



Project Report

Building and Strengthening Network for Conservation of Marine Turtles in India

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

2010 – 2011



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1.

Executive Summary

Since 2008, the Turtle Action Group (TAG) has been involved in bringing together organisations that work on the Indian coastline on marine turtle and coastal conservation. This has facilitated dialogue between groups from different parts of the country, working on a range of issues in a variety of contexts.

TAG is a network of NGOs (Non-Governmental Organisations) and other organisations dedicated to the cause of sea turtle conservation and coastal protection from around India, including the mainland and islands of Andaman & Nicobars and Lakshadweep. From 2008 – 2011, the network's activities have been supported through grants from the Marine Turtle Conservation Act Fund of the US Fish & Wildlife Service. For the initial year 2008-09, the project funds were administered, and project activities executed through the Ashoka Trust for Research in Ecology and the Environment in Bangalore, India. Since 2009 onwards, the project funds have been administered by the Madras Crocodile Bank Trust (MCBT), Chennai. Dakshin Foundation, an NGO based in Bangalore, is the key partner for the execution of the activities of this project and has assisted with the formulation of action plans and programme design for the implementation of the project.

2008 – 2009: Formation of a national level network: The first grant of \$ 5000 helped facilitate the formation of a network of committed groups and organisations from across the country 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 \$ 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.

2010-2011: Building and strengthening network for conservation of marine turtles of India: The third grant of \$ 39,000 provided support to initiate new activities, strengthen and expand existing programmes of the network, ensuring inclusion of all community based groups from around the country working on sea turtle conservation.

The primary aim of the project was to provide a platform for the exchange of information and knowledge and to share experiences amongst various groups and individuals working along the coast and to strengthen community based NGOs from various coastal states by providing small 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 the conservation action.

The 3rd Annual TAG workshop was conducted at Kumta, Karnataka, and hosted by Canara Green Academy, one of the members of TAG. The website 'www.seaturtlesofindia.org', a repository of information and resources on the sea turtles of the Indian sub-continent, was launched. The grant supported the publication of outreach and educational material, reports and manuals and partially supported the production of the Indian Ocean Turtle Newsletter. Small grants were disbursed to member groups of the network to carry out specific activities with the goal of collecting and disseminating information through standardised monitoring and data collection methods. Students from the Indian Institute of Science visited a couple of nesting sites for onsite training of new groups, to conduct data collection and monitoring of beaches. A mini workshop was also organized to engage with local fishermen on issues regarding sea turtle conservation.

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 during the nesting season at key sites along the mainland coast as well as the Lakshadweep and Andaman & Nicobar Islands.

The annual meeting serves 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. 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 of the functioning of the network and its member organisations; project goals and objectives; activities carried out during the three 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 possible recommendations and future plans for further strengthening the network towards more effective communication and conservation action.

2.

Introduction to TAG

Background

Four species of marine turtles have significant nesting/feeding grounds along the Indian coastline. They include the leatherback (*Dermochelys coriacea*), green (*Chelonia mydas*), hawksbill (*Eretmochelys imbricata*) and olive ridley (*Lepidochelys olivacea*) turtles. 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 Little Andaman Island and the Nicobar Islands. Sporadic nesting sites also exist throughout the coastline of the mainland. Despite all four species being 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 five years.

Sea turtles play an important role as flagship species for the diverse habitats they frequent. 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. 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 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 quite well in the field and are cost effective, but do not have the necessary resources or technical knowledge that is required to carry out effective conservation. 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.

The Turtle Action Group

The Turtle Action Group (TAG) is a network of over twenty five 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 that was held in Chennai, where it was felt that there has long been a need for a national level network to address how various groups can work together and collaborate 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.

Functioning of TAG

Executing organisation

Funding for the network's activities is channeled through the executing organisation (the Madras Crocodile Bank Trust). Under the programme, a policy team oversees 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 staff under the programme at MCBT carries out specific administrative tasks that are required, including the organisation and coordination of annual workshops and training programmes, compilation of information from member groups of TAG and the core committee and dissemination to network members, and compilation of reports at the end of the project term. Periodic updates are also made available on the website www.seaturtlesofindia.org (an initiative also supported by the MTCA grant).

Members of TAG

The TAG network comprises a core group of community based and local NGOs from across the country. Currently, its membership includes more than 20 organisations from the mainland and one each from the Andaman and Nicobar Islands and Lakshadweep. Detailed profiles of core member organisations are provided in Appendix I.

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. Since 2010, TAG has been providing small grants to a few member groups after evaluating their proposals. Institutional representatives from MCBT and Dakshin Foundation 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 fall. 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 the annual workshops.

Core Committee

Elected representatives from 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 determined 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, 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 is mandated to make 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 includes 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 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 continue monitoring the status of marine turtles at key sites along the Indian mainland and islands with the involvement of network partners, through the promotion and use of standardised data collection and monitoring techniques.
2. To continue and strengthen the long-term monitoring programme of olive ridley turtles in Orissa, leatherback turtles in the Andaman Islands and increase participation of local groups in these efforts.
3. To initiate a monitoring and conservation programme for green turtles in the Lakshadweep islands to resolve and mitigate fisher-turtle conflict in the region.
4. To enable the collation and analysis of data collected across sites to inform studies on population trends and impacts of climate change.
5. To develop and maintain an online portal for the upload and synthesis of relevant data contributed by member organisations.
6. To conduct training programmes for capacity building in order to enable individual member organisations of TAG to become financially and programmatically independent.
7. To develop appropriately designed educational and outreach material that can broaden the reach of the network to specific target groups including other stakeholder groups, educational institutions, governmental departments and the general public.
8. Strengthen local networks through the organisation of intra-state level workshops, meetings and consultations in addition to inter-state exposure and exchange programmes for members of the network.
9. To encourage and support independent, location specific conservation activities of member

organisations through the provision of small grants.

10. To define administrative tasks of elected representatives of the network in encouraging a transfer of ownership of the network, thereby ensuring long term sustainability.

4.

Project Activities and Outcomes

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

1. 3rd Annual TAG Workshop:

The 3rd annual TAG workshop was organized at Kumta, Karnataka (west coast) from 13th – 15th November 2010. The new members got an opportunity to introduce and showcase their work to other members. The activities laid down in the 2nd TAG workshop were carried forward. A summary of the workshop is provided in Appendix II.

2. To increase responsibilities of Network and Core Committee:

Once the constitution and primary responsibilities of the core committee were established, the committee was mandated to raise resources for the network and 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 of studies and workshops on community based marine turtle eco-tourism (Orissa)
- Documentation of the community based turtle conservation models and cases (films, booklet/ directory of turtle conservation groups)
- Review of threats to turtle nesting habitats and strategies for conservation protection (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.

3. Introduction to website – Sea Turtles of India

A brief introduction to the website www.seaturtlesofindia.org was made during the workshop at Kumta to the TAG members. Various features of the website were discussed and suggestions were solicited from the members. It was also decided to incorporate a web-based portal for members to upload data. While ensuring that the data requirements for SWOT are met, this website will be able to generate its own maps and graphs and will also be able to accommodate other types of data.

4. Integrating the local database with the Global database:

The members of TAG were introduced to SWOT, which was followed by discussions about TAG members providing their data to SWOT's online web portal (seaturtlestatus.org). It was agreed by all present that the initiative would be a mutually beneficial exercise. It was decided that incorporating suggestions from various member groups, a final SoI (Statement of Intent) would be drafted, which once signed by the TAG core committee, would be sent to SWOT.

5. Combined application for obtaining permit from forest department:

A combined letter was sent to the Ministry of Environment and Forestry (MoEF) India, the national governing body to endorse TAG and its members. The letter also seeks collective permission for the monitoring of nesting beaches by the member groups (a copy of the letter is provided in Appendix V).

6. Capacity Building Programs:

A training program was also conducted during the workshop in methods of collecting data and samples by various groups. Research assistants from Indian Institute of Science and Dakshin Foundation traveled to field sites of new members to train them in standard field methodology for data collection and beach monitoring. Mini workshops were conducted at a) Chavakkad, Kerala and b) Madhavpur, Gujarat as part of community outreach and conservation education/awareness programmes.

7. 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, manuals and other educational materials were prepared for key themes for distribution. This material will eventually be translated into local languages and distributed to target groups by members of respective coastal states.

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, and to study the effects of temperature on egg mortality. 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. Grants were given out to members of TAG to support their data collection, monitoring and conservation activities.

5.

Small Grants

Small grants were disbursed to members of TAG to support their data collection, monitoring and conservation activities. The respective amounts disbursed are provided in the table below.

Name of the organisation*	Grant amount (INR)**
Andaman and Nicobar Environment Team (Andaman and Nicobar Islands)	30,000
Alacrity (Odisha)	20,000
Action for Protection of Wild Animals (Odisha)	25,000
Field Services & Intercultural Learning (Karnataka)	30,000
Green Life Rural Association (Odisha)	25,000
Prakruti Nature Club (Gujarat)	25,000
Sea Turtle Action Programme (Odisha)	25,000
Sahyadri Nisarga Mitra (Maharashtra)	30,000
Students' Sea Turtle Conservation Network (Tamil Nadu)	30,000
Visakha Society for Protection and Care of Animals (Andhra Pradesh)	25,000

**See Appendix III for profiles of member organisations including activities carried out.*

***1 USD ~ 46.42 INR*

6.

Publications

i. Newsletter

Indian Ocean Turtle Newsletter

The 12th and 13th issues of the Indian Ocean Turtle Newsletter were published in July 2010 and January 2011 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 intends to cover 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 government 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

A. *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 adversely 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.

