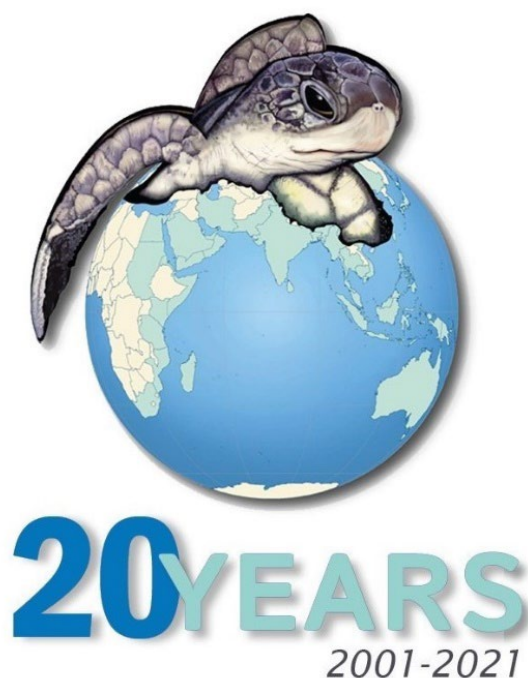


REPORT OF THE 9TH MEETING OF THE ADVISORY COMMITTEE

Online
15-19 March 2021



**Memorandum of Understanding on the Conservation and Management of Marine
Turtles and their Habitats of the Indian Ocean and South-East Asia**

Contents

Contents.....	1
1. Welcoming Remarks.....	2
2. Adoption of Agenda and Schedule.....	2
3. Review of Progress since AC8.....	2
3.1. Secretariat.....	2
3.2. Advisory Committee.....	3
4. Hawksbill Assessment.....	3
5. IOSEA-endorsed Research Projects.....	4
6. Plans for World Sea Turtle Day.....	5
7. Networks of Sites of Importance for Marine Turtles (Site Network).....	6
8. Capacity-building Strategy for 2021 and Beyond.....	8
9. Guidelines and Protocols for Data Collection and Management of Sea Turtles and their Habitats.....	10
10. Guidelines on Beach Management.....	11
11. Criteria for Identifying Habitats Critical for Marine Turtles.....	12
12. Species Assessment: Olive Ridley Turtles.....	13
13. National Reporting Format.....	14
14. Available Information on Genetic Analysis.....	15
15. Advances and New and Emerging Issues Related to Species and Habitat Management.....	17
16. Any other business.....	19
17. Closing of the Meeting.....	19
Annex 1: List of Participants.....	20
Annex 2: Agenda.....	23
Annex 3: Summary of Status of Working Groups.....	24

Report of the 9th Meeting of the Advisory Committee

1. Welcoming Remarks

1. Jack Frazier, the Chair, opened the meeting and conducted an introductory tour de table. Heidrun Frisch-Nwakanma (Secretariat) welcomed everyone to the first ever intersessional meeting of the IOSEA Advisory Committee (AC).
2. The Chair warmly welcomed the sub regional focal points and said their presence was extremely important and valuable. The first time they had had all four focal points join the meeting was at AC8. The same could be said for the MTTF participants who would all be joining, emphasized strengthening communication and encouraged the observers to contribute ideas so the AC could learn from them.

2. Adoption of Agenda and Schedule

3. The Chair asked whether there were any amendments to the [revised agenda](#). There were no interventions, so the agenda was adopted as presented. The final agenda is contained in Annex 2.
4. The Chair and the Secretariat explained the [Online Meeting Protocol](#), emphasizing the importance of following this protocol in plenary in particular. A list of participants is contained in Annex 1.
5. AC9 would meet in plenary each day and then in Working Groups (WGs), which would report back to plenary daily until they concluded their work. The WGs would work jointly on Teams (with document editing and chat functions) and/or meet in live video calls over the meeting days. Working Groups were held on: the Hawksbill Assessment (Lead *Hamann, Limpus, Miller*); IOSEA-endorsed Research Projects (Lead *Tiwari*); Plans for World Sea Turtle Day (WTSD) (Lead *Mohd Jani, Secretariat*); Capacity-building Strategy for 2021 and beyond (Lead: *Whiting, Tiwari*); Site Network (Lead: *Hamann, Nel, Tiwari, Frazier*); Guidelines and protocols for data collection and management of sea turtles and their habitats (Lead: *Miller, Nel*); Criteria for Identifying Habitats Critical for Marine Turtles (Lead *Whiting*); and Available Information for Genetic Analysis (Lead *Limpus, Bourjea, Nel*). A summary of the Working Group outcomes is contained in Annex 3.

3. Review of Progress since AC8

3.1. Secretariat

6. The Secretariat provided a background to the Work Programme, recalling it was a collation of all recommendations of recent years, ensuring that none of the important discussions of the past were forgotten, and contained all tasks and mandates confirmed by the 8th Meeting of Signatory States in one place. CMS/IOSEA/AC9/Doc.3 [AC-Tasks of the Work Programme 2020-2024, with Progress Update](#) contained only the activities indicating the AC as one of the actors, including a progress update which could again be updated after AC9.
7. The Agenda had been developed based on the Work Programme. In this report, the relevant activity (WP #) is shown at the start of each related item.

3.2. Advisory Committee

8. The Chair said the change to online meetings was a major development the AC had adapted to since AC8. He welcomed that the AC was now holding brief monthly virtual meetings to keep up-to-date, share advances, and discuss so as to act as a group. Members had continued to act on the activities assigned to them by the MOS.

4. Hawksbill Assessment

WP #12: Send out the draft Hawksbill Assessment to other experts in the region for their comments and provide a final report to the Secretariat by 30 June 2020 for publishing.

9. Mark Hamann (AC Member) presented an update on the status of CMS/IOSEA/MOS8/Doc.7.3 [Draft assessment of the Conservation Status of the Hawksbill Turtle in the Indian Ocean and South East Asia](#), explaining he had made significant progress on the document in 2020. The sub-chapters had more or less been finalized and were just awaiting comments. The key final steps were to: refine the maps and map format; update the summary tables of population or management unit sizes; and update the table on gaps for future research and management.
10. Colin Limpus (AC Member) flagged the difficulty they had had in getting the country focal points to provide the necessary information to create country summaries. The information provided by independent researchers had been vital. He said this was an issue in the basic functioning of IOSEA, where countries should drive efforts. The data did show, however, multiple sites with recovering breeding population of Hawksbill Turtles and, even allowing for the time-lag given the 1992 Japanese withdrawal of reservations for the trade in Hawksbill Turtles under the Convention on International Trade on Endangered Species of Fauna and Flora (CITES), there was a significant improvement in Hawksbill Turtles in some areas throughout the region. Where countries were taking positive action, there were positive recoveries. Mr Hamann pointed out that the country focal points were not always the people working on the ground and that they had flagged in the report where other sources had been used.
11. Jeff Miller (AC Member) suggested the Marine Turtle Specialist Group (MTSG) country reports provided more data than the IOSEA ones and urged including this data in the Assessment. He would contribute his analysis of the 2020 MTSG reports including a spreadsheet mapping and comparing nesting sites to the SWOT ([State of the World's Sea Turtles](#)) Report data and other data collated from the literature.
12. Thuraya Al Sariri (Oman: Sub-Regional Focal Point North-Western Indian Ocean) said Oman had participated in the MTSG specialist group regional report for 2020 and agreed that this information should be included in the Assessment.
13. Scott Whiting (AC Member) said the gaps in the document could identify the potential for capacity building and for projects.
14. The Chair stressed the vast amount of archaeological and historical information available about take of Hawksbill Turtles, showing the species historically under enormous pressure in the Indian Ocean and urged including this information in the Assessment. He agreed to contribute an introductory paragraph.
15. On how to address the inclusion of unpublished data from current research underway but not yet published, a number of researchers were mentioned and Mr Hamann asked members to suggest data that could be added, stressing there was no intention to

compromise unpublished work. Robert Baldwin (AC Member) proposed a section with a list of ongoing research with as yet unpublished results so it could be updated in future versions. Jarina Mohd Jani (AC Member) said from her experience there was a lot of hesitancy related to data sharing and ownership. She agreed that referring to such research in the report and flagging who was involved would be helpful.

