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Report of the Intersessional Workshop on the IWC Conservation Management Plan for the Southwest Atlantic Southern Right Whale Population (SWA-RW)

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Steering Committee: Juan Pablo Torres-Florez, Karina Groch, Barbara Galletti-Vernazzani, Cecilia Passadore, Miguel Iñíguez, Fabia Luna,

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## **1. WELLCOME**

The workshop was held during the 14-16 of April 2021. The coordinator Juan Pablo Torres-Florez, opened the meeting, welcoming the participants to the SWA-SRW CMP workshop and acknowledging the steering committee, the Scientific Committee CMP/SH subcommittees and the Conservation Committee. He clarified that original plans were to have an in person workshop, due to covid situation it was decided to do this virtual meeting and hopefully an in person meeting by the end of the year if conditions allow.

## **1.1. APPOINTMENT OF CHAIR AND RAPPORTEURS**

Juan Pablo Torres-Florez, acted as chair. Cecilia Passadore was appointed rapporteur for the first day of the workshop. Karina Groch and Els Vermeulen acted as rapporteurs for the second and third days.

## **1.2. REVIEW AND ADOPTION OF AGENDA**

The agenda was reviewed and adopted (Annex A). Schedule was established (Annex B).

## 2. WORKSHOP OBJECTIVES AND OUTPUT

The chair presented the objectives of the meeting, which were to: review of research CMP lines in order to establish the actual status of the action; evaluate the next steps in order to accomplish those actions not completed yet; evaluate the continuity of accomplished actions and establishment of new actions if necessary; move forward with the commitment of the range states to strengthen the databases.

#### **3. CHAIRS SUMMARY**

In 2009 (IWC/61) the Conservation Committee endorsed the formation of a small, specialist group (SSG) to construct a list of candidate conservation management plans (CMPs). The SSG reported to the IWC/62 (2010) providing a draft framework for producing CMPs. At IWC/62 a number of CMP candidates were suggested, which included all the South American Right whales (Chile-Peru and SouthWest Atlantic). At the same IWC/62, members of the Conservation Committee proposed that a workshop should be held in order to consider the first CMP proposal for the South West Atlantic Right whale population, immediately after the Scientific Committee Right Whale Assessment Workshop that would take place in Argentina. The IWC agreed to nominate the South West Atlantic Southern Right whale population for a Conservation management Plan (SWA-SRW CMP) (IWC/63/CC4). A workshop to begin the development of the SWA SRW CMP was held in Buenos Aires, Argentina from 19 – 20 September 2011.

In 2012, following the recommendations of the IWC and particularly considering the SRW recent and unexplained die-off of right whale calves in Argentinean waters, a Conservation Management Plan (CMP) drafted by Argentina, Brazil, Chile and Uruguay was endorsed by the IWC64 (IWC/64/CC7 Rev 1). This plan started to be implemented after a first workshop held in Buenos Aires, 2013 (IWC65/2014).

Nine high priority actions were originally identified for this CMP (IWC/64/CC7 Rev 1).

- 1. Implementation of the CMP;
- 2. Development of a strategy to increase public awareness and build capacity in range states;
- 3. Determination of movements, migration routes and location of feeding ground(s) through satellite telemetry.

- 4. Development of a GIS database on information on human activities that might have an adverse impact on whales;
- 5. Ensuring long-term monitoring of abundance, trends and biological parameters through photoidentification and biopsy sampling;
- 6. Enhancing the existing stranding networks including the capacity for undertaking post-mortems;
- 7. Development of a regional entanglement response strategy;
- 8. Development and implementation of a strategy to minimise kelp gull harassment; and
- 9. Establishment of an expert advisory panel.

In a second workshop held in Puerto Madryn, Argentina the 12th of September 2016 (IWC/66/CC12), the actions previously established were reviewed and updated.

Considering that no CMP should be regarded as a definitive and unalterable document. It is rather a document that covers a temporal phase within the framework of the efforts for the conservation of a species, and therefore needs to be reviewed periodically to adjust the actions to the diverse changes that can occur, either in response to the results of the monitoring of the CMP actions themselves or to changing external factors.

In the conception of the SWA-SRW CMP, it was proposed that this CMP should be reviewed annually and updated as needed but that a major review of work, including the possibility of updating the CMP should occur every four-six years (depending on the timetable of actions within the plan).

Bearing in mind that previously the workshop was proposed to be held during the 2020 year in the city of Santos, Brazil. However, due to the COVID-19 pandemic, this workshop could not be held in person, so it was decided to hold a shorter workshop virtually during April 14-16, 2021. The main objective of the workshop was to discuss the progress in some research, monitoring and mitigation actions established for this CMP.

The actions discussed and reviewed during this workshop were the following:

## **RES-01:** Determine movements, migration routes and location of feeding ground(s).

**RES-02:** Development of a GIS (meta) database on information on human activities that might have an adverse impact on whales.

MON-01: Ensure long-term monitoring of abundance, trends and biological parameters.

#### MON-02: Enhance existing strandings networks including the capacity for undertaking post-mortems.

## MIT-01: Development of a regional entanglement response strategy.

Invited participants presented a series of investigations on the different actions mentioned above. Each presentation was discussed in light of the existing bibliography and latest advances in knowledge regarding this population. Finally a document spreadsheet with the priorities for these actions or new actions, was filled by the participants after the review of the actions.

