## SC/67A/CMP/07 Rev1

# The Arabian Sea Whale Network: A brief progress report

Gianna Minton and Marina Antonopoulou



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Gianna Minton<sup>1</sup> and Marina Antonopoulou<sup>2</sup>

- 1. Independent consultant and part-time ASWN coordinator. Gianna.minton@gmail.com
- 2. Head of Marine Programme, EWS-WWF UAE, ASWN co-coordinator. mantonopoulou@ewswwf.ae

#### **Background**

The Arabian Sea Whale Network (ASWN) was formed at the conclusion of a January 2015 workshop in Dubai. The Network has no formal legal status or governmental recognition but has a website and logo, intended to create a sense of unified purpose and facilitate communication, fund-raising, collaborative research and data management and analysis. Members include independent researchers, researchers linked with academic institutions, and representatives of local, national and international NGO's, IGO's and government bodies.

#### Contributions to the SC from Arabian Sea Range States

In 2016 the ASWN submitted a newsletter highlighting members' activities (SC\_66b\_SH\_12) and a brief progress report on the network (SC\_66b\_SH\_14). This year, several documents are being submitted to the meeting by ASWN members and their colleagues. They include:

Document Number	Lead Author or ASWN representative in author list	Title	
Oman			
SC_67A_HIM_XX	Aida al Jabri/Tim Collins	Oman Stranding Data	
SC_67A_CMP_12	Andrew Willson	Update on Arabian Sea Humpback Whale research activities	
SC_67A_CMP_XX	Tim Collins	An updated Abundance Estimate for humpback whales in Omani waters	
SC_67A_CMP_15	Andrew Willson	Preliminary investigation into ecological niche modelling of Arabian Sea humpback whale vessel sightings and satellite telemetry data	
SC_67A_WW_03	Robert Baldwin	Planning for responsible humpback whale watching in Oman	
SC_67A_ SH_13	Howard Gray	A note on sperm whale ( <i>Physeter macrocephalus</i> ) records from the Sultanate of Oman and United Arab Emirates	
Iran/UAE/Kuwait			
SC_67A_CMP_14	Dakhteh, Moshri, Van Waerebeek,	On the presence of humpback whales in the Persian Gulf: Rare or rarely documented?	
Pakistan			
SC_67A_CMP_05	Moazzam Khan	Sightings of Humpback whales off the coast of Pakistan reported by fishing vessels participating in a bycatch observation scheme	
India			
SC_67A_CMP_03	Dipani Sutaria	Update on whale sightings/strandings off the coast of India	
Sri Lanka			
SC_67A_HIM_03	Asha de Vos	Potential application of Automatic Identification System (AIS) data extracted from a public platform to monitor ship-strike of whales	
SC_67A_HIM_11	Bob Brownell	Large Whale Strandings from Sri Lanka between 1889 and 2014	
SC_67A_INFO_61	Asha de Vos	First record of Omura's whale, <i>Balaenoptera omurai</i> , in Sri Lankan waters	
Regional			
SC_67A_INFO_88	Charles Anderson	Cetaceans and Tuna Fisheries in the Western and Central Indian Ocean	

The increase in the number of reports from Arabian Sea range states presented to this meeting, along with the breadth of topics and the number of range states represented in the content and authorship of these reports demonstrates concrete progress toward increased awareness, data collection and capacity building in the region. This is due almost entirely to the tireless efforts of the ASWN members and their colleagues working in the region.

#### ASWN progress at regional level

In addition to the progress made by ASWN members and their colleagues in individual Arabian Sea range states, the network is making some progress at regional level. During the 2015 workshop, ASWN members agreed on a number of recommendations for priority action (listed in the executive summary of the workshop report) The following table measures the progress that has been made against each recommendation, and highlights gaps where continued effort and funding are required to achieve the network's goals:

Recommendation	Progress as of May 2017	
Form an Arabian Sea Humpback Whale Research     Network: To include development of a mission statement and objectives and a clear set of conservation- and research-related roles for the members	The Arabian Sea Whale Network (ASWN) is formed and active, with a logo, website, and a master proposal which outlines the network's detailed objectives, activities and a budget for collaborative research and conservation actions.	
2. Identify a focal point in each ASHW range state responsible for liaising with the network coordination team and for 1) verification and documentation of all ASHW stranding and sighting reports, 2) working with local communities, coastguards and others to collect data opportunistically and 3) assistance in drafting funding proposals and research plans for country-based or cross-border priority areas	Focal points in each range state collect and share data on whale sightings and strandings, with an increasing number of confirmed records received from countries where previously little or nothing was known about whale distribution (see for example SC_67A_CMP_05- Pakistan and SC_67A_CMP_14 – Iran).	
3. Develop a common (web-based) platform for sharing documents, data and research protocols among network members. To include, if possible, a regional Photo-ID matching platform.	With financial support from the IWC, WWF International, WWF Pakistan, Emirates Wildlife Society –WWF and the Environment Society of Oman, a contract has recently been signed with WildMe, the developers of flukebook.org, to create a regional online data platform. Funding has been secured for Gianna Minton to help coordinate the project, ad data sharing agreements have been secured to upload humpback whale photo-identification data from Oman within the next few weeks. Additional sightings and phototraphic data will be uploaded from Oman and other ASWN countries in the following months. A fully functioning data platform is expected to be in place by July 2018. More detail is included in Appendix 1 to this update.	
4. Establish data-sharing agreements for any web-based/group-wide data repositories, and memoranda of understanding between partners who embark on shared analyses to ensure proper data ownership and publication rights.	The first data sharing agreement between the Environment Society of Oman (curators of the Oman humpback whale photo-ID catalogue) and Flukebook is in place in preparation for the upload of Oman humpback whale photo-ID data. This will form the template for future data sharing agreements between other users and Flukebook, as well as between users in different countries. Each agreement will be adapted to users' needs and conditions.	
5. Produce a "glossy" presentation of ASHW background and conservation concerns that network partners can use to raise awareness and attract funding.	An infographic was finalized in February 2017 (see Appendix 2), and was widely distributed throughout the ASWN and beyond. It has been translated into Persian and an Arabic translation is planned for Q3 of 2017. It has been shared with	

	government agencies, industries, schools and community groups throughout the Arabian Sea region.
6. Engage in dedicated fund-raising efforts to support network coordination and research activities at both national and regional scales.	Fund-raising at the national level has been successful for some members, with significant funds having been obtained for work in Pakistan, and moderate funds for work in India and Oman. However, fund-raising at the regional level has proven difficult so far. In 2016 the ASWN submitted 8 funding proposals, of which only one (the IWC) was successful. Apart from the IWC grant for data platform development, all funding for network coordination and communication and regional activities to date has been obtained through WWF's international and regional offices.
7. Implement regional research activities that include passive acoustic monitoring at strategic locations, dedicated boat surveys for genetic sampling, photo-Identification and collecting data on distribution and numbers, and further analyses of acoustic and genetic data already obtained from Oman and other locations.	Dedicated whale research is taking place in some ASWN member countries (see for example SC_67A_CMP_12 and 15 from Oman, SC_67A_CMP_03 from India). In other countries whale data is being collected incidental to dolphin research, or through community outreach and the establishment of reporting networks (see SC_67A_HIM_XX-Oman strandings, SC_67A_CMP_05 -Pakistan ASWH sightings, SC_67A_CMP_14- Persian Gulf humpback whales). A programme of passive acoustic monitoring is planned for the coast of Pakistan, to be launched in the second half of 2017. Plans are also underway for a comparison of humpback whale song recorded off the coasts of Oman, India and Madagascar.
8. Create a common pool of equipment and other resources that can be used for research and analysis in different range states as required	Sadly there has not yet been any progress on this objective.
9. Encourage Master's and PhD candidates from range states to conduct research and conservation work on ASHWs.	A PhD candidate is working on whale and dolphin research in Iran, several students and early career scientists are working in India, and one ASWN member is teaching at the University of Karachi, involving students in data collection.
10. Execute a large-scale GIS exercise - mapping all known/confirmed ASHW sightings (with effort indices when available) and strandings for analysis of spatial/temporal trends, as well as overlap with known threats (e.g. shipping lanes, high-density fisheries that use gillnets or vertical lines,	A PhD candidate in Oman is conducting a large-scale spatial analysis of humpback whale distribution and threats in the Arabian Sea region.  Papers detailing stranding records and recent live sightings are being submitted to this meeting as separate documents
oil and gas exploration and development sites).	from Oman, Pakistan, Iran and India. The creation of the regional database will greatly aid the effort to examine these all together at a regional scale.
11. Maintain liaisons with international and intergovernmental organisations that can support the network's aims and objectives and ensure that network findings/results are applied toward regional and international management and conservation frameworks.	The regional and international offices of WWF, WCS, the IUCN and CMS have been kept closely informed of ASWN activities and objectives through regular emails and contacts. The IWC is also routinely updated and contacted. Of note is an ongoing effort to obtain "concerted action" status for Arabian Sea humpback whales through a revised procedure being developed under CMS. This will be proposed at the next CMS COP in the Philippines in October 2017, and will hopefully provide a mechanism for a regional government supported conservation action plan, which to date has been difficult to achieve.

