

Indian Ocean – South-East Asian Marine Turtle Memorandum of Understanding

2009 Year-End Review and Look Ahead



**Compiled by Douglas Hykle
IOSEA Coordinator / Senior CMS Advisor
Bangkok, January 2010**

IOSEA 2009 Year-End Review and Look Ahead

A tour of the regions

We begin this review of 2009 with a tour of each of the four IOSEA sub-regions (Western Indian Ocean, Northwest Indian Ocean, Northern Indian Ocean and South-East Asia +) to identify some of the interesting events and issues that came to light during the year.

The **Western Indian Ocean (WIO)** sub-region received special attention in 2009, thanks in part to the activities of the WIO Marine Turtle Task Force chaired by Dr Ronel Nel (South Africa). A week-long “e-conference” was organised in February to identify issues of concern to task force members. In August, a number of informative WIO turtle-related meetings were organised in the margins of the successful WIOMSA Scientific Symposium, held in La Réunion. The WIO region also featured prominently on the IOSEA website, thanks to a comprehensive overview of each member country presented in the Profile of the Month for September. This synopsis was aided by a concerted effort made in 2009 to update the national reports of most of the countries of the sub-region.

There were many positive developments in individual WIO countries as well. South Africa’s world class conservation and research activities continued in earnest; and 2009 saw the formal establishment of Africa’s first and largest transfrontier marine conservation area, connecting South Africa’s iSimangaliso Wetland Park with the Ponto de Ouro Marine Protected Area in Mozambique. French colleagues in La Réunion began a two-year project known as TORSOOI to centralise and standardise available marine turtle data from the participating sites into a common online database and Geographic Information System (GIS). In April, Kenya organised a successful National Sea Turtle Stakeholders Workshop, as part of an ongoing participatory process to develop a comprehensive ‘Sea Turtle Conservation and Management Strategy’ for the country. Interest in marine turtle conservation remains high in Comoros, as evidenced by the organisation in Itsamia of a Marine Turtle Week in May.

Not all of the reports coming out of the Western Indian Ocean were positive though. As reported in April, turtle populations along the northern coast of Somalia and near its southern border with Kenya are apparently being heavily exploited by local fishermen with few alternatives to earn a living.

* * * * *

While there is less news to report here from the **Northwest Indian Ocean**, this is to some extent an artefact of news gathering that is focussed almost entirely on the English language, with the unfortunate exclusion of developments that might be reported on in other languages, including Arabic. Nevertheless, we learned in March of plans of the Environment Agency-Abu Dhabi to greatly increase the boundaries of a marine protected area that provides foraging grounds for endangered hawksbill turtles and other marine life. Incidentally, during the course of 2009 the United Arab Emirates added many sites of importance for marine turtles to the IOSEA Online Reporting Facility. In April, Qatar’s Ministry of Environment announced the initiation of a dedicated marine turtle conservation programme to be implemented by Qatar University’s Environment Study Centre. The Sultanate of Oman continued its productive collaboration with counterparts in the United States; and initiated a ground-breaking assessment of light pollution at its premiere protected area for marine turtles. Eritrea’s Ministry of Marine Resources continued its efforts to sensitise the public about marine turtle conservation, in response to increased hunting and domestic trade in turtle meat. In another positive development in that country, Eritrean science graduates have been recruited and trained to serve as onboard observers on shrimp/fish trawlers. Turtle conservation efforts continued in the Islamic Republic of Iran and sea turtles feature prominently in new Iranian stamp series released in 2009.

* * * * *

As usually happens, the complex situation in India's northeastern coastal state of Orissa dominated the news headlines in the **Northern Indian Ocean** throughout 2009. The headlines included reports of illegal fishing during the waning days of the 2008/2009 nesting season, the new arrival in November 2009 of turtles at the three most important coastal rookeries, as well as details of government-imposed fishing bans and the inevitable arrests for violations of the prohibition – interspersed with periodic articles about the plight of traditional fishermen, questions about the effectiveness of enforcement efforts and controversies concerning construction of a large port at Dhamra. In Bangladesh, concerns were voiced about the future of the unique biological treasures of St Martin's Island, which has seen exponential growth of human settlement in recent decades. There were reports in February of hundreds of dead turtles washing ashore in that area, thought to be victims of entanglement in fishing gear. Similarly, in September, an unusually high number of dead turtles were reported to have washed ashore on Sri Lanka's southwest coast, indicative of increasing incidence of entanglement in coastal gill nets.

