Supraja Dharini (Tamil Nadu).

West coast: Wesley Sunderraj (Gujarat), (Maharashtra), (Goa), (Karnataka), Sudheer Kumar  
(Kerala)

Islands: Jafer Hisham (Lakshadweep), Naveen Namboothri/Manish Chandy (Andaman & Nicobar  
Islands)

It was also decided to constitute an advisory committee which would consist of researchers and other experts with whom the network can consult on a regular basis while determining action plans and/or assessing and reviewing completed activities.

Based on the presentations made during earlier sessions and discussions that followed, common issues of concern were identified. From these, the key issues that the network as a collective could address were listed out. The key focus areas were identified as the following:

The members listed a number of activities that needed to be addressed:

- 1) Draft and submit a common letter of request to obtain permissions from state governments to carry out sea turtle related research and conservation activities
- 2) Enable Capacity building of community based NGOs through training programmes
- 3) Address the impacts of Casuarina plantations and their role as bioshields on nesting beaches
- 4) Address trawling related mortality on the east coast
- 5) Address unsustainable coastal development
- 6) Develop and disseminate information about cost-effective and technically sound hatchery management
- 7) Address the use of hard engineering options such as construction of sea walls, groynes, etc. and consequent impacts on nesting habitats
- 8) Study and address the impacts of artificial lighting on hatchlings
- 9) Develop appropriate material for outreach and education
- 10) Develop standards for data collection and monitoring
- 11) Facilitate media presence and visibility
- 12) Develop advocacy tools to address policy related issues

From the above listed issues, it was decided that focusing on two priority aspects will help initiate the network's activities for the following year. The obtaining of permits for members of TAG through seeking endorsement of the network and individual member organisations and addressing fishing related mortality were identified to be two key issues that were most common to all member organisations. It was also decided that the responsibility of developing a plan of action through seeking the inputs of all TAG members rested with the Core Committee.

#### *Session 4 – Planning for ISTS*

Kartik Shanker (President of the International Sea Turtle Society) made a presentation about the upcoming 30<sup>th</sup> Annual Symposium on Sea Turtle Biology and Conservation to be held between the 24<sup>th</sup> and 30<sup>th</sup> of April 2010 in Goa. This year marks the first time that the annual symposium will be held in India, and indeed the south Asia region.

The presentation highlighted the role of the individual constituent organisations of TAG and the network as a whole, at the symposium. In particular, the role of the network was identified as under:

- South Asia Mini Symposium: Unique to the 2010 Symposium is a special mini-symposium

convening turtle conservation groups from within the South Asia region. This event provides a unique opportunity for members of the TAG network to showcase its activities, and to promote collaborative action with organisations and networks within the subcontinent.

- An opportunity to showcase the efforts of individual members and the network as a single entity to the global conservation community through presentation and exhibition display, particularly highlighting the efforts of community based conservation in order to suggest models of intervention and advocacy that may be replicated elsewhere.
- An opportunity to meet and interact with groups and individuals and identify potential collaborations – within the region and globally.

## **Appendix III: TAG Member Profiles**

### **1. Action for Protection of Wild Animals (APOWA), Kendrapara, Orissa**

#### **Background of the organisation**

Action for Protection of Wild Animals (APOWA) was established on 20<sup>th</sup> April 1999 and registered under the society registration act XXI of 1860. APOWA was formed by a group of multi-skilled environmental professionals, technical personnel, community volunteers, teachers, experts and conservationists.

Our projects and programmes are aimed at solving problems by sound, sensible and applicable methods. The design of our activities or projects fully incorporates indigenous people. All our projects demonstrate a high chance of success in relation to the scale of the problem being tackled and the level of resources being used. All our projects are assessed to ensure positive long term impact on species, environment and local communities.

The team of APOWA (Action for Protection of Wild Animals) is fully committed to conserve the rich biodiversity and globally significant natural endowment by improving the capacity of local stakeholders of the coastal areas in Orissa. APOWA is an award winning team of community leaders, scientists, environmentalists, researchers, and teachers. The heart and, indeed, the mind of APOWA has always been its steering group of multi-skilled environmental professionals, technical personnel and conservationists.

#### **Objectives**

The mission of APOWA is:

- To conserve nature, especially endangered species and threatened habitats, in partnership with communities.
- To provide all that is necessary such as treatment, food, and protection for the welfare of animals.
- Provide emergency assistance to protect endangered wildlife species, with particular priority to marine turtles and dolphins.
- To preserve wildlife in its natural habitat.
- Catalyse action by the government and by people for conservation of wildlife and its habitat.
- To support and conduct research programmes, field action projects, and other activities that encourage proactive action for conservation of wildlife and wild habitats.
- To produce and disseminate public awareness and educational material and communication strategies that will promote the main objectives of the organisation.
- To promote environment and conservation education programmes in schools and villages.
- To help alleviate animal suffering and raise public consciousness toward giving animals the respect they need and deserve.
- To improve the knowledge and skill of community volunteers and animal owners for long term welfare of animals.

- To provide rescue, relief and rehabilitation programmes for animals and people during natural disasters.
- To initiate disaster management programmes.
- To conserve and protect the coastal, especially mangrove, resources of the region.
- To promote afforestation and plantation drives in the locality.



### **Geographical area**

The mission of APOWA is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the natural resources they need to survive. APOWA acts to conserve coastal resources, threatened species and ecosystems in coastal Orissa, choosing solutions that are sustainable, based on ground work and take account of human needs. APOWA is committed to saving critically threatened habitats, and their wildlife. And by saving vital habitats we are also helping save Life on Earth. APOWA has a high degree of expertise in conducting environment education programmes through its outreach programme to schools and communities which is supported by a strong team of environment and conservation educators. APOWA covers coastal districts like Kendrapara, Bhadrak, Jagatsinghpur, and Puri in Orissa.