B. *Building a network for conservation of marine turtles in India*

Authors: Shenoy, S., T. Berlie & K. Shanker. Report submitted to USFWS. 2010

The annual report was submitted for the annual year 2009-10 to the donor and to government agencies and non-governmental organisations along the coast of India.

iii. Manual

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

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

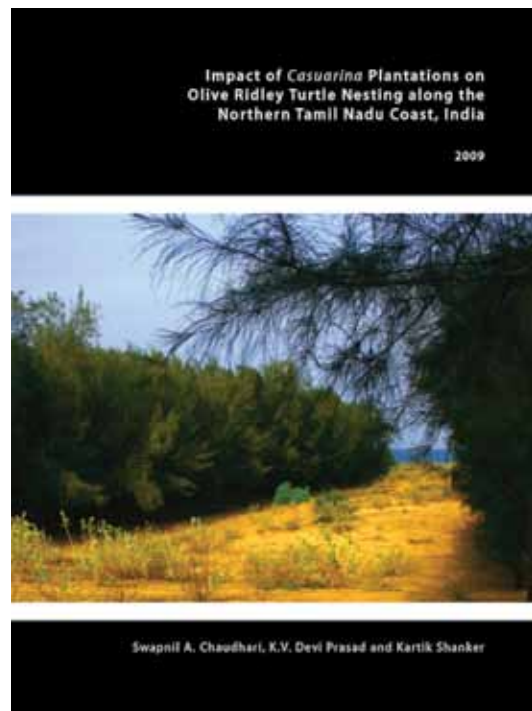
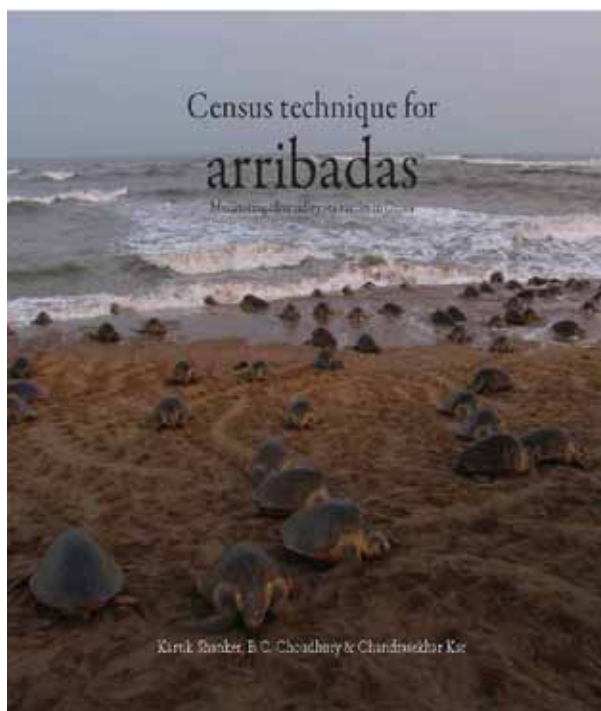
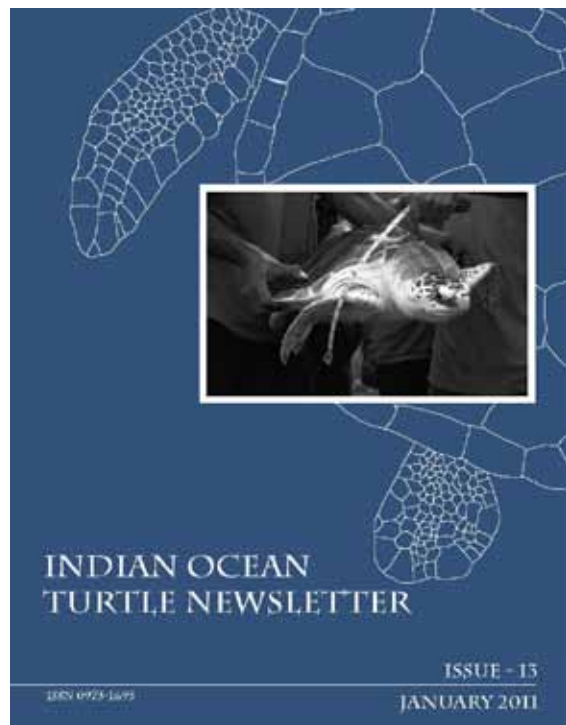
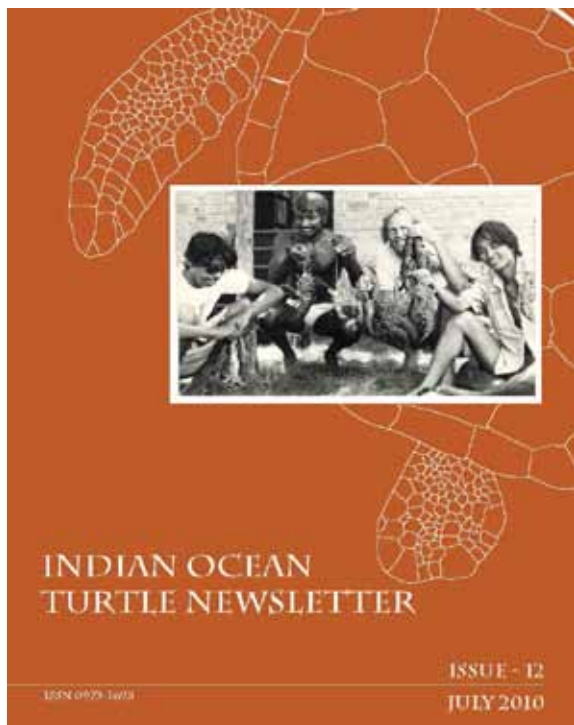
The manual, originally published in 2007, was produced as part of a collaborative initiative on censusing arribada nesting beaches of olive ridley turtles in Orissa. The intention of producing the manual was to enable the collection of data systematically and in a standardised fashion in order assess 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 was developed to collate information 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 therefore is an attempt to create such a space where research findings, notes, historical records, photos and the successes of various conservation activities across the region may be made available to anyone who might be interested.

The website also carries content dedicated to the Turtle Action Group (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, 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 2010-2011

7.

Future Plans for TAG (2011-12)

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 the larger objectives of TAG. The specific activities laid out for the year 2011 – 2012 include:

a. 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.

b. 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 intends to examine and address as a collective. These include:

- i. Casuarina plantations: Extensive planting of Casuarina as bioshields for coastal protection is promoted in many states across in India. Using the example of the Students' Sea Turtle Conservation Network's success in bringing to light the impacts of such 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 smooth passage of this 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 each member organisation listed as an applicant for a permit as being competent in carrying out studies.

iii. Fishing related mortality: Trawl fishing has been identified as 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, as well as with fishing communities and other stakeholders to address 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. Although the impacts of such developmental activities (such as construction of sea walls, urbanisation, development of ports, etc.) vary from one location to the next, all 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 website which will also be used as a portal to upload/download data and generate maps of distribution and temperature related data.

In addition to the five key issues that were identified, TAG will also work towards developing effective tools for advocacy, increase visibility of individual and collective efforts through outreach programmes and encourage media presence. It also aims to collate relevant information and provide guidance for hatchery management and develop education and outreach programmes (such as the setting up of interpretation centres).

c. To increase responsibilities of Network and Core Committee

Once the 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 the community based turtle conservation models and cases (films, booklet/ directory of turtle conservation groups)
- Review of threats to turtles nesting habitat and strategies for conservation protection (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

d. 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 2011-2012, it is proposed that manuals and other educational materials will be prepared for key themes and translated into local languages. 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.

8.

Recommendations

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

- 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 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 species-specific conservation.

9.

Acknowledgments

We are grateful to the US Fish & Wildlife Service for providing funding support under the Marine Turtle Conservation Act Fund.

We are also thankful to the staff at Madras Crocodile Bank Trust and Dakshin Foundation for carrying out the administrative tasks under the project and coordination of logistics in organising the annual workshops.

The organisers of the 3rd workshop – Dakshin Foundation and Canara Green Academy – would like to sincerely thank the staff and students of Dr. A.V. Baliga College, Kumta for their generous hospitality. The workshop particularly benefitted from the participation of key officials of the Karnataka Forest Department who participated in the workshop. Mr. Subhash Malkhed and Mr. Ashok Bhat provided valuable insights and their encouragement to involve non-governmental organisations in jointly carrying out conservation activities was appreciated by the participants. We would like to thank Mr. Udaykumar Jogi (ACF, Bhatkal) and Mr. D'Souza (ACF, Karwar) for attending the workshop. We are also thankful to them and the rest of the Forest Department staff for their enthusiasm and support towards arranging the logistics for the field visit. And finally, we are grateful to all TAG members who attended the workshop and hope that it was a useful and enjoyable experience for them.

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.

10.