* * * * *

The so-called **"South-East Asia +"** region, which includes Australia and the United States, is one of the largest and most diverse. In Australia, the year began with reports in February of fewer than usual numbers of turtles nesting in the Bundaberg area, but ended with a celebration of the highest number of loggerhead turtles laying at Mon Repos in the past 25 years, typical of the large annual fluctuations in turtle nesting patterns. Further north, hunting is believed to have contributed to green turtle numbers falling by 80 per cent in the past five years at Green Island in the Great Barrier Reef. In July, it was reported that Brunei Darussalam (not yet an IOSEA signatory) would establish a new turtle sanctuary and conservation programme, including construction of a dedicated centre on 5.33 hectares of land located at Meragang Beach in Muara. The important role of Chinese nationals in the illegal exploitation of turtle resources in South-East Asia was highlighted once again in April, with the arrest seven of individuals caught poaching green sea turtles in Philippine waters off northern Palawan. The pillaging of Indonesia's green turtles also continued unabated in 2009, with the discovery in November of a long net thought to have drowned more than 100 turtles in the Derawan Archipelago. Also in Indonesia, the Government rejected a proposal of the Governor of Bali for a quota of 1,000 green turtles to be sacrificed each year for Hindu ceremonial purposes. A glimmer of hope for Malaysia's last leatherback turtles faded when statistics released in February revealed that none of 500 eggs laid in nine nests over the previous year was fertile, despite efforts to incubate over 400 of the eggs.

The Philippines' Turtle Islands made headlines in December amid reports that one of the islands -- Great Bakungan – had been illegally sold. The government had declared the island group a protected area and turtle sanctuary in 1996 to guarantee the continued existence of the green sea turtles and their nesting sites. In January, WWF launched the second phase of its "Marine turtle bycatch and longline observer" programme in Viet Nam, which included training for local fishermen. However, in May, the wildlife trade monitoring network known as TRAFFIC released the findings of an important study which found that marine turtles were vanishing from Vietnam's waters and that illegal trade was largely to blame. In March, there was a similarly pessimistic assessment from Papua New Guinea, where leatherback nesting in one area was reported to be greatly reduced due to killing of adults and over-collection of eggs. More positively, the Government of Timor-Leste announced plans to establish a responsible tourism project, centered on marine turtles, on the island of Atauro north of Dili, to halt the decline of hawksbill and leatherback turtles which are a popular food source for local residents.

Other activities/issues making the headlines in 2009

There were numerous reports of stranded and rescued turtles in many countries across the IOSEA region in 2009 – notably in Australia, New Zealand, Philippines, Thailand and United Arab Emirates, where numbers of stranded turtles were particularly high. Interestingly, reports from the Philippines often mentioned the cooperation of fishermen in the release of accidentally caught turtles. More generally, some of the reported incidents of rescued turtles mentioned lengthy rehabilitation efforts, including the fitting of artificial prosthetic flippers in some cases. While perhaps interesting from a technological or an animal welfare perspective, such reports may arouse ethical concerns (eg. as to the appropriateness of providing such treatment to injured turtles in the face of shortages of prosthetic limbs for human amputees).

The ceremonial release of turtle hatchlings (and occasionally juveniles and adults) was often used as a backdrop for official publicity and, to some extent, public awareness-raising initiatives in 2009. Notwithstanding their questionable conservation value, there were many such examples reported by the media (eg. in Brunei, India, Malaysia, Philippines, and Thailand).

Some of the reporting in 2009 reflected a growing awareness of emerging issues related to marine turtle conservation, such as the problem of disorientation presented by artificial lighting, as well as potential climate change impacts on turtle populations, both direct and indirect (eg. related to the health of coral reefs).

