Its turtle time in Orissa again

The Olive Ridley nests at three major rookeries in Orissa, of which Gahirmatha is the largest rookery in the world today with over 100,000 nesting turtles. However, there has been no nesting at this rookery for the past two years. Much of the decline of the nesting population can be attributed to illegal trawl fishing operations, particularly shrimp trawling, in the near-shore waters of Gahirmatha and other coastal areas of Orissa. The Wildlife Institute of India has recorded over 30,000 dead turtles off the Orissa coast over the past four years and 14,000 dead turtles last year alone. This number exceeds the entire nesting population at the other two Orissa rookeries. What is particularly galling is that the turtles are not even the target of these mechanised trawlers. Sea turtles are incidental catch in the trawl fishing nets and drown during the long periods that the nets are operated.

Shrimp trawling has been identified as the biggest cause of sea turtle mortality throughout the world. The immediate solution to reduce this mortality is the strict enforcement of Orissa Marine Fishing Regulation (OMFR) Act 1982 and Rules 1983, which prohibits any kind of mechanised fishing within five km from the shore line along the Orissa coast. A blanket ban on near shore mechanised fishing will bring down the turtle mortality to a large extent. A second step towards minimising this mortality would be the mandatory use of Turtle Excluder Devices (TEDs) in the trawl nets. At the moment, none of the 3,000 odd trawlers operating in Orissa use TEDs in their nets.

It is also important to carry out research projects on these turtles including continued monitoring of the nesting beaches, quantification of mortality and conservation genetics to determine population structure and the origin of this population.

Mechanised trawling has not only endangered turtles, but also the lifestyles of the local artisanal fishing community. In the case of other highly endangered species, conservationists have advocated a highly protectionist approach. However, the best solution for the Olive Ridleys along the coast of Orissa (and elsewhere along the coast) would be to encourage artisanal fishing and to return the coastal waters to the local traditional fisherfolk.

Solutions are also available to many other problems of Olive Ridleys. Indigenously designed TEDs and turtle friendly lights are available, but the difficulty lies in getting people to use the technology.

A conservation effort, Operation Kachhapa, has been launched in 1998, with the cooperation of local conservation groups and the Orissa Forest Department. This initiative hopes to implement management practices by strictly enforcing the ban on near-shore mechanised trawling by providing the necessary support to the Forest Department and seeking the cooperation of the Coast Guard.

Since sea turtles do not respect national boundaries, it is important to have active regional cooperation in the conservation of these species. We would therefore like to initiate a regional network where we can exchange information and support each other’s programs. In this issue, we profile various organisations, primarily NGOs, working on sea turtles in this region. We also outline the plan for Operation Kachhapa and for this network.

Kartik Shanker
The Olive Ridley in Orissa

The main rookeries in Orissa are at Gahirmatha, Rushikulya and Devi River mouth, of which Gahirmatha is the largest, with over 100,000 turtles in most years and 600,000 in some years. However, there has been no mass nesting at this beach during the past two seasons. An additional concern at Gahirmatha is that the major nesting beach was fragmented during a cyclonic storm in 1989 and nesting has since been restricted to a 4 km island known as Ekakulanasi.

Main threats:
- Incidental mortality in trawl nets
- Habitat degradation (Casurina plantation)
- Artificial illumination at Rushikulya and Gahirmatha
- Egg predation at Rushikulya

Conservation Measures for this coast:
- Implementation of OMFR Act
- Declaration of Devi River mouth and Rushikulya as protected areas
- Use of TEDs in trawlers
- Minimising lighting at Rushikulya and Gahirmatha

Operation Kachhapa

aims to protect sea turtles and to help preserve local fisheries by

- enabling strict enforcement of the non-mechanized 5 km fishing limit and the Gahirmatha sanctuary provisions by the Forest Department and the Coast Guard.
- continuing to scientifically monitor turtle nest sites and mortality through government scientists.
- increasing awareness among the public and local fishing communities and their participation in turtle protection through NGOs.
- increasing protection of nest sites from predation using local people.

Project description

Operation Kachhapa is a cooperative program between central and state authorities, local non-government organizations, local fishermen and local media to drastically reduce turtle mortality and to safeguard the future of Olive Ridley turtles on the Orissa coast. The project involves: from the Indian Government, the Wildlife Institute of India; from the Orissa government the Forest Department; from the Orissa non-government sector, the Wildlife Society of Orissa and various other organisations and individuals.