Appendices

APPENDIX I (a)

Member Organisations of TAG

Name of Organisation	State
Andaman & Nicobar Islands	Andaman and Nicobar Environment Team (ANET)
Andhra Pradesh	Visakha Society for the Protection and Care of Animals (VSPCA)
Gujarat	Prakruti Nature Club (PNC)
Karnataka	Field Services and Intercultural Learning (FSL)
Karnataka	Canara Green Academy
Kerala	Green Habitat
Kerala	Naithal
Lakshadweep	Lakshadweep Marine Research and Conservation Centre (LMRCC)
Maharastra	Sahayadri Nisarga Mitra
Odisha	Action for Protection of Wild Animals (APOWA)
Odisha	Alacrity
Odisha	Green Life Rural Association (GLRA)
Odisha	Orissa Marine Resources Conservation Consortium (OMRCC)
Odisha	Rushikulya Sea Turtle Protection Committee (RSTPC)
Odisha	Sea Turtle Action Programme (STAP)
Odisha	Podampeta Ecotourism and Olive Ridley Protection Club (PEORPC)
Tamil Nadu	Students' Sea Turtle Conservation Network (SSTCN)
Tamil Nadu	TREE Foundation

National level organisations and research institutions that support TAG

- Centre for Ecological Sciences, Indian Institute of Science
- Dakshin Foundation

- Greenpeace – India
- International Collective in Support of Fishworkers
- Madras Crocodile Bank Trust
- Wildlife Institute of India
- Wildlife Protection Society of India

APPENDIX I (b)
Core Committee members of TAG

East coast:

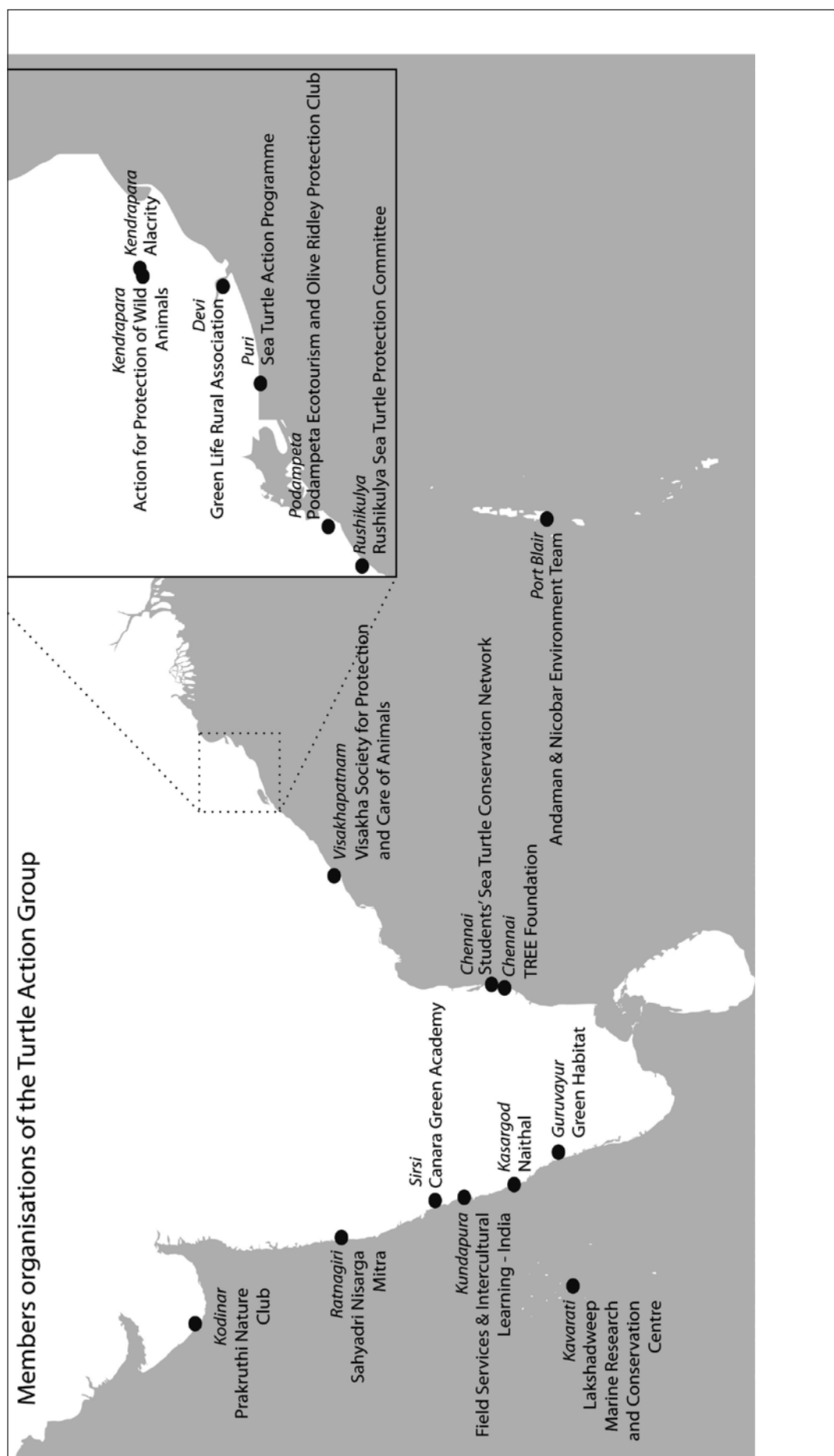
1. Supraja Dharini, TREE Foundation, Tamil Nadu
2. Mangaraj Panda, Orissa Marine Resources Conservation Consortium, Orissa
3. Pradeep Kumar Nath, Visakha Society for the Protection and Care of Animals, Andhra Pradesh

West coast:

1. Wesley Sunderraj, (Independent researcher), Gujarat
2. Sudheer Kumar, Naithal, Kerala
3. Ravi Pandit, Canara Green Academy, Karnataka

Islands:

1. Naveen Namboothri (filling in as a temporary representative), Dakshin Foundation



Map showing locations of core member organisations of TAG

APPENDIX II

Workshop Summary Report: 3rd Turtle Action Group (TAG) workshop

Dates: 13th to 15th November 2010

Venue: Dr. A.V. Baliga College, Kumta, Karnataka

This document is a summary of the discussions and decisions of the 3rd Turtle Action Group (TAG) Workshop. The workshop was organised by the Canara Green Academy, Sirsi in coordination with the organising team at Dakshin Foundation, Bangalore

Objectives of the workshop

The main objectives of the workshop were:

- To discuss and define a concrete structure for functioning of the network, in recognition of the need for more systematic implementation of activities and programmes, and effective follow-up,
- To get an update on the work carried out by the NGOs under the TAG of activities laid out during the previous workshop,
- To discuss the roles and responsibilities of individual members of the network and that of the collective,
- To initiate new activities, and discuss ways to expand and strengthen existing programmes undertaken by the network, and
- To introduce new member organisations to the network

Workshop agenda

Day 1: Saturday, 13th November, 2010

Time	Session
8:00AM	<i>Breakfast</i>
10:30AM	Inauguration Chief guest address - Mr. Subhash Malkhed, IFS, CF, Canara Circle, Sirsi Introduction to the workshop – Dr. Kartik Shanker, Centre for Ecological Sciences, Indian Institute of Science and Dakshin Foundation, Bangalore Invited talk - Mr. Ashok Bhat, ACF, Honavar
12:00PM	Introductions to new TAG members: <ul style="list-style-type: none">• Green Habitat, Guruvayur, Kerala
01:00PM	<i>Lunch</i>

02:00PM	Introduction to data collection techniques Introduction to beach profiling techniques
03:30PM	<i>Tea</i>
03:45PM	Group presentations
05:00PM	Wrap up + Travel reimbursements + Announcements
06:30PM	Core Committee meeting

Day 2: Sunday, 14th November, 2010

Time	Session
08:15AM	<i>Breakfast</i>
09:00AM	Review of TAG activities (2010) + Initiation of new activities <ul style="list-style-type: none"> • Collective permit letter • Sea Turtles of India - Introduction to website • SWOT - TAG's role in the SWOT Network
10:00AM	<i>Tea</i>
10:15AM	Special session: Mr. Ananth Hegde Ashisar (Chairman, Western Ghats TaskForce)
11:00AM	Core Committee initiated discussion: Structure and functioning of TAG
01:00PM	<i>Lunch</i>
02:00PM	Conservation Education and Outreach
03:30PM	<i>Tea</i>
03:45PM	Session Continued
05:00PM	Wrap up + Travel reimbursements + Announcements

Day 3: Monday, 15th November, 2010

Time	Session
08:00AM	<i>Breakfast</i>
08:30AM	Field based techniques: Captive animal handling; Data collection and monitoring; Beach profiling
01:00PM	<i>Lunch</i>

Language: All sessions were translated into Hindi, whenever necessary.

Workshop Minutes

Day 1: Saturday, 13th November, 2010

Inauguration and Chief Guest Address

The workshop commenced with an inaugural ceremony organised by the students and staff of Bio

Club of Dr. A.V. Baliga College, Kumta. The ceremony was preceded by a welcome speech by the Principal of Dr. A.V. Baliga College, Kumta, Dr. V. K. Hampihole. Mr. Subhash Malkhed, Conservator of Forests, Kanara Circle, Sirsi then made the chief guest address, where he briefly outlined the efforts and achievements of the Forest Department in Karnataka and his office's activities related to sea turtle conservation and coastal protection along the North Karnataka coast. He stressed the need for greater collaboration between forest department agencies and non-governmental organisations in ensuring effective conservation of the species. He also stated that the Forest Department was determined to refine their research and awareness programmes, and invited the non-governmental organisations present to participate in joint efforts.

Introduction to TAG and the 3rd Annual Workshop

The chief guest address was followed by an introduction to TAG and the workshop by Dr. Kartik Shanker. Dr. Shanker introduced the network and outlined the nature of the network's functioning and the activities carried out by TAG to those present. He expressed the need for TAG to also include the participation of other actors, including local forest department officials, research institutions and other NGOs such as those working with fishworkers, coastal development, etc. The focus of this introduction was to give impetus to the notion of TAG evolving into a self-sustained network, towards which an important step had already been taken in Canara Green Academy's successful efforts towards organising the workshop. He also appreciated the involvement of the Karnataka Forest Department staff in attending and participating in the workshop, in addition to organising the field visit for the participants.

Invited Presentation

Mr. Ashok Bhat, Assistant Conservator of Forests, Honavar, made a presentation that provided an overview of sea turtles along the Karnataka coast. He also provided details of the activities of the Forest Department in Honavar, and credited individual forest officers who, in the past, and presently, and taken special interest in creating awareness among local communities. In particular, he lauded the Canara Green Academy and certain members of the Forest Department for undertaking joint activities in spreading awareness and promoting outreach programmes.

