

take of eggs was occurring was one of our objectives and we gave support and training to guards and local government officials throughout the season. We initiated outreach campaigns in the community informing people about the importance of the turtles in the wild and the effects of captivity as well as teaching the biology and life cycle. The objective of these activities was to change the way local residents view turtles, informing them of the threatened status and the economic potential of a nesting congregation. There is a need for immediate protection and conservation of this population as development is still in early stages and we can work with developers and locals alike to create a sustainable turtle-friendly island. We started working with several active members of the local community and ran groups of workshops and training sessions along with nighttime visits to the nesting beaches so people could witness the process. These actions were supported by the city hall, local authorities (also involved) and local businesses. This had a strong impact on the community and outreach activities were viewed as a positive experience for all, assuring the interest and feeling for protection of the species. All the people involved during the course of these actions were very committed, but after the departure of our delegation from Maio Island things fell into oblivion and no more efforts were made to improve and continue the work begun during our stay. There is a need for a hatchery, active beach protection and a tagging program to progress the ongoing task of saving sea turtles and developing a successful community based conservation project.

INTEGRATING LOCAL COMMUNITIES INTO WILDLIFE CONSERVATION ON BIKO ISLAND, EQUATORIAL GUINEA, AFRICA

Shaya Honarvar, Daniel B. Fitzgerald, Filemon R. Etingue, and Gail W. Hearn

Drexel University, Philadelphia, Pennsylvania, USA

The local community of Ureca has been collecting sea turtle nesting ecology data on the southern beaches of Bioko Island since 1998. Our goal was to: 1) reassess the data collection regime from the past 11 years; 2) educate the local community and local university students in sea turtle nesting ecology; 3) train census takers for more accurate data collection. We patrolled the nesting beaches with the local census takers during the 2007–2008 nesting season and compared our data to their collected data. During the 2008–2009 nesting season, we educated the local community and students as well as trained them in census taking through weekly visits to the village over six months. During these visits we explained turtle nesting ecology and solved problems that they encountered while on census. We incorporated the use of GPS units to improve supervision and data collection. We found that it is very important to have onsite supervision for better data collection. Our efforts for better education and training of the local community improved the quality of data. Lastly, having local people on the nesting beaches not only decreased the number of turtles poached but also helped decrease the number of primate hunters in the area.

COMMUNITY AWARENESS AND CAPACITY BUILDING IN SEA TURTLE CONSERVATION IN SRI LANKA

Thushan Kapurusinghe, Lalith Ekanayake, M. M. Saman, Saman Rathna Kumara, Himali Purnima, and Wasantha Edirisooriya

Turtle Conservation Project (TCP), No. 11 Perera Mawatha, Madakumbura, Panadura, Sri Lanka

The TCP's community awareness and capacity development programs included conducting a training workshop, field training, vocational training, school lectures, exhibitions, film shows etc. TCP's community capacity development programme has turned the turtle egg poachers into nest protectors. Thirty-two former egg poachers have been employed as nest protectors in Kosgoda and Rekawa villages. Furthermore, with the assistance of the Sri Lanka Tourist Board (SLTB) TCP trained these local villagers and licensed them as eco tour guides. In addition, TCP has formed small community groups or Community Based Organizations (CBOs) such as the Community Batik Group, Community Sewing Group, Community Ornamental Fish Breeding Group, Community Coir Group and Turtle Nest Protector Groups in Kosgoda and Rekawa villages in order to implement various community livelihood development projects. Developing the capacities of CBOs facilitated the TCP's implementation of various community projects. Through the education and awareness projects in these villages, TCP was able to change some of the negative attitudes of the local fishermen on marine and coastal resources that led them to over-

exploit the resources. In addition, TCP has also implemented community skills development programs such as primary school programs, computer classes, free English language classes, sewing training, disaster preparedness training, etc. Children's clubs were established in order to involve children in the coastal ecosystem conservation and management process, providing them with necessary awareness through various educational programs. The target groups of TCP's awareness and capacity development programs included local fishermen, school children, the general public, wildlife officers, NAVY and Police officers, tour operators, academics, etc.

