

**Report of the Consultation on Needs and Mechanisms for
Regional Conservation and Management of Marine Turtles.
Perth, Western Australia, 19 – 22 October 1999**

EXECUTIVE SUMMARY

Representatives of nations from the Indian Ocean and South East Asian region met in Perth from 19 to 22 October 1999 to discuss the needs and mechanisms for regional cooperation in the conservation and management of marine turtles.

The nations represented were Australia, Bangladesh, Cambodia, Comoros, India, Iran, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Pakistan, Philippines, France (Réunion), Seychelles, Sri Lanka, Tanzania, Thailand, United Arab Emirates and Vietnam.

The meeting was also attended and advised by experts from a number of nations, regional and international organisations, namely the Convention on the Conservation of Migratory Species of Wild Animals (CMS), the World Conservation Union (IUCN), the IUCN Marine Turtle Specialist Group, the IUCN Commission on Environmental Law / Environmental Law Centre, the USA State Department and National Marine Fisheries Service, the ASEAN Marine Turtle Technical Working Group and the South East Asian Fisheries Development Centre.

Presentations identified the key biological characteristics of marine turtles that need to be considered in relation to their management and conservation. Participants exchanged information on the values of marine turtles to communities and nations in the region, the pressures facing marine turtles, and the policies, legislation and programs in place for conservation and management of marine turtles. Information was presented to the meeting on existing strategies and international agreements relevant to the conservation of marine turtles.

Participants discussed in some detail the range of actions for marine turtle conservation that could be taken through regional cooperation. The meeting examined possible frameworks for regional cooperation for marine turtle conservation, and identified the key features of effective regional cooperative arrangements for migratory species conservation.

Representatives of nations present at the meeting developed and adopted by consensus a resolution that nations in the region move towards an agreement that would at least initially be non-binding, that could be called the “Indian Ocean and South East Asian Regional Agreement on the Conservation and Management of Marine Turtles and their Habitats” (Attachment 1).

The representatives accepted the offer from the CMS Secretariat to table the resolution at the forthcoming CMS Conference of the Parties, and at the Convention on Biological Diversity Conference of the Parties in May 2000.

The representatives welcomed the offer made by Environment Australia to prepare a draft text of an instrument for further negotiation. As reflected in the resolution, the meeting agreed that a further meeting should be held in the first half of 2000 to discuss the instrument.

The representatives also welcomed the offers of assistance from the CMS Secretariat and the IUCN Marine Turtle Specialist Group to aid the process of developing an instrument.

Participants noted that in order to establish effective regional cooperation on marine turtle conservation, it would be necessary for nations to identify which agencies and officers would need to be involved in future discussions on these issues.

The meeting requested that Malaysia, with assistance from the IUCN, further develop a proposal to declare 2001 to be the Year of the Sea Turtle in the Indian Ocean and South East Asian region, for consideration at the next meeting.

Participants endorsed an initiative of the United Arab Emirates to organise a sub-regional meeting on the conservation of marine turtles for the North West Indian Ocean and adjacent seas, in collaboration with the CMS and IUCN. The meeting will be held in the United Arab Emirates in the first half of April 2000.

Participants also noted that the French Department of Réunion will host a meeting to discuss marine turtle conservation in the Western Indian Ocean in November 1999.

Participants thanked all those organisations and individuals who had organised, supported and contributed to the meeting, and looked forward to future cooperation for the conservation and management of marine turtles and their habitats.

LIST OF ABBREVIATIONS

ACCOBAMS	Agreement on the Conservation of Small Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area
ASEAN	Association of South East Asian Nations
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Wild Animals
FAO	Food and Agriculture Organisation
GCC	Gulf Cooperation Council
GEF	Global Environment Facility
IUCN	World Conservation Union
MoU	Memorandum of Understanding
MTSG	Marine Turtle Specialist Group (of IUCN)
SEAFDEC	South East Asian Fisheries Development Centre
TEDs	Turtle Excluder Devices
TIHPA	Bilateral Agreement for the Establishment of the Turtle Islands Heritage Protected Area
UNCLOS	United Nations Convention on Law of the Sea
UNDP	United Nations Development Program
UNEP	United Nations Environment Program

SUMMARY REPORT

Representatives of nations from the Indian Ocean and South East Asian region met in Perth from 19 to 22 October 1999 to discuss the needs and mechanisms for regional cooperation in the conservation and management of marine turtles. The nations represented were Australia, Bangladesh, Cambodia, Comoros, India, Iran, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Pakistan, Philippines, France (Réunion), Seychelles, Sri Lanka, Tanzania, Thailand, United Arab Emirates and Vietnam.

The meeting was also attended and advised by experts from a number of nations, regional and international organisations, namely the Convention on the Conservation of Migratory Species of Wild Animals (CMS), the World Conservation Union (IUCN), the IUCN Marine Turtle Specialist Group, the IUCN Commission on Environmental Law / Environmental Law Centre, the USA State Department and National Marine Fisheries Service, the ASEAN Marine Turtle Technical Working Group and the South East Asian Fisheries Development Centre.