### **Support for the organisation:**

The activities of APOWA have been supported by the members and volunteers of APOWA. The villagers have continued to donate in kind and labour for various activities of APOWA. Apart from that, the organisation has been conducting fund raising activities for running of the project. The organisation has been receiving small grants from Animal Welfare Board of India as an annual regular

grant for animal welfare projects. Private organisations also support the activities of APOWA with small contributions as donations.

### **Role within the network**

APOWA has been continuing to save, protect and help conserve the endangered sea turtles and their habitat along the Orissa coast, which falls under one of the major objectives of TAG. TAG encourages sea turtle activities throughout the country, and as a member of the TAG, APOWA seeks cooperation, guidance, and technical help to continue its sea turtle conservation programmes in its geographical area of work in Orissa.

*Contributed by Bijaya Kabi, Honorary Director, APOWA*

Contact information:

Bijaya Kabi, Honorary Director, APOWA

Postal address:

Action for Protection of Wild Animals

Hatapatana, P.O. Kadeliban, Kendrapara District,

Orissa – 754222

Phone: +91 9437439946

Email: [bijayakabi@apowa.org](mailto:bijayakabi@apowa.org)

Website: [www.apowa.org](http://www.apowa.org)

## **2. Andaman and Nicobar Environmental Team, Andaman and Nicobar Islands**

### **Background of the organisation**

In the late 1980s, Romulus Whitaker, Satish Bhaskar and Alok Mallick set up a base in Wandoor, South Andaman for herpetofaunal and other ecological studies in the islands of the Andaman and Nicobar. The Andaman and Nicobar Islands Environmental Team (ANET), a division of the Madras Crocodile Bank Trust, was constituted in 1990. Five acres of land was bought in 1993 (with grants from Conservation International and the Royal Netherlands Embassy) at Wandoor on the southern tip of South Andaman, staff were hired and further grants enabled construction of a base for conservation, research, and education. ANET remains the main active environmental NGO and the only such research base in the islands.

### **Objectives**

ANET's primary aim is to help ensure the long term survival of as much of the Andaman and Nicobar natural biodiversity as feasible, whilst recognizing the needs of the settled human inhabitants and the threatened aborigines. Since little conservation work had been conducted in the islands prior to ANET's formation in 1989, the team has found it necessary to tackle several different, though ultimately complimentary fields. ANET aims to teach local people of the "workings" of the fragile island ecology and help them understand the dangers of putting too much pressure on its resources. The team also endeavors to instill a greater level of environmental awareness; that is, stakeholders are encouraged to appreciate nature and develop an active interest in conserving the islands' wildlife and habitats. Further to this, ANET supports and trains local teachers, school children, settlers, people from the armed forces and naturalists so that they can build upon its conservation efforts.

### **Geographical extent**

ANET has had a wide presence in the past in the islands, although currently, our activities are focused along specific beaches and habitats. Our collaborative sea turtle project work is carried out in mainly in Little Andaman, and our surveys also include a few beaches and other habitats along south Andaman and little Andaman. Extensive educational programmes have been carried out in schools of Havelock island. A livelihood assessment has been carried out in Karen villages located in Middle Andaman island. Our past work with crocodiles and sea turtle surveys included all the islands in the Andaman group excepting Narcondam island. This island was visited by a team from ANET earlier this year.

ANET, with other partners is also involved in studying mechanisms of sharing and cooperation through socio-ecological change in the Nicobar islands, specifically Chowra, Kamorta (Central Nicobar), Little & Great Nicobar islands.

In the near future with other members of our team, ANET will be involved in imparting training and conducting training on a basic socio-economic monitoring of reefs and resources for the Havelock/Neil regions which are highly influenced by the tourism economy. Part of the team is also involved in a similar exercise and will set up a reef check monitoring system in the near future. Earlier, they were

involved in an educational program with schools of Havelock island.

### **Activities**

Extensive studies on sea snakes, the flora, marine turtles, herpetofaunal biogeography, bats, other small mammals, resource use, land use, rain water harvesting, coral reefs, invasive species, crocodile surveying and socio-economics have been undertaken. Other activities include assisting the Forest Department in ecologically suitable protected area management planning. ANET has an ongoing environment education programme and collaborated with Centre for Environmental Education to produce a teacher-training manual in English and Hindi, ('Treasured Islands') for the schools in the islands.

#### *Leatherback sea turtle monitoring program*

The leatherback nesting population of the Andaman and Nicobar islands is the single largest in the Indian Ocean. The coastline and beaches of these islands were severely affected by the December 2004 earthquake and the subsequent tsunami. Many important nesting sites in the region were badly affected and no information exists on the effect of these disturbances on the leatherback nesting populations of the region. Especially from the islands of the Nicobar which are prime nesting beaches for the leatherback turtles in the Indo-Pacific. This is largely due to the remoteness of the sites and logistical constraints in conducting such a study. In collaboration with the Centre for Ecological Sciences (Indian Institute of Science), Ashoka Trust for Research in Ecology and the Environment (ATREE), Dakshin Foundation and the Department of Environment and Forests, Andaman and Nicobar Islands, we have been supporting and helping coordinate the monitoring of leatherback sea turtle nesting in some of the prime nesting beaches of the Little Andaman island in order to understand the post-tsunami recovery of nesting on these beaches. We have also been tagging the turtles and assist in collection of tissue samples for genetic analysis of these populations.

### **Support for the organisation**

The bulk of ANET's funding is provided by The Madras Crocodile Bank Trust. Financial support for the leatherback turtle monitoring programme has been coming from MTCA, Ashoka Trust for Research in Ecology and the Environment and the Centre for Ecological Sciences, Indian Institute of Science.

### **Plans for the future**

We intend to continue the current leatherback nesting monitoring programs and also undertake tagging, monitoring and surveys in the more remote, though prime nesting beaches of the Nicobar group of islands. We also intend to undertake more focused long-term scientific data collection that would help understand the impacts of climate change on the sex-ratio of leatherback turtles of the Andaman and Nicobar islands.

