

changes in clutch frequency rather than to changes in absolute numbers of reproductive females. In the end, the Casey Key study has set a benchmark for

future research on sea turtles, and reminds us why it is so important to have accurate measures of basic life history measures.

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Report

30th Annual Symposium on Sea Turtle Biology and Conservation 24 - 30 April, 2010, Goa, India

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For the first time in 30 years, the International Sea Turtle Society's Annual Symposium was held in south Asia, a region home to globally significant populations of marine turtles, and a diverse range of organisations, community based groups and institutions involved in sea turtle research and conservation. The symposium provided an excellent opportunity to participants from countries in South and Southeast Asia underrepresented in previous symposia to attend the event.

The theme of the symposium 'the world of turtles'

drew attention to the wide range of ecosystems that sea turtles inhabit including coastal, nearshore and oceanic ecosystems, from sandy beaches to coral reefs and seagrass meadows, and pelagic habitats. An important focus of the symposium was also to draw attention to the human communities that sea turtles interact with, in particular resource dependent coastal fishing communities.

With over 500 participants from over 60 countries, the success of the symposium was reflected in the coming together of ideas in research and lessons in

conservation from a diverse range of individuals and groups, representing the diverse habitats that the world's turtles inhabit, together with the diversity of the social aspects of conservation and its impacts on people, both at the local and regional / global scale.

Over 400 abstracts were received and a total of 376 were presented after a careful review process by the Programme Committee, overseen by Programme Chairs Matthew H. Godfrey and Brendan Godley and the Programme Coordinator DuBose Griffin.

The symposium was held at the Kala Academy in Panaji, Goa's renowned centre for performing arts, situated on the banks of the Mandovi River. The venue was ideal for hosting main symposium sessions in addition to parallel and satellite meetings and workshops. A few workshops were also held at the Taj Vivanta Hotel situated across the road from the Kala Academy. All evening social events were held at the Cidade de Goa hotel at Vainguinim beach in Dona Paula.

Programme

Pre-symposium meetings and workshops commenced on 24 April and included workshops on: Marine Invasive Species, Bayesian Statistics, Stable Isotopes and Conservation of Marine Turtles and Dugongs. Regional meetings including the Indian Ocean and Southeast Asia, Africa, Mediterranean and Latin America (RETOMALA) meetings were held on the three days prior to the symposium. Workshops on Satellite Telemetry and Turtle Rehabilitation, and the IUCN SSC Marine Turtle Specialist Group – Annual General Meeting were held on 30 April.

Two special meetings were held at this year's symposium: the Fisheries Forum on 25 April and the South Asia Mini-Symposium on 26 April. The Fisheries Forum drew attention to the various dimensions of interactions between fisheries and conservation. The participation of a diverse range of participants, including representatives of resource dependent livelihood communities and conservationists, was instrumental in achieving the objectives of conducting the forum; that of enabling greater interaction between participant groups with

species conservation objectives and those with an interest in fisheries and highlighting the culture and diversity of various South Asian fisheries to promote awareness of its multifaceted complexity. The Organising Committee of the Fisheries Forum comprised a range of partner organisations including Dakshin Foundation, Bangalore, Foundation for Ecological Research, Advocacy and Learning (FERAL), Pondicherry, FishMarc, Trivandrum, International Collective in Support of Fishworkers (ICSF), Chennai, Kalpavriksh, the Tata Institute of Social Sciences and Duke University Marine Laboratory (USA). Aarthi Sridhar from Dakshin Foundation and Gomathy N.B. of the Tata Institute of Social Sciences facilitated the proceedings of the Forum. Dakshin Foundation and FERAL also organised a Culture of Fisheries Exhibition with financial assistance from Fisheries Survey of India, SACEP, VJSMF and Sir Ratan Tata Trust.

The South Asia Mini-Symposium was held to fulfill a 'need to initiate integrated and coordinated conservation actions, and an opportunity to share and learn from each other'. The mini-symposium brought together stakeholders and representatives of conservation groups and research organisations from across the region. Invited presenters included participants from Bangladesh, India, Maldives, Pakistan and Sri Lanka. In addition to presentations made under thematic sessions, a review of existing platforms and opportunity to initiate fresh strategies towards collective regional action plans was undertaken by a panel of experts including representatives from key organisations from across the region.

Complementing the objectives of the mini-symposium to "promote regional cooperation in sea turtle conservation in South Asia", the Maldives government ratified the Indian Ocean –South-east Asian Marine Turtle Memorandum of Understanding (IOSEA), becoming the latest signatory to the memorandum.