DAY 1

The meeting was chaired by the Head of the Marine Group of Environment Australia, Dr Conall O'Connell, who opened the meeting and welcomed the participants. The meeting commenced with a presentation by Environment Australia, in which it was noted that this meeting could examine some key issues:

- firstly, whether we need to act to conserve turtles and their habitats, and why;
- secondly, whether action is required at local, national and regional scales; and
- thirdly, what key regional actions are needed, and how those actions can be coordinated and supported.

Members of the IUCN Marine Turtle Specialist Group then presented outlines of marine turtle biology and the migratory patterns of turtle populations in the South East Asian and Indian Ocean region. Available data on where in the region marine turtles nest, and the migratory patterns of adult turtles, are summarised in the maps at Attachment 2. It was noted that the maps do not show the distributions of hatchling and juvenile turtles, which travel much more widely around the region.

These presentations made it clear that there are several key characteristics of marine turtles that need to be considered in relation to their management and conservation. These characteristics are that marine turtles:

- are very depleted in numbers relative to their abundance earlier this century,
- migrate and disperse over large areas,
- have complex life cycles in which they
 - take decades to reach sexual maturity,
 - need an extended breeding life,
 - do not reproduce every year,
 - are temperature-dependent for sexual differentiation in hatchlings,

- comprise discrete management units which are shared over a wide area, and
- are subject to many and diverse causes of mortality.

As a result of these characteristics, there can be a delay of decades before the full impacts on turtle populations of harvesting or other activities become clearly visible to humans. Conservation actions consequently must also be carried out and evaluated over many decades.

In the afternoon, participants exchanged information on the values of marine turtles to communities and nations in the region, the pressures facing marine turtles, and the policies, legislation and programs in place for conservation and management of marine turtles. Following are summaries of the information presented.

Values

Broadly, marine turtles are of value to people in various nations and communities for:

- subsistence (meat and eggs),
- commerce (meat, eggs, crafts),
- tourism,
- cultural, mythological and religious purposes,
- perceived medicinal and aphrodisiac qualities,
- education, as a flagship species,
- indicating the state of health of marine habitats,
- helping to maintain healthy ecosystems,
- science and research, and
- as a significant component of marine biodiversity.

Pressures

Nations identified numerous threats and pressures on marine turtle populations and their habitats. Those pressures can be summarised by type as follows:

Natural threats:

- Predation
- Disease
- Flooding

Direct take:

There are subsistence and commercial harvests that target: eggs, meat, shells, oil, and other body parts for perceived medicinal and aphrodisiac values.

Commercial operations result in harvests that are many times larger than traditional subsistence takes of eggs or turtles.

Accidental take:

Many of the pressures on turtles are accidental side-effects of human activities. At sea, turtles are adversely affected by:

- incidental take in fisheries, including trawls, gillnets, longlines and shark control nets,
- ingestion of and entanglement in marine debris,
- pollutants such as oil, domestic sewage and hypersaline water, and
- boat strikes.

Habitat change and degradation:

On land, coastal development in all its forms is impacting seriously on marine turtle nesting habitat. These include:

- ports,
- sand mining,
- oil refineries,
- desalination plants,
- industrial and urban development,
- inappropriate management of nesting beaches and hatcheries, which reduces hatchling production and survival.

Light pollution on beaches from these activities results in hatchling disorientation and mortality.

Further inland, changing land use and deforestation in catchment areas lead to deteriorating water quality, affecting marine turtle foraging areas.

At a broader scale, threats to marine turtle populations include global warming, sea level rise, and erosion of nesting beaches.

Contributing factors:

Additional factors that contribute to declines in marine turtle populations include:

- insufficient information on their biology and conservation issues,
- lack of awareness about marine turtles and their habitats, where large areas are unsurveyed,
- uncontrolled tourism,
- insufficient funding for effective management,
- misdirected conservation approaches,
- lack of enforcement of existing regulations,
- people's attitudes that underlie human induced threats to turtles (some groups lack interest in or are hostile to changing their activities in order to reduce threats to turtles).

Policies, legislation and programs

Participants identified the legislation, policies and programs that are in place or proposed for the management and conservation of marine turtles in various countries within the region. The measures described included:

- recognition of the status of marine turtle populations by legally designating the species as either endangered, threatened or vulnerable,
- national and state / provincial legislation prohibiting the taking of marine turtles and eggs,
- declaration of sanctuaries, marine parks, nature reserves etc, as to provide legislative protection of nesting and foraging areas,
- ratification and implementation of CITES, CMS, UNCLOS and other international and regional conventions, bilateral and multilateral agreements, such as the ASEAN Sea Turtle MOU, TIHPA and the ASEAN Agreement on the Conservation of Nature and Natural Resources 1985,
- preparation of integrated plans for biodiversity conservation, turtle conservation and/or threat abatement,
- coastal zone management regimes, including building codes and requirements for environmental impact assessments of proposed coastal and marine developments,
- cooperation among government agencies, non-government organisations and stakeholders,
- public awareness and education programs,
- promotion of turtle excluder devices in relevant fisheries,
- permit conditions and codes of practice relating to fisheries and aquaculture practices,
- research and monitoring programs including basic surveys where needed,
- capacity building and training programs for research, management and law enforcement, and
- turtle hatcheries.