Operation Kachhapa is funded by the Barbara Delano Foundation. It is being coordinated by the Wildlife Protection Society of India (WPSI) based in Delhi under the directorship of Belinda Wright, the Executive Director of WPSI, and by a local coordinator based in Bhubaneshwar in Orissa.

The project consists of three major elements:

Enforcement: Operation Kachhapa is
- providing a sea-going patrol vessel for the Forest Department.
- sponsoring a high speed launch to compliment the main vessel.
- providing equipment for mobile camps to protect key areas.
- creating an incentive scheme for enforcement officers, including the monthly Kachhapa Award for outstanding service.
- preparing an assessment of enforcement action and penalties incurred to date to present the results to the Orissa government's committee for the conservation and protection of endangered sea turtles.
- following all relevant court cases and pursuing private proceedings where necessary.

Monitoring: Operation Kachhapa is
- financially assisting government-approved tagging and monitoring of turtle nesting and mortality.
- taking steps to prevent predation of mass nest sites.

Awareness: Operation Kachhapa is
- producing hoardings in fishing port areas detailing local fishery and wildlife laws.
- producing flyers for the operators of fishing boats.
- producing slots for local radio.
- providing a public identity to efforts to protect turtles.
- establishing an e-mail update network to keep all parties informed of developments.
- providing regular media updates.

General Project Resources:
4WD Vehicle; Motorbike for field camp;1 mobile monitoring/protection camps; 2 video cameras & accessories; Binoculars.

Resources for Forest Department:
Hire of sea-going boat (inclusive of crew, maintenance & fuel); Support boat with 40 hp outboard motors; Monitoring/protection camp (including camp equipment); Binoculars; Spotting scope; Turtle t-shirts & caps; Incentive award; Legal support.

Resources for Turtle Research & Awareness:
3 turtle monitoring/protection camps + local assistance; Boat for Hukitola Camp; Interpretation/Monitoring; Centre at Rushikulya; Slide Projector.
### Wildlife Protection Society of India (WPSI)

**Contact Person:** Belinda Wright  
Executive Director  

**Address:** Thapar House, 124 Janpath, New Delhi 110001, India.  

**Phone:** (011) 6213864 & 6238710  
**Fax:** (011) 6464918  
**Email:** blue@vsnl.com, wpsi@nde.vsnl.net.in  

**Started in:** 1994  

**Activities:**  
- Stopping illegal trade in wildlife products  
- Database on wildlife crime  
- Legal cell that operates throughout India  
- Awareness campaigns  
- Publications on important wildlife issues

### Wildlife Institute of India (WII)

**Contact Persons:** B.C. Choudhury, Principal Investigator & Faculty, WII  
Bivash Pandav, Research Fellow, WII  

**Address:** PO Box 18, Chandrabani, Dehradun 248001, India  

**Phone:** (0135) 640112 – 640115  
**Fax:** (0135) 640117  
**Email:** bcc@wii.gov.in, pandavb@hotmail.com  

**Coastal Area:** Surveys along entire coast of Orissa  
Intensive research at Rushikulya and Gahirmatha  

**Activities:**  
- Monitoring of nesting beaches  
- Survey of Orissa coast to quantify mortality  
- Quantifying mortality rates due to trawling  
- Tagging of nesting females  
- Tagging of mating pairs  
- Education and Awareness programs  
- Conservation genetics  

**Publications:**  

### Wildlife Society of Orissa

**Contact person:** Biswajit Mohanty, Secretary  

**Address:** TULEC Building, Link Road, Cuttack 753012, India.  

**Phone:** (0671) 611513/610980  
**Fax:** (0671) 610980  
**Email:** biswajit@cal.vsnl.net.in  

**Started in:** 1994  

**No. of members:** 47  

**Activities:**  
- Tackling illegal trade in wildlife products  
- Filing legal cases and intervention petitions  
- Providing legal support to the Forest department  
- Collecting data regarding wildlife and habitat

### Project Swarajya

**Contact Person:** Chitta Behera, Director  

**Address:** Moti Bhawan, Kesharpur Road, Buxibazar, Cuttack - 753001, Orissa, India  

**Phone:** (0671) 621097 & 623518  
**Fax:** (0671) 621097  
**Email:** swarajya@cal.vsnl.net.in  

**Started in:** 1988  

**No. of members:** 20  

**Activities:**  
- Awareness programmes for local people  
- Education for students  
- Involved in the transfer of TED technology and providing TEDs at subsidised rates to trawlers  