Main Symposium Programme

The main symposium sessions were held between 27-29 April at the Kala Academy, with parallel

sessions running at the adjacent hall within the Academy complex. Symposium session titles, which were intended to reflect the theme of the symposium included: Ecosystem function, Conservation and Management, Foraging Biology, Fisheries and Bycatch, Health and Physiology, Research in Social Science, Environmental Impacts, Reproduction Biology, and Migration and Navigation. There were 119 oral, 30 speed (oral) and 222 poster presentations during the symposium. Dedicated “meet the author” poster sessions were held between 3:30 and 4:00 pm on 27 and 28 April.

The main symposium was opened by Kartik Shanker, and the sessions commenced on 27 April with a keynote address by Romulus Whitaker on ‘A brief history of sea turtle conservation in India’. Brian Bowen delivered the second keynote address on the afternoon of 27 April on the ‘Comparative phylogeography of sea turtles and marine fishes’. The sessions concluded on 29 April with a keynote address by Jack Frazier entitled ‘Marine turtle ecology and Heraclitus’ river’.

Lunch meetings held during the days of the symposium included an informal discussion group on sea turtle genetics coordinated by Nancy Fitzsimmons, a meeting on ports and shipping coordinated by Teri Shore and the IOSEA MoU meeting conducted by Douglas Hykle. Rod Kennet from North Australian Indigenous Land and Sea Management Alliance (NAILSMA) held a workshop over lunch about the working of the software CyberTracker. This is being used by a network of indigenous ranger groups across northern Australia supported by NAILSMA and partners, for sharing experiences, learning and tools across northern Australia.

Petitions

The venue and programme also allowed groups and individuals to present petitions on issues that were of immediate and serious concern. The objective of providing such a space was to enable groups to showcase causes that they have been working towards and garner the support of the international community present at the event. A petition by a collective of individuals and organizations

addressed to the Minister for Environment and Forests, Government of India, Mr. Jairam Ramesh expressed serious concern over the proliferation of large-scale coastal development in the close vicinity of ecologically critical coastal areas, and called for protection of such areas by introducing effective legal safeguards. In particular, it asked that no ports be permitted within 25 km of olive ridley turtle mass-nesting areas and other important feeding, migratory and refuge habitats. The other key demand was for a no-development zone for all industrial activities for at least a 10 km radius around the olive ridley mass nesting beaches in Orissa. Over 300 participants present at the symposium signed this petition. The copy of the letter enclosing the petition was uploaded by the Ministry of Environment & Forest on its website. The Minister has acknowledged receipt of the petition in a meeting with president of the ISTS and promised to look into the issues and concerns raised and to take action in this regard.

The Archie Carr Student Awards

Eight out of a total of 109 student presentations were selected for the Archie Carr Student Award under the categories of best (and runner-up) oral presentations in biology and conservation and best (and runner-up) poster presentations in biology and conservation. The student awards this year were sponsored by the Marine Turtle Conservation Act Fund of the US Fish and Wildlife Service and the National Centre for Biological Sciences, India.

Media

The event was covered by both local and national level newspapers and television channels. A press conference held on 29 April provided the opportunity for the ISTS to voice its concerns with regard to sea turtle conservation in India and the importance of convening this symposium in India. Jack Frazier and B.C. Choudhury, Programme Advisors of this year’s symposium, were present at the press conference and provided important insights highlighting the relevance of the theme of the symposium and the need to broaden approaches to sea turtle conservation in the region to include eco-system and social dimensions of conservation interventions. A number of articles in newspapers

and online magazines have appeared since the symposium and we are hopeful that this will help draw attention to issues that were highlighted at the event.

Vendors

Vendor and exhibition stalls were set up at the poster exhibition venue. International vendors included CLS-ARGOS, Telonics, Wildlife Computers, Marine Life Alliance, Sirtrack and SWOT. Exhibition stalls were also set up by local organisations like the TREE Foundation, Foundation for Ecological Research, Advocacy and Learning (FERAL), Visakha Society for Protection and Care of Animals, the Wildlife Institute of India, Dakshin Foundation and others.

Social evenings

The ISTS welcomed participants to the symposium on the evening of 26 April at the out door venue of the Hotel Cidade de Goa. A local Goan band played popular Goan music adding their own flavour to the local hospitality in welcoming participants from all over the world. Drinks were sponsored on all evenings by the hotel. The farewell banquet was held at the Grand Sala at the Hotel Cidade de Goa. The evening commenced with the distribution of the Archie Carr Student Awards and the ISTS Special Awards. The President's farewell speech and vote of thanks was followed by the handing over of the Presidential trowel to the incoming ISTS President Jeffrey A. Seminoff.

