

INDOCET CONSORTIUM WORKSHOP

SAINTE-MARIE, 3RD-4TH OF JULY 2015

Context

During a workshop held in Reunion in November 2014, the decision was taken to create a regional cetacean research Consortium in the South-Western Indian Ocean (SWIO), with the aim of bringing together researchers actively working on cetaceans in the region under a common understanding and partnership. Following this decision, it was agreed to take the opportunity of the Humpback Whale World Congress, which was held in Sainte Marie, Madagascar from the 29th of June to the 2nd of July, to organize a post-conference workshop to move ahead on the creation of the Consortium.



Participants

The workshop was open to the founding members of the Consortium. Ten of them, including all but one steering committee member, attended the meeting (Table1).

Table 1. List of the founding members

| Founding members (Reunion, Nov.2014) | Affiliation | Email | Steering Committee | Sainte Marie workshop participants |
|--------------------------------------|--|--|--------------------|------------------------------------|
| CERCHIO Salvatore | New England Aquarium, Woods Hole Oceanographic Institution | scerchio@gmail.com | Yes | Yes |
| DE TOMA CA-DINOUCHE Adèle | Commission de l'Océan Indien (COI) | adele.detoma@coi-ioc.org | | Yes |
| DULAU Violaine | Globice, La Réunion | violaine.dulau@globice.org | Yes | Yes |
| MOUYSSSET Laurent | Globice, La Réunion | globice@globice.org | | |
| FINDLAY Ken | University of Prétoria, Afrique du Sud | kenfin@mweb.co.za | Yes | Yes |
| FOSSETTE Sabrina | Megaptera, France | sabrina.fossette@googlemail.com | Yes | Via Skype |
| VELY Michel | Megaptera, France | megapteraone@hotmail.com | | |
| GARRIGUE Claire | IRD, France Opération cétacés, Nouvelle-Calédonie | Claire.garrigue@ird.fr op.cetaces@lagoon.nc | Yes | Yes |

| Founding members (Reunion, Nov.2014) | Affiliation | Email | Steering Committee | Sainte Marie workshop participants |
|---|---|----------------------------|---------------------------|---|
| MAYER Francois-Xavier | Cétamada, Madagascar | fx.mayer@gmail.com | | Yes |
| SALOMA Anjara | Cétamada, Madagascar | anjara@cetamada.com | Yes | Yes |
| TRUELLE Laurene | Institut des Neuro-Sciences Paris-Saclay (Neuro-PSI) Université Paris Sud, France | laurene.trudelle@gmail.com | | Yes |
| TYACK Olivier | Mauritius Marine Conservation Society (MMCS) | otyack@gmail.com | Yes | Yes |
| ZERBINI Alexandre | National Oceanic and Atmospheric Administration USA | alex.zerbini@noaa.gov | Yes | |
| WILLSON Andy | Five Oceans Environmental Services, Oman | andywillson@gmail.com | | |

Agenda of the workshop

The following agenda was adopted at the beginning of the workshop:

- Review the Memorandum of Understanding (MoU)
- Review the code of conduct and ethic of the Society of Marine Mammalogy
- Define next steps for the Consortium
- Discuss funding opportunities
- Discuss development of Photo-identification platform/matching tools

Day 1: Friday 3rd of July (afternoon only)

Through several skype meetings, the Steering Committee of the Consortium worked on establishing a Memorandum of Understanding (MoU) for the Consortium. A draft version of the document was sent by e-mail to all founding members before the workshop, so that all members have time to review it and provide feedbacks and amendments.

The first session of the workshop was consequently used for review, comment and approval of the draft MoU. Several modifications were made to the draft.

Additional main decisions taken were:

- Agreement on the Name of the Consortium as **IndoCet**
- The acceptance of the Steering committee as the first Executive Committee for the first term of the Consortium
- The adoption of the code of conduct and code of ethic of the SMM by the Consortium.

The final version of the MoU will be circulated for all members to sign. The code of conduct and ethic of the Society of Marine Mammalogy will also be attached for approval.

Day 2: Saturday 4th of July

The discussion on the second day of the meeting centered on a number of identified topics.

1. The Way Forward: where do we go from here with the Consortium?

- The following steps were identified:

- Go public: to WIOMSA, MARMAM, MMS, SANCOR (South African Network for Coastal and Oceanographic Research), COI, IUCN Cetacean Specialist Group, etc...
- Acceptance of membership

- How do we implement these steps?