**Other key participants in Operation Kachhapa**  
Banka Behary Das, Orissa Krushak Megha Sangh, 14, Ashok Nagar, Bhubaneswar 751009.  
Madan Mohanty, IAS, Secretary of Govt of Orissa, Fisheries Dept, Jobra, Cuttack 753007.  
Sanjeev K. Chadha, IFS, Chief General Manager (Environment) Orissa Industrial Infrastructure Dev. Corp, IDCO Towers, Janpath, Bhubaneswar, 751007.
Marine Turtle Preservation Group - India (MTPGI)

Contact Person: Mr. Pradeep Kumar
Vice President (Eco-counseling and Conservation)
Phone: (040) 3703389

Contact Person: Dr. P.S. Rajasekhar
Senior Conservation Scientist for MTPGI
Assistant Professor, Environmental Sciences, Andhra University, Vishakapatnam 530003. India.

Started in: 1991
No. of members: 153

Activities:
- In situ protection of nests with the help of local fishermen, and providing primary health care for them
- TED demonstrations at fishing harbours
- Tagging nesting females and mating pairs
- Conservation education for the fishing community

Coastal Area/Species: Andhra coast/Olive Ridley

Main threats to turtles: largely same as in Orissa

Assistance Required:
- Voluntary vets, pediatricians, gynecologists
- Liaison with Central/State Government

Publications:
A project Report for the “Protection and Conservation of sea turtles” at Vishakapatnam (An Environment Development Program). Vishaka Society for prevention of cruelty to animals, Vishakapatnam, India.

Andaman and Nicobar Environmental Team (ANET)

a division of the Centre for Herpetology, Madras Crocodile Bank Trust

Contact Person: Harry V. Andrews
Address: Centre for Herpetology, Madras Crocodile Bank, Postbag 4, Mamallapuram 603104. India.
Phone: 098410 31256
Fax: (044) 4910910 / (04114) 42511
Email: lsthiru@giasmd01.vsnl.net.in

Started in: 1988

Activities:
- Various studies including sea turtle surveys, crocodile and wetland surveys, herpetological investigations, botanical explorations, and epifaunal studies.
- Environmental education
- Biodiversity conservation and protected areas management

Coastal Area: Andaman & Nicobar islands
Species: Leatherback, Green turtles, Olive Ridley, Hawksbill

Main threats to turtles:
Similar to Orissa

Conservation measures:
- Use of TEDs
- Ban on sand mining
- Fencing nesting beaches to keep cows out of leatherback nesting sites
- Shoot feral dogs
- Education, surveys and monitoring

Recent Publications:
ANET NEWS, a newsletter started in February 1998.


Vishaka Society for Prevention of Cruelty to Animals (VSPCA)

Contact Person: Pradeep Kumar Nath
Address: 26-15-200, Main Road, Vishakapatnam 530001. India.
Phone: (0891) 564759
Fax: (0891) 564759

Started In: 1996
No. of members: 45

Turtle related Activities:
- Survey of nesting beaches
- In situ protection of nests
- Involving the local fishing community in sea turtle conservation

Coastal Area/Species: Andhra coast/Olive Ridley
**Marine Turtle Conservation Action**

**Contact Person:** Jayakumar C.

**Address:** PB No. 815, Kawdiar, Trivandrum 695003.
**Fax:** (0471) 437230
**Email:** nccouncil@hotmail.com

**Started in:** 1996

**No. of members:** 45

**Coastal Area/species:** Kerala/ Olive Ridley, Green (?)

**Main threats:**
- same as other coastal areas of India
- tourism related development

**Activities:**
- Survey of sea turtles on the Kerala coast
- Community education leading to conservation
- Preparation of 5 year self sustaining community conservation plan

**National Aquatic Resources Agency (NARA)**

**Contact person:** D. Amarasooriya, Research Officer

**Address:** Crow Island, Mattakkuliya, Colombo –15, Sri Lanka.
**Phone:** (01) 522000
**Fax:** (01) 522932
**Email:** amara@nara.ac.lk

**Activities:**
- research and monitoring programmes
- islandwide survey of sea turtle nesting habitats

**Coastal Area:** Near Galle and Tangalle

**Species:** Green (50%), Olive Ridley (46%), Leatherback (2%), Hawksbill (1%), Loggerhead (1%)

**Main threats:**
- poaching of eggs
- mortality in gill nets
- habitat degradation
- current hatchery practices

**Conservation measures:**
- declaration of protected areas for major nesting and feeding grounds of turtles
- collaborative research and conservation with regional countries, specifically India