16. The AC continued discussions in an online working group and several members provided comments on the draft document. Reporting back to plenary, Mr Hamann encouraged anyone who had not yet commented on the document to do so by 15 April 2021. He thanked AC Members for establishing contact with additional researchers who might be able to contribute data. Mr Whiting reminded participants that if people were to fill in gaps in the map about nesting, they would need a locality, latitude and longitude, and information about the type of data quantified, ideally linked to an official report. The Chair urged people to continue to contribute more detail to the document.

5. IOSEA-endorsed Research Projects

WP #42: Promote a list of IOSEA-endorsed research projects to help to leverage funding for scientific research to investigate the conservation biology of marine turtles.

17. Manjula Tiwari (AC Member) gave a short presentation based on CMS/IOSEA/AC9/Doc.5 [Draft List of IOSEA-endorsed Research Projects](#) and CMS/IOSEA/AC9/Inf.5 [Compilation of Documents on the Importance of Socio-economic and Cultural Aspects of Marine Turtle Conservation](#). She explained that the task was for the AC to come up with a list of research priorities that could be promoted by the AC and the Secretariat and used to leverage funding. All AC members and Sub-Regional Focal Points had been approached to help identify priorities in their region/countries. The resulting list was organized in different categories, from general issues to species-specific issues. The task for AC9 was to endorse the final list, check for gaps, come up with recommended next steps and establish priorities for funding.
18. The meeting considered the criteria for prioritization, with several stressing that even within one sub-region, different countries would have different needs. Ms Al Sariri
19. suggested adding Key Performance Indicators (KPIs), and proposed including the timeline for different projects and the funding resource, where this was known. Lisama Sabry (Maldives: Sub-regional Focal Point for the Northern Indian Ocean) stressed the importance of the document. Mohammed Omar Said (Kenya: Sub-regional Focal Point for the Western Indian Ocean) undertook to send some details for input.
20. Mr Miller said a number of issues were about in-country capacity building and proposed separating the document into (1) on-ground research done by countries (e.g. genetics) and (2) more conceptual and contextual items where the AC could help in developing background and identifying roles, then revert to the country focal points to raise awareness in-country. Mr Whiting agreed but proposed three categories, covering education/training/capacity building, mitigation, and research.
21. Mr Baldwin suggested the title of the document was confusing as the task was more about priorities than about endorsement and the Secretariat confirmed that the AC was free to revise the title.
22. Mr Whiting referred to the success of the GEF-funded project coordinated in the framework of the CMS Dugong MoU and said he would also like to see some bigger projects identified, for which the Secretariat and AC could fundraise with GEF or industry.

He urged that the AC thought about what they would like to see completed in the next five to ten years.

23. Reporting back from continued work on this document in an online working group, Ms Tiwari thanked those from whom she had received a number of comments but noted that there were still some key issues to be agreed. These included what to call the document; whether to include all priorities or only research priorities; the fundamental purpose of the document; the prioritisation process; and how to link to other tasks the AC had been given. As pointed out by Mr Miller, this document was connected to many other items in the Work Programme, in particular as many of the items in the priorities list would require capacity building in the countries or regions identified.
24. Ronel Nel (AC Member), supported by Ms Sabry, warned against prioritising on behalf of countries or regions, suggesting countries look through the document to indicate what is a priority for them. The Chair proposed stepping back and considering the total Work Programme and including an explanation of how the AC sees the purpose of the document in the introduction. Mr Whiting supported going ahead with endorsed projects and that it could be used as a reference for multiple purposes in the future. Mr Miller pointed to the need to review the document structurally and strategically.
25. Ms Tiwari called for a brainstorming session to discuss how to move forward. The Chair agreed that this was critical, proposed an AC meeting in a few weeks to discuss this and requested that all AC members try to join the meeting, including the sub-regional focal points. Accordingly it was agreed to finalize the document after the AC9 meeting.

6. Plans for World Sea Turtle Day

WP #50: Promote high profile events such as World Sea Turtle Day for the purpose, inter alia, of raising public and political awareness of turtle conservation and IOSEA's role. Develop media materials to raise the profile of marine turtle conservation issues.

26. Ms Mohd Jani referred to CMS/IOSEA/AC9/Doc.6 [Plans for World Sea Turtle Day](#), inviting those interested in contributing to the plans for a big event in June to join the Working Group.
27. She said the objective of the celebrating World Sea Turtle Day in the context of the MOU ('WTSD@IOSEA') was to provide a platform to celebrate the participants' commitment to sustainability, to encourage focal point engagement, and to celebrate the 20th Anniversary of the MOU. The format proposed was oriented towards the public, with a day-long online celebration moving from one country to another around the IOSEA region.
28. World Sea Turtle Day was generally celebrated on 16 June, and the idea was to suggest that the event be launched in Florida in their morning hours, afterwards 'passing the baton' to Australia, from where programmes would be hosted roughly in anti-clockwise direction around the IOSEA region, ending in a closing event in Bonn. A series of 'global' events were also suggested, which could include webinars, children's programmes or TED talks, while most would be hosted by local partners in the region who would be free to choose their content freely.
29. She had developed a draft plan and an indicative timetable and urged people to join the online working group foreseen to agree the concept and consider potential national focal points who might be interested to take the lead.

30. Reporting back from the first round of deliberations of the working group, Ms Mohd Jani informed that AC members had agreed to the general concept and proposed events. She shared a timetable including all IOSEA Signatory States with their time zones showing how events could be distributed across the sub-region, and asked the meeting to review the table and suggest contacts.
31. Ms Nel expressed concern about the proposed date, both in terms of preparation time and noting that 16 June was an important political public holiday in South Africa – Youth Day – so it was not an appropriate day for engagement. Ms Mohd Jani noted that using World Sea Turtle Day was foreseen in the Work Programme, as it was a well-known event that people could identify with in connection with the anniversary of IOSEA.
32. The Secretariat noted that the Signatory States had been informed of the proposed date in December 2020 and none had expressed their disagreement. However, this would not preclude the AC from considering an alternative date. She suggested more discussion but urged holding the event in 2021 as the anniversary year.
33. Following further discussions in the online working group, Ms Mohd Jani reported that now an alternative approach was suggested, namely splitting the celebration into two by carrying on with the global launch on 16 June 2021, as originally planned, and continuing celebrations on the following weekend, Saturday, 19 June 2021. This proposal was welcomed.
34. The Secretariat explained that she would send a letter to all Focal Points following this AC9 meeting, explaining the proposed schedule and inviting expressions of interest to host events. Ms Mohd Jani urged all participants to help by reaching out to potential hosts once this official invitation had gone out.

7. Networks of Sites of Importance for Marine Turtles (Site Network)

WP #35: The Site Network working group established by MOS8 should develop 1) revised Site Information Template, 2) refined evaluation criteria and scoring instructions, and 3) a simplified post-scoring process. The working group to provide these documents to the Secretariat by 31 October 2020 for circulation to the Signatories for their comments within two months. The Secretariat to circulate to Signatories the final proposals for intersessional adoption by correspondence in order to enable their use in the run-up to MOS9.