#### 4. ABSTRACT PRESENTATIONS AND NEW RESULTS

#### 4.1. Determine movements, migration routes and location of feeding ground(s).

#### **4.1.1. Satellite tracking**

I. Update on satellite tracking of Western South Atlantic southern right whales from Península Valdés and adjacent areas, Argentina Alax Zarbini, Santiago Formandez

Alex Zerbini, Santiago Fernandez

Satellite tracking of Southern right whales wintering near Península Valdés, Argentina, began in 2014 (Zerbini et al., 2016, 2018) and corresponds to one of the scientific actions of the western South Atlantic right whale CMP (CMP Res-01). The original goal of this study was to describe the movements, diving

behavior, migratory routes and feeding destinations of the whales. However, since 2019 the tagged whales have also been systematically monitored after tag deployment as part of a larger initiative to assess effects of tags on individual whales. Since 2014, a total of 39 (33 location-only and 6 archival) "transdermal" consolidated Type C (as defined by Andrews et al., 2019) satellite tags have been deployed on SRWs, with three tags not transmitting due to poor implantation (and therefore not considered in the data provided below). These instruments were deployed on solitary individuals (n=23) and mothers (n=13) in Golfo Nuevo (n=27) and Golfo San Matías (n=9). In addition to the transdermal tags, a new Type C "blubber-only" tag under development for right whales was deployed in 2019 in Golfo Nuevo (n=8). The latter tag represents an initiative to develop and assess performance of less invasive implantable tags for large cetaceans with support from the US Office of Naval Research (ONR) and the National Oceanic and Atmospheric Administration (NOAA). Transdermal transmitter duration has been 115 days on average (range: 18-237 days) for location only tags and 95 days (71-126) for archival tags. The 2019 season, when a new anchor design was introduced, was the most successful tracking season of this project with a mean tag duration of 134 days (range: 18-216 days). Median duration of an initial design of a blubber-only tag was 16 days (mean = 21, range: 14-34 days). Further surface modifications are expected to the blubber-only tag design to improve their retention time. Satellite tracking revealed novel and unique movement patterns of SRWs at various scales. New information has been obtained on (1) residency times and occupancy patterns of solitary individuals and mothers and calves in Golfo Nuevo and Golfo San Matias, (2) whale connectivity among different northern Patagonian gulfs and coastal habitats along the eastern coast of South America, and (3) migratory routes and habitat use on feeding destinations, including the Patagonian shelf, the western South Atlantic basin, the Scotia Sea and the northern Weddell sea. This study has also revealed the use of open ocean oceanographic features by SRWs, presumably for feeding, in middle latitudes of the South Atlantic basin. The project is expected to continue in 2021 and possibly 2022 and instrumentation of an additional 15-30 individuals are planned for upcoming field seasons. Project participants are greatly indebted to the International Whaling Commission, the National Government of Argentina and the Provincial Governments of Chubut and Rio Negro for logistical support and for facilitating/issuing permits for this work to be conducted.

*Torrez-Florez*: — asked about the possibility of tagged whales to be genetically related to each other? *Zerbini*: — The design aim is try to tag animals of different sexes and age classes. Once a whale is tagged we follow them for at least one hour. The relatedness could only be checked after genetic analyses are done. *Sironi*:— clarifies that some of the whales tagged have been studied (photo-id) during several years. *Riet*: — asked about the reaction of the whales when tagged. *Zerbini*: — answered that reaction varies a lot, they do not react as much as other whale species (such as humpback whales). The tags are deployed very close to the whales, so the ones that react they do it mainly to the closeness of the vessels, besides the tagging itself.

## *II. Update on satellite tracking in Georgias del Sur/South Georgia Amy S. Kennedy*

Two southern right whales were tagged off the southern coast of GS/SG on January 28<sup>th</sup>, 2020. "Annenkov", a female, left GS/SG almost immediately after tagging and travelled south, reaching her southernmost point (66.2° S, 41.6° W) on March 31<sup>st</sup> before heading north. Annenkov's tag transmitted for 117 days and recorded ~5,528 km of trackline. The male right whale, "Braveheart", stayed on the GS/SG shelf within 300km of the tagging site for 164 days. Between July 9<sup>th</sup> and August 5<sup>th</sup>, Braveheart migrated west and then northwest along the shelf break before reaching the coast of Argentina, just north of the mouth of Rio Negro. From there, the whale travelled northeast along the coast of Uruguay and Brazil before turning, just north of Porto Alegre, Brazil, to head southwest on September 8<sup>th</sup>. In the 238 days of tag transmission, "Braveheart" travelled nearly 10,000 km and is the first tracked right whale to visit 3 countries during the breeding season.

*Sironi:* — asked if someone saw Breaveheart in any of the three countries (Arg, Ur, Br)? *Kennedy:* — No, no one saw it. We have overhead photos, biopsy, drone. *Groch:* — asked if they know the age of whales tagged? *Kennedy:* — It was probably a juvenile. *Jackson:* — comments that there are also stable isotopes samples from Annenkov and Braveheart. Braveheart had high Nitrogen signature, so fed on low latitude; and Annenkov had high N signature, meaning high latitude feeding. *Passadore:* — comments that when Braveheart was close to the shore in Uruguay, there was very bad weather, blows were seen but no photo-id was taken. *Passadore:* — asked about Annenkov, she did not show any relation with bottom features, but what about with oceanographic features? Did you check satellite images for SST or chlorophyll? *Kennedy:* — Annekov performed area restricted search only in 3 areas, no formal comparisons were done yet with oceanographic features.