

SC/68A/CMP/05

IWC Eastern South Pacific Southern Right
Whale Conservation Management Plan –
Progress Report April 2019

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INTERNATIONAL
WHALING COMMISSION

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Abstract

Eastern South Pacific southern right whale population found off Chile and Peru is one of the most threatened whale populations worldwide. In 2012, the International Whaling Commission adopted a Conservation Management Plan (CMP) for this population. In 2016, the first implementation strategy was adopted and effectively completed in 2018. Activities conducted over the last period include the first Multinational Combined Capacity Building on Cetacean Stranding and Entanglement Response Training, the signing of a Memorandum of Understanding between the governments of Chile and Peru, and the beginning of the implementation of a Passive Acoustic Monitoring program to identify a breeding area, among others. Furthermore, in 2018 the Commission endorsed a new CMP implementation strategy 2019-2020. The CMP proves to be a key framework to facilitate the implementation of conservation measures for this Critically Endangered population of whales and to enhance international collaboration for its long-term recovery.

Introduction

The Eastern South Pacific (ESP) southern right whale (*Eubalaena australis*) population was classified as Critically Endangered by IUCN in 2008 and in 2012 the International Whaling Commission (IWC) adopted a Conservation Management Plan (CMP) for this population (IWC 2013).

The ESP southern right whale CMP aims to guide and encourage range states, stakeholders and international partners to take steps towards the recovery of this population to levels that will allow the species to withstand both environmental and anthropogenic impacts and ensure its long-term survival (Galletti Vernazzani *et al.* 2016).

In the short-term, the plan is focused to 1) obtain baseline data, particularly referring to population size, concentration areas of the species (breeding or feeding areas) and stock structure; 2) conduct a detailed assessment of potential impacts in identified concentration areas and; 3) develop specific mitigation strategies.

In 2016 a revised version of the CMP was submitted by range states (Galletti Vernazzani *et al.* 2016) and the first CMP Implementation Strategy was adopted (CMP 2016). Over these years significant advances have been made (Galletti Vernazzani *et al.* 2018; CMP 2017, 2018a) to strengthen the conservation of the Critically Endangered Eastern South Pacific population of southern right whales and a new Implementation Strategy 2019-2020 (CMP 2018b) was endorsed by the IWC (IWC 2018a) to overcome new challenges.

This report provides information on the advances made from April 2018 to March 2019 regarding the implementation of priority actions and outline the new Implementation Strategy 2019-2020.

Advances on Priority Actions – Implementation Strategy 2017-2018

a) *Coordination meetings and reporting*

In May 2018, a progress report on the advances made on implementing CMP priority actions from April 2017 to March 2018 was presented (Galletti Vernazzani *et al.* 2018) and was acknowledged by the IWC Scientific Committee (IWC 2018b). In particular the Committee **reiterated** “the importance of the CMP for the conservation of this critically endangered population of southern right whales in the southeastern Pacific”, **welcomed** “the progress being made in its implementation by Chile and Peru” and **commended** “the scientific work and international co-operation being undertaken for the PAM project and looks forward to receiving the results of the acoustic studies such that future sighting surveys will be more informed and baseline information on the location of breeding grounds will be available”.

A second coordination meeting was held in August 2018 in Lima, Peru, to review advances of the CMP (CMP 2018a) and a new implementation strategy 2019-2020 was proposed (CMP 2018b). The Steering Committee includes representatives from the governments of Chile and Peru, the Chair of the Scientific Committee or the representative of the CMP Working Group, the Chair of the Conservation Committee or the representative of the CMP Standing Working Group, and the Coordinator of the Eastern South Pacific Southern Right Whale CMP.

Both documents were presented during the 67th biennial meeting held in Florianopolis, Brazil (September 2018). The Conservation Committee “**thanked** the CMP coordinators for their ongoing commitment and excellent work to protect vulnerable populations of cetaceans; **endorsed** the 2019-2020 implementation strategy for the South Pacific Southern Right Whale; and **recommended** approval of an allocation of £10,000 from the CMP Voluntary Fund, to support stranding and entanglement response training under the Eastern Southern Pacific Southern Right Whale CMP” (IWC 2018c).