Lastly, but not least, there were a few stories from 2009 worth mentioning simply because of their “wow” factor – for instance:

- Australian genetics research confirming the presence of loggerhead turtles from Australia in the waters of the eastern Pacific off Chile and Peru;
- the satellite tracking of a leatherback turtle from KwaZulu-Natal, South Africa, to a location near St Helena island in the Atlantic Ocean;
- the return to a Mon Repos (Australia) beach of a loggerhead turtle for a 10th documented nesting season since she was first tagged there an incredible 33 years ago; and
- light-hearted publicity for the French language version of the IOSEA Marine Turtle DVD, which was taken into ‘Zero-Gravity’ by a European Space Agency Astronaut.

Environmental calamities and habitats at risk

On a more serious note, 2009 had its fair share of environmental calamities, with real or potential harm to marine turtles and the habitats on which they depend. In March, oil from a damaged ship fouled dozens of kilometres of beaches on Australia's east coast in what officials said was likely to be Queensland's worst environmental disaster. In India, in May, an undersea pipeline carrying crude oil from Paradip port – situated 15 km away from Gahirmatha wildlife sanctuary – broke and reportedly released 2-3,000 tons of crude into the sea. Just four months later, a Mongolian vessel carrying about 25,000 tonnes of iron ore fines and more than 900 tonnes of furnace oil capsized in the harbour of the same port. Fortunately, disaster was averted as the oil was eventually pumped out over a two month period. Finally, in August, a major leak from a Thai-owned oil well threatened marine life in the Timor Sea off northwest Australia. The oil rig platform erupted in flames during lengthy efforts to plug the well, which was reported to have leaked as much as 30,000 barrels of oil before the spillage was contained.

The year also saw a number of major development projects with potentially significant ramifications for turtle populations put forward, approved or deferred for further study. In April, Australia's Environmental Protection Authority approved a \$AUS 50 billion dollar Gorgon liquefied natural gas plant project off Western Australia, close to important flatback turtle rookeries. In India, concerns were raised about the impact of the proposed expansion of Gopalpur port located about 17 km from the mouth of Rushikulya River, considered to be the second largest nesting site of Olive Ridley turtles in the world. In December, IOSEA profiled the biologically-rich Sonadia Island in Bangladesh, which is being considered as the possible location of a new deep-sea port. Further afield, in Guam, the environmental cost of the planned construction of a massive pier for military aircraft carriers was debated, over concerns about loss of habitat for hawksbill and green turtles. On a much smaller scale, Indian conservationists working to protect Olive Ridley turtles near the Rushikulya rookery worried about the construction of a new lighthouse which could disorient nesting turtles and their hatchlings.

Not all of the development-related news in 2009 was negative. In Australia, plans for a \$AUS 1.15 billion tourist resort were rejected because of its potential impact on marine life in the Great Barrier Reef. And, in Malaysia, public outcry over plans to redevelop Pulau Upeh – one of the country's top hawksbill turtle nesting sites – caused the state government of Malacca to defer the project, pending the outcome of environmental and fisheries impact assessments.

IOSEA institutional progress in 2009

The IOSEA Marine Turtle MoU welcomed two new Signatory States – France and Mozambique – to the family, effective 1 March 2009, bringing to 30 the current number of IOSEA members. Their important addition leaves very few countries with significant coastlines in/around the Indian Ocean that have yet to sign the agreement.

The first-ever IOSEA Strategic Planning session was organised in Brisbane, in February, in the margins of the International Sea Turtle Symposium, with participation of IOSEA Focal Points, Advisory Committee members and other experts. The report of the gathering contains valuable recommendations for further consideration by an open-ended working group.

A new Technical Support and Capacity Building Programme, launched in September, will benefit many IOSEA Signatory States that elect to take advantage of the assistance on offer. So far about a half-dozen eligible countries have applied for assistance, which is to be delivered mainly through IOSEA Advisory Committee members who have generously volunteered their services.

The United States' Focal Point collaborated with the Secretariat and members of the Advisory Committee to produce draft Terms of Reference / Guidelines for IOSEA Focal Points and Sub-regional Coordinators, with a view to clarifying the roles and responsibilities of these key individuals in relation to IOSEA MoU implementation. The texts – which were circulated for comment in November – will be further developed and refined over the coming year prior to their formal adoption by the next Meeting of the Signatory States, in the latter part of 2010.

