

Report of the IWC Conservation Management Plan for the Southern Right Whale Southwest Atlantic population.

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PERIOD: July 2013 – April 2014

The overall objective of the CMP is to protect Southern right whales (SRW) habitat and minimise anthropogenic threats to maximise the likelihood that SRW will recover to healthy levels and recolonise their historical range.

ACTIONS

RES-01: determine movements, migration routes and location of feeding ground(s)

--Argentina announced the availability for research purposes in 2015 of the rescue cutter of 50 m vessel 'Tango', now configured as multi-purpose vessel. These international expeditions will be carried out in 2015 into two feeding grounds in the South West Atlantic and all available non-lethal techniques will be used in an integrated way (satellite telemetry, photo-identification, passive acoustic, genetic, etc.).

--As part of the SORP/ABWP, an exploratory trip was performed on board of the "Tango" to South Orkney (*Islas Orcadas del Sur*) area and area of influence (1 degree to the N, S, E and W) and the west side of the Antarctic Peninsula (*Península Antártica*), from the Shetland Island (*Islas Shetland del Sur*) to Brown Base (*Base Brown*) of Argentina in Paradise Bay (*Bahía Paraíso*). The trip took place from February, 17th to March, 5th 2014. It recorded information on sightings and acoustics. Each cetacean observed during the trip was recorded but the species of main interest were the Antarctic blue whales, humpback whales, southern right whales and killer whales. The only species that could not be recorded was the southern right whale, probably due to bad weather conditions on the north of South Orkney (*Islas Orcadas del Sur*) area where it was expected to find them. In 2015, a new trip to South Orkney (*Islas Orcadas del Sur*) will be organized.

--A telemetry proposal was presented and it is under evaluation by governmental authorities.

--Southern right whale long-range movements between nursery grounds have been studied based on resightings of known individuals off Argentina and Brazil. The analysis of photo-id catalogs shows known individuals that have been sighted in both nursery grounds (catalog curators: Vicky Rowntree - Southern Right Whale Program, Argentina and Karina Groch - Projeto Baleia Franca, Brasil, unpub.).

--Censuses from the "Punta Flecha Observatory", Golfo Nuevo, Chubut province.

During the season of permanence of Southern right whales (*Eubalaena australis*) in Peninsula Valdes, between the months of July and December 2013, in this second season, the censuses were conducted from the "Punta Flecha" Observatory of whales of the Patagonia Natural Foundation, on the west coast of Nuevo gulf (Chubut province, Argentina) (See: <http://www.patagonianatural.org/observatorio-punta-flecha.html>).

The project "Censos de ballenas francas en el ANP "El Doradillo", golfo Nuevo, Provincia del Chubut: temporada 2013" has been approved by Disp. 79-2013 of the "Dirección de Fauna y Flora Silvestre", of the province of Chubut (See: <http://www.patagonianatural.org/noticias-fpn/859-2013-12-12-19-28-49.html>). These censuses cover a small fraction of the area used each year by southern right whales in Peninsula

Valdes, Chubut, however Punta Flecha is where most of the shore-based whale watching takes place in Patagonia. Maintaining time series of whales counted from Punta Flecha is therefore valuable.

--Fundación Cethus is developing projects in Golfo San Jorge and Cabo Vírgenes (Santa Cruz province) and Miramar (Buenos Aires province) based on land observation and using photo-ID techniques. Aerial census were carried on in Golfo San Jorge and NE of Buenos Aires province.

RES-02: development of a GIS database on information on human activities that might have an adverse impact on whales.

This action is postponed to 2015 in order to optimize human sources and funds for this activity. Argentina received a GEF grant which is coordinated by the Secretaría de Ambiente y Desarrollo Sustentable and includes determining human activities that might threat Southern right whales. It is necessary to secure also funds to carry on this activity in Brazil, Chile and Uruguay.

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

--Cooke is still working on the abundance and trends of the population for Argentina and Brazil using the long-term photo-identification programs.

--Aerial surveys of southern right whales off the coast of Península Valdés, Argentina, were conducted on September 3 and 6, 2013 by researchers from Instituto de Conservación de Ballenas / Ocean Alliance. The purpose of the surveys was to document the presence and distribution of southern right whales along the perimeter of the Península by photo-identifying individuals from the callosity patterns on their heads and recording their locations and the presence of calves, and update the long-term database for population dynamic studies.

A total of 729 southern right whales including 297 calves were counted, and 5,000 photographs were taken. Final results of photo-identification analyses are under way. Analyses of photographs in the right whale catalog of ICB/OA are available for the years 1971-2010. Number of individuals photo identified: 2,850.