In outlining these measures, participants also identified a number of difficulties with implementing marine turtle conservation measures. Commonly, there were difficulties in achieving:

- effective enforcement of legal protection,
- sufficient resources for effective management and research,
- agreement to the declaration of protected areas,
- agreement to use turtle excluder devices or make other changes to fishing practices,
- effective controls on coastal developments, and
- effective management of hatchery operations.

DAY 2

The morning session on Day 2 was chaired by Dr Conall O'Connell, Australia. It comprised presentations and discussions on existing agreements and strategies relevant to marine turtle conservation, namely the:

- Memorandum of Understanding on ASEAN Sea Turtle Conservation and Protection;
- Convention on the Conservation of Migratory Species of Wild Animals (CMS);
- Inter-American Convention for the Protection and Conservation of Sea Turtles, and
- IUCN Strategies and Centre for Environmental Law.

The presentations are summarised at Attachment 3 to this report.

Participants then identified the issues relating to marine turtle conservation and regional cooperation that needed to be discussed further over the remaining two days of the meeting.

The afternoon session on Day 2 was facilitated by Mr Kevin Hiew, Malaysia, and the meeting considered what actions could be taken through regional cooperation. It was agreed that regional cooperation could facilitate all of the following actions.

1. Exchange of expertise, techniques and knowledge among parties

Participants highlighted the need in many countries to obtain more expertise and knowledge about marine turtles and management techniques. The meeting identified that the following activities would help the exchange of expertise and knowledge:

- Establishing a network, which could be
 - informal; or
 - formalised and resourced with coordinators; and could be
 - structured with sub-regional networks, each with a coordinator who meets and networks with other sub-regional coordinators.
- Ensuring that there is two-way exchange of information;
- Establishing a centralised data base and resource centre

2. Involving, training & educating communities

The meeting saw involving communities in the process as essential to effective conservation of marine turtle. Many comments were made, including:

- nations could exchange information about successful / best practice training and education programs;
- it is necessary to train conservation staff so they can in turn run training programs in their countries;

- regional as well as local public awareness programs could be run (e.g. Year of the Sea Turtle);
- funding is needed for training programs, and communities need assistance to apply for and obtain funding.;
- in addition to training, there is a need for institutional strengthening.

3. A. Collaborative research and monitoring on the status of marine turtles, the stability of marine turtle populations, key threats, and threat abatement measures; and

B. Standardising methods and levels of data collection and data dissemination among parties

It was agreed that further research and monitoring, such as tagging and genetic studies, were needed. There was considerable discussion on this need, and proposals included:

- Having regional, sub-regional and national coordinators to manage exchange of scientific information between and within nations;
- Using scientific committees, which can range from networks such as the IUCN Marine Turtle Specialist Group to formal committees established under binding agreements;
- Where data collection is already taking place, focusing effort on getting resources to collate and analyse the data and make it widely available on databases.

4. Collaboration with international organisations.

Marine turtle conservation could benefit from collaboration between nations and a number of international organisations, including:

- The annual international symposium on marine turtle biology and conservation, held in the USA – regional meetings could be linked to this;
- IUCN – can hold workshops and provide specialist technical advice;
- CMS – can help in developments of regional agreements and can provide limited financial assistance for small-scale catalytic projects, and can facilitate joint funding requests to multi-lateral funding agencies;
- UNEP – has a number of regional programs including a sea turtle program in this region;
- GEF – has significant financial resources and has explicit criteria which have to be met from program assistance;
- FAO and international fisheries bodies.

5. Conducting studies to identify the conservation status of shared populations of marine turtles

The meeting agreed that it was necessary to identify the gaps in information about the status of shared marine turtle populations, and to conduct studies to fill these gaps and build a clearer picture of the status of turtle populations.

6. Conduct studies to identify the threats to particular turtle populations, and best practices approaches to reducing threats

Participants noted their earlier discussions, on day 1 of the meeting, on the range of threats to marine turtles, including direct and incidental take, habitat degradation and indirect human impacts. A range of threat reduction measures exists, and it is necessary to identify which measures are most appropriate for particular local circumstances and activities. For example, there are various approaches that can be adopted to reduce incidental take in fisheries, including use of TEDs in trawl fisheries, more frequent checking of nets / lines in gillnet and longline fisheries, and seasonal or spatial closures of fisheries.