Afterwards, the Commission **endorsed** “the recommendations of the Scientific and Conservation Committee on CMPs” (IWC 2018a).

b) Adoption of Memorandum of Understanding

The preparation of a Memorandum of Understanding (MoU) between the governments of Chile and Peru was agreed at the first CMP coordination meeting conducted in March 2017 to formalize cooperation between both range states (CMP 2017). The objective of this document was to promote binational cooperation and facilitate the implementation, at national level, of CMP activities in both states.

During the II Binational Cabinet Meeting of Chile-Peru held in Santiago, Chile, November 2018, 14 bilateral instruments were signed, including a Memorandum of Understanding (MOU) between the Ministry of Foreign Affairs of the Republic of Chile and the Ministry of Foreign Affairs of the Republic of Peru “to coordinate cooperation in the conservation of the southern right whale population of the southeast Pacific” (MOU 2018). A presidential declaration was also signed and referred *inter alia* to this MOU, strengthening and giving great importance to the eastern South Pacific southern right whale CMP.

The MOU represents a strong political commitment from Chile and Peru to prioritize actions oriented to increase public awareness about the critical status of this whale population, promote bi-lateral cooperation and coordinate policies oriented to prevent its extinction.

c) Increase sighting efforts on possible reproductive areas (RES-05)

Most of the scientific information available on this population comes from opportunistic sightings and thus, many priority actions can hardly be implemented until a breeding area is identified.

In 2016 the IWC Scientific Committee decided to support the project “Acoustic Monitoring of the Eastern South Pacific population of southern right whales, a key to increase the results of the CMP”, with the aim to facilitate the identification of potential breeding areas along the coast of Chile and Peru (IWC 2017).

The passive acoustic monitoring (PAM) project contemplates the annual deployment of two hydrophones at selected sites. The first deployment was successfully conducted in July 2018 at northwestern Isla de Chiloe, southern Chile, an area that has a strong likelihood to be part of a breeding area (Galletti Vernazzani *et al.* 2014). To date, 10 months of continual acoustic data from northwestern Isla de Chiloe has been collected. The second deployment is underway off the Arauco Gulf, central Chile, a former whaling area. The advisor team is currently considering recruiting MSc or PhD students to conduct data analysis. Further details on advances of the passive acoustic monitoring project from May 2018 to April 2019 can be found in Galletti Vernazzani *et al.* (2019).

d) Increase capacity to respond to entangled whales in both countries (PACB-02)

From 2014 to 2017, two entangled southern right whales have been recorded in Chile. Due to the low population number of this population, these events are considered as very high risk under the CMP. Consequently, at its first coordination meeting in March 2017, the CMP Steering Committee agreed to increase local capacities and proposed a workshop for attending disentanglement and stranding events with the aim to address cases involving southern right whales as extremely urgent (CMP 2017).

As a result, the first Multinational Combined Capacity Building on Cetacean Stranding and Entanglement Response Training under the CMP was successfully conducted in Lima, Peru, between the 13th and 16th November 2018. More than 60 specialists from diverse areas participated in the workshop, including representatives of government institutions, university students, civil society representatives from Chile and Peru, as well as special guests from Colombia, Ecuador and Panama. The four-day workshop included two days for entanglement response training and two days for stranding and necropsy training. Both issues included theoretical and in-hand lessons at sea and laboratory.

The workshop was conducted thanks to the contributions of the Government of Peru, in particular the Instituto del Mar del Peru (IMARPE), the IWC, the Permanent Commission of the South Pacific, Cetacean Society International (CSI, USA) and World Animal Protection (WAP, UK), as well as logistical and in-kind support from Centro de Conservación Cetacea (CCC, Chile) and Center for Coastal Studies (CCS, USA).

e) Increase efforts to collect photo-identifications and genetic data (Res-02 and RES-03)

Collaboration has been essential in recording sightings of the species. During the last year, seven opportunistic sightings were recorded in the coast of Chile and Peru thanks to the information provided by different groups and institutions contributing to the Southern Right Whale Sighting Network in both countries. These included a total of four cow-calf pair.

