

Review of ASHW conservation issues and recommendations for further action.

Work on the ASHW has been presented at several sub-committees during the 2015 IWC SC meeting, including; Whale Watching, Other Southern Hemisphere Whale Stocks and Environmental Concerns. This working paper presents a current summary of urgent conservation concerns which require action and/or recommendations by the IWC SC.

Threats and vulnerabilities:

1. The population is listed as Endangered on the IUCN Red-list based on a population abundance estimate of 82 (95% CI 60-111) for animals sighted in Oman (Minton et al., 2008). Recent genetic analyses also suggest that ASHW have been isolated for millennia (*ca* 70,000 years) and have low genetic diversity; other indices suggest the population is in decline (Pomilla *et al.* 2014).
2. Five ASHW strandings were recorded in Oman in the five month period preceding the 2015 SC meeting (IWC/SC/66a/SH22).
3. 22% of catalogued ASHW in Oman display evidence of tattoo-like skin disease, with an increasing trend from 2000 to 2012 (15.6-30%) (Van Bresseem et al. 2014).
4. Images of whales photo-identified in Oman between 2000 and 2003 demonstrate that 30-40% have scarring consistent with entanglement in fishing gear (Minton et al., 2011).
5. Several studies of ASHW habitat preferences demonstrate that the Gulf of Masirah and Hallaniyats Bay in Oman provide critical habitat (IWC/SC/66a/SH22). Developments emerging in these areas include:
 - Possible expansion of whale watching industry;
 - Seismic surveys;
 - Drilling of test wells for offshore oil production;
 - Startup of a large multipurpose port and dry dock facility;
 - Construction of new city for 100,000 people;
 - Expansion of fisheries including construction of Oman's largest fishing port;
 - Fast ferry routes from new terminals;
6. Positional data from satellite tagged whales indicates localized use of areas coincident with offshore shipping routes (IWC/SC/65a/SH19)

Seismic surveys were conducted at the beginning of the 2014/15 breeding and calving season in an area identified of critical habitat in Oman with one whale struck by a seismic spreader cable during the survey (IWC/SC/66a/SH23). This has raised concern about the adequacy of mitigation measures for this industry

A consultancy/NGO/Industry partnership is successfully developing a 'Whale Management and Mitigation Plan' for the Port of Duqm in the Gulf of Masirah (IWC/SC/66a/SH23). This should be used as a model for engaging more regional industries and encouraging the adoption of appropriate mitigation measures.

A report on a regional workshop to stimulate research collaboration between range states highlighted significant ASHW knowledge gaps and identified current and potential threats (IWC/SC/66a/FI39). An informal network of researchers agreed to collaborate to raise funds and implement a research workplan including:

1. review of stranding information;
2. Identification of focal points to report on humpback whale distribution;
3. Region wide passive acoustic monitoring in strategic locations;
4. Dedicated small-vessel surveys in range states other than Oman;

5. Revised mark recapture estimates from dedicated small-boat surveys in Oman.

Although a conservation research agenda has been identified by the new regional network, the population's extreme vulnerability and the scale of current threats merit the establishment of an independent advisory panel. This should be equivalent in scale and prominence as that for the Western Grey Whale population. Resourcing and support for such a panel warrants further discussion if this initiative is welcomed.

Where threats can not be delayed or avoided until knowledge gaps are filled, it is suggested that resources are made available through a partnership approach (industry/ government/ NGO/ Academic) to expedite field surveys and risk assessments. These assessments should be formulated to generate cross-sectorial management plans that consider all industrial activities and infrastructure development.