The Chronic Blues Circus Band, an ensemble band from Bangalore, added the final twist of fun and colour to the day's events. Despite the sweltering heat and the packed schedule of the preceding days of the events, spirits were kept high and a special thanks is due to the managing staff of the Cidade de Goa hotel for their service and for the Indian and traditional Goan cuisine and refreshments.

ISTS Awards

The ISTS President's Award to an organization was presented jointly to the Trust for Environmental Education (TREE Foundation) in recognition of their work with fishing communities and sea turtle

conservation in south India and the Students' Sea Turtle Conservation Network in recognition of their work on sea turtles in Chennai and for inspiring students to work in ecology and conservation. The individual awards went to Saw Agu in recognition of his work on sea turtle monitoring and conservation in the Andaman and Nicobar Islands, to Kalakar 'Kalia' Behera and Dambarudhara Behera in recognition of their work on sea turtle monitoring and conservation in Orissa, representing the contributions of the field assistants at the three mass nesting beaches in Gahirmatha, Rushikulya and Devi River Mouth.

The ISTS Champion's Awards were presented to Daniel William, in recognition of his contributions and lasting impact on sea turtle conservation in French Guiana, Satish Bhaskar, in recognition of his pioneering surveys and research on sea turtles in South and Southeast Asia and the Turtle Conservation Project, Sri Lanka, in recognition of their contribution to sea turtle conservation and their work with coastal communities in Sri Lanka.

The ISTS Lifetime Achievement Award was presented to Dimitris Margaritoulis for his significant impact on sea turtle biology and conservation through the course of his career.

The Awards Committee, comprising elected members of the society, and chaired by Karen Arthur, worked hard to consider deserving individuals and organisations that were nominated for the ISTS Awards this year.

Silent and Live Auction

As is a tradition of the ISTS's fund raising efforts at each year's symposium, a silent and live auction event was held at this year's symposium. A spectacular range of items which included showpieces, mobiles, items of clothing, etc. were brought by participants from around the world were displayed at the silent auction, held at the Kala Academy during 27-28 April, and the live auction night held on the evening of 28 April at the Cidade de Goa hotel.

Spirits were not dampened by an unexpected downpour on the evening of the live auction, and the venue had to be shifted indoors. Special thanks are

due to Jennifer Homcey and Narissa Bax and their dedicated team of volunteers for this outstanding effort, and to Rod Mast, our live auctioneer.

Travel grants

The ISTS raised \$ 113,700 towards travel grant support this year. \$ 49,916 was disbursed as cash awards to 172 participants and free accommodation for the entire duration of the symposium was provided to 327 participants, the most at any symposium thus far. The tireless efforts of Hoyt Peckham (Travel Chair) and the regional travel chairs made sure that all deserving participants could avail of the travel award. Brian Wallace did an excellent job of coordinating travel award disbursements between regional travel chairs and travel award recipients on site. The regional travel committee comprised of Aliko Panagapolou (Europe), Angela Formia and Manjula Tiwari (Africa), Nicolas Pilcher (Asia/Pacific), Karen Eckert (Caribbean), Alejandro Fallabrino (Latin America), Kartik Shanker (India/South Asia) and Bryan Wallace (USA/Canada).

Local participation

With over 250 participants from India, and 53 from our neighbouring countries of Sri Lanka, Myanmar, Bangladesh and Pakistan, this year's symposium achieved one of its primary objectives, that of enabling the participation of as many individuals as possible from the region. The registration fee for students and the low-income category was substantially reduced, and travel grants were provided to support travel of as many as 80 participants from south Asia (including India).

Partners

Unique to this year's symposium was the range of partner organisations that helped to host the event. The Turtle Conservation Project in Sri Lanka, Marine Life Alliance and Centre for Advanced Research in Natural Resources and Management (CARINAM) in Bangladesh, WWF-Pakistan and Marine Research Centre in Maldives were regional partners at the event. Apart from their efforts at raising funds towards travel support for participants from their respective countries, these organisations

also helped in spreading information about the symposium, and ensuring adequate representation of individuals and organisations who had not previously had the opportunity to attend the ISTS's annual symposium.