Our objective is to involve more local community people in turtle conservation activities. This will not just serve as an alternate livelihood option for many local communities who are otherwise dependent on

natural resources, but also help in increasing conservation awareness among the local communities.

Current data on leatherback turtle nesting from the Andaman and Nicobar islands are patchy. In collaboration with Centre for Ecological Sciences, Indian Institute of Science and the Forest Department, Andaman and Nicobar islands, we plan to undertake satellite telemetry studies on the leatherback turtles of the region that would help us understand the migration patterns of the turtles and also help characterize ecology and behaviour. This information will be valuable in formulating meaningful conservation strategies for this critically endangered species.

### **Role within the network**

While there are a considerable number of organisations working on conservation of sea turtles, most of them are based in the Indian mainland. We are unique in being the only organisation based out of the Andaman and Nicobar islands, an important and prime nesting site for sea turtles of all four species that occur in India, namely Olive ridley, Green, Hawksbill and Leatherback. In addition, nesting sites of the leatherback turtles in the country are entirely restricted to the Andaman and Nicobar islands.

Our organisation has been based in the Andaman and Nicobar islands for the past 20 years and we have been involved in sea turtle conservation in the region for more than 2 decades. Through our years of involvement in conservation related work in the region, we have built considerable rapport with the local communities (both indigenous and mainlanders) as well as the resource managers (Forest Department). We already have a strong platform of sea turtle conservation history in the islands from where more focused conservation and research actions can be launched. This is what we have to offer to the TAG.

The Andaman and Nicobar islands are an isolated group of islands from the Indian mainland and so are the conservation groups and their activities. The Turtle Action Group would provide an excellent opportunity not only to highlight our work and activities to groups of similar interests in the country, but also help to share and learn from experiences and best conservation practices from other parts of India. This knowledge we feel is vital to the evolution and long-term goals of our organisation.

*Contributed by Soham Mukherjee, Madras Crocodile Bank Trust*

Contact information:

Tasneem Khan, Assistant Director, ANET

Postal address:

Andaman and Nicobar Islands Environmental Team

Centre for Island Ecology

Post Bag- 1, Junglighat P.O.

Port Blair – 744 103

Andaman Islands

Phone: 91- 03192 280081

Email: [contactanet@gmail.com](mailto:contactanet@gmail.com), [tasneemkhan85@gmail.com](mailto:tasneemkhan85@gmail.com)

Blog: [www.anetindia.blogspot.com](http://www.anetindia.blogspot.com)

### **3. Canara Green Academy, Sirsi, Karnataka**

#### **Background of the organisation**

Canara Green Academy was established and registered under Karnataka Societies Registration Act, 1960 on 17<sup>th</sup> October 2005. It has its head office at Sirsi. The organisation was established with a motto of conserving flora and fauna of North Kanara District. Our activities are carried out exclusively within the North Kanara District.

#### **Activities**

Conservation of sea turtles, mangroves and medicinal plants is the main mission of Canara Green Academy. In last four years, the activities that have been carried out by the Academy include:

##### *Conservation of sea turtles*

In 1984, the Karnataka Forest Department had established about 40 sea turtle breeding centres all over the Karnataka coastline. However, in North Kanara, the only surviving breeding centre that was thus established is at Jali. In 2006, the Academy collected secondary information on sea turtles visiting the coast, and potential sea turtle nesting beaches were identified and temporary breeding centers were established at Manki, Haldipur, Dhareshwar, Kagal and Gangavali. Ex-situ and in-situ conservation is carried out, depending on the security of the nests identified. This is done with the help of local villagers. For the creation of awareness among the locals, door to door campaigns and meetings at the micro level (i.e. of the village) are conducted. State level workshops are been conducted by the Academy. As an incentive to promote conservation and the participation of local people in our activities, an honorarium is awarded to the person who identifies and informs our volunteers of nests along the beach.

##### *Development of methodology for sustainable harvesting of medicinal plants and NTFPs*

The Western Ghats are a treasure trove of medicinal plants and NTFPs (Non-Timber Forest Products). There is active trade of medicinal plants and NTFPs and the methods of extraction of such products are often destructive. For the conservation and development of medicinal and NTFPs local people need to be motivated and methods for sustainable harvesting should be introduced. For the development of methodology in sustainable harvesting, Canara Green Academy has worked as a partner NGO with the Foundation for Revitalisation of Local Health Traditions (FRLHT). This project is implemented in Shirgunji village of Honavar Division.

##### *Bird census*

The Academy regularly carries out bird census in mangrove areas and along the coast. Students from local colleges in the area assist with the census. Workshops conducted at local colleges, like the recent workshop at Kumta provides students with knowledge about identification of birds and census techniques.

## Support for the organisation

The Canara Green Academy raises funds to support its programmes from various donor organisations and voluntary contributions from private organisations and citizens. It also sustains its activities by working as a partner with other organisations (such as the FRLHT) or as an evaluating agency in the implementation of certain government schemes such as the National Afforestation Programme.



## Plans for the future

CGA aims to expand its activities to include:

1. Extending conservation activities to freshwater turtles
2. Introduction of sustainable harvesting methods to Village Forest Committees of Honavar Forest Division in collaboration with the Karnataka Forest Department.
3. Conservation of mangroves and sea turtles in collaboration with the Karnataka Forest Department
4. Continue bird census in North Karnataka

## Role within the network

CGA recognizes that in order to bring individuals, NGOs and institutions with similar interests together on same platform, a network is necessary. The network provides us an opportunity to interact with other organisations from around the country and will help develop our own skills and learn from their experiences in the field, and in return we have the opportunity to share our experiences with others.