Introductions

Mr. Ashok Bhat's presentation ended the morning session of the workshop. This was followed by a round of introductions by participants present at the workshop. While a majority of the participants were present at the previous workshop, members from organisations that were represented for the first time were also present. (See Annexure 1 for a complete list of participants).

Of the organisations that were new members of TAG, N. James of Green Habitat, Guruvayur, Kerala made a presentation introducing the organisation to the participants, and detailed the activities that they carry out.

For the benefit of those who were present for the first time, and for the students of the Bio Club of the

Dr. A.V. Baliga College, Kartik Shanker made a brief presentation about sea turtles in India – outlining their current status, threats and conservation measures, and monitoring and research techniques.

Introduction to Data Collection Techniques

The afternoon session commenced with a presentation made by Ema Fatima, to introduce data collection techniques. As part of an ongoing effort, certain members of TAG are involved in data collection and monitoring. While the presentation provided an overview of these techniques, the focus was on the activities of the groups involved. The main objectives of the session were:

- Ensuring that the objectives of sea turtle monitoring project are well understood
- Addressing the field techniques undertaken - why and what has been done so far,
- Defining and detailing procedures for sample collection and cataloguing errors that are ignored during sampling.

The key points covered were:

- Objectives of the sea turtle monitoring initiative,
- Why we need to monitor sea turtle nesting populations,
- Common mistakes during counting of females on a mass nesting site during arribadas,
- Importance of Hatchery programme and the methods involved,
- Why collecting tissue samples, dead hatchlings and recording temperature of the site is necessary throughout the nesting season
- Errors involved during cataloguing of collected samples
- Accurate data collection protocol

The presentation initiated a discussion that included defining an appropriate location for setting up the hatchery, the reasons behind hatchery infestation and methods to overcome it, and minimising time lag between the collection of eggs from the wild and shifting them to a hatchery.

Introduction to Beach Profiling

Naveen Namboothri made a presentation on beach profiling techniques and the importance of using these techniques in relation to the study of sea turtle nesting habitats. He briefly introduced these techniques that were to be demonstrated on the field on the third day of the workshop.

Group Presentations

As the sessions for the day had ended in advance of the scheduled time, a few groups requested making presentations. These included members of the TREE Foundation, Chennai, Tamil Nadu, Action for Protection of Wild Animals, Kendrapara, Orissa, and Rushikulya Sea Turtle Protection Committee, Rushikulya, Orissa.

Core Committee Meeting

Three members of the existing core committee met after the day's sessions to put down an outline for discussions that were scheduled for the following day regarding taking the activities of the network forward. The discussion and its outcomes are detailed in the following sections.

Day 2: Sunday, 14th November, 2010

The second day of the workshop commenced with a review of the activities of the network over the past year before an action plan for the following year could be put down. It was widely acknowledged that the lack of clear roles and responsibilities of individual members of the network and the Core Committee was a key hindrance in effectively carrying forward what had been decided at the previous workshop. The suggestions that were made by various participants were slated for discussion in the post-lunch session, and are summarised below (Core Committee initiated discussion: Structure and functioning of TAG).

Collective permit letter

One priority activity that was identified during the previous workshop was to draft and submit a common, collective letter requesting permission for carrying out sea turtle work. To help facilitate obtaining the mandatory permit in order to carry out monitoring and conservation work by individual members, a collective letter of endorsement addressed to the central government will seek to help speed up the process and also provide impetus to state forest department agencies to better recognise and appreciate the work carried out by individual organisations. The details of this process were discussed and the following key points were identified to be included in the letter:

- The letter will be addressed to the central government (Ministry of Environment and Forests), and drafted as a letter of endorsement, recognising the capacity and efforts of individual members of the network.
- The letter will refer to the endorsement granted by the Ministry of Environment and Forest at the initiation of the network in 2009 where in principal support was guaranteed by the Ministry towards TAG. (Independently, a letter of endorsement for the current year will also be sought).
- The finalised version of the letter, having incorporated all suggestions by TAG members will be printed on the TAG letterhead and will be signed by the Core Committee as representatives of the network. This official letter will then be distributed to each member organisation.
- The signed letter will be sent to the Ministry of Environment and Forests.
- A copy of the letter shall be sent along with individual applications for permits by member organisations to their respective state government departments.

Members of Dakshin Foundation will take on the responsibility to prepare an initial draft of the letter which will then be shared with all TAG members for comments and suggestions.

Sea Turtles of India - Introduction to website

Kartik Shanker made a brief presentation about the website that currently hosts information on TAG (www.seaturtlesofindia.org). At this session at the workshop, the various features of the website that will be included in the near future were discussed and suggestions and requests from the participants were solicited. In addition to the features already present on the current website, the main additional features of the website are designed to include:

- Individual web pages for member organisations that do not at present have an independent website.
- A web-based portal for members to upload data. An initiative by SWOT (discussed later) has solicited nesting data from TAG members to be uploaded on the SWOT website. It was decided that since Sea Turtles of India will help coordinate and streamline this data, seaturtlesofindia.org will host its own data uploading portal. While ensuring that the data requirements for SWOT are met, this website will be able to generate its own regionally significant maps and graphs and will also be able to accommodate other types of data, the nature of which is to be discussed by members of TAG in the following weeks.

SWOT - TAG's role in the SWOT Network

The discussion on the Sea Turtles of India website was followed by a presentation to the SWOT initiative to include TAG members as data providers on SWOT's online web portal (seaturtlestatus.org). The objective of SWOT is to be able to collate data collected from across the globe in order to produce interactive maps on the website. The long term objective of such an initiative is to be able to provide a comprehensive picture of sea turtle status around the world. The Annual Reports produced by SWOT incorporate this collated data.

A draft Statement of Intent (SoI) between the managers of Sea Turtles of India, SWOT and TAG was circulated. It was agreed by all present that the initiative would be a mutually beneficial exercise although some participants expressed reservations about whether individual contributions would be duly acknowledged and credited. The particular provisions in the SoI that provided for appropriate and adequate credit to the data provider were highlighted. It was decided that participants would look over the SoI carefully, and in consultation with members of their respective groups who were not present and a finalised SoI, incorporating their suggestions and changes would then be sent to SWOT. The finalised SoI would then be signed by the TAG Core Committee. Kartik Shanker explained the process by which data would be solicited by the SWOT web hosters, through the managers of Sea Turtles of India who would act as mediators between SWOT and TAG by streamlining data requests and mediating communication between SWOT and TAG members.

Special session: Mr. Ananth Hegde Ashisar

Mr. Ananth Hegde Ashisar, who was in Kumta to attend another workshop made a brief visit at the TAG Workshop. Although not initially on the schedule of the workshop, Mr. Ashisar's visit was a welcome interruption to the day's proceedings. Kartik Shanker provided a brief introduction to the network and

its activities, after which Mr. Ashisar addressed the participants. Mr. Ashisar is Chairman of the Western Ghats Task Force, and also runs the Parisara Samrakshna Samiti, an environmental protection NGO working in Karnataka. Mr. Ashisar posited that despite the efforts of government agencies in ensuring protection to beaches and conservation of coastal and marine fauna, it was imperative that others working in the sector, in particular, non-governmental organisations join hands with local government agencies to boost local conservation efforts. He then discussed the current pertinent issues in Uttara Kannada and suggested that a national network such as TAG collaboratively approach the problem of sea walls in the state and submits a joint petition to the central government to take action against the effects of sea walls on coastal habitats. He felt that such efforts would provide impetus to the central government authorities to step up their own efforts and pressurise state and local agencies into action.

Core Committee initiated discussion: Structure and functioning of TAG

The afternoon session, moderated by Naveen Namboothri as the coordinator of the Core Committee, laid the floor open to discussion about taking the activities of the network forward during the coming year. Following up on the brief discussions during the previous day and the morning of the second day, the Core Committee put forth the following suggestions:

1. Drawing up operational guidelines for the functioning of the network

Having acknowledged that the current structure of the network did not effectively meet its goals, a defined structure was suggested for the proper functioning of the network to enable more effective and efficient follow-up and coordination between members. While some participants suggested the need for providing TAG with an official identity by registering the network as a legal entity, others highlighted the importance of maintaining a loose structure, albeit with defined roles for members and the Core Committee. It was decided, after prolonged discussion, that currently, the network would be unable to support itself as a separate registered entity and that it would be most beneficial if it were to continue to function more as a network than an independent body. Such a structure would allow for individual organisations to continue functioning within their areas of focus as priority, while contributing to TAG to achieve the objectives of the network as a collective.

In keeping with these suggestions, it was decided that a set of operational guidelines would be developed (similar to by-laws of a non-governmental organisation) that would clearly define the following:

- i. Primary objectives of the network.
- ii. Procedure to incorporate new members: Here it was decided, through a collective vote, that membership would be restricted to individuals and groups working on conservation of marine and coastal species/habitats, although TAG would continue to solicit inputs and participation from other stakeholder groups. Having agreed upon the restriction of membership, it was further decided that application forms would be made available on the Sea Turtles of India website and the decision to accept or reject an application would rest with the Core Committee. The Core Committee in turn would scrutinise the application in accordance with a set of criteria to be defined and approach current members of TAG who are familiar with the applicant's work to verify the credentials of the applicant.