There was discussion of the benefits of exchanging technology such as Turtle Excluder Devices (TEDs) and information about how to introduce the technology to industry. An example was given of the Australian Northern Prawn Fishery, where international advice was obtained on TEDs, industry was given assistance with testing TEDs, and now the fishers have adopted mandatory use of TEDs. Australia could share information about the technology and how it could be introduced in an industry. Some other types of fisheries, such as fish traps, can also be modified to reduce turtle bycatch. It was noted however that in some small scale fisheries it would not be feasible to introduce TEDs, and there was a need to balance the economic need of the fishers with the conservation need of marine turtles.

7. Complementary implementation of threat reduction measures.

Participants again noted their earlier discussions on the range of threat reduction measures that could be adopted, as outlined under item 6.

In addition, it was noted that the FAO has done a lot of work on commercial fisheries, and that it is critical that this organisation and international fisheries bodies address turtle bycatch issues, in order to reduce bycatch on the high seas. Recognising that some actions have already been taken in this area, participants agreed that closer cooperation on a regional basis would be desirable. Some conservation efforts can help fisheries and marine wildlife conservation, for example sea grass conservation.

8. Control of trade in sea turtle products

There is a need to focus on domestic and international trade in sea turtle products, as commercial harvesting is being carried out at unsustainable levels. CITES regulates international trade in wildlife products, but not all nations in the region are signatories to CITES at present.

9. Assistance to nations to develop national programs for monitoring, threat abatement and habitat protection (e.g. nesting beaches, feeding habitat)

There was agreement that assistance to nations was needed for all aspects of marine turtle conservation and management.

In conclusion, participants noted that in order to establish effective regional cooperation on marine turtle conservation, it would be necessary for nations to identify which agencies and officers would need to be involved in future discussions on these issues.

The meeting participants acknowledged the able facilitation by Mr Hiew and expressed their thanks to him.

A dinner was held at Yanchep National Park on day 3 of the meeting, hosted by the Western Australian Minister for the Environment, the Hon Cheryl Edwardes MLA. Meeting participants resolved to record their thanks to the Minister for taking time from her busy schedule to attend and speak at the dinner. Participants also wished to thank to the Western Australian Department of Conservation and Land Management for organising and providing the dinner, and to thank the Aboriginal Rangers at Yanchep for presenting aspects of their culture to the group.

DAY 3

On day 3 of the meeting, participants considered:

- possible frameworks for regional cooperation for marine turtle conservation;
- the key features of effective regional cooperative arrangements for migratory species conservation; and
- a resolution that nations in the region move towards a non-binding “Indian Ocean and South East Asian Regional Agreement on the Conservation and Management of Marine Turtles and their Habitats”.

Possible frameworks

The possible frameworks that were considered by the meeting included both binding or non-binding agreements. One example outlined was the Memorandum of Understanding Concerning Conservation Measures for Marine Turtles of the Atlantic Coast of Africa under the CMS. Its features included that:

- the covering MoU is not very specific or detailed, the substantive actions appearing in a separate comprehensive Conservation Plan;
- this type of agreement is being applied to a wide range of taxa;
- this particular agreement does not mention sub-regional agreements, and it would be desirable to include this in an agreement relating to the Indian Ocean and South East Asian region; the ACCOBAMS agreement concluded under CMS provides a model for building on existing sub-regional initiatives.

The question of including other interested nations in an agreement, e.g. nations involved in fishing on the high seas as well as other nations prepared to support regional marine turtle conservation efforts; was discussed and there was general agreement that this was desirable. There was also consensus that it would be desirable for any proposed arrangement to recognise and not to duplicate existing arrangements.

Participants were in agreement on the objective of achieving more effective conservation of marine turtles. Participants discussed making a recommendation to move towards a non-binding agreement. There would be several steps to go through before concluding an agreement. Any agreement would not be imposed on countries but would involve nations expressing willingness to cooperate and coordinate on turtle conservation.

The purpose of an over-arching, non-binding agreement would be to link up various sub-regional activities. In addition to an over-arching regional agreement, sub-regions can also enter into their own arrangements, which could be binding agreements if the parties so desired. Smaller, bilateral agreements could also be linked through a regional agreement.

The meeting agreed to recommend that a regional agreement be developed. Participants noted also the need to carry out practical actions now and to build on existing sub-regional arrangements. In other words, countries in the region can pursue national and sub-regional programs but at the same time can also work towards a regional agreement.

Key features

The meeting then considered what would be the key features of an effective regional arrangement for marine turtle conservation. The following key features were identified:

1. participation of all nations within the Region in the ranges of the populations to be conserved, as well as other nations prepared to support regional marine turtle conservation efforts;

There was consensus that, given the migratory nature of turtles and the geographic ranges of marine turtle populations, inclusion of all Indian Ocean and South East Asian nations would be desirable. It was also agreed that nations outside that region could be invited to participate in the negotiation and agreement process.