**Amphibia and Reptile Research Organisation of Sri Lanka (ARROS)**

**Contact Person:** Anslem de Silva

**Address:** 15/1, Dolasbage Road, Gampola, Sri Lanka.
**Phone:** 08 388130
**Fax:** 08 389106
**Email:** anslem@med.pdu.ac.lk

**Started in:** 1991

**No. of members:** nearly 100

**Activities:**
- have published the 1st Turtle Action Plan
- 1st National Conference on Herpetology
- 1st International Conference on Herpetofauna of South Asia
- will be organising 4th World Congress of Herpetology

**Main threats and Conservation measures:**
Same as above
Brief profiles of Other NGOs

There are numerous NGOs in the subcontinent who work for sea turtle conservation, but we have not received information from some and therefore could not include updated information. Some of you may want to try your luck directly with these organisations.

Turtle Conservation Project (TCP), Sri Lanka.
Address: Hambantota Road, Tangalle, Sri Lanka.

Centre for Advanced Research in Natural Resources and Management (CARINAM)
Contact: S.M.A. Rashid
Address: 70, Kakrail, Dhaka 1000. Bangladesh.
Phone: 880-2-417111  Fax: 9564969

Centre for Environmental Education (CEE)
Contact: E.K. Nareshwar
Address: Thaltej Tekra, Ahmedabad 380054. India.
Phone: (079) 6442642/6442651  Fax: (079) 6420242

Governmental organisations

Over the years, many governmental bodies have been involved in sea turtle conservation, including the Central Marine Fisheries Research Institute (CMFRI), and Tamil Nadu and other state Forest Departments in India. The Orissa Forest Department is of course deeply involved in Operation Kachhapa. Some of the others are currently not directly involved with sea turtle conservation. However, we have received information from a few departments and hope to encourage more states to join us actively in the network.

Forest Department, Government of Goa
Contact person: C.A. Reddy, DCF (Wildlife)
Address: 4th Floor, Junta House, Panaji, Goa 403001.
Phone: (0832) 229701  Fax: (0832) 224747

Species: Olive Ridley
Activities: Cash Award (Rs.500) was given to 11 villagers for protecting sea turtles

The Maharashtra Forest Department has assured us of their involvement in the network and help in collecting information about sea turtles nesting on their coast.

Marine Research Station
Contact: Hussein Zahir
Address: Ministry of Fisheries and Agriculture, Male 20-06, Republic of Maldives.
Phone: (960) 322242  Fax: 322509
Email: marine@fishagri.gov.mv

Nesting Species: Green and Hawksbill
Threats: Illumination and poaching

Sindh Wildlife Department
Contact: Fehmida F. Asrar
Address: PO Box 3722
Government of Sindh, Pakistan.
Phone: 9204952

Coast/Species: Karachi coast/ Green and Olive Ridley

Threats: Poaching, habitat degradation, disturbance due to picnic groups and fishermen, illumination

Activities:
- Protection of eggs from poaching
- Tagging of adults
- Education

Some messages

- The response to the call for the formation of this network was overwhelmingly positive. The problems of sea turtles all over the subcontinent seem to be largely similar. While the debate over the relative merits of in-situ conservation and hatcheries goes on (NARA lists ‘current hatchery practices’ as a major threat to turtles in Sri Lanka), it seems that hatcheries may still be necessary on coasts where density is low and poaching is rampant. However, we would strongly advise against head-starting and request all hatchery managers to release hatchlings immediately after emergence. We do hope that this network and newsletter will grow and aid substantially in the conservation of marine turtles in the sub-continent.

- In this issue, we have tried to put out information on various groups currently involved in turtle conservation. Perhaps, in future issues, we can devote some space to the history of sea turtle conservation in the subcontinent.

- Please send us detailed information of nesting (species, densities), problems and conservation on your coast during this season. We would like to compile detailed nesting information on the subcontinent in the next issue of Kachhapa. We will also include a detailed update of the Orissa situation and Operation Kachhapa in the next issue.

- Write to us with a self addressed envelope for the complete mailing list of turtlers in the subcontinent (about 75 postal and email addresses) and send us your mailing list so that we can expand the network.

- Operation Kachhapa can now be reached at kachhapa@vsnl.com. Please join us in discussions over the email.

- Please feel free to photocopy and distribute this newsletter to as many people as possible.