On whether or not individuals can apply to be members of TAG, it was decided that there would be two categories under which the application will be processed: Individuals and Groups. It was suggested that in the case of students or researchers, a temporary membership could be considered (in the nature of an internship), and the Core Committee (or other volunteers of the network) could help identify groups or individuals within the network that are carrying out work of particular interest to the applicant.

iii. Procedure to review membership: One common point of contention that many of the participants raised was that many organisations and individuals continued to be members of the network although their participation in the network's activities had been absent over the past year (or past two years). The Core Committee therefore suggested that the operational guidelines will define a procedure by which membership of organisations or individuals will be subject to review by the Core Committee. For example, if a member was absent for more than two consecutive workshops without a valid reason, and/or is unresponsive to emails, their membership would be liable to be discontinued.

iv. Procedure to elect members of the Core Committee: The newly constituted Core Committee (see below) would continue to function for a defined period of time (tenure to be defined in the operational guidelines) and in future, nominees to the Committee could be submitted in advance, following which a process of voting by email among the 'General Body' (i.e., member organisations of TAG) will be put in place. A detailed Terms of Reference for processing nominations will be included in the operational guidelines. Sovakar Behera, GLRA, Orissa was nominated for membership of the Core Committee. It was decided that he would be included if there was a lack of representation from Orissa in the Committee on account of the maximum number of groups that are part of TAG are from the state.

v. Roles and responsibilities of the Core Committee: It was decided that the Core Committee will take on primary responsibility for all decisions related to the activities of the network. Where prior consultation with all members of the network is needed, or with the donor agency or executing agency (the agency moderating the funds) is required, the same will be solicited. It will periodically communicate its decisions to all members. The operational guidelines will also contain a detailed Terms of Reference for the functioning of the Core Committee. The Core Committee members would be provided with a group email id through which they will be able to communicate with each other, and also communicate with the rest of the members. (Currently, a single TAG email group id is in function).

vi. Roles and responsibilities of the Core Committee coordinator: The guidelines will also define the role of the Core Committee coordinator. The coordinator's main task would be to facilitate communication amongst Core Committee members, the Core Committee and other members of TAG, and between the Core Committee/TAG and the donor or executing agency. Seema Shenoy of Dakshin Foundation volunteered to take on this responsibility.

Ashis Senapati of Swarajya, Orissa volunteered to help draft the operational guidelines. The name of Pradeep Kumar Nath (VSPCA, Andhra Pradesh), who was not present at the workshop, was also suggested to help Mr. Senapati with the drafting of the guidelines.

2. Reconstitution of the Core Committee

As some of the members of the previously constituted Core Committee had been inactive during the past year, it was suggested that the Core Committee be reconstituted in order for the committee to take on more responsibility and a more active role in directing the network's activities and coordinating between its members. The revised list of names, accepted by the participants present, included:

East coast:

Supraja Dharini, TREE Foundation

Mangaraj Panda, OMRCC

Pradeep Nath, VSPCA (not present)

West coast:

Wesley Sunderraj (not present)

Sudheer Kumar, Naithal (not present)

Ravi Pandit, Canara Green Academy

Islands:

Naveen Namboothri (filling in as a temporary representative)

3. Funding support for TAG

Currently, funding support is provided from a grant from the US Fish and Wildlife Service through the Marine Turtle Conservation Act Fund, and executed jointly by the Madras Crocodile Bank Trust and Dakshin Foundation. In order to expand the scope of the network's activities, and that of individual members, it was decided that collective and individual fund raising efforts need to be initiated. For individual member organisations to raise funding support for their activities, it was decided that the network would share information on potential donor or sponsor agencies. By building individual capacities of member organisations, it was agreed that their contribution to the network would be greater. It was also suggested that the respective state forest departments could be approached for support (financial support or support in kind), for community members participating in conservation activities. The examples of the Orissa groups working with the Orissa Forest Department, TREE Foundation working in collaboration with the Tamil Nadu Forest Department, and the support granted by the Gujarat Forest Department to Prakruti Nature Club could be highlighted while soliciting funds from such state government agencies.

Conservation Education and Outreach

The post-lunch session entitled 'Conservation Education and Outreach' was originally designed to be moderated by Anitha Sharma (conservation educator and researcher). However, Ms. Sharma was unable to attend the workshop. Naveen Namboothri took over as moderator of the session. Prior to the workshop, participants were asked to bring the education and outreach material that they use along with a brief note/presentation regarding the methods and material that they had found to be successful or were problematic. The main objective of this session was to facilitate a discussion on development

of effective material based on on-the-ground experience of the participants. The other objective of the session was to discuss the ways in which TAG could collectively develop material that could be used by all member organisations, through translation/adaptation.

The following groups made presentations on the various outreach and awareness activities that they have conducted:

1. Action for Protection of Wild Animals (APOWA), Kendrapara
2. TREE Foundation, Chennai
3. Green Habitat, Guruvayur
4. FSL, Kundapur
5. Rushikulya Sea Turtle Protection Committee, Rushikulya
6. Prakruti Nature Club, Kodinar

The following observations from the presentations made for an interesting discussion among the participants regarding the use of material and methods for effective outreach and awareness:

- Involvement of the local community in conservation through sensitisation: Groups such as APOWA, TREE and RSTPC showed how the involvement of local community members in their activities sensitised them to the need for conserving the species and preserving the habitat. The OMRCC network in Orissa also constantly engages with the fishing community and members of the community are represented in its membership. Such engagement over the long term has proven to be useful not only in sensitising the fishing community towards the need for conservation, but has enabled the views and priorities of the fishworkers to be incorporated in the objectives of those carrying out conservation work.
- Use of innovative outreach material targeted towards school students: Some groups carry out awareness programmes in local schools in order to spread the message of conservation to children belonging to the local coastal villages in the aim of this message being passed on to their parents and others in the community. FSL demonstrated the use of puppets; stories that include important conservation messages as morals are conveyed through the use of puppets made by the volunteers at FSL along with school children. Green Habitat screened an animated film that is shown to school children in Guruvayur that illustrated the consequences of poaching turtle eggs. TREE Foundation also screened a film that was produced by the organisation with the aim to spread awareness about turtles, their habitats and the threats that they currently face.
- Involvement of local politicians to lobby for conservation objectives: Prakruti Nature Club in Gujarat has been involving local politicians and religious leaders in their campaigns. They explained that the exercise has proven to be mutually beneficial, as their activities have benefitted from wider publicity and a greater diversity of people paying attention to their efforts. In turn, local leaders get political mileage through their support towards a good cause and will likely help influence positive decisions that affect the plight of coastal habitats in the region.

Day 3: Monday, 15th November, 2010

A field visit to Haldipur was organised on the third day of the workshop.

On the ground demonstrations of beach profiling techniques, animal handling and sample collection that were discussed during the previous days of the workshop were conducted at the site. An olive ridley turtle which was in captivity with the Forest Department was transported to the field site for the purpose of demonstration.

Basic field techniques in relation to sea turtle identification, morphometrics as well as beach profiling were undertaken, with the assistance of the Karnataka Forest Department officials who were present. The various scute and scale patterns used in identifying turtles were shown and a basic taxonomic key to identify turtles was explained. Standardised protocol for taking the different morphometric characters of the turtles such as curved carapace length (CCL), curved carapace width (CCW), weight, sexing, etc. were demonstrated on the captive turtle.

The “Emery method” for profiling beaches to monitor nesting beaches for turtles was demonstrated with the help of graduated poles and measuring tapes from the beach vegetation line to the low tide line. The members attending the workshop were actively involved in this session of data collection. A rough graphical representation of the data acquired was then demonstrated to those involved on the beach sand and the advantages of using such techniques for long term monitoring was discussed. The field session concluded with a visit to the hatcheries set up by the local NGO’s and guidelines for maintaining them were discussed based on the collective knowledge of all the members of the workshop.

4. Acknowledgements

The organisers of the workshop – Dakshin Foundation and Canara Green Academy – would like to sincerely thank the staff and students of Dr. A.V. Baliga College, Kumta for their generous hospitality. The workshop particularly benefitted from the participation of key officials of the Karnataka Forest Department who participated at the workshop. Mr. Subhash Malkhed and Mr. Ashok Bhat provided valuable insights and their encouragement to involve non-governmental organisations in jointly carrying out conservation activities was well acknowledged and appreciated by the participants. We would like to thank Mr. Udaykumar Jogi (ACF, Bhatkal) and Mr. D’souza (ACF, Karwar) for attending the workshop. We are also thankful to them and the rest of the Forest Department staff for their enthusiasm and support towards arranging the logistics for the field visit are greatly appreciated. And finally, we are grateful to all TAG members who attended the workshop and hope that it was a useful and enjoyable experience for them.

Table 1: List of participants

Sl.No	Participant Name	Organisation	State
1	Dinesh Goswami	Prakruti Nature Club	Gujarat
2	Jignesh Gohil	Prakruti Nature Club	Gujarat
3	Dayanand Salins	FSL India	Karnataka
4	Lisa Andresen	FSL India	Karnataka
5	Judith Kleibs	FSL India	Karnataka
6	N. James	Green Habitat	Kerala
7	Salim	Green Habitat	Kerala
8	Kalpana Mallick	Alacrity	Odisha
9	Ashis Senapati	OMRCC/Project Swarajya	Odisha
10	Sovakar Behera	OMRCC/Green Life Rural Association	Odisha
11	Bijaya Kabi	OMRCC/APOWA	Odisha
12	C.H. Babajee	OMRCC/Podampeta Ecotourism and Olive Ridley Protection Club	Odisha
13	Rabindranath Sahu	OMRCC/RSTPC	Odisha
14	M. Parabathi	OMRCC/Samudram	Odisha
15	Bichitrnanda Biswal	OMRCC/Sea Turtle Action Programme	Odisha
16	Mangaraj Panda	OMRCC/UAA	Odisha
17	Nandikesh Sivali	SSTCN	Tamil Nadu
18	Rahul Prabhakar	SSTCN	Tamil Nadu
19	Adbus Saeef	TREE Foundation	Tamil Nadu
20	Azhra Saaha	TREE Foundation	Tamil Nadu
21	D. Pavan Kumar	TREE Foundation	Tamil Nadu
22	Durga Graranja Magar	TREE Foundation	Tamil Nadu
23	Ezhumalai G.	TREE Foundation	Tamil Nadu
24	M. Prabhakara Rao	TREE Foundation	Andhra Pradesh
25	Madhavi Vatturi	TREE Foundation	Andhra Pradesh
26	Neelu Dunghana	TREE Foundation	Tamil Nadu
27	Rahul Muralidharan	TREE Foundation	Tamil Nadu
28	Robin Jayaraj	TREE Foundation	Tamil Nadu
29	Sabha Natesan	TREE Foundation	Tamil Nadu
30	Supraja Dharini	TREE Foundation	Tamil Nadu and Andhra Pradesh
31	T.A. Pugalarasu	TREE Foundation	Tamil Nadu