35. Mr Hamann introduced a status report on CMS/IOSEA/AC9/Doc.10 [Guide to Comments/Decisions on Site Network Criteria Descriptions](#). The concept of a site networks had been around since early AC meetings, and following its finalization at MOS6, sites had subsequently nominated. MOS7 had highlighted problems to the AC, including that there were components that people did not understand and that the objectives of the Site Network were broad and open to interpretation.
36. MOS8 had established a working group to deal with three tasks: to revise the Site Information Template; refine the evaluation criteria and scoring instructions; and simplify the post-scoring process. The AC had decided that it first needed to prepare a proposal before involving the whole working group, and some work had been done at AC8 but the need to refine the evaluation criteria first became clear with *inter alia* the scoring criteria including subjective terms leading to differing interpretation. Document 10 had some broad comments to address, and Mr Miller had given comments on the table.
37. Mr Hamann raised the following questions for discussion: (1) Is it necessary to have the scoring as it is at the moment or can we convert it to a consistent standardized

- framework? (2) Could we refer to management stocks/genetic stocks and only revert to species if there is no Management Unit (MU) available, and then talk in terms of species presence/absence in a particular area of the IOSEA region rather than all throughout the region?
38. Responding to a question from the Chair about the purpose of the site network, Mr Hamann explained the [original MOS6 resolution](#) set out a broad goal to promote the conservation of marine turtles in the region through enhancing collaboration and connections between sites that are important to the species. The problem was that some people had interpreted it either as a formal network (similar to a social network analysis approach) and others as an informal network. While revisiting the objectives of the site network was important, it was not what Signatory States had asked for at this point.
 39. Ms Tiwari proposed that the WG schedule a call to discuss this further. Mr Hamann showed the document, outlined how difficult it was to interpret the scoring, and recommended revising this as outlined above to make it easier for people to fill in and interpret the forms.
 40. Lindsey West (WIO-MTTF) asked whether the purpose of discussions was solely to figure out the criteria or also how to operationalize the network as there were many sites that had already been designated as sites of importance. She also wanted to understand how this network was aligned with the initiative of the MTSG working on marine protected areas (MPAs). Mr Hamann said he understood that the MTSG work looked at different components of sites and their importance.
 41. Mr Whiting pointed out overlaps with the task on critical habitats.
 42. Mr Miller supported by Mr Whiting and Mr Baldwin, proposed tying the concept of the Site Network to the concept of index sites as it would strengthen both and would encourage countries to create and compare index sites, helping to standardize methodologies.
 43. The Chair supported a special meeting to advance with this. Mr Hamann welcomed all comments in the meantime, so that the AC could come to a conclusion on the three tasks it had been asked to help the working group set up by MOS8 to complete.
 44. Updating on discussions in the online working group, Mr Hamann reminded AC9 that the direction from Signatory States was to revise the documents, not to start all over again with conceptualizing the Site Network. The focus now was on the scoring criteria. He supported the Site Network as a valuable tool.
 45. Mr Miller reported that he had written up his ideas in a document on combining the concepts of the Site Network and the index beach approach. Mr Limpus had provided a good definition of an index beach: “a beach with more than 10 years of data”. Many countries could not meet that criterion, but it could be opened up to for example a beach with at least some years of continuous data and a commitment to continue the monitoring programme, making sure the same set of methodologies was being used to allow for comparison of index beaches.
 46. Discussion focused also on areas other than nesting sites and it was agreed that, while there was little long-term monitoring of foraging areas and there were challenges in sharing the criteria and evaluation systems, they should also be included. The idea was to engage at a variety of different levels to help protect the turtles and their habitat. Mr Limpus supported the concept of the Site Network as a good idea but flagged that a number of countries have processes in place that have been there for years – e.g.,

national parks that met the IUCN criteria for quality habitat protection, Ramsar sites and MPAs – and urged mapping not only the Site Network but also the other tools that were already being used by the countries.

47. The Chair emphasised the need for focal points to comment. Ms West spoke about a site in Tanzania which had no nesting but provides strong ecological connectivity between nesting sites in the region. The criteria weighting system should be adapted to allow capturing such areas as priorities, too.
48. It was agreed that in the time available during this meeting, it was not possible to address these issues in sufficient detail or resolve them. A dedicated online meeting would be held in the coming months. Prior to this meeting, Mr Hamann would develop a working document to outline key unresolved issues, and present potential solutions including the proposal to link to index sites and lessons to be drawn from other site network initiatives, e.g. for birds.

8. Capacity-building Strategy for 2021 and Beyond

WP #48: Facilitate capacity building in applying best practice/standard methods.

WP #85: Adopt a proactive process for identifying needs and providing training within the IOSEA region:

- a) *offer Signatory States training topic options*
- b) *develop an over-arching structure for training to be based on the Objectives of the CMP and activities in the Work Plan*
- c) *structure training to address identified 'needs' of the Signatory States through tailoring content*
- d) *develop skills of country representatives in the preparation and revision of country reports*
- e) *develop skills of Sub-regional and Country representatives and researchers in (1) collecting, analyzing, and presenting biological data, (2) defining foraging populations, and (3) conservation management techniques (interactions with fisheries, coastal development). In addition, training should emphasize communication and coordination techniques that can be used among various levels (local, province, country, sub-region, region) to coordinate conservation activities*
- f) *organize follow-up visits to assess the effectiveness of the transfer of information and skills*

WP #87: Encourage organization of sub-regional capacity building / technical workshops, including involvement of Advisory Committee. Topics could include:

- a) *management of nesting beaches, hatchery management, lighting etc.*
- b) *identification of threatening processes*
- c) *rescue and rehabilitation*
- d) *training on site network management*
- e) *socio-economic and cultural aspects*
- f) *training and technology-transfer needs to reduce mortalities in fisheries operations, in particular by providing training for:*
 - i. *observers particularly for small-scale fisheries (separate for trawlers/ gill nets, smaller outboard fisheries in large quantities)*
 - ii. *proper recording of turtle interactions in a harmonized and standard way, inter alia, to assist IOTC member countries in meeting their reporting requirements*
 - iii. *safe release of bycaught turtles*
 - iv. *enhancing use of bycatch reduction technologies*

WP #88: Conduct sub-regional capacity-building workshops on bycatch assessment methods and engagement strategies with key government authorities and stakeholders

- a) *develop a concept note and send a formal proposal to potential hosting countries*

- b) *government and NGOs in the region to investigate potential opportunities for organizing the workshops and identify the role that each party can play*
- c) *conduct follow-up workshops to address specific issues at country level following regional capacity building workshops, involving fishers associations and communities.*

WP #89: Consider

- a) *activities to address capacity-building needs to integrate marine turtle considerations into existing Ramsar Site management plans,*
- b) *cooperating with the Ramsar Secretariat to raise funds for implementing these activities,*
- c) *soliciting capacity-building support to conduct coordinated or joined activities for sites that are both IOSEA Network Sites and Ramsar Sites, from the IOSEA and Ramsar Secretariats.*

49. Mr Whiting referred to documents CMS/IOSEA/AC9/Inf.11a [Further Development of the IOSEA Technical Support/Capacity-building Programme](#) and CMS/IOSEA/AC9/Inf.11b [IOSEA Technical Support and Capacity-building Review](#), noting the Work Programme was the foundation of what is in scope and what is out of scope in terms of capacity building activities and measurable outputs. He said there was a need to consider what could be delivered over the next 2 or 7 years for example. In a presentation, he ran through a list outlining some ideas.
50. A key to success in capacity-building activities was good planning and having an ongoing maintenance and exit strategy. He stressed the need for funding and highlighted the impact of COVID-19 limiting movement and that both of these issues might mean there was a need to just consider what was possible right now.
51. He concluded by urging the meeting to: decide what was in scope; brainstorm realistic ideas that could be an output and if possible define measures of success; brainstorm the types of activities, noting there were different ways of considering this issue; decide on some easy wins. It was also important to consider what product was wanted: a capacity building plan? a conservation activities implementation plan? items in capacity building that could form the basis of funding applications? and/or a definition of what was in and out of scope in the next 2, 5 or 10 years?
52. Following a first session of the online working group on the issue, discussion addressed potential partnerships. Ms Tiwari suggested making a list of partners already doing capacity building in the region, and ideas expressed included the Arafura Timor Seas Programme (ATSEA-2), US Fish and Wildlife Service, Regional Seas Conventions and Programmes, as well as smaller scale organisations. Muralidharan Manoharakrishnan (NIO-MTTF) said that the Task Forces could help to put together a list. It was agreed that identifying the nodes (the countries and NGOs) around the Indian Ocean that could help deliver capacity building, as well as available databases and online tools, was important. Ideas included South-to-South training, initiatives such as train the trainers, links to other projects which were going on, those with relevant experience to engage with, and peer review.
53. Ms Mohd Jani stressed self-learning, that the younger generation learn a lot on their own in particular if it is on their device.
54. Following a second working group session on capacity building, Mr Whiting reported on a productive discussion and said that recognising the constraints of COVID and that capacity building was expensive, the focus was to at least list what could be done with current resources such as information sharing/exchange. The group talked briefly about index beaches and foraging sites and how they might link into channels for capacity

building and that the output could be a stand-alone capacity building plan or activities integrated into something else with specific timeframes.