*Contributed by Ravi Pandit, Canara Green Academy*

Contact information:

Ravi Pandit, Canara Green Academy

Postal address:

No. 163, Shrikrishna, Shree Vananagara Chipgi, Sirsi, Karnataka – 581402

Phone: +91 9945734535

Email: [mail@canaragreenacademy.org](mailto:mail@canaragreenacademy.org), [ravi\\_kfd@rediffmail.com](mailto:ravi_kfd@rediffmail.com), [ravi.kfd@gmail.com](mailto:ravi.kfd@gmail.com)

#### **4. Lakshadweep Marine Research and Conservation Centre, Lakshadweep Islands**

##### **Background of the organisation**

The Lakshadweep Marine Research and Conservation Centre (LMRCC) was formed on 16 January 2008, the International Year of Coral Reefs. The organisation was established by young islanders who wanted to build on the results of 'Project Giant Clam', which was carried out under the Darwin Initiative and ran from April 2005 till April 2008. LMRCC is the first organisation of its kind in Lakshadweep. The vision of LMRCC is a sustainably progressing Lakshadweep where marine ecosystems are healthy and well managed.

##### **Objectives**

The main objectives of the LMRCC are:

To develop as a centre of excellence in marine research and conservation.

To conserve the flora and fauna of Lakshadweep through community participation.

##### **Geographical extent**

LMRCC has been registered to work in all inhabited and uninhabited islands of Lakshadweep. Our Head office is in Kavaratti, the capital of Lakshadweep. Currently, LMRCC is working in Kavaratti, Agatti and Pitti Bird Sanctuary. We have conducted sea turtle and bird surveys in the uninhabited islands of Bangaram, Thinnaka, Parali 1 and Parali 2 Islands. During the 2010 season, we are planning to organise a turtle survey in the Suheli group of islands, where we have previously carried out bird surveys.



##### **Activities**

###### *Pitti Bird Sanctuary Conservation*

Pitti Bird Sanctuary is the only oceanic tern nesting sanctuary in India and the only protected area in Lakshadweep. The main economic activity in the islands of pole and line tuna fishing is directly dependent on the existence of terns. We work with the fishing community to reduce the threats to

these birds on the island, while ensuring the sustenance of livelihoods based on tuna fishing.

#### *Marine turtle conservation*

Lakshadweep has a significant population of the endangered green and hawksbill turtles. Increasing tourism and fishing activities in the islands have started to have negative impacts on the turtles and their habitats. We work with the local community, school students and fishermen to reduce the threats to these ocean ambassadors through education and awareness programmes.

#### *Environmental education*

Lakshadweep follows the school curriculum of the neighbouring state of Kerala, and this denies the island students a chance to learn about their immediate environment, the coral reefs. We develop educational resources on coral reefs and their conservation under our SEACOLOGY funded program, which students are encouraged to use along with their existing curriculum. An Environmental Education programme for conserving the Pitti bird sanctuary is operational in two islands with financial assistance from ATREE's Small Grants Program, which has been well received by the schools and the local community.

#### *Fishermen empowerment programme*

We work closely with fisherman associations in islands by providing technical and scientific advice on matters of coastal development and livelihoods issues. We also help them to voice their concerns at national platforms by linking them with national organisations in the country.

#### *Lakshadweep Dive Club*

This initiative is organised to provide a common platform to Scuba Divers from Lakshadweep and also involve them in marine conservation efforts. Divers can collect valuable data which will help in reef conservation; they can also teach tourists the value of coral reefs and make them supporters of conservation.

#### *Networking*

LMRCC partners with many local, national and international organisations for marine conservation. We work with TAG-India, Indian Bird Conservation Network (IBCN), the Ashoka Trust for Research in Ecology and the Environment, Dakshin Foundation (ATREE), TREE Foundation, Bombay Natural History Society (BNHS), Reef Watch Marine Conservation, CARESS, SEACOLOGY, PADI Project, AWARE Foundation / Asia Pacific and the Department of Fisheries, Environment & Forests of the Lakshadweep Administration.

### **Support for the organisation**

Most of the activities of the organisation are supported by voluntary contributions from members and interested groups. We have received financial assistance from LEAD International, BNHS, ATREE, SEACOLOGY and the Department of Environment and Forests, U.T of Lakshadweep.

## **Role within the network**

As a member of TAG, we see our role to include:

- Acting as the Lakshadweep focal point of TAG and to organise collaborative research, conservation and advocacy programmes for sea turtle conservation in the islands.
- Strengthening the network by training local groups from the Lakshadweep Islands to carry out sea turtle conservation activities in their respective islands.
- Coordinating a local network in Lakshadweep to strengthen the objectives of the national network.

Benefits from TAG:

The diversity of organisational partners in the TAG group will provide an excellent platform for learning from each other's experience. The lack of media attention to Lakshadweep often sidelines conservation issues in the islands; the network will therefore provide an excellent platform to make the voice of the islands heard by national and international audiences.

*Contributed by Jafer Hisham, Chief Executive Officer, LMRCC*

Contact information

Postal address:

Lakshadweep Marine Research and Conservation Centre(LMRCC)

Conservation Education Centre,Pittiyathala, Kavaratti Island,

U.T of Lakshadweep India - 682555

Phone: + 91 9447048400,+ 91 9746544553

Email: jaferhisham@gmail.com

Website: www.lmrcc.in

## **5. Prakruti Nature Club, Junagad, Gujarat**

### **Background of the organisation**

The Prakruti Nature Club was started in 1997, and was initiated for the conservation and protection of wildlife and marine life. At present, the organisation has over 180 members and volunteers. The members of the organisation come from a diverse range of backgrounds and include members of the local fishing community, coastal area farmers and members of forest villages.

### **Geographical area**

Prakruti Nature Club focuses its activities along the Saurashtra and Gujarat coast. We work towards protection of sea turtles, their nests and habitats, whale sharks and other sea creatures, in collaboration with the Gujarat Forest Department. Apart from coast and marine related issues, our organisation also works towards conservation of wildlife and migratory birds with the active involvement of local communities.