An intersessional working group on the 'Proposal for a network of sites of importance for marine turtles in the IOSEA region' held its first meeting by teleconference in December. The aim was to chart a course for completion and presentation of a final proposal over the coming year.

Over the course of 2009, ties were strengthened with the Indian Ocean Tuna Commission (IOTC), which adopted an important resolution on marine turtle conservation during its deliberations in April. The IOSEA Secretariat also participated in inception workshops for two new FAO/GEF projects that may benefit marine turtle conservation in Asia: one for the "Bay of Bengal Large Marine Ecosystem Project", and a second for the "Bycatch Management and Reduction of Discards in Trawl Fisheries" project.

Knowledge Management / Information Exchange

The Secretariat continued to develop the IOSEA website as a rich source of information and practical tools for the benefit of turtle practitioners around the region. The creation of a new Satellite Tracking Metadatabase, the development of a comprehensive Bibliography Resource for the Western Indian Ocean, and additions to the Projects Database were among the other innovations and enhancements realised in 2009.

The IOSEA Satellite Tracking Metadatabase warrants a special mention, given the importance and relatively high cost of this increasingly utilised technology to elucidate the migration and behaviour of marine turtles. By the end of 2009, the database contained records of well over 100 projects that have tracked the movements of nearly 600 individual marine turtles in and around the Indian Ocean since 1990. At years' end, research projects in nine countries were actively tracking satellite transmitters originally deployed on 150 turtles of all six marine turtle species found in the IOSEA region.

The Bibliography Resource now contains over 550 English, French and Portuguese references (from 1907 to the present) relevant to marine turtle conservation in the Western Indian Ocean. The Projects Database has information on about 135 projects undertaken by NGOs and governments in 29 countries around the Indian Ocean – South-East Asia region.

Other additions/improvements to the IOSEA website included a new webpage on turtle bycatch mitigation directives, expansion of the 'Frequently Asked Questions' section, updates to the popular "Species Overviews" and "Flipper tag series", and publication of results of a survey of National Sea Turtle Committees / Networks.

Ongoing material support

All of this work would not be possible without the continuing voluntary contributions from IOSEA Signatory States, as well as facilities and services provided by the UNEP Regional Office for Asia and the Pacific, in Bangkok. The Secretariat would like to acknowledge here the generous financial support from Australia, South Africa, United Kingdom and United States, whose contributions have underpinned the IOSEA programme for many years. We are pleased also to recognise India, Myanmar, and the Sultanate of Oman – which contributed to the IOSEA Trust Fund for the first time in 2009, in response to the appeal collectively agreed by the IOSEA membership in Bali in August 2008; and to note with appreciation further pledges of support from France, Mauritius and Thailand.

Additionally, the Secretariat has sought and secured funding from the United States' Marine Turtle Conservation Fund, which has been an essential source of finance for the organisation of Meetings of the IOSEA Signatory States and, more recently, the operation of the IOSEA Technical Support and Capacity Building Programme.

Looking ahead in 2010

Work on a region-wide IOSEA assessment of loggerhead turtle conservation, led by Dr. Mark Hamann with support from other Advisory Committee colleagues, is expected to be completed in the first half of this year. The compilation will draw on information available in the Online Reporting Facility, as well as other information sources within and outside the Advisory Committee. The project will focus on countries with nesting and foraging populations of loggerheads and will also examine the potential impacts of climate change.

We can also expect to hear more in the coming months about the formal implementation of a project developed last year under the Southwest Indian Ocean Fisheries Project (SWIOFP), with an

important marine turtle component coordinated by Mauritius, which will strengthen IOSEA implementation in the WIO sub-region.

The negative impact of light pollution on marine turtles is a pervasive problem, not only in the IOSEA region, but worldwide. The ground-breaking mitigation activities proposed in Oman have stimulated the IOSEA Secretariat to initiate discussions with colleagues in the United Nations Environment Programme (UNEP) and its Division of Global Environment Facility Coordination (DGEF) to see whether there may be scope for addressing this problem within the framework of climate change adaptation / energy efficiency initiatives, which currently attract substantial funding from donor agencies.