2. global recognition of the regional arrangement;

It was accepted that the need for resources for turtle conservation was a key issue, and that it would be highly desirable for multi-lateral funding bodies to recognise the regional arrangement and to provide resources for regional turtle conservation programs.

3. conservation measures to mitigate threats to marine turtles and degradation of marine turtle habitat;

Participants agreed that this was a key feature, and that such measures should focus on efforts to mitigate the threats and pressures identified on Day 1 and listed on pages 5-6 of this report.

4. national commitments to implementing the regional arrangement;

It was noted that the regional arrangement should not place strain on nations' resources and that it should not impede existing programs. It was also noted that in order to achieve effective regional cooperation it would be necessary to obtain governmental agreement and commitment to such action.

5. clear links to administrative structures and financial resources, including to multi-lateral funding organisations, for implementing agreed actions;

It was noted that a linkage to the CMS could help to access multi-lateral donors. Participants discussed what administrative structures would be required at regional and sub-regional levels. An example was given of an agreement under CMS where sub-regional administrative structures provide the coordinating mechanism for the agreement (ACCOBAMS).

Existing administrative structures in this region include ASEAN, the Gulf Cooperation Council (GCC) and the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region. There would also need to be a whole-of-region coordinating and secretariat function to ensure communication between sub-regions on marine turtle conservation.

6. recognition of widely differing national and sub-regional circumstances, and flexibility to provide for a range of national and sub-regional approaches to turtle conservation;

The meeting agreed that it is essential that any regional agreement be flexible and recognise differing national and sub-regional circumstances. It was pointed out that some people, such as fishermen and artisans, will need alternative livelihoods if they are to stop collecting turtles or eggs, or significantly change their fishing practices. There is also a need to recognise indigenous subsistence and cultural harvests in some countries. Any changes to practices have to be made with an understanding of the impacts on communities, and with appropriate time frames and support mechanisms to enable communities to adjust.

7. provision for regular review of and improvement to strategies or agreements and their implementation.

Participants agreed that regular review would be a key feature of any effective regional agreement.

Towards a non-binding regional agreement

Having considered the key features of an effective regional arrangement for marine turtle conservation, participants then discussed in further detail how a non-binding regional agreement might be used as a framework. Issues considered were:

1. the role of a secretariat/coordinator;
2. implications of linkages with CMS;
3. linkages with other regions; and
4. details of what should be included in a resolution recommending a non-binding regional agreement.

1. The role of a secretariat

The role of the secretariat was discussed, and it was suggested that the secretariat could have a number of functions. They could assist with:

- information exchange and networking,
- development of project proposals in order to get coordinated projects across the region,
- seeking funds from donor organisations, and
- helping parties and sub-regions to come to consensus on priorities in particular action areas.

2. Linkages with CMS

The CMS Secretariat representative noted that the CMS can facilitate the development of the concept, and of a proposed agreement that could be taken forward to another meeting. He noted that generally CMS prefers that coordination and secretariat functions for regional agreements reside within the region, either within an inter-governmental body or in one of the parties to the agreement.

It was noted that some countries in the region have not ratified CMS. The CMS Secretariat representative clarified that countries were eligible to become parties to Agreements concluded under the auspices of CMS without necessarily becoming parties to the parent Convention.

3. Linkages with other regions

It was noted that linkage with CMS would facilitate linkage to other major regional marine turtle agreements and programs. The CMS can assist nations to put together an agreement, then once it is together, can ensure links to other regions globally.

There are cooperative marine turtle conservation arrangements underway in other regions: on the western coast of Africa, in the inter-American region, the Caribbean and South Pacific. Gradually global coverage is being achieved, and ideally the regions should be linked up in a common framework.

4. Resolution

The meeting then discussed a draft resolution that nations in the region move towards an agreement that would at least initially be non-binding, that could be called the Indian Ocean and South East Asian Regional Agreement on the Conservation and Management of Marine Turtles and their Habitats. The draft was revised based on detailed comments from participants, and prepared for further discussion on day 4 of the meeting. The CMS Secretariat representative offered to table the resolution at the CMS Conference of the Parties in November 1999.

Participants noted that, given the serious pressures on marine turtle populations, it was a matter of some urgency to take further action, so a time frame should be identified. Environment Australia offered to draft a document as a basis for negotiation, and it was suggested that a further meeting be held within 6 months so as not to lose momentum, whilst allowing governments time to fully consider the issues. The IUCN Marine Turtle Specialist Group and CMS Secretariat offered to assist with drafting.

The meeting also discussed what action could be taken prior to a further meeting, for example, declaring 2001 to be the year of the sea turtle in the Indian Ocean and South East Asian region. It was noted that similar action had been taken in the South Pacific recently, and had been effective in raising public awareness of marine turtle conservation issues.

DAY 4

On Day 4 of the meeting, participants considered the draft resolution in detail, amended it as required, and adopted the resolution by consensus.