The members identified the need to create a website, to present the Consortium and allow for online applications. This Consortium website/portal could include:

- A “static” webpage that provides background and descriptive information about the Consortium
- Links to a dynamic Facebook page
- Links to organization/institutional webpage
- Private Consortium member-only page for announcements
- Online application tool for prospective members

- Funding

Although the question of having membership fees was raised, it was thought that we should seek seed funding to launch the Consortium. This seed funding could cover the creation of the Consortium webpage/portal and the first annual meeting of the Consortium

2. Funding opportunities

An update was provided by Adèle Cadinouche, regarding funding and partnership opportunities in the SWIO:

- FED funding (COI Biodiversity project):
 - Call of proposal launched on the 7th of July
 - 1 single leader
 - leader need 2 year of existence with a legal status
 - 100 000€ max

The guidelines for the call for proposals are available online:

<http://commissionoceanindien.org/activites/biodiversite/appel-a-propositions-call-for-proposals/>

- FFEM project (runs until July 2017):

This funded project includes:

- 37 000€ for an online cetacean data sharing tool
- 15 000€ for a technical regional workshop

3. Online cetacean data sharing tool

The members agreed that the major question that needs to be addressed from the region is that of population structure of humpback whales. For example, are the different population estimates from Mozambique and Antongil Bay (Madagascar) discrete or common? Furthermore, the recent extension of humpback whale breeding habitat into the Mascarene islands requires investigation. Without such information it is difficult to assess the status of humpback whales in the SWIO and such status assessments are critical for adequate management (tourism, fisheries, oil and gas exploration) to achieve effective conservation of the species. Furthermore, humpback whales are a trans-boundary migratory species so management of the population needs to be shared across range states.

Population structure can be best investigated through a number of innovative research techniques including natural marking (photographic and genetic) and satellite tagging. These techniques provide information about connection across breeding sites, links between breeding and feeding grounds, and have proved to be powerful tools (e.g., mark-recapture for abundance estimation).

Therefore, because there is a need for a regional multi-species database, the members decided that the effort should be dedicated to develop a data sharing tool on humpback whales. This should be a multi-disciplinary platform including photo-identification, genetic and satellite tagging data.

One of the most challenging issues facing the members is the matching of the large volume of data, both genetic and photographic, that have been collected over the last two decades. Not

only are such data dispersed across institutes, but they are also spread over large geographic areas. We believe that the best method for the analysis of such data (which include contemporary data collection) is through the formation of a collaborative research Consortium which can ensure that common data comparison methodologies are used across the region. The best way to do this would be to develop a common matching platform in the SWIO. However, the development of such matching platform is expensive and not a trivial process. A number of tools to facilitate such matching are in current development. In the SWIO, Cetamada, is developing a web-based application to store their data (cetamet, www.cetamet.org) and an automated matching tool (IdentiWhale). More globally, the participants recognized the existence of Wildbook, open-source software developed for the management of wildlife data, including mark-recapture sightings, genetic and tagging metadata (<http://www.wildme.org/wildbook>). An automated matching tool is also being currently developed as part of Wildbook.

A demo of Cetamet/Identiwhale was provided by Saloma during the Humpback Whale World Congress and a presentation of Wildbook was provided by Ted Cheeseman, via Skype. Unfortunately, due to bad internet connection, the demonstration could not be viewed entirely. The pros and cons of the two systems could not be assessed appropriately due to lack of time during the workshop.

In view of the above, the members recognized the need for:

- TASK 1: 10,000€ to fund the setting up of the Consortium:
 - Set up a website to advertise the Consortium, allow for membership application, etc.
 - Through the above establish a metadata database to identify available data in the SWIO

- Task 2: 27 000€ to develop existing platforms for data sharing and photo-ID matching (following the identification of the strength and challenges that can be found in existing platforms). We will first create a Terms of Reference for what the Consortium wishes to accomplish. We will then communicate this to Inria and Wildbook, and put them in contact so that the developers could see if there is possibilities to merge both system and at what cost. We will expect a proposal(s) from them for fulfillment of the ToR, either jointly or individually based upon their discussions.

4. Call for proposal for the Biodiversity Project (FED)

Time was lacking to discuss the way to go concerning the Biodiversity Project (FED). Proposition of concepts and ideas will have to be made by email.

5. Acknowledgement

We are grateful to the Indian Ocean Commission (COI), FFEM, and Cetamada for funding this workshop and covering the travel expenses of the Steering Committee.