Organising Team

Ravi Pandit	Canara Green Academy, Sirsi
Shankar Hegde	Canara Green Academy, Sirsi
Dr. Prakash Pandit	Assistant Professor, Dr. A.V. Baliga College, Kumta
Dr. Somshekhar Gaokar	Assistant Professor, Dr. A.V. Baliga College, Kumta
N.D. Bhat	Canara Green Academy, Sirsi
Students of Bio Club	Dr. A.V. Baliga College, Kumta
Kartik Shanker	Centre for Ecological Sciences, Indian Institute of Science and Dakshin Foundation, Bangalore
Seema Shenoy	Dakshin Foundation, Bangalore
Naveen Namboothri	Dakshin Foundation, Bangalore
Ema Fatima	Ashoka Trust for Research in Ecology and the Environment, Bangalore
Aarthi Sridhar	Dakshin Foundation, Bangalore
M Muralidharan	Ashoka Trust for Research in Ecology and the Environment, Bangalore
Saktheeswaran	Centre for Ecological Sciences, Indian Institute of Science
Bharti DK	Centre for Ecological Sciences, Indian Institute of Science
Sasmita Mallik	Centre for Ecological Sciences, Indian Institute of Science

APPENDIX III

Small Grants program 2010-2011

As part of the MCTA project, funds are disbursed as small grants through Madras Crocodile Bank Trust. The small grants programme was started in 2008. Till date, three rounds of small grants have been disbursed. The main aim of this initiative is provide financial support to local NGOs and member organisations of TAG that work on sea turtle conservation in different parts of India. To make this exercise more comprehensive and instructive, we have made the grant making process go through the usual steps of grant application/ proposal submission, review and approval and grant making.

The table below provides details of the small grants disbursed during 2009-10. The total amount disbursed through 2009-10 small grants amounted to 283, 000 INR (1USD= 46 INR).

Name of Grantee Organisation	Grant Amount approved (in INR)
ANET	48,000
Canara Green Academy	25,000
Sahyadri Nisarga Mitra	25,000
TREE Foundation	35,000
SSTCN	25,000
RSTPC	20,000
STAP	20,000
VSPCA	25,000
LMRCC	20,000
GLRA	20,000
APOWA	20,000

During 2010-11, 10 TAG members were given small grants amounting to Rs. 2,65,000. At the end of the grant period, the organisations submitted their programmatic and financial reports to Madras Crocodile Bank Trust. We intend to give greater emphasis to this process for future small grants and will solicit inputs from independent reviewers who are experts in the field in order to enhance project design and implementation by member groups.

Increased capacities of independent groups will ensure greater benefits to the network as a collective and allow for the creation of local networks that seek inputs from these groups. Financial support to individual efforts of member organisations in the nature of small grants can help sustain their interest and participation in the network, in addition to achieving the overall conservation objectives of the network.

This has justified our need to solicit continued support from the Marine Turtle Conservation Fund towards continuing to facilitate and coordinate the network's activities. With the support of Dakshin Foundation, TAG is now coordinated by a dedicated team of members from both organisations who will continue their roles in providing administrative support to the network.

Table: 2010-2011 Small Grants Details

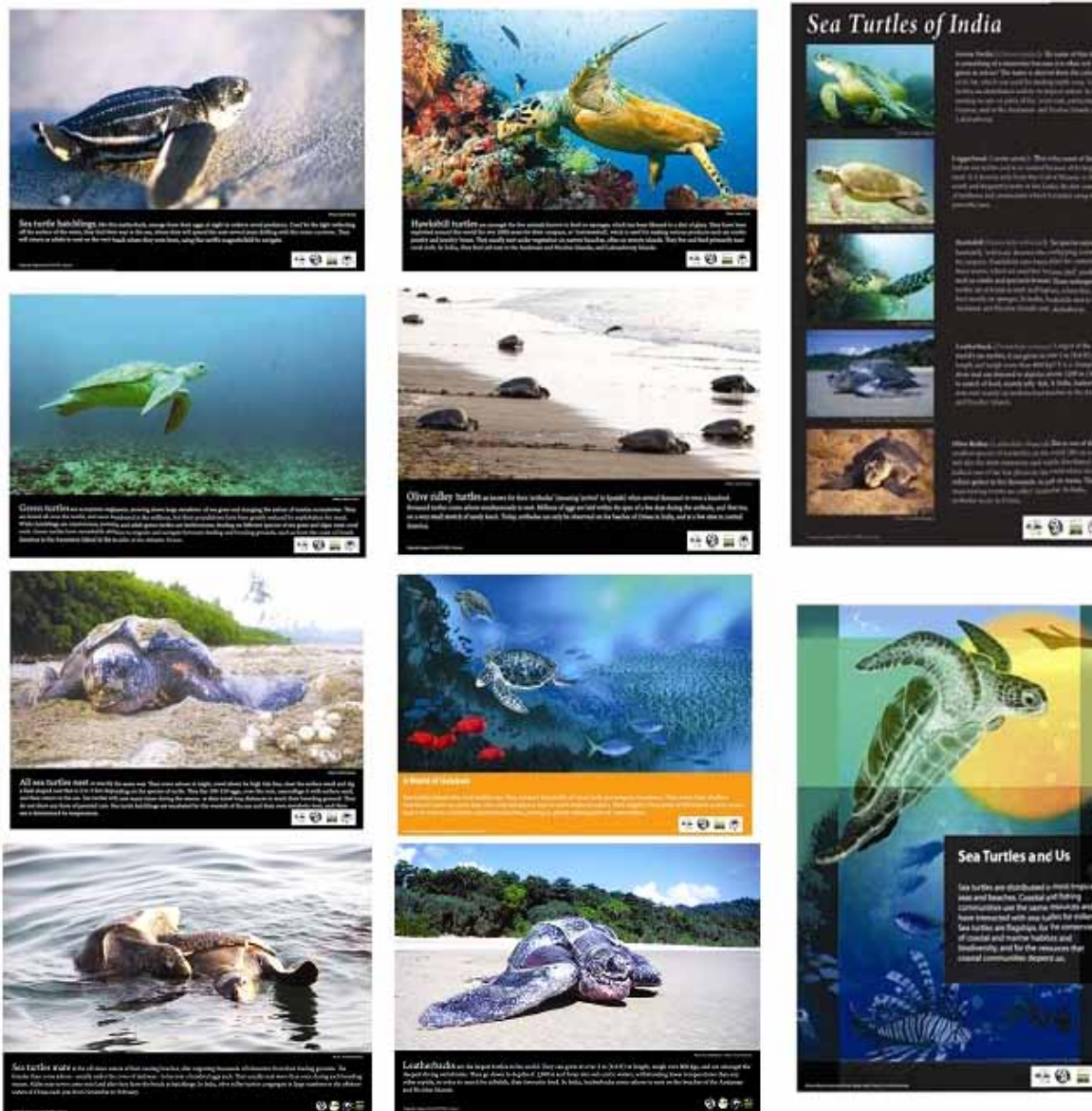
Organ- isation Name	Project Title	State	Grant amount (in Rs.)	Contact person	Project Goal
Alacrity	Sustainable development of the conservation of the sea turtles through people participation in the nearest villages of Penth beach of Rajnagar block of Kendrapara district in Orissa	Orissa	20,000	Kalpana Mallik	To develop a sustainable model for the conservation of Olive ridleys through a holistic and people participation process. And to oppose the construction of Sea Wall. To make people aware about the conservation and management of olive ridleys as well as the mangrove ecosystem by conducting awareness campaign through IEC materials (Information, Education and Communication) including video clip.
APOWA	Community based sea turtle and their habitat conservation towards sustainable approach in the buffer zone of Gahirmatha	Orissa	25,000	Bijaya Kabi	Protection of sea turtles and their habitats those are critical to the survival of marine biodiversity. The project is to develop sustainable programs for protecting the sea turtles and conservation the nesting habitat through interventions based on the concept of environmental stewardship and participatory management.
FSL	Community Based Conservation in Kundapur and Udupi taluka, Udupi District, Karnataka	Karnataka	30,000	Doreswamy	To prioritize maximum hatchling survival rates in turtle eggs, focus on successfully hatching of turtle eggs and hatchlings reaching the sea safely.

GLRA	Community Based Sea Turtle Conservation along Devi Coast, Odisha	Orissa	25,000	Sovakar Behera	To document the nesting intensity of sea turtles along Devi to Kadua & Kadua to Ramachandi area. Beach cleaning will be in a periodic manner & awareness programmes in coastal villages & schools. The proposal awareness programme will go long way towards information and knowledge among the coastal public for conserving the species.
Prakruti Nature Club	Survey of Saurashtra-Gujarat region for sea turtle conservation	Gujarat	25,000	Dinesh Goswami	To increase awareness and sensitivity amongst local communities towards coastal habitats and marine animals, to increase awareness of rules and regulations and laws pertaining to coastal resource management and endangered species protection, to strengthen our partnerships with other research institutions and govt. agencies and develop an active network for the region for conservation actions.
Sahyadri Nisarga Mitra	Marine Turtle conservation and awareness through community participation in Maharashtra	Maharashtra	30,000	Bhau Kat-dare	Protection and to conservation of endangered marine sea turtles their nests along the Maharashtra coast and release of hatchlings to the sea by actively involving the local community. Awareness activities in community and schools.