The first record was reported in August 2018 and corresponded to a cow-calf pair sighted south of Lima, Peru. Other four sightings occurred off northern Chile (III and IV region) and two corresponded to cow-calf pairs. The other two sightings were recorded off central Chile and include one record of a cow-calf pair.

One individual photo-identification of an adult was obtained by personnel of the Fisheries and Aquaculture Service (Chile) with an aerial drone. Most of the sightings lasted only one day, so in spite of the efforts to relocate them it was not possible to obtain photoID and/or biological samples.

In collaboration with the St. Andrews University (United Kingdom), Centro de Conservación Cetacea (CCC, Chile) conducted the first genetic and hormone analyses of biological samples obtained from a southern right whale specimen. The biological samples are the first and, until date, the only ones available of this population. They were collected by CCC in 2017 after the death and stranding of a southern whale due to entanglement in fishing gear in southern Chile (Galletti Vernazzani *et al.* 2017). Preliminary results on the structure of this whale population will be reported (Carroll *et al.* 2019) during this meeting of the IWC Scientific Committee. These unprecedented scientific results support the hypothesis that the Eastern South Pacific southern right whale population is different from populations off Australia, Argentina and South Africa.

f) Increase identification capacities of cetacean species, with special emphasis on southern right whales, along the coast of Chile and Peru (PACB-03)

The CMP Steering Committee agreed in March 2017 the development and distribution of an informative poster as part of its strategies to increase species identification capacities (CMP 2017).

The Fisheries and Aquaculture Service of Chile produced 2000 informative posters for distribution in 500 communities along Chile. The Steering Committee acknowledged these efforts and decided to elaborate a bi-

national poster of the CMP to distribute along all Chile-Peru coastline. With the support of Centro de Conservacion Cetacea and Patagonia Environmental Grants from Tides Foundation this action is underway (CMP 2018a).

g) *Development of strategy to raise citizens' awareness and increase Range States capacities (PACB-01)*

This action has two sides: media outreach and environmental education. Some specific actions have been identified and completed in the short term such as development of a CMP logo, press releases, website banners, etc. (Galletti Vernazzani *et al.* 2018). Others for medium term included a promotional kit, involvement of children, social networks, etc.

During 2018, several news articles were published in mainstream and social media in Chile and Peru, including a press article released at the International Whaling Commission website with the main results of efforts conducted on the conservation of this population¹.

The PAM project also includes educational lectures to children and informative workshops to the community in locations where the project is implemented. From January to March 2019, meetings have already been held with local authorities and artisanal fishermen from northwestern Isla de Chiloe to inform about the project objectives. An in-depth workshop to train fishermen and tourist operators on species identification and its conservation status as well as educational lectures to local schools to inform about acoustic technologies, photography and the role of whales in the ecosystem are being developed and are schedule to be conducted from May 2019 (Galletti Vernazzani *et al.* 2019).

CCC and Patagonia Environmental Grants Fund from Tides Foundation will continue to contribute with a community manager of social networks.

As part of CCC raising awareness campaign, the PAM project was also presented at the Adventure Film Festival Eco Fair in December 2018 with a stand oriented to present its objectives and preliminary results. More than one thousand people participated in the event and visited the stand, making it a valuable opportunity to promote the need to urgently protect this species in Chile and Peru.

Finally, the Conservation Management Plan has already been translated into Spanish and is now being reviewed before it is publicly release. This will create awareness and facilitate communication of the CMP to local people.

h) *Funding*

During April 2018-March 2019, the CMP received support to conduct activities from the Governments of Chile and Peru, IWC Research Fund, IWC Entanglement Fund, IWC Welfare Fund, IWC CMP Fund, Permanent Commission of South Pacific, Centro de Conservacion Cetacea, COPAS-Sur Austral of the University of Concepción, Centro i-Mar from the University of Los Lagos, Patagonia Environmental Grants Fund from Tides Foundation, the 'Whale and Dolphin Bharathi Viswanathan Award for Innovative and Non-Invasive Research', Cetacean Society International, World Animal Protection, Center for Coastal Studies and the Fishermen Union Viento Fuerte from Puñihuil, as well as several individuals that contributed to a successful implementation of this CMP.