55. Mr Whiting asked the Secretariat if there would be funding available for capacity building where external expertise was needed and the Secretariat said there might be small sums available on a case-by-case basis.
56. Mr Whiting confirmed that after this meeting, he would draft a skeleton document with some suggested headings and take into account all comments received online and through discussions. The document would set out what would be realistic to accomplish with the current COVID scenario and a very limited budget while also considering bigger and more long-term objectives. AC Members were invited to fill in their ideas and methods of implementation to the tables Mr Whiting had put online by 1 April 2021, after which he would develop a draft framework for the future capacity building plan, which would then be circulated for detailed comments.

9. Guidelines and Protocols for Data Collection and Management of Sea Turtles and their Habitats

WP #46: Apply guidelines and protocols recommended by the Advisory Committee for data collection and management of sea turtles and their habitats.

57. Mr Miller said that he had circulated a list of citations prior to the meeting and asked for comments. He said there were some areas where further information was needed, for example relating to hatcheries and dealing with eggs, and regarding assessment of beaches. There were three options in helping with guidelines and protocols: dealing with the status quo and providing case-by-case recommendations but otherwise leaving people to their own methods; providing a list of options; or facilitating standardization of methodologies. In addition, the AC could provide training and offer analysis and preparation of reports to facilitate meaningful data that might have an effect on decision makers.
58. He proposed that either, following a literature review, the AC develop an IOSEA book of methods listing all recommended guidance that had been published to date. Alternatively, one could approach the IUCN Marine Turtle Specialist Group and determine their interest in working together to update their [1999 manual](#). He proposed further discussions in a virtual meeting after AC9 and emphasized that taking into account country needs was very important.
59. The Chair noted that the former Coordinator Douglas Hykle, when still with the CMS Secretariat, had provided support for the development of the MTSG manual, and Jérôme Bourjea (AC Member) and Mr Hamann noted that the revision of the manual was already under discussion by the MTSG. Mr Hamann, supported by Ms Tiwari and Mr Manoharakrishnan, further emphasized the need to consider new technologies such as video tutorials and web documents.
60. Mr Limpus warned against a single set of standards with the Chair suggesting the proposal was for advice and recommendations rather than imposing a single standard.
61. Mr Miller asked for a virtual meeting to agree bullet points to be circulated to finalise.
62. Reporting back from discussions in the online working group, Mr Miller referred the meeting to a draft document reflecting the agreement to review the MTSG 1999 manual as the basis for recommended procedures and guidelines for methods. It did not prevent

- others from using other processes. He recommended that the Secretariat reach out formally to the MTSG Co-Chairs to identify who on the MTSG would be the right people to connect with.
63. Discussion focused around data storage and access, with Mr Miller saying it was a complex issue and involved establishing a hierarchy of who could access data. Ms Tiwari and Mr Limpus stressed it was a country's mandate to decide on a database, with Mr Limpus pointing out that many countries already had their own databases. In some countries no national repository existed, but universities were collating data from their own research. These sort of gaps were a concern.
64. Mr Limpus referred to a partnership between the Queensland Department of Environment and Science and CMS on a mapping database, which would soon be available to the general public to generate maps of turtle nesting by abundance. Users were not granted access to the raw data, but could see the source of the data. Mr Miller said this was similar to the practice in SWOT and agreed with the importance of ensuring people know that data was protected through this system. The Queensland mapping tool should certainly be featured as a useful resource.
65. The Chair recommended that this discussion be reflected in the document, making it clear that these were recommendations as guidance.

10. Guidelines on Beach Management

WP #15: Develop guidelines on the management of beaches for successful hatchling production, including management of hatcheries if and when required. The Advisory Committee to provide these documents to the Secretariat by 31 October 2020 for circulation to the Signatories for their comments within two months. The Secretariat to circulate to Signatories the final proposals for intersessional adoption by correspondence in order to enable their use in the run-up to MOS9.

66. Ms Nel and Ms Tiwari spoke to this item, noting this subject had initially been discussed in 2015. This activity was potentially a huge task, linking to various others, including Mr Miller's document on Guidelines and Protocols.
67. Focussing initially on hatcheries, Ms Ronel referred to document CMS/IOSEA/AC9/Inf.16 [Concept note: Estimation of the impact of egg location and hatchery practices on critically low populations in the IOSEA region, and practical solutions](#) developed in 2015 by several AC Members following the Leatherback Turtle review and reassessment. The expected outcome was a review of the extent of nest relocations, a review of the impact of these practices, identification of best practice approaches for relocation strategies, drafting of a brochure and training materials and recommendations for management interventions. The activities were well thought through and relevant to the current activity on beach management guidelines.
68. There was also a suggestion to get a PhD student to do a literature review and then to identify potential partners. She proposed extending this document and forming an idea of budget, possibly as a priority research project.
69. Ms Tiwari continued, explaining that the general approach recommended was first to focus on techniques for protecting nests in situ and increasing/maximizing hatchling production there. Different solutions to common problems on nesting beaches had been tried in different countries, but there was no comprehensive review of these and their applicability and success rate. Compiling the state of knowledge with references would

be very beneficial, but it was clear that further research was required. The documents would be circulated for comments.

70. The Secretariat asked whether e.g. the website could be used to provide links to existing guidance documents for some of the problem areas in an interactive format. There was brief discussion on the links to the work on Guidelines and Protocols, with Mr Miller noting relevant references on hatcheries which could be referred to as guidance.
71. Mr Limpus noted it was important to determine how much of the relevant population needed to be functioning to have a sustainable population, noting that for the continental level of Australia the government was proposing that at least 70 per cent of clutches should be producing hatchlings. Having a measurable goal was critical, rather than just saying we need to go out and protect them.
72. Ms Al Sariri emphasised the need for indicators to measure the success of any management approach, and for studying the social impacts of any measures on the people living near the beaches.
73. It was suggested that an intern, either based in the Secretariat or with one of the universities AC Members were affiliated with, could be used to mine data from the national reports on the extent to which hatcheries were used across the region. Mr Miller confirmed it was a fairly straightforward task.

11. Criteria for Identifying Habitats Critical for Marine Turtles

WP #30: Define criteria for identifying habitats critical for marine turtles (e.g. proportion of population, core areas).

74. Mr Whiting described the complexity of the global governance space around this issue which included a number of different concepts including Marine Protected Areas, World Heritage Sites, Ramsar sites and IUCN proposals to implement marine turtle areas, and of course IOSEA had the Site Network. He cautioned against using the term “critical habitat” for this work package because it had legal implications in many countries. The task of the AC was to identify the criteria for determining which habitats were indeed critical for sea turtles.
75. He outlined possible ways to define criteria, which could be either based on existing criteria or be developed new based on judgement and expert elicitation. He noted that the World Conservation Monitoring Centre used a global screening layer for critical habitat and referred to a recent paper on likely and potential and unclassified areas of critical habitat around the world which used sea turtles as one defining factor¹. He said there was also a need to be clear on objectives as well as to consider management and

¹ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0193102>

Martin, C.S., Tolley, M.J., Farmer, E., Mcowen, C.J., Geffert, J.L., Scharlemann, J.P.W., Thomas, H.L., van Bochove, J.H., Stanwell-Smith, D., Hutton, J.M. and Lascelles, B., 2015. A global map to aid the identification and screening of critical habitat for marine industries. *Marine Policy*, 53, pp.45-53.