Over 25 organisations in India partnered in the event. The National Centre for Biological Sciences, FERAL, the Centre for Ecological Sciences at the Indian Institute of Science and Dakshin Foundation contributed significantly to the planning and hosting of the event. A special mention must be made of the staff at the Madras Crocodile Bank Trust, a key local partner organisation, for their consistent support and for Dr. Gowri Mallapur's excellent assistance with the administrative tasks both prior to and at the symposium.

Sponsors and donors

The International Sea Turtle Society and the local organizing committee is grateful to the support provided by our international donors and sponsors, including many of our annual sponsors who supported us despite the economic recession. In particular, we thank the Western Pacific Regional Fishery Management Council (WestPac), the Marine Turtle Conservation Act Fund of the US Fish and Wildlife Service, National Oceanographic and Atmospheric Administration (NOAA, USA), NAILSMA and Disney's Animal Programs for support towards travel and accommodation grants provided to grant recipients. Wildlife Computers, Sirtrack, Telonics and the UNEP – Abu Dhabi provided support towards associated workshops and regional meetings.

The Ministry of Environment and Forests contributed our largest grant this year. We are particularly grateful to Minister for Environment and Forests Jairam Ramesh for supporting the symposium. The Council for Scientific and Industrial Research and the Departments of Science and Technology and Biotechnology of the Ministry of Science and Technology, Government of India also contributed towards travel awards, venue rentals and printing expenses. The Department of Science and Technology of the State Government of Goa and the Goa Tourism Development Corporation Ltd. were

also key supporters and sponsors of the event.

Our major corporate sponsors included Reliance Industries Ltd., USV Limited, Sesa Goa, the Indian Farmers Fertilisers Cooperative Ltd (IFFCO), Ambuja Cements and ABG Shipyard. Institutions and organizations that provided generous donations included National Centre for Biological Sciences, Navajbai Ratan Tata Trust, Fishery Survey of India, South Asia Cooperative Environment Programme (SACEP), Ashoka Trust for Research in Ecology and the Environment, Vasanth J. Sheth Memorial Foundation and Foundation for Ecological Security. Our tea and coffee break sponsors included EID Parry (India) Ltd., Unibic India and CLS-America. We are also grateful to various individuals who contributed through room and coffee break sponsorships. In particular we thank Kellie Pendoley, Nancy FitzSimmons and Wildlife Computers for their generous contributions towards room sponsorships.

ISTS Business meeting

The ISTS Business Meeting held on the afternoon of 29 April was attended by about 134 members. The opening statement by the President was followed by presentations of the Treasurer's Report by Terry Meyer and Michael Coyne, the Travel Committee Report by Bryan Wallace (standing in for the Travel Committee Chair, Hoyt Peckham) and the Awards Committee Report by Nancy Fitzsimmons (standing in for the Awards Committee Chair, Karen Arthur). The Director of Information Technology, Michael Coyne was reappointed by the President to serve another five year term.

ISTS Elections: The following candidates were announced as winners of the ISTS elections: Ana

Barragan for President Elect (2010 – 2011), Roldan Valverde and Cynthia Lagueux for the two Board of Directors positions, Terry Meyer for Treasurer (currently serving as Interim-Treasurer), Manjula Tiwari for Secretary, and Pam Plotkin and Kate Mansfield for the Nominating Committee. Jeff Seminoff, President of the ISTS for 2010 - 2011 announced details of the upcoming 2011 Symposium in San Diego, USA.

Resolutions: There were no resolutions passed at the 2010 Business Meeting.

Acknowledgments

Several individuals contributed countless hours of time and effort to ensure the success of this symposium. Aarthi Sridhar and Meera Anna Oommen were instrumental in raising funds for the event and overseeing organizational aspects. Individual contributions from Anand Pakkurti, Chico D'Lima, Donna Kwan, Elena Finkbeiner, M.M. Venkatachalam, Michael D'Souza and Wesley Sunderraj towards raising funds from various sources deserve special thanks. Maya Ramaswamy & Arjun Shanker provided beautiful artwork and design for the symposium. The students at the Centre for Ecological Sciences made a fantastic team and ensured that the programme went off without a glitch. BC Choudhury and Jack Frazier guided the entire symposium, and Brendan Godley and Matthew Godfrey chaired the programme. Michael Coyne and Manjula Tiwari were stellar in their roles as always, and all my colleagues at the ISTS supported us in conducting a successful symposium. Finally, we thank Seema Shenoy and Naveen Namboothri for being the backbone of all the planning and execution for the symposium.