### **Activities**

In the year 2009 – 2010, we have been successful in the following activities:

- i. Rescue of 25 whale sharks
- ii. Rescue of 4 leopards
- iii. Migratory bird census (during winter)
- iv. Release of 7760 turtle hatchlings



### **Support for the organisation**

Volunteers at the organisation contribute in terms of time and effort and funding for activities is largely supported through individual contributions by members of the organisation. We are grateful to have Ambuja Cements support and endorse our efforts through funds provided for specific activities.

## **Plans for the future**

In addition to our existing activities, we are in process of starting an awareness programme towards minimum usage of plastic along the coastal areas, among local community members and school children. Our efforts will also be aimed at reducing consumption of turtle eggs, a practice that is prevalent amongst some of the communities that live on the coast.

## **Role within the network**

As a partner organisation within the network, we hope to contribute through the collection of data for turtles visiting the west coast in Saurashtra and the rest of Gujarat. Particularly, our strong association with the local forest department will be beneficial to the network as a whole in terms of collection and distribution of information and data, furthering the growth of the network. Our contribution also extends to providing information on the activities that we carry out that may be beneficial to other members and in turn hope to learn important lessons from other parts of the country. We would like to spread our wings, and solicit the support and the attention of the international community as well.

*Contributed by Dinesh Goswami and Jignesh Gohil, Prakruti Nature Club*

Contact information:

Dineshgiri D. Goswami / Jignesh Gohil, Prakruti Nature Club

Postal address:

Marutinagar Society

Opp. Kanya Chhatralay

Veraval Road, Kodinar-362725

Gujarat, India

Phone: +91 2795 222228, +919898515362(Dinesh), +919978311011(Jignesh)

Email: dineshgoswami2008@gmail.com, jignesh.gohil2009@gmail.com

Website: [www.prakrutinatureclub.org](http://www.prakrutinatureclub.org)

## **6. Rushikulya Sea Turtle Protection Committee, Rushikulya, Orissa**

### **Background of the organisation**

The Rushikulya river mouth in Orissa is an important nesting site for olive ridley turtles. Every year from November to the end of January, mating takes place in the coastal waters. Hundreds of thousands of female turtles then visit the beach en masse to lay their eggs from February to early April. Wildlife biologist, Bivash Pandav who carried out extensive studies in the area in the early 90's noticed the lack of awareness about the olive ridley turtles among the villagers. This prompted him to set up the Rushikulya Sea Turtle Protection Committee (RSTPC) with the assistance of the local youth in 1998. The RSTPC was officially registered in 2003. Right from its inception, volunteers and others became wholeheartedly involved in spreading awareness among the village folk about the ridleys, thus ensuring the involvement of the community in conservation efforts.

### **Objectives**

RSTPC's primary aim is to help conserve olive ridley turtles and safeguard their nesting beaches along the Rushikulya coast. Members of the organisation are actively involved in collecting data and monitoring breeding and nesting turtles and recording mortality, nest predation and other factors that affect the olive ridley population. Since its inception, the RSTPC has also been involved in encouraging youth from the local communities to be involved with conservation activities in the area.



### **Geographical area**

RSTPC's activities are primarily focused along the Ruhikulya river mouth along the coast of Orissa. The team members also carry out surveys and conservation activities along this coast in collaboration with other organisations in Orissa and networks such as the Orissa Marine Resources Conservation Consortium in Orissa.

### **Activities**

The members of the RSTPC have begun to monitor the nesting population and also assist in the release of hatchlings during mass hatching along the Rushikulya coast. They have also encouraged tourists,

locals and especially children to participate in the collection and release of disoriented hatchlings as a part of their awareness programmes. Members also assist in collecting data and collaborate with researchers to provide logistic support and field staff. Towards this end, they are trained in the latest data collection and monitoring/survey methods.

### **Olive ridley sea turtle monitoring**

The current projects of the RSTPC include data collection from the tagging of turtles, recapture studies, distribution of the mating congregation, satellite transmitter ranging studies and monitoring hatchling mortality rates.

#### *Rescue and reorientation of hatchlings on beaches affected by artificial lighting*

At Rushikulya beach, hatchlings often get disoriented due to artificial lighting. The RSTPC members have therefore involved themselves in collecting the hatchlings in buckets and then releasing them in the ocean. Recently, a net has been placed along the beach to enable easy collection of hatchlings.

#### *Public awareness*

By putting up stalls and creating sculptures of turtles, the RSTPC has made its presence felt at Gopalpur Beach festival in recent years. The V.J. Sheth Memorial Sea Turtle Interpretation Centre has been set up by the RSTPC (courtesy the Eastern Shipping Corporation, Mumbai), which aims to increase public awareness about sea turtles and conservation programmes. For the locals, the turtle is sacrosanct as an incarnation of Lord Vishnu. Education and awareness materials are also provided by the RSTPC to local school children and organisations in the form of CDs, journals, documentaries and pictures.

### **Support for the organisation**

Current activities of the RSTPC are undertaken in collaboration with other organisations and agencies which include the Forest Department, Orissa, Dakshin Foundation, Bangalore, Wildlife Institute of India, Greenpeace, World Turtle Trust, Wildlife Society of Orissa, People for Animals and the Wildlife Trust of India. Members of RSTPC who have been trained by wildlife experts serve as research assistants, working in collaboration with scientists such as Dr. Bivash Pandav, Dr. Basudev Tripathi, Dr. Kartik Shanker Dr. Chandrasekhar Kar and researchers such as Suresh Kumar and Divya Karnad.

### **Plans for the future**

RSTPC intends to continue and expand the current monitoring programs. It also aims to increase capacity of staff in education, awareness and outreach programmes. RSTPC aims to strengthen its infrastructural and institutional capacity in order to independently carry out studies in addition to providing assistance to research organisations and individuals. The greater involvement of local community members, including members of fishing communities in turtle conservation activities

will increase sensitivity to conservation issues and the importance of conserving resources in order to safeguard livelihoods.