Brauner, K.M., Montes, C., Blyth, S., Bennun, L., Butchart, S.H., Hoffmann, M., Burgess, N.D., Cuttelod, A., Jones, M.I., Kapos, V. and Pilgrim, J., 2018. Global screening for Critical Habitat in the terrestrial realm. *PLoS one*, 13(3), p.e0193102.

- future evaluation. He proposed adopting a well-regarded existing system or combination of systems rather than re-inventing it.
76. Mr Limpus noted that one cannot normally do rigorous comprehensive monitoring of the populations in high density areas and that the optimal sites for in-depth monitoring were often small beaches that had just a few hundred turtles, and similarly for the feeding grounds.
 77. Ms Tiwari noted an overlap with the Site Network. Mr Whiting responded that, given the complexity of the issue, there were a number of overlaps with both national and international initiatives, pointing to the situation in Australia where the definition of critical habitat was so strict that it only applied to a very limited number of cases, meaning that there another definition of habitats critical for survival was needed.
 78. Ms Mohd Jani proposed developing a new definition and urged taking into consideration the practical elements such as whether the geography made it possible to patrol and manage a site. Mr Hamann urged keeping in mind habitats that might become critical in the future, so these criteria might help to future-proof.
 79. The Secretariat noted that the task for the AC was to provide the criteria, the Signatory States would have to address designation and management.
 80. Mr Whiting, reporting back on the proceedings of the online working group, noted the need to consider the objectives more fully. He said he would use comments and ideas from the discussions and comments to formulate examples of draft objectives and criteria for Habitat Critical for the IOSEA region. Several alternate objectives would be provided. Criteria to support the objectives would be developed or adopted from other documents.
 81. Mr Limpus proposed that for IOSEA there was an opportunity to address a major gap in global understanding of sea turtles and habitat requirements, namely the whereabouts of the pelagic feeding post hatchlings after they leave the nesting beach and before they return to the foraging grounds. This could be a focal issue brought into this discussion on habitat to try and get people to bring together data to identify where efforts should be focused to look after these post hatchlings in particular. There was strong evidence that plastic ingestion by these post hatchlings was approaching crisis level.
 82. Mr Whiting asked AC member to provide comments on the online document by 1 April 2021.

12. Species Assessment: Olive Ridley Turtles

WP # 13: Initiate the next species assessment for Olive Ridley Turtles with a view to tabling a draft at IOSEA MOS9.

83. The Chair asked the AC what the general view was on starting the species assessment for Olive Ridley Turtles. There was general agreement of the need to continue to work though the species to be able to give an informed summary of what is happening. It was further mooted not to start this assessment until the Hawksbill Assessment was complete.
84. Mr Miller offered to do a literature review. Mr Manoharakrishnan noted that SWOT was working on a special issue which could act as a starting point, with Ms Nel proposing piggybacking off this work or partnering with them so as not to double effort. Mr Hamann said the MTSG was also updating their assessment of Olive Ridley Turtles and

suggested finding out who was coordinating that effort and its status. Mr Whiting recommended reviewing the Hawksbill Turtle assessment process and benefitting from any lessons learnt. This could also be an opportunity to consider and identify habitat critical for this species in the IOSEA region.

85. The Chair recommended including an acknowledgement in the preamble that the AC was aware of other complementary efforts and emphasized that undertaking this assessment would require proper planning. He reconfirmed the view that it was not time to start this assessment at this point. Mr Hamann proposed reviewing the assessment structure once the Hawksbill Turtle Assessment was complete.

13. National Reporting Format

WP #78: The working group established by MOS8 to revise the format for National Reports should seek feedback from Signatory States and the Advisory Committee. It will deliver its outputs to the Secretariat by 31 October 2020 for circulation to the Signatories for their comments within two months. The Secretariat will circulate to Signatories the final proposals for intersessional adoption by correspondence in order to enable their use in the run-up to MOS9.

86. The Secretariat said that MOS8 had set up a working group to revise the national reporting format. The working group, of which Jeff Miller was a member, had done extensive revisions following multiple rounds of comments. In November 2020, the resulting draft had been circulated to the Signatory States and the AC with a two-month deadline for comments. Some AC Members had asked for an extension and their late comments had also been accepted.
87. At present, the Secretariat was still assisting the working group to produce a further revised draft based on the responses received, which besides specific comments had also brought up some more fundamental questions needing feedback from the working group. When completed, a revised draft would be circulated to the Signatory States for their approval. There was no further role for the AC at this stage.
88. Mr Miller noted some disagreement between Signatory States as to what and how much detail to include in the format. He also said there was a need to see how the reports fit with the use of the MTSG country reports. He said it was important to keep pushing for a way to extract the information so it was useful.
89. The Chair suggested it would be worth considering reducing the length of the reports, currently 45 pages, and even considering how to extract the most critical information on specific issues, such as bycatch.
90. Ms Mohd Jani, supported by the Chair, suggested it would be useful to have more information on the human dimension to make it more relatable for management and to highlight key issues on the historical situation.
91. There was some discussion about how to keep the national reports flexible with the templates updateable. The Secretariat explained that once there was an approved format it needed to be put into the online reporting system. Hence, for the next reporting round the issue had to be considered closed once Signatories had approved the format. Following the first use of the revised reporting format in the run-up to MOS9, the AC could then review the resulting submissions and consider whether further improvements to the reporting form should be recommended.

14. Available Information on Genetic Analysis

WP #44: Conduct genetic analyses to identify genetic stocks (management units) for Marine Turtles in the IOSEA region:

- a) *compile and assess available information to identify needs and opportunities for regional analyses to inform genetic stock assessment, starting with nesting beach sampling*
- b) *develop maps for each genetic stock indicating rookery locations and habitat use in pelagic and benthic environments, rather than relying on the Regional Management Unit (RMU) maps given in Wallace et al. (2011)*
- c) *incorporate genetic sampling into ongoing monitoring activities (subject to budget and resources available)*
- d) *standardize protocols for collection and storage of samples to ensure they will remain usable in the long term*
- e) *address capacity building needs to enable in-country analyses, upon request*
- f) *AC and Secretariat to facilitate contacts with laboratories and CITES permits to conduct genetic analyses, upon request*

WP #45: Periodically update the list of genetic studies in the IOSEA region and publish it on the IOSEA website.

92. Mr Bourjea presented document CMS/IOSEA/AC9/Doc.23/Rev.1 [Genetic Research on Marine Turtles in the IOSEA Region](#) on this topic, noting it followed up on a paper presented to MOS7 and made available as CMS/IOSEA/AC9/Inf.23 [Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps](#).
93. The document included: a brief history of genetic research on marine turtles in the region; a summary of advances made with updated maps on currently known genetic management units in the region and main gaps; an overview of how the work was being structured at the scale of the IOSEA region; and considerations of some important issues that genetic work was facing.
94. Mr Bourjea, as guided by the Chair, also took the opportunity to remind the meeting why doing population genetic studies at the oceanic or smaller scale was important as a baseline of regional management units, and to provide information on major technological advances in term of genetics applied to marine turtles (for example environmental DNA, whole genome screening and species identification related to illegal trade). This was important for management as it allowed an understanding of the connectivity between populations, identify units to conserve (rookeries), create a rookery baseline, and estimate stock proportions.
95. Mr Limpus said he had developed maps, generated by the Queensland Government turtle mapping database, for each of the six turtles in the IOSEA area, describing findings and flagging that the maps could help identify where there were gaps in understanding. He said they were looking at site differences between nuclear DNA versus mitochondrial DNA.
96. Mr Bourjea said there were quite a few new initiatives in this field, including the Indo-Pacific Hawksbill Genetics Working Group, Tortue IMbriquee Ocean Indien (TIMOI); Asia-Pacific Marine Turtle Genetic Working Group; a group of experts working under the EU project targeting the South West Indian Ocean region and the green turtle, and other local initiatives.
97. He concluded by asking which priorities might be interesting to raise at this stage, noting both lack of funding but mainly for field collection and analysis of samples and CITES permit issues.