SSTCN	Sea turtle conservation and coastal habitat protection	Tamil Nadu	30,000	Akila Balu	To make the coastal stretch safe for turtles and hatchlings so need for human intervention can be done away with. To use turtle conservation to raise awareness about adverse consequences of consumption centred living, and the need to adopt sustainable lifestyles to reduce pressure on limited natural resources.
STAP	Olive Ridley Sea Turtles and their habitat conservation in the Devi river mouth	Orissa	25,000	Bichitranda Biswal	To create awareness, action and impart knowledge amongst locals and fisheries communities about the importance of sea turtles and their habitat. For achieving this, the team will work with community to aid them in developing their vision for the management of habitat and to support these threatened species
VSPCA	Habitat Conservation, Management and Community based Conservation	Andhra Pradesh	25,000	Pradeep Kumar Nath	To protect sea turtles and release of hatchlings into the sea, to spread awareness amongst the public creating sense of responsibilities among the fishing communities and lobbying with the government departments to permanently frame guidelines to protect sea turtles.
ANET	Long-term Leatherback monitoring programme in the Little Andaman island	Andaman & Nicobar Islands	30,000	Tasneem Khan	To support a long-term monitoring programme that will generate critical information on the population trends, nesting intensities and migration patterns of leatherback sea turtles of the Andaman and Nicobar islands.

APPENDIX IV

Posters and website



A set of ten posters on sea turtles in India is printed and distributed to TAG members for further distribution to schools, colleges, other NGOs and local government offices.

APPENDIX V

MoEF Letter



24th October 2011

The Director General (Wildlife)
Ministry of Environment & Forests
Government of India
Paryavaran Bhawan
CGO Complex, Lodi Road
New Delhi- 110003

Subject: Request for endorsement of TAG and permission to carry out sea turtle research and monitoring to member organisations of the Turtle Action Group (TAG-India)

Dear Sir,

We are writing to you in representation of the Turtle Action Group (TAG), a national level network consisting of over 25 organisations working towards sea turtle conservation and habitat protection along the coastline of India, including the islands of the Andaman and Nicobar and Lakshadweep. A complete list of member organisations with details is provided in **Annexure I** (attached). This network of organisations came together in early 2009 and has since expanded its membership and scope of activities. Our current efforts are geared towards strengthening the network by continuing to support and coordinate sea turtle conservation activities along the Indian coast, and to undertake collaborative and collective action that can lead to better coastal and marine conservation.

A major focus of TAG's activities is in training member groups in standardised and effective data collection and monitoring techniques. Extensive field based training is also carried out at the Annual TAG Workshops that aims to build the capacities of the member organisations in carrying out research and monitoring activities that will help generate baseline information. This information will be critical to inform appropriate management decisions and conservation activities by individual TAG member organisations as well as the forest department.

These member organisations work closely with the state forest and wildlife department authorities and routinely seek permission for carrying out research and conservation in the areas that they work. In this context, it would be extremely helpful if you could endorse the activities of TAG as a network and its individual member organisations and communicate the same to the respective state department offices. This would substantially help facilitate the process of obtaining necessary permits and encourage more organisations and individuals to be involved in coastal and marine conservation activities. We would like

to emphasise that the research and conservation work proposed to be carried out is **non-invasive** in nature to both turtles and their habitats.

TAG supported activities of individual organisations are supervised by experts at the Centre for Ecological Sciences, Indian Institute of Science, Wild Life Institute of India, Madras Crocodile Bank Trust and the Dakshin Foundation.

The Ministry of Environment and Forests had endorsed the 'Sea turtle Conservation Network Project' of which the Turtle Action Group is an outcome. (Kindly refer to your letter dated 9th September 2009; F.No. 4-41/2009-WL (pt)). We hope to receive your continued support.

Please also find enclosed:

1. Annual TAG report submitted to the USFWS/MTCA
2. Indian Ocean Turtle Newsletter: Special issue profiling core members of the network

Thank you.

Sincerely,

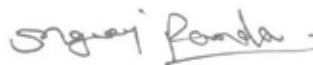
TAG Core Committee



Ravi Pandit
Canara Green Academy,
Honavar, Karnataka



Dr. Supraja Dharini
TREE Foundation, Chennai,
Tamil Nadu



Mangaraj Panda
United Artists Association &
Orissa Marine Resources
Conservation Consortium, Ganjam,
Orissa



Pradeep Kumar Nath
Visakha Society for
Protection and Care of
Animals, Visakhapatnam,
Andhra Pradesh



Dr. Wesley Sunderraj
Senior Principal Scientist
Kachchh, Gujarat, India



Dr. Naveen Namboothri
Dakshin Foundation, Bangalore,
Karnataka

Annexure I

TAG members:

1. Andaman & Nicobar Environment Team (ANET): Andaman and Nicobar islands

Unique in being the only organization based on an island. Andaman and Nicobar islands are an important and prime nesting sites for sea turtles of all four species that occur in India, namely Green, Hawksbill and Leatherback.

2. Visakha Society for Protection and Care of Animal (VSPCA): Andhra Pradesh

Through its innovative awareness programmes, VSPCA intends to educate the masses and build a strong and lasting bond between animals and human societies. They have field related expertise, necessary for effective conservation of sea turtles.

3. Prakruti Nature Club (PNC): Gujarat

PNC focus their activities along the Saurashtra and Gujarat coast. Their main focus is on protection of sea turtles, their nests and habitats, whale sharks and other sea turtle creatures. Having an excellent relationship with the forest department, they hope to contribute through the collection and distribution of information and data related to turtles.

4. Canara Green Academy (CGA): Karnataka

CGA's main mission has been conservation of turtles, mangroves and medicinal plants. Along with the Karnataka Forest Department, they have established 40 sea turtle breeding centres all over the Karnataka coastline. Potential sea turtle nesting beaches have been identified and both ex-situ and in-situ conservation are carried out, depending on the security of the nests identified.

5. Field Services and Inter-Cultural Learning (FSL India): Karnataka

They have been successful in creating awareness among fishermen community along 60km of North Udupi district of Karnataka state. They are unique in placing international volunteers in local community projects to support sustainable development and to bring inter-cultural dimensions to community projects.

6. Lakshadweep Marine Research and Conservation Centre (LMRCC): Lakshadweep

The organization established by a group of islanders, is the first that has a primary focus on community based marine conservation. Lakshadweep has a significant population of endangered green and hawksbill turtles. LMRCC work with the local community, school students, fishermen and the Forest Department to reduce the threats to these ocean ambassadors through education and awareness programmes.

7. Sahyadri Nisarga Mitra (SNM): Maharashtra

They work towards conservation, awareness and research of region's biodiversity, focusing on conservation of marine turtles, white-rumped vultures and Indian swiftlet.

8. Action for Protection of Wild Animals (APOWA): Orissa

APOWA believes in finding solutions to animal welfare and conservation challenges that provide lasting benefits for animal and community. They have ten years of experience in sea turtle conservation in Orissa through research, conservation and action. Their work is carried out in the buffer zone of Gahirmatha sea turtle rookery site, world's largest olive ridley mass nesting site.

9. Alacrity: Orissa

Amongst several, their sea turtle activity involves imparting awareness to fishing community residing within the periphery of the Gahirmatha area. They have also developed 'eco-development' groups, with 60 so far, within the region for conservation of natural resources including mangrove forests.

10. Podampeta Ecotourism and Olive Ridley Protection Club: Orissa

They address various threats to the nesting turtles by carrying out awareness programmes that inform people in nearby villages regarding the importance of turtles to the coastal ecosystem and the illegality of such activities.

11. Rushikulya Sea Turtle Protection Committee (RSTPC): Orissa

With the primary aim to help conserve olive ridley turtles and safeguard their nesting beaches along the Rushikulya coast, they began to monitor the nesting population and assist in the release of hatchlings during mass nesting. They also collect data on tagged turtles, recapture studies, distribution of mating congregation, satellite transmitter ranging studies and monitoring hatchling mortality rates.

12. Students' Sea Turtle Conservation Network (SSTCN): Chennai, Tamil Nadu

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. The group has been mainly organized and operated by students from colleges and even schools and a few young working adults. The motive has always been conservation and awareness creation.

13. TREE Foundation: Chennai, Tamil Nadu

It involves the fishing community youth (Sea Turtle protection Force- STPF) in a sea turtle protection and conservation programmes in South India. Education and creating awareness at the community level is an integral part of our conservation programme.

14. Green Mercy: Andhra Pradesh

An NGO based in Srikakulam. They carried out intensive surveys in 2001, giving better picture of marine turtles status on the coast of Andhra Pradesh. They have contributed to the conservation of marine and coastal life by holding consultative meetings with fisherfolk and local communities.

15. Sea Turtle Action Programme (STAP): Orissa

16. Green Life Rural Association (GLRA): Orissa

17. OMRCC: Orissa

It brought together divergent groups comprising of conservationists, biologists, fisherfolks to meet and interact which would be beneficial to both conservation as well as livelihoods.

18. WWF-India: Orissa

WWF-India is engaged in a multitude of activities with respect to its Marine Programme. To maintain the biodiversity and ecological processes of marine and coastal ecosystems while ensuring the sustainable use of natural resources. In Orissa they have focused on promoting conservation awareness amongst local fishing communities, through a participatory approach to conserve marine resources.

19. Green Habitat: Kerela

20. Naithal: Kerela

21. Theeram: Kerela

Appendix VI

Audit Statement for Financial Year 2010-11

MADRAS CROCODILE BANK TRUST, MAHABALIPURAM ROAD, CHENNAI - 603 104.