Having made an important investment in the further development of the IOSEA website in 2009, there are no immediate plans for major revisions this year, apart from exploring the feasibility of introducing automated translations of some pages into other languages. Additionally, the Secretariat plans to have discussions with counterparts in the UNEP / World Conservation Monitoring Centre early in the year about upgrading the interface for the Marine Turtle Interactive Mapping System (IMapS). Once a cutting-edge application, IMapS is overdue to incorporate a number of technological advances that have come online in recent years.

The institutional development of the IOSEA Marine Turtle MoU will continue in 2010 as the ongoing Strategic Planning process gathers pace, the 'IOSEA Site Network' proposal is put in its final form, and the Term of Reference for IOSEA Focal Points and Sub-regional coordinators are finalised.

The Signatory States are due to meet for a sixth time during the course of 2010 – most likely in the last quarter of the year – and it is hoped that an interested Signatory will come forward in the next couple of months to offer to host the meeting; otherwise the venue will likely revert to Bangkok, the seat of the Secretariat.

Apart from this important meeting in the 2010 calendar, the International Sea Turtle Society will hold its annual symposium in Goa, India, towards the end of April 2010. This large gathering should provide an additional opportunity for IOSEA associates to hold side-meetings to discuss matters of relevance to marine conservation in general and IOSEA implementation, in particular.

Final words

If you have read this far, we hope you have enjoyed this overview of marine turtle conservation activities in and around the Indian Ocean in 2009. This account is inevitably incomplete since many other worthwhile and interesting activities must certainly have taken place in the region without being reported as widely as they should have.

We can only repeat a long-standing appeal to governments, organisations and individuals working on marine turtle conservation in the IOSEA region to provide the Secretariat with details of your endeavours from time to time, so that others can benefit from your experience and knowledge, and learn from your successes and occasional mishaps.

Best wishes for a productive and prosperous 2010.

Douglas Hykle
IOSEA Coordinator / Senior CMS Advisor
Bangkok, January 2010

Meetings organised and publications produced in 2009, with relevance to IOSEA

A number of meetings were held in 2009 of relevance to marine turtle conservation in the IOSEA region, some of which were attended by the Secretariat and written up on the IOSEA website. Among them:

- Technical Workshop on Mitigating Sea Turtle Bycatch in Coastal Net Fisheries, organised by the Western Pacific Regional Fishery Management Council (Honolulu – January)
- 29th Annual Symposium on Sea Turtle Biology and Conservation, and related meetings/workshops (Brisbane, Australia – February)
- 13th meeting of the Indian Ocean Tuna Commission (Bali, Indonesia – March/April)
- Kenyan National Sea Turtle Stakeholders Workshop (Mombasa, Kenya – April)
- World Ocean Conference (Manado, Indonesia – May)
- Workshop on regional cooperation to address direct capture of sea turtles, with a particular emphasis on South-East Asian waters (Kuala Terengganu, Malaysia – June)
- Sixth Scientific Symposium of the Western Indian Ocean Marine Science Association, and related meetings (St Denis, La Réunion – August 2009)
- Second Ministerial Meeting for the Coral Triangle Initiative (Solomon Islands – November)

Publications

A few publications of interest that were released during the course of 2009 and mentioned on the IOSEA website included:

- Report of the Fifth Meeting of the IOSEA Signatory States (Bali, Indonesia, August 2008)
- Report on the Third Regional Technical Consultation on Research for Stock Enhancement of Sea Turtles (SEAFDEC, Kuala Lumpur, Malaysia, October 2008)
- A Biological Review of Australian Marine Turtles (Dr. Colin Limpus / Queensland Environmental Protection Agency)
- The State of the World's Sea Turtles (SWOT) Report, Volume IV: "Discovering the Flatback - Australia's Own Sea Turtle"
- Marine Litter: A Global Challenge (United Nations Environment Programme - UNEP)
- Abandoned, lost or otherwise discarded fishing gear (UNEP/FAO)

Websites

The popular 'Useful Contacts' page of the IOSEA Website contains links to hundreds of organisations and associated websites of interest to IOSEA readers. By way of example, here are just a couple of well-maintained, informative sites from the Western Indian Ocean that caught our attention in 2009:

- Turtle monitoring around Mahe Seychelles with the Marine Conservation Society Seychelles
- Lamu Marine Conservation