--Centro Nacional Patagónico (CENPAT)

CENPAT is also developing a program of aerial surveys around Península Valdés which increases the aerial and temporal survey coverage.

For the determination of the habitat usage and abundance of Southern right whale in Golfo Nuevo, several linear transects on a semi-rigid haul boat (belonging to Fundación Vida Silvestre Argentina) were performed each day: three in Area Natural Protegida (ANP) El Doradillo and four in Bahía Nueva (Puerto Madryn). In the last census in Bahía Nueva carried out in November 2nd 2013 no whales were watched in the area. At that time, whales moved to deeper waters, out of the Bahía Nueva, where more than 200 individuals were watched performing diving behaviors.

<i>Date</i>	<i>Area</i>	<i>No of sightings</i>
06-09-13	Bahía Nueva, Puerto Madryn	37
14-09-13	Bahía Nueva, Puerto Madryn	32
15-09-13	Bahía Nueva, Puerto Madryn	58
16-09-13	Bahía Nueva, Puerto Madryn	38
17-09-13	Bahía Nueva, Puerto Madryn	43
21-09-13	Bahía Nueva, Puerto Madryn	12
02-10-13	Bahía Nueva, Puerto Madryn	42
03-10-13	Bahía Nueva, Puerto Madryn	15
18-10-13	Bahía Nueva, Puerto Madryn	12
19-10-13	ANP El Doradillo	29
02-11-13	Bahía Nueva, Puerto Madryn	0

--Fundación Patagonia Natural (FPN) and Wildlife Conservation Society (WCS)

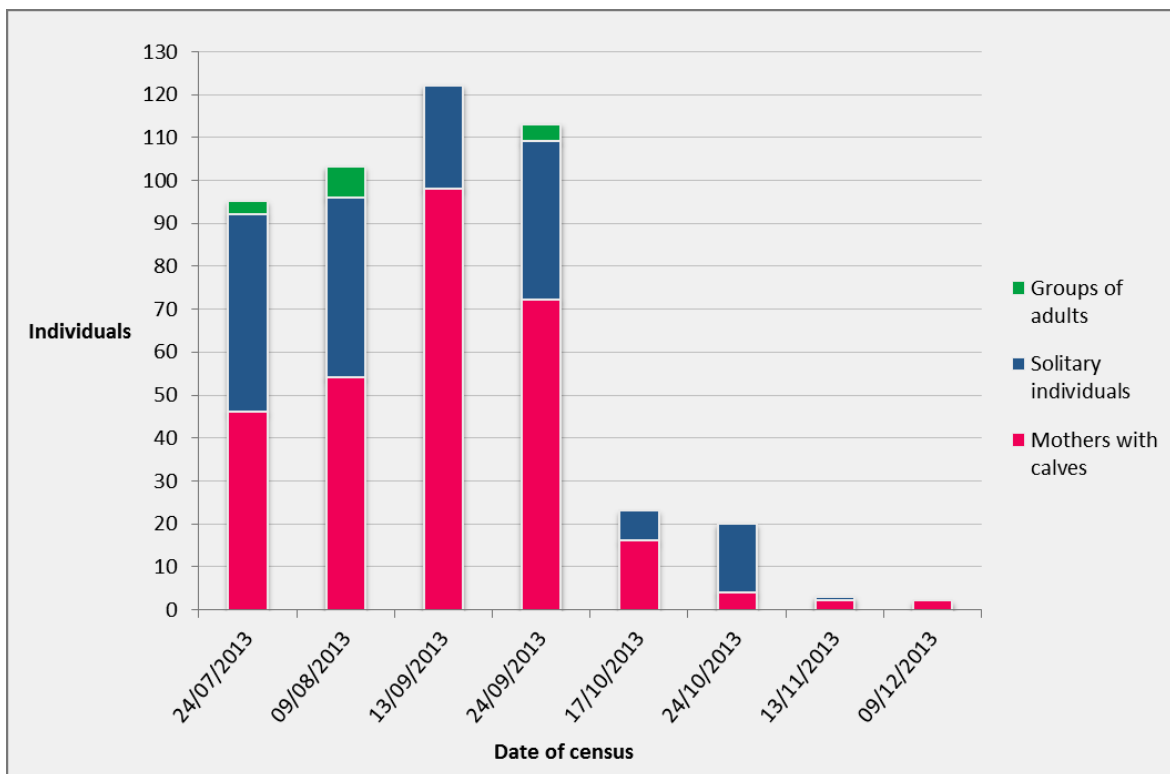
Between July and December 2013, 8 censuses were carried out, with a total of 18 hours of observation (2.25 hours/census), generally during the morning tides, from the Observatory. The conditions of the observations were between regular to very good; with winds that did not exceed, in general, 10 knots.