98. Ms Al Sariri stressed the importance of genetic analysis, noting that when Oman prepared a regional report on marine turtles there were a lot of gaps. She called for an AC recommendation to encourage countries to work on genetic analysis and biology data as a top priority for the management of turtles.
99. Mr Bourjea said that any initiative developing new genetic markers should systematically also use standard markers that allowed the creation of a rookery baseline so that it could be compared with other countries to get the global view of the Indian Ocean. At the same time, it was important to be open minded regarding adding new markers and developing new approaches.
100. Mr Limpus noted that genetic analysis allowed one to identify independently where individual stocks were breeding and where index beaches were needed to assess how the stocks were performing and providing guidance as to where conservation efforts needed to focus.
101. Ms Nel emphasised identifying foraging areas too, noting that in South Africa they were analysing samples from strandings and bycatch, which had identified previously unknown connectivity with Loggerhead Turtles originating from Oman and Australia.
102. Mr Manoharakrishnan said many countries did not have the facilities to conduct the genetic analysis themselves, and confirmed that the difficulty of obtaining CITES permits for sending samples abroad for analysis was an issue in the Northern Indian Ocean sub-region, too.
103. Mr Limpus said in Queensland they were using a different approach to the use of genetics, linking mixed stock analysis in the feeding grounds to the sex identification for the individual turtles and the age class in the population. They had been able to identify that for the Northern Great Barrier Reef green turtles were approaching zero male production, which was very different from sex ratios found amongst the adults of that genetic stock. Having that genetic marker was a tremendously powerful tool that allowed for more than identifying where the turtles came from, but also linked to effective management in view of climate change. The Chair agreed that based on such results, different management approaches would be needed.
104. Mr Bourjea explained that the document provided a baseline of what was available at present and further information would be added as and when available.
105. In response to a question from Ms Al Sariri, Mr Boujea explained that genetics were like a human fingerprint, the information for the individual was the same from the hatchling to the adult. He also said taking environmental DNA was an important new technique, in which one can take the water from an area and filter and screen the DNA in the water and, based on the markers used, see which species occur in that area.
106. Mr Limpus urged remaining with the mandate of the task. Given genetics was a rapidly evolving field, he warned against taking on a continual update and that the AC should wait until there were further directions from the Signatory States.

15. Advances and New and Emerging Issues Related to Species and Habitat Management

WP #97: Review, comment, and provide guidance on advances and new and emerging issues related to species and habitat management.

107. The Chair invited participants to present ideas.

Citizen Science

108. The first issue raised, by Mr Hamann, concerned the strong growth of citizen science. He recounted receiving many photos which allowed using photo-ID techniques and knew of similar activities in the Maldives, Mozambique and Tanzania, linked mainly to marine megafauna in general rather than just turtles. He suggested it was worth paying attention to this and at some point considering how to help with developing standardised approaches or capacity building.
109. Several members reported similar experiences and welcomed the additional information these activities provided. The challenge was in collecting robust data and setting citizen scientists up with workable systems from the start which involved capacity building and training. Useful citizen science was not a random process but required design and steering behind any programme to ensure it was robust and provided useable data.
110. Mr Manoharakrishnan suggested a different database design was needed to support data from citizen science. A major challenge was data storage and quality control. As an example, the online database of bird observations, eBird, contained much data collected through citizen science. He recommended the AC raise this issue with the Signatory States.
111. Ms West spoke about work being done in Watamu, Kenya on the concept of using image recognition with a database of images from the local bycatch programme and exploring scaling that up for in-water work as part of the citizen science programme.
112. The Secretariat noted that task 55 of the Work Programme related to this topic, which suggested that the AC and other experts “train organizers and (potential) participants of citizen science activities about species identification and data collection techniques”. The Chair welcomed the valuable comments being made about a Work Programme task that had not yet been tackled.
113. Mr Bourjea explained that in Reunion they had built a good citizen science programme which also served to raise awareness, with one aspect being to share the history of a particular individual when photos were received from citizen scientists and they were able to match it in their photo ID database. He agreed that a key issue was data quality.
114. Ms Nel noted that in South Africa citizen science engagement was being used as a political intervention for public awareness raising so that people cared about the turtles. She stressed the need to be aware of social media.
115. Ms Mohd Jani suggested that the development of citizen science programmes should be included in the capacity building strategy. She emphasised, with much agreement from the floor, that citizen science had to be more clearly defined as involving citizens who are committed and want to analyse and understand the data. The word had been made too popular and interest could be commercially driven.

116. Mr Limpus referred to Queensland's standardised system of data recording for nesting turtles and strandings, which included training of community members so that people living along the coast could be actively involved in reporting what was happening and in local management along their stretch of coast. That information was then put into the state-wide database.
117. Mr Manoharakrishnan urged open access, ensuring that data were publicly available, and noted consideration should be given to citizen's needs regarding data collection and sharing. For example, fishermen might need to use the data to approach the government for fuel subsidies and should be able to access data they had provided.

Indian Ocean Tuna Commission

118. The Chair raised a further important issue about the Indian Ocean Tuna Commission (IOTC) and called upon Mr Bourjea to summarise the relevance of IOTC to IOSEA.
119. Mr Bourjea said he had prepared a document relating to WP #6 which called on Signatories to "compile information on the status of on-board observer programmes and the status of marine turtle bycatch recording within those observer programmes and share with the Advisory Committee". The main focus of the IOTC was to manage tuna and tuna-like species in the Indian Ocean open seas operating in international and EEZ waters. There were 31 contracting parties, 24 of whom were also IOSEA Signatory States. IOTC representatives were generally national fisheries agencies.
120. There was limited coordination between agencies dealing with fisheries and agencies dealing with biodiversity but the IOTC had agreed various mitigation measures directly or indirectly related to marine turtles. A recent focus had been on the issue of onboard observers, with the IOTC helping countries to build capacity for collection of information and implementing mitigation measures via the development of data collection standards and ID cards, provision of training, and so on.
121. He stressed the importance for the AC to understand the work IOTC was conducting related to turtles and to think about its role in fostering stronger cooperation between IOSEA and IOTC.
122. Mr Baldwin pointed to the link with other bycatch like cetaceans. A recent paper² had estimated a cumulative total of 4.1 million bycaught small cetaceans in the Indian Ocean between 1950-2018. He wondered what the equivalent figure would be for turtles. In Oman, the female loggerhead turtle nesting population was estimated as 30-40,000 forty years ago and had fallen to about 10-12,000 today. He queried whether the Indian Ocean tuna fisheries contributed to this decline given the statistics on cetacean bycatch.
123. Mr Bourjea suggested that an external expert be allowed to briefly join the meeting. Teresa Athayde (External Expert) explained more about the IOTC regional observer scheme (ROS) which required IOTC Contracting Parties to establish National Observer Programmes to collect standardized information on bycatch of birds, sea mammals and turtles. This data was available.
124. Ms Nel lamented the sub-standard nature of the region's bycatch information, and noted that governments often did not act on findings of focused projects.

² Anderson RC, Herrera M, Ilangakoon AD, Koya KM, Moazzam M, Mustika PL, Sutaria DN (2020) Cetacean bycatch in Indian Ocean tuna gillnet fisheries. *Endang Species Res* 41:39-53. <https://doi.org/10.3354/esr01008>

125. Mr Bourjea said BirdLife International had a very strong presence within IOTC and urged that the MOU's connections with the IOTC be strengthened to increase its influence. Ms Mohd Jani suggested thinking of championing NGOs to have something like Birdlife for sea turtles. The Chair wondered whether this was a role for the IUCN MTSG or the International Sea Turtle Society.