The offer from the CMS Secretariat to table the resolution at the forthcoming CMS Conference of the Parties, and at the Convention on Biological Diversity Conference of the Parties in Nairobi in May 2000, was gratefully accepted.

The representatives welcomed the offer made by Environment Australia on day 3, to prepare a draft text of an instrument for further negotiation, based on the discussions and outcomes of the meeting. As reflected in the resolution, the meeting agreed that a further meeting should be held in the first half of 2000 to discuss the instrument.

The representatives also welcomed the offers of assistance from the CMS Secretariat and the IUCN Marine Turtle Specialist Group to aid the process of developing an instrument.

The meeting agreed that the suggestion that 2001 be declared the Year of the Sea Turtle in this region should be developed further by Malaysia with assistance from IUCN, for further consideration at the next meeting.

The meeting noted and endorsed the initiative of the United Arab Emirates to organise a sub-regional meeting on the conservation of marine turtles for the North West Indian Ocean and adjacent seas, in collaboration with the CMS and IUCN. The meeting will be held in the United Arab Emirates in the first half of April 2000.

Participants had also noted that the French Department of Réunion will host a meeting to discuss marine turtle conservation in the Western Indian Ocean nations in November 1999..

Participants considered the draft report of the meeting, and agreed that Environment Australia should proceed to complete the report, in consultation with individuals who had made presentations on day 2 of the meeting.

Participants expressed their thanks to Environment Australia for organising the meeting.

Environment Australia gratefully acknowledges the financial contributions and/or technical assistance of the following programs and organisations:

- *the Natural Heritage Trust of the Australian Federal Government;*
- *the United Nations Environment Programme / Convention on the Conservation of Migratory Species of Wild Animals*
- *the World Conservation Union (IUCN), the IUCN Marine Turtle Specialist Group and the Asia Pacific Centre for Environmental Law;*
- *the US State Department East Asia and Pacific Environmental Initiative; and*
- *the Western Australian Department of Conservation and Land Management.*



RESOLUTION
on developing an
Indian Ocean and South East Asian Regional Agreement on the
Conservation and Management of
Marine Turtles and their Habitats

Representatives of Australia, Bangladesh, Cambodia, Comoros, India, Iran, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Pakistan, Philippines, Reunion (French Department), Seychelles, Sri Lanka, Tanzania, Thailand, United Arab Emirates and Vietnam met in Perth, Australia from 19 to 22 October 1999.

The meeting was also attended and advised by experts from a number of nations, regional and international organisations, namely the Convention on the Conservation of Migratory Species of Wild Animals (CMS), the World Conservation Union (IUCN), the IUCN Marine Turtle Specialist Group, the IUCN Commission on Environmental Law / Environmental Law Centre, the USA State Department and National Marine Fisheries Service, the ASEAN Marine Turtle Technical Working Group and the South East Asian Fisheries Development Centre.

The representatives of the nations present:

Aware that the populations of the six species of marine turtles inhabiting the waters and beaches of the Indian Ocean and South East Asia (the Region) are listed as vulnerable, endangered or critically endangered on the IUCN Red List of Threatened Species;

Recognising that the marine turtles occurring in the Region migrate and disperse over vast distances, which makes their survival dependent on their conservation over a wide area and in a wide range of marine and coastal habitats;

Noting that marine turtles are generally protected by laws of the nations of the Region and that marine turtle conservation programs are being developed and implemented by many nations;

Noting that marine turtles are listed in Appendices of the Convention on the Conservation of Migratory Species of Wild Animals (CMS), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the ASEAN Agreement on the Conservation of Nature and Natural Resources, the African Convention on the Conservation of Marine and Natural Resources and the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region and related protocols;

Recognising that other international instruments, including the United Nations Convention on Law of the Sea (UNCLOS) and the Convention on Biological Diversity (CBD), have relevance to conservation of marine turtles and their habitats in the Region;

Aware that initiatives have been taken among groups of nations in the Region to develop cooperative marine turtle conservation programs;

Noting that communities in the Region value marine turtles for a wide range of reasons including: subsistence; tourism; cultural and religious purposes; medicinal purposes; education, as flagship species; as indicator species of the state of health of marine habitats; for helping to maintain healthy ecosystems; as a significant component of marine biodiversity; and for science and research;

Recognising that altering marine turtle management regimes has potential social and economic impacts;

Recognising the need to raise public awareness of the threatened status of marine turtles and the consequences of human activities for marine turtle populations and their habitats;

Aware that threats to marine turtles, including harvests of eggs and turtles, destruction or modification of habitats including through coastal development and pollution, tourism, hatchery operations, and incidental mortality of turtles including through fishing activities, could, if not properly managed, lead to further decline in marine turtle populations;

Concerned by the additional harm caused to marine turtles by actions that are not within the jurisdiction of nations in the Region, including pollution from ships and distant water fishing operations;

Acknowledging the need for shared responsibility for the conservation and sustainable management of marine turtle populations and their habitats;