### **Role within the network**

RSTPC is part of local networks of organisations in Orissa, including the Orissa Marine Resources Conservation Consortium (OMRCC) which facilitates sustained interactions amongst member organisations in the state. RSTPC is representative of a globally important olive ridley nesting site at the Rushikulya river mouth and come with a wealth of experience to contribute to the national level network through the sharing of local lessons in conservation.

The Turtle Action Group is an ideal platform for RSTPC to interact with members of organisations involved in sea turtle conservation activities along other parts of the Indian coastline, and would provide an opportunity showcase its activities to groups of similar interests in the country.

*Contributed by Rabindranath Sahu, Secretary, RSTPC*

Contact information:

Rabindranath Sahu

Postal address:

Rushikulya Sea Turtle Protection Committee

Purunamandha, Palibandha Post, Ganjam district,

Orissa – 761026

Phone: +91 9437204384, +91 9861203479

Email: turtle\_rushikulya@yahoo.co.in

## **7. Sahyadri Nisarga Mitra, Chiplun, Maharashtra**

### **Background of the organisation**

Sahyadri Nisarga Mitra (SNM) was established in the year 1992 by a small group of people from Chiplun, Maharashtra interested in undertaking conservation work. Mr. Bhau Katdare took the lead and announced a meeting to discuss nature conservation work and in the same meeting, the constitution and mandate of SNM was decided. Immediately afterwards, SNM was registered as a non-governmental organisation, and began its activities.

In the beginning we were engaged mostly in awareness programmes, which included nature trails, exhibitions, and contests in schools and colleges. Slowly we moved towards study and research of endangered species, and the Konkan region has a rich biodiversity. In little time we understood that this work is not sufficient; many individuals and organisations carry out research, but very little is actually done towards conservation. Hence, we decided to focus our activities on conservation oriented interventions.

Our mission is “Nature conservation through field protection, awareness, education and scientific base action”.

### **Geographical area**

SNM works throughout India but a major portion of our activities is focused along the Maharashtra coastline.

### **Activities**

We work towards conservation, research and awareness of the region’s biodiversity. Some of our important projects include:

- Conservation of marine turtles
- Conservation of white-rumped vultures
- Conservation of Indian swiftlet
- Conservation of white-bellied sea-eagle
- Project Mangrove
- Study of birds

### **Support for the organisation**

Our organisation is supported by donations and contributions from citizens, private companies, trusts, and other non-governmental organisations in the country, some of whom work actively in the same area. As a policy, we regularly communicate with our donors and supporters, and ensure to regularly send them annual reports, financial reports and information regarding our activities.

### **Role within the network**

With help from other members of the network, we will strengthen our efforts in conservation, research and awareness of marine turtles, and hope in return to contribute in our capacity to the best possible extent in each of the network's activities. As the network is constituted of groups from all over the country with support from international organisations, we will certainly be benefited as an individual organisation and as a network.

*Contributed by Bhau Katdare, Sahyadri Nisarga Mitra*

#### Contact information:

Bhau Katdare, Sahyadri Nisarga Mitra

Postal address:

Sahyadri Nisarga Mitra

Near Laxminarayan Temple,

At & Post taluka: Chiplun,

Dist. Ratnagiri, Maharashtra 415605.

Phone: +91 2355 - 253030. Mobile: 9423831700, 9373610817

Email: snmcpn@rediffmail.com sahyadricpn@gmail.com

Website: [www.snmcpn.org](http://www.snmcpn.org)

## **8. Students' Sea Turtle Conservation Network, Chennai, Tamil Nadu**

### **Background of the organisation**

The Students' Sea Turtle Conservation Network (SSTCN) was formed, and established its first hatchery, in December 1988. Tito Chandy and Arif Razack were the original founders, and were joined shortly thereafter by Tharani Selvam, Kartik Shanker, Yohan Thiruchelvam, and Tara Thiagarajan. Satish Bhaskar, one of India's pioneering sea turtle biologists was based in Madras from 1988 to 1991 and mentored the students and worked for the SSTCN during the 1989-90 season. Others, such as Romulus Whitaker and Harry Andrews of the Madras Crocodile Bank also provided support.

Sea turtle conservation began in 1971, when a few dedicated wildlife enthusiasts began walking the beaches of Chennai to document the status of and threats to sea turtles. Amongst these were S. Valliapan and Romulus Whitaker, the founder of both the Madras Snake Park and the Madras Crocodile Bank. From 1982 to 1988, the Forest Department set up several hatcheries along the Tamil Nadu coast, three near Madras (now Chennai) and two near Nagapattinam. The closing of hatcheries & conservation program by the Forest Department in 1988 resulted in SSTCN being born.



The SSTCN has mainly been organised and operated by students from colleges and even schools and a few young working adults. Once students finish courses, they routinely leave Chennai after participating in or leading the organisation for two to three years, so the SSTCN has seen a high turnover of both membership and leadership.

One of the main motives in taking up this activity by SSTCN was to save nests from poaching. The objectives were always two fold: conservation & awareness creation. The idea was to use the context of the plight of the turtles to highlight the state of the environment.

### **Geographical extent**

We cover a total of about 7 km along the stretch of beach from Neelankarai in the south up to the Adyar estuary along the Chennai coast. Since 2009, we have also been covering the entire stretch of Marina

beach (approximately 15 km), from the Adyar estuary up to Napier's bridge.

### **Activities**

The activities include beach monitoring, relocating nests found on our stretch of beach, hatchery management, and education and awareness campaigns; the programme has continued from 1988 until the present. Each season, the group establishes a hatchery, and every night from end-December through mid-April, the same 7.5 km stretch of beach is patrolled. From this year the additional stretch of 6.5 Kms covering the Marina beach up to the Cooum, has also been taken up for patrolling and nest relocation, and a new hatchery has been set up for this purpose.