***WHERE SCIENCE AND CONSERVATION COALESCE; INDIAN CITIZEN INITIATIVES AND MARINE TURTLES**

Divya Karnad¹, Bhau Katdare², Ravi Pandit¹, Arun V¹, Supraja Dharini¹, and Kartik Shanker¹

¹ *Ashoka Trust for Research in Ecology and Environment, India*

² *Centre for Ecological Sciences, Indian Institute of Science, India*

Population dynamics of marine turtles can be best understood through long term monitoring. The most systematic technique is offshore monitoring, but this is too expensive to carry out across vast areas of coastal water. In India, the olive ridley turtle nests along the coast of six states: Orissa, Andhra Pradesh and Tamil Nadu on the east and Kerala, Karnataka and Maharashtra on the west coast. The dynamics of this population of olive ridleys is little known, as offshore monitoring is prohibitively expensive. Onshore monitoring can act as a surrogate, giving us indices of population size, shifts and fluctuations. Hence we, along with groups and organizations that are already involved with sea turtle conservation along various parts of the Indian coast, have established an onshore monitoring programme. This long-term initiative could provide insights into the biology/population dynamics of olive ridleys that nest along Indian shores. Eight local community-based conservation groups dedicated to sea turtle conservation have agreed to collect scientific data. They have been trained and provided with the necessary equipment to collect data that will be pooled into a growing database of turtle nesting locations, clutch sizes, hatching rates and nest temperatures across the six states where the olive ridley nests. The groups have also begun to share information and expertise amongst themselves. This initiative has helped us identify the specific threats that affect these turtles along different regions of the Indian coast, such as the sea walls and oil pipelines along parts of the Maharashtra coast. There are distinct patterns of nesting along the two coasts. The timing of nesting appears to be linked to the monsoon. Temperature regimes are also influenced by the timing of nesting during the year, potentially generating dissimilar sex ratios along the two coasts. Eventually this data could be used to understand turtle population dynamics and genetics and model the impacts of climate change on the temperature dependent hatchlings.

OLIVE RIDLEY (*LEPIDOCHELYS OLIVACEA*) CONSERVATION AND AWARENESS THROUGH COMMUNITY PARTICIPATION IN MAHARASHTRA, INDIA

Bhau D. Katdare and Jayant G. Kanade

Sahyadri Nisarga Mitra, Chiplun, Maharashtra, India

Of the seven species, five species of marine turtles are found in Indian waters. The olive ridley is the most abundant sea turtle in India (Rajgopalan 1984). The olive ridley nesting season starts from October to March along the coast of Maharashtra, where sporadic nesting of olive ridleys is reported with a few potential beaches in Sindhudurga and Ratnagiri district (Giri and Chaturvedi 2003). Sahyadri Nisarga Mitra (SNM) is a leading NGO working on nature conservation, protection, education, and research since 1992. While on status surveys for the white-bellied sea eagle (*Haliaeetus leucogaster*) along the coast of Maharashtra, SNM found evidence of marine turtle nesting on the coast of Velas, a tiny village in Ratnagiri district. SNM started the study and conservation work for marine turtles in Maharashtra, India from 1 October 2002 and in 2007 launched the UNDP GEF SGP, CEE Central supported project "Marine Turtles Conservation and Awareness through Community Participation" in Maharashtra India. SNM completed a status survey of the entire 720 km coastline of Maharashtra state India. Main threats are poaching of eggs, poaching of adults for meat, habitat destruction and trawling. Conservation of marine turtles, community participation, and linkage of eco clubs, youth clubs and SHGs to give an alternate income source are the objectives of the project. SNM undertook conservation work and an olive ridley awareness campaign through a hatchery management programme in 30 coastal villages along the Maharashtra coast. Also undertaken was an awareness campaign on the entire coastline of Maharashtra. Outcome: during the years 2002 to 2009, 530 nests were protected