Sustainable Use

126. Ms Mohd Jani referred to synthesis paper on [Illegal Take and Trade of Marine Turtles in the IOSEA Region](#) that had been prepared for MOS7, which had found that 75 per cent of the countries in the IOSEA region reported consumption of turtle meat, and asked that sustainable use be included in the agenda for a future meeting.

Plastic Ingestion

127. Mr Limpus mentioned a collaboration with the University of Exeter researching global study sites in the Mediterranean, Caribbean, South West Pacific and East Indian Ocean looking at plastic ingestion in sea turtles³. The study had identified that the main problem was the post hatchling planktonic stage of all species of sea turtles and the opinion within the group was that we might be at crisis level for sea turtles because of the quantity of plastic in ocean currents. The main issue was fragmented hard plastics. Measures decided by governments mostly focused on soft plastics and accordingly had limited benefits for small turtles. It was an increasing issue of concern which applied across all species. This, too, could be placed on the agenda of a future meeting.

16. Any other business

128. No other business was proposed.

17. Closing of the Meeting

129. Given the AC's heavy workload, the Chair repeated the importance of maintaining clear objectives, having clear expectations and outcomes, undertaking evaluations and setting realistic tasks.
130. After the customary expressions of thanks to all AC Members, the Chair, the Sub-Regional Focal Points, the two MTTF representatives, the Secretariat, and all that had contributed to the success of the meeting, the Chair declared proceedings closed.

³ Duncan EM, Broderick AC, Critchell K, Galloway TS, Hamann M, Limpus CJ, Lindeque PK, Santillo D, Tucker AD, Whiting S, Young EJ and Godley BJ (2021) Plastic Pollution and Small Juvenile Marine Turtles: A Potential Evolutionary Trap. *Front. Mar. Sci.* 8:699521. doi: 10.3389/fmars.2021.699521

List of Participants

Advisory Committee Members

Mr Robert BALDWIN
Scientific Adviser
Five Oceans Environmental Services
United Kingdom
Tel. +44 7497104835
Email: wosoman@gmail.com

Dr John FRAZIER (Chair)
Research Associate
National Museum of Natural History
Smithsonian Institution
United States
Tel. + 1 6073915488
Email: kurma@shentel.net

Dr Mark HAMANN
Associate Professor
James Cook University
Australia
Tel. +61 415298238
Email: mark.hamann@jcu.edu.au

Dr Jérôme BOURJEA
Researcher
IFREMER
France
Tel. +33 692657800
Email: jerome.bourjea@ifremer.fr

Dr Colin LIMPUS
Chief Scientific Officer
Department of Environment and Science
Queensland Government
Australia
Tel. +61 427002633
Email: col.limpus@des.qld.gov.au

Dr Jeff MILLER
Research Director
Biological Research and Education
Consultants
United States
Tel. +1 406 493 1572
Email: jmillerar@gmail.com

Dr Jarina MOHD JANI
Senior Lecturer
Faculty of Science and Marine
Environment
Universiti Malaysia Terengganu
Malaysia
Tel. +60 199580588
Email: jarina@umt.edu.my

Prof Ronel NEL
Associate Professor
Zoology Department
Nelson Mandela University
South Africa
Tel. +27 415042335
Email: Ronel.Nel@mandela.ac.za

Dr Manjula TIWARI
Conservation Scientist
Research Affiliate of: Marine Turtle
Ecology and Assessment Program,
NOAA-Southwest Fisheries Science
Center
United States
Tel. +1 8582201256
Email: manjula.tiwari@noaa.gov

Dr Scott WHITING
Principal Research Scientist
Department of Biodiversity, Conservation
and Attractions
Australia
Tel. +61 413375782
Email: scott.whiting@dbca.wa.gov.au

Sub-Regional Focal Points

Western Indian Ocean

Dr Mohamed MOHAMED
Principal Scientist
Kenya Wildlife Service
Kenya
Tel. +254 722764691
Email: msaid26474@gmail.com

North-Western Indian Ocean

Dr Thuraya SAID AL SARIRI
Assistant Director General of Nature
Conservation
DG of Nature Conservation/ Environment
Authority
Oman
Tel. +968 99435775
Email: thuraya.alsareeri@meca.gov.om

Marine Turtle Task Forces

Northern Indian Ocean

Mr Muralidharan MANOHARAKRISHNAN
Chair, NIO- MTTF
Field Director: Flagships Species –
Biodiversity and Resource Monitoring
Programme, Dakshin Foundation
India
Tel. +91 8861750457
Email: murali@dakshin.org

External Expert

Ms Teresa ATHAYDE
Independent Consultant (Fisheries
Monitoring & Management)
France
Tel: +33 695924861
Email: ttathayde@live.co.uk

Northern Indian Ocean

Ms Lisama SABRY
Conservation Officer
Ministry of Environment
Maldives
Tel. +960 9695929
Email: lisama.sabry@environment.gov.mv

South-East Asia +

Dr Kongkiat KITTIWATTANAWONG
Senior Marine Biologist
Phuket Marine Biological Center
Department of Marine and Coastal
Resources
Thailand
Tel. +66 846298803
Email: kkongkiat@gmail.com

Western Indian Ocean

Ms Lindsey WEST
WIO- MTTF
Technical Advisor, Sea Sense
United Kingdom
Tel. +44 7875792742
Email: lindsey@seasense.org

Secretariat

Ms Heidrun FRISCH-NWAKANMA
IOSEA Marine Turtle MOU Coordinator
Aquatic Species Team
UNEP/CMS Secretariat
Germany
Tel. +49 228 8152491
Email: heidrun.frisch-nwakanma@un.org

Ms Tine LINDBERG-RONCARI
Meeting Assistant
Conference Services
UNEP/CMS Secretariat
Germany
Tel. +49 228 8152493
Email: tine.lindberg-roncari@un.org

Agenda

1. Welcoming Remarks and Introductions
2. Adoption of the Agenda and Schedule
3. Review of Progress since AC8
 - 4.1 Secretariat
 - 4.2 Advisory Committee
4. Hawksbill Assessment
5. IOSEA-endorsed Research Projects
6. Plans for World Sea Turtle Day
7. Day 1 Plenary Wrap Up

8. Recap of Day 1
9. Reports back from Working Groups
10. Network of Sites of Importance for Marine Turtles (Site Network)
11. Capacity-building Strategy for 2021 and Beyond
12. Guidelines and Protocols for Data Collection and Management of Sea Turtles and their Habitats
13. Day 2 Plenary Wrap Up

14. Recap of Day 2
15. Reports back from Working Groups
16. Guidelines on Beach Management
17. Criteria for Identifying Habitats Critical for Marine Turtles
18. Day 3 Plenary Wrap Up

19. Recap of Day 3
20. Reports back from Working Groups
21. Species Assessment: Olive Ridley Turtles
22. National Reporting Format
23. Available Information on Genetic Analysis
24. Day 4 Plenary Wrap Up

25. Recap of Day 4
26. Reports back from Working Groups
27. Advances and New and Emerging Issues Related to Species and Habitat Management
28. Any Other Business
29. Day 5 Plenary Wrap Up

Summary of Status of Working Groups

(as at 19 March 2020)

For each Working Group, the following is indicated:

- 1) **Major** tasks that need to be completed
- 2) What is needed from AC Members to be able to complete the task
- 3) When – **realistically** – it is hoped to finalize the draft document, and pass it on to the next stage

Hawksbill Turtle Assessment (WP #12) – Hamann, Limpus, Miller

The draft, current Nov 2020, was presented and discussed. The draft will be “open” for comments until April 15, 2021. In addition to the AC, Sub-regional Focal Points and Task Force representatives, we have sent the document (or sections) out to a variety of experts for comment.

Aside from reviewing the text, main tasks remaining include finalizing the maps, and map format, summary tables, and checking reference lists.