### **Support for the organisation**

SSTCN has always been working only with student volunteers. As a result expenses have been very low. The hatchery is made with low cost bamboo slats and is reused for up to five years. Only in the last few years we have been paying a person from the fishing community to supervise the hatchery. This year we have employed a couple of people to monitor the stretch from the Adyar estuary up to the Cooum. As costs are minimal, we are able to easily raise them from a few friends and well wishers.

### **Plans for the future**

We plan to build on the existing outreach activities to create more awareness and work towards positive solutions. Also, we liaise with other similar minded conservation groups to synergise energies, share volunteers, and create positive contexts for interested people to participate, and we plan to expand these to greater levels.

### **Role within the network**

We participate in combined research work, learn from each other's experiences, draw energy from groups working with similar objectives, share data, participate, and work towards creating a strong voice to talk on behalf of turtles effectively.

*Contributed by Akila Balu, SSTCN*

#### Contact information

Postal address:

Students' Sea Turtle Conservation Network

8/25, 2nd Street

DP Nagar, Kotturpuram

Chennai 600085

Phone: +91 9940300200 (Akila), +91 9789864166 (Arun)

Email: [sstcnchennai@gmail.com](mailto:sstcnchennai@gmail.com)

Website: <http://sstcn.org>

## **9. TREE Foundation, Chennai, Tamil Nadu**

### **Background of the organisation**

TREE Foundation (Trust for Environment Education, Conservation and Community Development) is a non-governmental organisation founded by Dr. Supraja Dharini in 2002, inspired and guided by Dr. Jane Goodall, and driven by compassion and care for the welfare of all animals, the environment and communities. TREE Foundation involves the fishing community youth in a sea turtle protection and conservation programme (Sea Turtle Protection Force - STPF) in Chennai. TREE Foundation, along with the permission and support of the Wildlife Wing of the Forest Department, identified the need for a similar programme to be extended to Kancheepuram.

Educating and creating awareness at the community level is an integral part of our conservation programme. Community acceptance and involvement has undoubtedly been the most important factor in the success of our conservation programmes over the past eight years. TREE Foundation is committed to the sustainable and continued future of the programme.

### **Objectives**

TREE Foundation focuses on developing an eco-aware society ensuring harmonious co-existence with all life forms. The Foundation also aims to establish partnerships with local education institutions and decision-makers to disseminate findings and encourage more effective conservation policy through participatory workshops, curriculum development, and knowledge exchanges with conservationists.

Our primary mission is to protect the fragile marine eco-system of India and educate people to conserve all life forms. We strongly believe in the land-ocean connection, in that if people are the problem, then they are the solution. Successful conservation requires a multi-disciplinary approach, where communities and livelihoods are not excluded but instead empowered, thereby facilitating the base for effective change.

### **Activities**

In view of our objectives, TREE Foundation aims to address marine conservation by focusing on the following:

#### *Sea turtle conservation*

Using the olive ridley as a flagship species to address marine conservation issues with the fishing community, Department of Fisheries, Department of Wildlife and the general public, TREE Foundation's community based sea turtle conservation work has and would further enhance efforts to recover turtle populations along the South Indian coastline and promote community involvement in conservation through training and stewardship opportunities. Community members, many of whom were egg poachers, are encouraged to consider sea turtle nest monitoring as a professional alternative livelihood. The programme continues to partner with coastal communities interested in assuming greater responsibility for sea turtle survival in South East India, by facilitating beach patrols and the development of outreach materials.

TREE Foundation pioneered a successful community based conservation programme for the endangered olive ridley sea turtles nesting along the south eastern coast of India. TREE also initiated the sea turtle conservation community based programme in 2002 for fishers of 5 fishing villages, covering 13 km of the coast to protect nesting female turtles, their eggs and to reduce turtle mortality. The olive ridley (*Lepidochelys olivacea*) nests on the Kancheepuram coast (in Tamil Nadu), and juvenile hawksbill turtles (*Eretmochelys imbricata*) and green turtles (*Chelonia mydas*), forage in the coastal waters of the area. However, no conservation measures had been initiated in the 76 km. Kancheepuram coast and 20 km. stretch in Nellore (Andhra Pradesh) where TREE Foundation has now launched its pilot programme. Until 2008, local communities were unaware of the protection laws and importance of the turtles in the coastal marine ecosystem.

#### *Community development*

In helping to evolve a symbiotic and harmonious co-existence with nature and to develop self reliance among the community by identifying them as responsible key stakeholders in the resource, the Foundation seeks to facilitate a sustained commitment to conservation goals by fostering capacity for livelihood diversification and income-generation.

#### *Environment education*

The Foundation's environment education programme is focused on fisher-folk and students in schools and colleges in India, specifically along the east coast of India to improve environmental awareness and literacy.

#### *TREE Roots & Shoots eco groups*

The TREE Roots & Shoots programme helps connect youths through education, volunteering and communication to expand the member network for a wider reach and effective movement towards marine biodiversity conservation in India.

In addition to the above activities, TREE Foundation has also been the first non-governmental organisation to perform the satellite tagging of sea turtles, necropsy of sea turtles and marine mammals and has been involved in rescue and rehabilitation. The Foundation is also involved in the study of the Indo-Pacific humpback dolphins.

### **Geographical area**

TREE Foundation is based in Chennai. Our activities are carried out along the coast of Chennai and Kancheepuram in Tamil Nadu and Nellore in Andhra Pradesh.

### **Support for the organisation**

The Foundation is supported by the Trustees' personal funds, properties and well wishers. The Wildlife Wing of the Forest Department (Tamil Nadu) has supported the Sea Turtle Protection Force since 2006

with a stipend provided to members of the Force during the turtle nesting period. The Wildlife Wing of the Forest Department (Andhra Pradesh) has also supported the STPF from 2009 onwards. The National Biodiversity Authority of India has support the annual Flipper Fest form 2007 onwards. Supraja Dharini has also received awards form the Whitley Fund for Nature for the year 2009 and the US Fish and Wildlife Service, Disney Worldwide Conservation Fund, Peoples Trust for Endangered Species, Conservation Fund and Oak Foundation for Environment Awareness, Community Outreach and Sea Turtle Conservation Programs form 2010.