Future Priority Actions - Implementation Strategy 2019-2020

In the light of the new information and the progress made on several CMP activities, a new implementation strategy that should be addressed in the short term 2019-2020 (CMP 2018b) was adopted during the second coordination meeting of the CMP steering group and endorsed by the Commission at its 67th Biennial

¹ <https://iwc.int/multi-faceted-approach-to-protecting-endangered-so>

Meeting held in September 2018 in Florianopolis, Brazil (IWC 2018). Identified priority actions are the same of the implementation strategy 2016-2018 with new and upcoming activities for each one. However, four additional priority actions previously considered as medium to long-term actions, are now considered to be short-term under the new implementation strategy.

Therefore, short-term priority actions include: conduct coordination meetings among stakeholders (COORD-01); increase survey efforts on possible breeding ground (RES-05); increase effort to collect photo ID and genetic data (RES-02 and RES-03); strengthen capacities on entanglement and stranding response in both countries (PACB-02); increase species identification capacities along the coast of Chile and Peru (PACB-03); provide advice on whale watching regulations for this population (MIT-03); develop strategy to raise citizens' awareness and increase Range States capacities (PACB-01); create a web platform to report sightings (RES-01); prevent entanglements and disentangle whales (MIT-01); adopt alert systems to reduce the risk of collisions (MIT-02) and prevent and fight pollution to the marine environment (MIT-06).

For this new period, it was noted that one of the highest short-term priorities in the revised CMP is to identify a breeding aggregation area for this population (RES-05). The PAM project is the first project to use passive acoustic monitoring for this population in the entire Eastern South Pacific and it continues to be a key part of the CMP.

It was also agreed to focus on the development of protocols and permit systems to ensure a rapid response after a sighting is reported. The Steering Committee also agreed to give short-term priority to the development of a Mobile Phone App (RES-01). This action was previously set as medium-term priority but due to the delay in receiving sighting reports over the past two years, it was agreed to implement it on 2019-2020. This App will increase real-time reporting of sightings for southern right whales and will also report on stranding and entanglement events. Therefore, a citizen-science social network will be key to encourage sightings and reports of whales at risk.

The Steering Committee considered the CMP an excellent opportunity to standardize measures in both countries to have consistent regulations. Also, the Steering Committee considered that the adoption and enforcement of whale watching regulations in range states may greatly benefit from the advice of the IWC whale watching working group. In this sense, the Steering Committee agreed to conduct a workshop on experience exchange about whale watching regulations. It also decided to include in the workshop issues related to permits for scientific research operations on the species since it has been noted that permits to obtain scientific data may delay the implementation of priority actions.

To increase awareness and public involvement, the Steering Committee also agreed: to prepare a letter to distribute to international organizations informing about the CMP and seek possible ways of cooperation; to develop an educational kit that could include information leaflets, posters, stickers and audiovisual material to distribute to schools, communities, media, etc.; and to establish the Southern Right Whale Day in Chile and Peru to position the conservation of species as high-priority for both States, among others.

The execution of actions for the period 2019-2020 was estimated at approximately £200,000 pounds (CMP 2018b).

Support from the IWC Research Fund, Centro de Conservacion Cetacea, COPAS-Sur Austral of the University of Concepción, Centro i-Mar from the University of Los Lagos and Patagonia Environmental Grants Fund from Tides Foundation have already been committed to conduct part of the CMP activities considered for 2019-2020 and is estimated at about £30,000 pounds.

Conclusions

Coordination efforts have proved to be essential for the effective and positive implementation of the ESP southern right whale CMP. The 2016 implementation strategy was successfully completed and a new 2019-2020 implementation strategy has been adopted.

Particularly the implementation of the PAM project, the multinational combined stranding and entanglement response training workshop, the signing of a MOU between range states and the several activities conducted to raise public awareness have been essential elements to successfully complete the 2016-2018 program of this CMP. Moreover, the active involvement and/or financial support of a wide range of institutions and organizations facilitated the efficient implementation of priority activities.

It is expected and necessary to ensure continual funding and support for the proper completion of the new implementation strategy 2019-2020 that will certainly enhance the conservation of this Critically Endangered population of whales within range states and at international level.

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