Agreed that

- All parties would benefit from closer collaboration between coastal states of the Region as well as concerned states from outside the Region and relevant inter-governmental, non-governmental and private sector organisations, to improve the conservation of marine turtles and their habitats;
- An appropriate structure to facilitate this collaboration would be a new regional instrument, with a small secretariat to coordinate actions under the agreement, working with nations and with institutions in South East Asia, Australasia, the Northern Indian Ocean, the North West Indian Ocean and adjacent seas, and the Western Indian Ocean [as indicated in the attached diagram];
- Further consultations should take place to reach consensus on ways in which appropriate arrangements, mechanisms and structures to facilitate regional cooperation can best be established and developed;
- These consultations should aim to conclude an instrument (the Indian Ocean and South East Asian Regional Agreement on Conservation and Management of Marine Turtles and their Habitats), possibly under the CMS, that:
 - is non-binding, at least initially;
 - builds on the existing cooperative arrangements between nations in the Region; and
 - includes both parties and non-parties to the CMS, which is provided for under Article V of the CMS;

- These consultations should build on the discussions documented in the report of this consultation;
- The instrument could include the following key features:
 - participation of nations within the Region in the ranges of the marine turtle populations to be conserved, as well as other nations prepared to support regional marine turtle conservation efforts;
 - global recognition of the regional arrangement;
 - conservation measures to mitigate threats to marine turtles and degradation of marine turtle habitat;
 - national commitments to implementing the regional arrangement;
 - provision for public participation in the implementation of the agreement;
 - clear links to administrative structures and financial resources, including to multi-lateral funding organisations, for implementing agreed actions;
 - recognition of widely differing national and sub-regional circumstances, and flexibility to provide for a range of national and sub-regional approaches to marine turtle conservation;
 - recognition of the responsibilities of existing marine resource management organisations in the Region; and
 - provision for regular review of and improvement to strategies or agreements and their implementation;
- The instrument could make provision for the following cooperative actions, *inter alia*:
 - exchange of expertise, techniques and knowledge among nations, including information about best practice approaches;
 - cooperating on the following initiatives:
 - involving stakeholders in marine turtle conservation and management;
 - developing public awareness programs; and
 - developing retraining programs for communities and industry participants affected by changes in marine turtle management regimes;
 - collaborative research and monitoring on the conservation status of shared populations of marine turtles, and the stability of marine turtle populations and their habitats;
 - conducting studies to identify the threats to particular turtle populations, and best practice approaches to minimising threats, including:
 - developing mechanisms to minimise fisheries-related marine turtle mortalities, and

- developing mechanisms, such as environmental impact assessments and regional planning, to minimise the impact of coastal developments on turtles and their habitats;
- standardising methods and levels of data collection and data dissemination among parties;
- collaboration with international organisations;
- capacity building and strengthening existing institutions;
- developing best practice approaches to conservation;
- complementary implementation of threat reduction measures;
- assistance to nations to regulate trade in marine turtle products;
- assistance to nations to develop national programs for the protection, management and conservation of marine turtles and their habitats;
- Efforts should be made to ensure that the nations of the Region meet within the first half of 2000 with a view to drafting and negotiating an instrument.

Dated this 22nd day of October 1999

AGREEMENTS AND STRATEGIES RELEVANT TO MARINE TURTLE CONSERVATION

Memorandum of Understanding on ASEAN Sea Turtle Conservation and Protection

Mr Hashim Bin Ahmad, Regional Coordinator of the ASEAN Marine Turtle Technical Expert Working Group, presented information about this Memorandum of Understanding (MoU), which:

- is an agreement between nine governments;
- was made in 1997;
- aims to promote conservation of marine turtles and their habitats in the ASEAN region;
- recognises cultural, socio-economic and environmental differences, and the sovereignty of nations;
- designates Malaysia to be the coordinator of actions under the MoU, and requires the coordinator to report directly to the ASEAN Fisheries Working Group;
 - the MoU coordinator serves as the contact point for projects, organises input from member nations, and organises meetings of the Technical Expert Working Group;
- provides that each nation will nominate a country coordinator;
 - each country coordinator: collects and compile information on national activities on research and conservation; participates in workshops for formulation of research programs; and conducts research based on regional projects;
- requires each nation to nominate experts to form the Technical Expert Working Group to prepare a marine turtle conservation program and work plan, for endorsement by the ASEAN Fisheries Working Group and approval by the Senior Officials Meeting of the ASEAN Ministers on Agriculture and Forestry (SOM – AMAF);
- provides for close cooperation and collaboration with the South East Asian Fisheries Development Centre (SEAFDEC).

The MoU is open to any cooperation with other regional or international arrangements.

In July 1999 a workshop was held at which parties to the MoU met to exchange information and discuss the program.