### **Plans for the future**

We would like to set up a Biodiversity Research and Conservation Center and expand our current activities. We are currently pursuing further collaborations on projects and activities. We have also recently founded BEACON (Bay of Bengal Conservation Network) with field workers along the Bay of Bengal in India, Bangladesh and Sri Lanka for better conservation management in the Bay of Bengal region, with a special focus on marine megafauna.

### **Role within the network**

In being an active member of the TAG network, we would like to share information whole heartedly with all members of the network. We would like to initiate a Turtle Recover Program for the Indian coast with the participation and involvement of all members of TAG. For TREE Foundation in particular, being a part of the network strengthens the determination of individual STPF members, who are valuable assets to the Foundation.

*Contributed by Supraja Dharini, Founder – Trustee and Chairperson, TREE Foundation*

Contact information:

Supraja Dharini, Founder-Trustee and Chairperson, TREE Foundation

Postal address:

63, First Avenue, Vettuvankeni, Chennai–600 041

Phone: +91 44 24492242, +91 9444052242 / 9941267035

Email: [treefoundation2002@yahoo.com](mailto:treefoundation2002@yahoo.com)

Website: [www.treefoundationindia.org](http://www.treefoundationindia.org)

## **10. Visakha Society for Protection and Care of Animals, Visakhapatnam, Andhra Pradesh**

### **Background of the organisation**

Visakhapatnam is a fast growing city on the east coast of India along the Bay of Bengal in the state of Andhra Pradesh. In June 1996, a small group of animal lovers from the city started the Visakha Society for Protection and Care of Animals (VSPCA). The aim of VSPCA was to make a profound and lasting impact on the lives of many suffering animals and to protect the environment against the destructive forces of unplanned development in the region. VSPCA is an associate member of the Royal Society of Prevention of Cruelty to Animals (RSPCA) and the World Society for Protection of Animals (WSPA), and is recognized by the Animal Welfare Board of India, Chennai and the Union Ministry of Environment and Forests.

### **Objectives**

The Society being non-profit in nature and set up exclusively for the promotion of welfare of all animals which are an essential part of the environment and society is dedicated to prevent cruelty and alleviate suffering of all animals. Through its innovative awareness programmes, VSPCA intends to educate the masses and build a strong and lasting bond between animals and human societies, and compelling responsibility upon people towards the welfare of animals, especially the sick, injured and abandoned. We endeavor to provide a framework for the enforcement of law at all levels of government and pursue and promote a uniform codified law for animals.

### **Geographic area**

VSPCA carries out its activities in various parts of Andhra Pradesh with a focus in Visakhapatnam. Our sea turtle conservation activities are carried out primarily in Visakhapatnam, Bheemili and Srikakulam.

### **Support for the organisation**

VSPCA has a multifaceted approach, and our protection programmes involve different kinds of species. Therefore, the categories under which we solicit funding and support for various projects, ranges from donations from individuals and philanthropists and grants from organisations associated or interested in supporting programmes for particular species. We also receive partial support from government agencies.

### **Plans for the future**

Of the various projects that our organisation carries out, sea turtle protection is our earliest and most ambitious endeavor. Therefore our plans as far as the sea turtle protection is concerned would like to expand in geographical scope from the Visakhapatnam beaches to the borders of the Orissa in the north, where there are much more significant turtle nesting grounds, approximating to a total of 990 km. So far the activities we have successfully carried out is restricted to about 60 km. The paucity of funds for sea turtle protection has always been the greatest hindrance in our efforts, presumably due to the nature of nesting in the area, which is sporadic, as compared to mass nesting in the neighbouring state of Orissa.

This, despite it being proven that success rates are higher in the significant nesting beaches along our coast. Our efforts in future therefore will focus on drawing attention to the importance of these nesting beaches in ensuring the survival of the species.



### **Role within the network**

VSPCA sees its role within the network to provide basic field related expertise, one of the necessary ingredients for effective conservation of sea turtles. Our strength lies in our dedication and commitment to the cause. As a core member of TAG, we are willing to lead from the forefront and hope to provide the requirements that will help meet the objectives of TAG. Our action based interventions and experience with education and awareness encompassing all animals will help provide a more comprehensive approach to the cause. We love all animals and for us, to save and protect sea turtles is not based on the number of sea turtles coming to nest on our beaches. This is the motive which drives our commitment to support such conservation efforts for sea turtles even if it is just one sea turtle!

We hope that TAG will benefit from our role within it and utilize our expertise in a manner that would best support its activities and fulfill its objectives. The nature of the constitution of the network which involves organisations from all over the country will enable us to interact with others and help develop a working model for collaborative efforts, to seek and provide any help that is required to continue the efforts towards protecting sea turtles.

*Contributed by Pradeep Kumar Nath, President and Founder, VSPCA*

Contact information:

Pradeep Kumar Nath, President and Founder, VSPCA

Postal address:

Visakha Society for Prevention of Cruelty to Animals (VSPCA)

26.15.200 Main Road, Visakhapatnam - 530001

Phone: +91 891 2716124

Email: [vspcadeep@yahoo.co.in](mailto:vspcadeep@yahoo.co.in)

Website: [www.vspca.org](http://www.vspca.org)



*For more information on the Turtle Action Group visit  
[www.seaturtlesofindia.org/tag](http://www.seaturtlesofindia.org/tag)*

Cover photo: Olive ridley hatchlings emerging  
from a nest at Rushikulya, Orissa  
Photo: K. Shanker



Ashoka Trust for Research in  
Ecology and the Environment