PAN : AAATM0397E

ASST. YEAR-2010-2011

YEAR ENDING -31.03.2010

ADI (E) , CHENNAI

Memo for Income Tax Purpose:

INCOME:		
Total Income as per Consolidated Income and Expenditure Account	26623021	26623021
APPLICATION		
Total Expenditure as per Consolidated Income and Expenditure Account	26623021	
Less : Excess of Income over Expenditure	6259376	
Less: Depreciation	772665	
	19590980	
Add: Capital Additions	1435864	21026844
Surplus	5596177	
Amount ought to have been spent being 85% of total income	22629568	
Amount Spent	21026844	
		<u>1602724</u>

for MADRAS CROCODILE BANK TRUST

 Director

MADRAS CROCODILE BANK TRUST
VADANEMMELI VILLAGE, MAHABALIPURAM
CONSOLIDATED BALANCESHEET AS AT 31/03/2010

PREV YR.	LIABILITIES	AMOUNT(Rs.p)	AMOUNT(Rs.p)	PREV YR.	ASSETS	AMOUNT(Rs.p)	AMOUNT(Rs.p)
20,940,217	CAPITAL FUND: As per last year Balance Sheet Add: Excess of income over Expenditure	20,940,216.99 6,259,375.74	27,199,592.73	6,473,577 76,555	FIXED ASSETS: As per Schedule MCBT Master Plan Development ADVANCES AND DEPOSITS: Staff Advances As per last year Balance Sheet Add: Given during the year Less: Recovered during the year	144,500.00 139,350.00 196,850.00	7,136,775.74 76,555.00
88,000	Loan from Mr. Romulus whitaker		88,000.00	145,700 212,000 (213,200)	Telephone Deposits Cylinder Deposits Security Deposit Cable Deposits Electricity Deposits	13,475.00 2,500.00 100,000.00 4,000.00 52,376.00	67,000.00
56,124	EPF Payable			850,000	RECURRING DEPOSITS: As per last year Balance Sheet Add: Invested during the year Less: Matured During the year	850,000.00 180,000.00 1,030,000.00 850,000.00	172,351.00
70,000	Payable for Equipment			108,722	STAFF SAVINGS As per last year Balance Sheet Advance for Expenses Add: Given during the year Less: Recovered during the year ANET Advance Add: Given during the year Less: Recovered during the year	695,559.00 4,139,386.00 4,148,145.00 207,687.00 1,311,596.00 1,353,078.00	180,000.00 5,86,800.00 166,205.00
				36,352 5,026,620 7,478,814	CLOSING BALANCES: Cash on hand Cash at bank Short term Deposits	85,130.00 10,127,392.99 8,569,383.00	18,781,905.99
21,154,341			27,287,592.73	21,154,341			27,287,592.73

For MADRAS CROCODILE BANK TRUST

For C V Ramaswamy & Co

Date
Chennai



[Signature]
Director

Chartered Accountants

[Signature]
Partner

MADRAS CROCODILE BANK TRUST
VADANEMMELI VILLAGE, MAHABALIPURAM
CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31/03/2010

PREV YR.	EXPENSES	AMOUNT (Rs. p)	AMOUNT (Rs. p)	PREV YR.	INCOME	AMOUNT (Rs. p)	AMOUNT (Rs. p)
8,094,239.00	Brought Forward	10,850,484.60	10,850,484.60	21,422,688.78			26,623,020.79
4,080,121	SALARIES AND STAFF PAYMENTS						
795,055	Salaries	6,099,227.00					
214,063	Wages (Casual)	1,127,452.00					
28,801	Staff Welfare Expenses	174,682.00					
130,161	Staff Provident Fund	145,054.00					
26,781	Staff Insurance and Medical	94,973.00					
6,300	Contract Labour Welfare (Tea Etc)	36,746.00					
	Staff Savings	25,800.00					
			7,703,934.00				
19,000	OTHER PAYMENTS:						
769,180	Donations		18,201.00				
	Meetings & Seminars		1,018,360.00				
	Depreciation		772,665.45				
7,258,988	EXCESS OF INCOME OVER EXPENDITURE		6,259,375.74	21,422,689			26,623,020.79
21,422,689			26,623,020.79				

For C V Ramaswamy & Co
Chartered Accountants

A. A. Suman
Partner

For MADRAS CROCODILE BANK TRUST

Patel
Director

Date: 29/9/10
Chennai



MADRAS CROCODILE BANK TRUST, MAHABALIPURAM ROAD, CHENNAI - 603 104
Schedule to Fixed Assets as at 31.03.2010 - MCBT

DESCRIPTION	WDV AS AT 1.4.2009	ADDITIONS	DEDUCTIONS	TOTAL	RATE	DEPRECIATION	WDV AS AT 31.03.2010
Airconditioner	59,910.06	30,750.00		90,660.06	25%	22,665.01	67,995.04
Boats & Boats (UP)	268,736.00	190,219.00		458,955.00	20%	91,791.00	367,164.00
Bolero	455,766.73			455,766.73	25%	113,941.68	341,825.05
Building, including roads, walls etc	804,533.55			804,533.55	5%	40,226.68	764,306.87
Building on leased land-(UP)		455,915.00		455,915.00	5%	22,795.75	433,119.25
Building-Thandara		497,319.00		497,319.00	5%	24,865.95	472,453.05
Camera & camera(UP)	45,277.50			45,277.50	25%	11,319.38	33,958.13
Cellphone	5,220.34			5,220.34	25%	1,305.08	3,915.25
Computer	2,395.03	50,000.00		52,395.03	60%	31,437.02	20,958.01
Crockstock Souvenir Shop	2,243.20			2,243.20	25%	560.80	1,682.40
Directors House	25,746.16			25,746.16	10%	2,574.62	23,171.55
Equipments R&D & Equipments (UP)	57,247.05	87,166.00		144,413.05	25%	36,103.26	108,309.79
Fax Machine	592.52	6,500.00		7,092.52	25%	1,773.13	5,319.39
Furniture & Fittings	89,633.84	15,433.00		105,066.84	10%	10,506.68	94,560.15
Furniture & Fittings	5,860.19			5,860.19	25%	1,465.05	4,395.14
Fridge		15,000.00		15,000.00	25%	3,750.00	11,250.00
Generator(in Kind)	455,962.50			455,962.50	25%	113,990.63	341,971.88
Guest house	21,813.00			21,813.00	10%	2,181.30	19,631.70
Laboratory	1,420.21			1,420.21	10%	142.02	1,278.19
Land	1,801,209.00			1,801,209.00		-	1,801,209.00
Laptop	43,807.46	36,400.00		80,207.46	25%	20,051.87	60,155.60
Machinery and tools	63,075.84			63,075.84	25%	15,768.96	47,306.88
Motor Bike	48,190.40			48,190.40	25%	12,047.60	36,142.80
New pit construction	402,549.17			402,549.17	10%	40,254.92	362,294.26
Office equipment	59,595.56			59,595.56	25%	14,898.89	44,696.67
Printers	19,887.39			19,887.39	25%	4,971.85	14,915.54
Pump set	8,465.06	13,462.00		21,927.06	25%	5,481.77	16,445.30
Shed at Thandara	119,796.26			119,796.26	5%	5,989.81	113,806.45
Sheds	208,351.44			208,351.44	10%	20,835.14	187,516.29
Shop construction	108,779.13			108,779.13	5%	5,438.96	103,340.17
Slide Projector + LCD projector	34,992.19			34,992.19	25%	8,748.05	26,244.14
Snake room	15,437.19			15,437.19	10%	1,543.72	13,893.47
Ticket counter	109,813.14			109,813.14	5%	5,490.66	104,322.48
Turtle tank	84,196.61			84,196.61	5%	4,209.83	79,986.78
TV,VCR, & Stabilizer	11,925.27			11,925.27	25%	2,981.32	8,943.95
Water Tank and well construction	36,700.00			36,700.00		-	36,700.00
Washing Machine		21,550.00		21,550.00	25%	5,387.50	16,162.50
	5,479,129.00	1,419,714.00		6,898,843.00		707,495.87	6,191,347.13

MADRAS CROCODILE BANK TRUST, MAHABALIPURAM ROAD, CHENNAI - 603 104
Schedule to Fixed Assets as at 31.03.2010- ANET BASE

DESCRIPTION	WDV AS AT 1.4.2009	ADDITIONS	DEDUCTIONS	TOTAL	RATE	DEPRECIATION	WDV AS AT 31.03.2010
15HP Motor	2,505.95			2,505.95	25%	626.49	1,879.46
Building	396,074.37			396,074.37	5%	19,803.72	376,270.65
Camera & Flash	8,041.16			8,041.16	25%	2,010.29	6,030.87
Computer	15,189.51			15,189.51	80%	9,113.70	6,075.80
Equipments	95,692.69			95,692.69	25%	23,923.17	71,769.52
Furniture & Fittings	9,556.37	16,150.00		25,706.37	10%	2,570.64	23,135.73
Land	430,000.00			430,000.00		-	430,000.00
Laptop	20,737.50			20,737.50	25%	5,184.38	15,553.13
Motor bikes	601.86			601.86	25%	150.47	451.40
Office equipment	1,240.23			1,240.23	25%	310.06	930.17
Slide Projector	299.18			299.18	25%	74.79	224.38
Water tank and well construction	7,500.00			7,500.00		-	7,500.00
Zodiac inflatable boat	7,009.39			7,009.39	20%	1,401.88	5,607.51
	994,448.19	16,150.00		1,010,598.19		65,169.58	945,428.62
GRAND TOTAL	6,473,577.19	1,435,864.00		7,909,441.19		772,685.45	7,136,775.74



*For more information on the Turtle Action Group visit
www.seaturtlesofindia.org/tag*

Cover photo: Olive ridley after making its nest at Rushikulya,
Odisha
Photo: Kartik Shanker