### CREATION OF A REGIONAL DATA ARCHIVAL AND ANALYSIS TOOL FOR CONSERVATION OF ARABIAN SEA WHALE POPULATIONS

During SC66b, the SH subcommittee agreed to fund project SH3B, the "creation of a regional data archival and analysis tool for conservation of Arabian Sea whale populations". This funding proposal was formally approved during the Commission meeting in October 2016, and following slight modifications to the original proposal and approval by the SH chair, a contract was signed between the IWC and the Emirates Wildlife Society –WWF in February 2017. As of May 2017, the proposed project is on schedule with the following activities/milestones completed:

- A wide range of project-based, national, regional and international databases have been consulted as references for the structural design and field names/data categories to be included in the database. A complete terms of reference (ToR) has been written and agreed between ASWN project partners and Wild Me, the designers of Flukebook.org.
- The ToR agreed by the ASWN have been extensively compared with the ToR of the Indocet (Southwest Indian Ocean Cetacean Consortium), who are also working with Flukebook.org to design a regional humpback whale photo-ID online matching platform. Areas of overlap and complementarity have been identified.
- Co-funding has been obtained from various partners to support the design and first stages of implementation of the data platform (see table below).
- A sub-contract has been signed between EWS- WWF and WildMe, and a data sharing agreement has been signed between WildMe, and the Environment Society of Oman to prepare for the import of the first dataset to be included in the platform— The Oman humpback whale photo-ID catalogue.
- A timeline has been agreed for the design and implementation of subsequent stages of the data platform to include a wide range of associated sightings, strandings, genetic, satellite tagging and effort data (see table below).

Table 1: Contributions from different organisations to Arabian Sea regional online data platform development

Name of Organisation	Aspects funded	amount contributed (USD)
IWC	general data platform development	\$12,000.00
WWF International	general data platform development	\$4,000.00
WWF Pakistan	Coordination of data platform project and ASWN network and data platform ability to incorporate incidental/opportunistic data	\$14,000.00
Environment Society Oman	Import of Oman dataset	\$1,000.00
EWS-WWF UAE	administration and support	\$2,062.00
Total		\$33,062.00

Table 2: Agreed timeline for implementation of Arabian Sea regional online data platform development

Action	Date for completion
Database map and complete list of desired data fields, formats and functionality	03/17
Beta version of data platform ready for population and testing with Oman data	10/17
Trialled and refined data platform ready for import of data from Pakistan and Iran	01/18
Final Arabian Sea data archiving platform and expanded Flukebook functionality for wider cetacean community	06/18

Appendix 2: Arabian Sea humpback whale Infographic



This Infographic was completed in February 2017 and distributed through ASWN members and their organisations, the IUCN Cetacean Specialist Group website, and by ASWN members throughout the Arabian Sea. It has been translated into Persian (see below) and will be translated into Arabic in the second half of 2017.

It has been distributed to the following target groups in Oman: posted on the Environment Society of Oman (ESO)'s social media; picked up by local newspapers; Used in ESO's community outreach and education presentations for schools; Sent to key stakeholders such as local ports and Port Development Authorities. It has been sent to similar groups in Iran, Pakistan, India and the UAE, and has been well received.



Persian translation of the Infographic.