AC members are asked to read sections they are familiar with (or more if they have time) and make suggestions/comments (the live document will be maintained in the Teams environment until April 15 to enable this).

After April 15, all comments will be addressed, and a final version produced by around April 30 for proofreading/editing and then submitted.

Species Assessment – Olive Ridley (WP #13)

To be determined

Guidelines on Beach Management (WP # 15) – Nel, Tiwari

The two documents presented at Plenary will be merged and major tasks include (1) drafting a preamble for this document to advise the Signatory States on the implementation these guidelines; (2) Hiring of an intern to do a literature review of existing measures on in-situ nest protection and hatcheries and to work with Jeff Miller to extract relevant information from the National Reports.

AC members leading this initiative will draft the preamble and oversee the work done by the intern. Other AC members will be invited to share relevant literature.

Finalization of this document will probably take a couple of months and will be determined by the speed at which the intern is hired and completes his/her task.

Criteria for Identifying Habitats Critical for Marine turtles (WP #30) – Whiting

Major tasks that need to be completed:

Scott will use comments and ideas from the Teams discussions and posts to formulate examples of draft objectives and criteria for Habitat Critical for the IOSEA region. Several alternate objectives will be provided. Criteria to support the objectives will be developed or adopted from other documents.

What is needed from AC members to be able to complete the task:

- a. AC members to post comments online by 1 April 2021.
- b. Once the draft is sent out, critical comment will be sought from AC members and Focal Points to ensure that:
 - a. This meets the understanding of the intent within the Work Programme
 - b. The AC see no political or governance issues with the process
 - c. The process does not leave a legacy of time-consuming administrative burden for the AC.

When – realistically – is it hoped to finalize the draft document, and pass it on to the next stage:
A draft document by 6 May 2021

Site Network WG (WP #35) – Frazier, Hamann, Nel, Tiwari

A document describing the main issues for discussion and resolution was presented. The main tasks are to (1) revise the Site Information Template; (2) refine evaluation criteria and scoring instructions; and (3) simplify the post-scoring process. In the time available it was not possible to address these issues in sufficient detail or resolve issues. A dedicated online meeting will be held in follow-up to refine the process and develop the path forward. Prior to the meeting Mark will develop a working document to outline key unresolved issues, and present potential solutions (noting the suggestions of Jeff and the AC to better include the index sites, and other site network criteria and objectives (e.g., birds)). Realistically the meeting could be held in May.

Draft List of IOSEA endorsed Research Projects (WP #42) – Tiwari

The following issues need to be addressed before the document presented at the AC9 meeting can be finalized:

- What does this document represent (e.g., research priorities or priorities) and what should it be called?
- Who is this document for?
- How should this document be structured?
- Should this document be linked more tightly to other IOSEA documents and/or be a stand-alone document?
- Should this list be prioritized and if so how and by whom?

It was agreed that another online AC meeting would be organized to discuss and resolve the above issues. The document will be finalized after this AC meeting.

Available Information on Genetic Analysis (WP #44, 45) – Bourjea, Limpus, Nel

A document describing a follow up on genetic activities in the IOSEA region was presented. It includes a (1) a brief history of genetic research on marine turtles in the region; (2) advances in genetic research on marine turtles with the description of updated maps on currently known genetic management units in the region and main gaps; (3) how the work is being structured at the scale of the IOSEA region; and (4) some important issues that genetic work is facing.

The presentation of the document was also the opportunity to (1) remind why doing genetic population studies at the oceanic or smaller scale is important as a baseline of regional Management Units; and (2) provide information on major technological advances in term of genetic applied to marine turtle (environmental DNA, whole genome screening, species identification related to illegal trade...).

Guidelines and Protocols for Data Collection and Management (WP #46) – Miller

Major tasks that need to be completed:

Two major tasks have been identified and initiated.

The first task is the development of a set of “Advice Sheets” on a variety of topics for use by the IOSEA Secretariat to answer inquiries from Member States, NGO research groups, and others concerning Recommended Guidelines and Protocols for data collection and management in the IOSEA region.

The second task concerns the identification of research methods that are recommended by the AC to facilitate standardization of the methods used in the IOSEA Region, while providing for the use of other methods. As part of the second task, the Secretariat was asked to contact the MTSG concerning the possible revision/up-dating/expansion of the 1999 MTSG methods manual and the role/contribution that IOSEA might play.

What is needed from AC members to be able to complete the task:

The AC members will be asked to provide specific comment/input/evaluation concerning the format and potential content, as well as the value of continuing development of this style of “Advice Sheet”.

The AC will be asked to review and consider the revision/up-dating/expansion of the 1999 MTSG methods manual as well as the potential use of other manuals that have been submitted to the IOSEA library.

When - realistically – it is hoped to finalize the draft document, and pass it on to the next stage:

Assuming that the development of “Advice Sheets” is approved by the AC, a series of short documents will be drafted available for review by the AC by the end of May. The first three documents will concern Databases, GIS programs, and Bibliographic programs that are available either for free or purchase via the internet. The documents will provide general assessment of the programs and links to their sources.

The revision/up-dating/expansion of the 1999 MTSG methods manual need to be planned in conjunction with MTSG. Timelines will be communicated as soon as possible.

Capacity Building Strategy for 2021 and Beyond (WP #48, 85, 87, 88, 89) – Tiwari, Whiting et al.

Major tasks that need to be completed:

The major output will be a capacity building framework or plan. This will be the road map that will outline what will be in scope for delivery from the Work Programme. The document will set out what will be realistic to accomplish with the current Covid scenario and a very limited budget. The core resources for delivery will primarily be the Secretariat and AC.

Scott will draft a skeleton document with some suggested headings and take into account all comments received online and through discussions. It is envisaged that this will not be a large document. It is also recognised that many actions in the Work Programme link with Capacity Building and many of these actions link with each other.

What is needed from AC members to be able to complete the task:

AC members can contribute in the following ways:

- a. Prior to 1 April 2021 – go to the files and fill in your ideas and methods of implementation on the attached tables
- b. We are happy to receive any good examples of concise Capacity Building plans, which may provide the AC with difference approaches to this task
- c. After 1 April Scott will combine all comments into a draft document and seek detailed comment on the structure and content.

When – realistically – is it hoped to finalize the draft document, and pass it on to the next stage:
A draft document will be sent around on 6 May 2021

Summary of Plans for World Sea Turtle Day (WP #50) – Mohd Jani

Major tasks that need to be completed:

With clear objectives, practical timing and responsibilities decided, the task to focus on next is to assist the Secretariat to prepare relevant information and the WSTD@IOSEA Host Brief to be sent together with the invitation letter that will be sent by the Secretariat by 1st week of April (to allow enough time for NFP to give feedback by the given deadline: 3rd week of April?).

Start the detailed planning with the Organizing Committee, setting specific tasks and deadlines.

What is needed from AC members to be able to complete the task:

- Give feedback on the latest timetable and the draft briefs when they are ready.
- Assist the organising committee in securing hosts (for global and local events) once the letter has been sent (by the given deadline – 3rd week of April)

When – realistically – is it hoped to finalize the draft document, and pass it on to the next stage:
Next Friday, 26 March 2020

National Report Format (WP #78) – Miller

Major tasks that need to be completed:

Awaiting the finishing of editing current version

What is needed from AC members to be able to complete the task:

No role for the AC at this stage. Working Group set up by MOS8 will review the document and recommend to Secretariat to facilitate circulation to Signatory States for approval and posting on the IOSEA web page.

When – realistically – is it hoped to finalize the draft document, and pass it on to the next stage:
Hopefully less than a month (by end of April)

Following the first use of the revised reporting format in the run-up to MOS9, the AC will be requested to review the resulting submissions and consider whether further improvements to the reporting form should be recommended.



**Memorandum of Understanding on the Conservation and Management of Marine
Turtles and their Habitats of the Indian Ocean and South-East Asia**