Convention on the Conservation of Migratory Species of Wild Animals (CMS)

Mr Douglas Hykle, of the CMS Secretariat, presented information about the CMS, which:

- is a formal treaty, among governments;
- now has 65 member nations (Parties), with a further 15-20 non-Parties involved in specialised regional agreements developed under CMS;
- was adopted in 1979;
- aims to promote conservation of migratory species and their habitats (i.e. addresses a much more specific issue than the Convention on Biological Diversity does);

- complements CITES, which deals with international trade, whereas CMS deals with regional cooperative arrangements, as well as protection of endangered species at the domestic level;
- lists all marine turtles except flatbacks on Appendix 1 (endangered migratory species, requiring strict domestic protection);
- lists all marine turtles except flatbacks on Appendix 2 (migratory species which require or would benefit from international agreements for their conservation);
- has some, limited funding available for projects (e.g. genetic identification of marine turtle breeding stocks in Indian Ocean and Western Pacific; a GIS database of Indian Ocean nesting beaches; and an assessment of by-catch – fisheries interactions in Sri Lanka);
- has also co-sponsored marine turtle management training workshops;
- encourages nations to develop regional agreements for conservation of shared populations of species, and is flexible as to the type and content of regional agreements;
 - Nations that are non-Parties to the parent Convention can participate as full members of the regional agreements.
 - These regional agreements can be legally binding instruments, which take some years to develop and come into force, e.g. the African-Eurasian Migratory Waterbird Agreement.
 - Nations can also develop non-binding agreements under the CMS, such as MoUs and Action Plans, and these do not take as long to develop or get signed, e.g. the MoU Concerning Conservation Measures for Marine Turtles of the Atlantic Coast of Africa.
- has several benefits as a framework for regional agreements, including that, as a global convention, it assists coordination between, as well as within, regions, and it can assist in obtaining funding from organisations such as GEF and UNDP.

The decision-making body for CMS is the Conference of the Parties, which meets every three years to consider funding and species priorities. The next meeting is in November 1999, and will consider and adopt a strategic plan for the next five years, in which marine turtle conservation will figure prominently.

Inter-American Convention for the Protection and Conservation of Sea Turtles

Mr Bill Gibbons-Fly, of the US State Department, presented information about this Convention, which:

- is a formal convention, between governments in the Americas;
- was made in 1996, and is hoped to be ratified by the USA in 1999 (need to get it onto the Senate agenda to get it ratified);
- requires parties to implement a range of measures for marine turtle conservation in their jurisdiction, including:
 - prohibition of intentional capture, domestic or international trade in turtles, eggs and their products;
 - reduction of incidental capture, through use of gear including TEDs;
 - conservation of marine turtle habitats;
 - research, education and training;

- allows takes to satisfy economic subsistence needs of traditional communities, subject to a number of conditions, including reporting the takes to other parties;
- requires parties to meet annually for the first three years, then at least once every two years, to consider reports and issues under the Convention, and to make decisions by consensus;
- establishes a consultative committee, comprising a representative of each party, and three representatives each from the scientific community, the private sector and non-governmental organisations;
- the consultative committee meets at least annually, considers reports and makes recommendations to parties on measures to be adopted;
- establishes a scientific committee to make recommendations on scientific and technical matters;
- provides that a Secretariat can be established, and that a special fund can be established to meet the costs of the Secretariat and to assist developing nations to implement measures required under the Convention (but the source of money for this fund is not identified).

IUCN Strategies and Centre for Environmental Law

Professor Kheng-Lian Koh, Director, Asia-Pacific Centre for Environmental Law, presented information about IUCN strategies and the IUCN Centre for Environmental Law.

The Marine Turtle Specialist Group (MTSG) is part of the Species Survival Commission (SSC) of the IUCN (the World Conservation Union). It has about 300 members world-wide, with expertise in marine turtle research, education, management etc. The role of the MTSG is to provide advice on marine turtle research and conservation issues.

In 1995 the MTSG prepared a *Global Strategy for the Conservation of Marine Turtles*, which contains strategies for key action areas including research and monitoring, integrated management, capacity building, public awareness, community involvement and regional cooperation.

Since the publication of the global strategy, the MTSG has produced a regional strategy for marine turtle conservation in Western Indian Ocean and has drafted one for the Northern Indian Ocean. The MTSG has assisted in preparing a national plan for marine turtle management for Sri Lanka, which is being examined by that government with a view to implementation.

These documents are not legally binding, but they provide plans which nations can adopt and implement.

The IUCN Centre for Environmental Law assists the IUCN in working towards its objectives in a number of ways, including drafting legal instruments. An example is the ASEAN Agreement on the Conservation of Nature and Natural Resources. This is a framework agreement which deals with impact assessment, research, education and training, and capacity building. Articles of this Agreement that are relevant to marine turtle conservation are Articles 3, 4, 5, 13(1), 18, 19(3)(a) and (b), and Appendix 1. At present leatherback turtles are listed on Appendix 1, which needs to be updated to include other marine turtles. Member nations determine the specific actions they will take under this Agreement.