The total number whales recorded varied between a maximum of 122 individuals (in September 13) and a minimum of 2 individuals (in December 9) (see table below).

The number of mothers with calves varied between a maximum of 49 (49 mothers with their 49 calves, in September 13) and a minimum of 1 (a mother and her calve, in December 9), coinciding with the maximum and minimum of the total number of registered individuals.

The number of solitary individuals (adults) varied between a maximum of 46 (in July 24) and a minimum of 0 individual (in December 9).

Groups of adults (mating groups), of 3 or 4 individuals, were present during the census of July 24 (1 group), August 9 (2 groups) and September 24 (1 group).



Date	# Individuals				Total
	Mothers	Calves	Solitary individuals	Group of copula (# adults)	
Jul 24, 2013	23	23	46	1(3)	95
Aug 9, 2013	27	27	42	1(3)+(4)	103
Sep 13, 2013	49	49	24	0	122
Sep 24, 2013	36	36	37	1(4)	113
Oct 17, 2013	8	8	7	0	23
Oct 24, 2013	2	2	16	0	20
Nov 11, 2013	1	1	1	0	3
Dec 9, 2013	1	1	0	0	2

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

There are two programs working with the die-off events in Península Valdés.

--One is the SRW Health Monitoring Program which is run by a consortium of the non-governmental organizations Wildlife Conservation Society, Whale Conservation Institute/Ocean Alliance, Instituto de Conservación de Ballenas and Fundación Patagonia Natural. Several results of these studies have been presented to the IWC.

During 2013 the Southern Right Whale Health Monitoring Program (SRWHMP) studied and collected samples from a total of 67 stranded whales at Península Valdés, including two juveniles (3%), two adults and 63 calves (96%). Researchers conducted post-mortem examinations on the stranded whales and when conditions permitted, collected biological samples that will be analyzed for infectious diseases, biotoxins, contaminants, nutritional status, diet, genetics, and other potential factors contributing to mortality.

--The second program is run by "*Red de fauna costera del chubut*", through its necropsies team, with collaboration from CENPAT and the Veterinary College – University of Buenos Aires. Results were presented at the 2013 workshop of Puerto Madryn. Samples of skin lesions were taken from living and whales. These samples were analyzed for histopathological and etiologic diagnosis, using advanced technology and molecular techniques such as electron microscopy, immunohistochemistry and PCR. Swabs of skin lesions were performed on live whales. Swab samples were cultured for bacteria and fungi isolation. C. Fiorito (CENPAT). As a result of analysis of skin lesion, it was detected the presence of poxvirus in skin lesions from Southern Right Whales. Histopathological analysis showed typical intracitoplasmatic inclusion bodies in epidermis cells. The sample was processed for transmission electronic microscopy (TEM). Viral particles were observed with morphology compatible with poxvirus. PCR assay was performed with positive results. Bacteria were isolated from swabs of wounds caused by seagulls. *Erysipelotrix spp* was isolated from wounds in a stranded and in a live whale. Also other bacteria were isolated, as *Enterococcus faecalis*, *Staphylococcus epidermidis* and *Streptococcus spp*.

--Uruguay

The following information was received on SRW stranding

Year	# of individuals	Sex	Location
2011	1	Female	Rocha
2012	1	Female	Maldonado

MIT-01: development of a regional entanglement response strategy

Following the disentanglement workshops conducted by David Mattila –International expert on disentanglement of big whales and member of IWC Secretariat– 2 Brazilian and 2 Argentinean experts were trained at the Center for Coastal Research in Cape Cod, USA. The objective is to work on prevention measures.

-- *Information reported on entanglement for 2013*

--Argentina

Date: 28th August 2013

Location (Lat/ Long): 1.5nm offshore of Las Grutas, Río Negro (40°49'51.0''S - 65°4'35''O).

Number of animals involved: 1 adult

Event description: The whale was reported by “Cota Cero” whale watching operator. It presents a rope that surrounded the body behind the eyes (see pictures attached). The individual was observed only one day, it was socializing and could not be released.

Source: L. Albornoz, “Cota Cero”, C. Jiménez-Pinedo.



Picture: J. Padilla/ Cota Cero



Picture: J. Padilla/ Cota Cero

--Brazil

Date: 2013

Location (Lat/ Long): coast of Santa Catarina State, Southern Brazil

Number of animals involved: a total of 10 cases of confirmed different individuals

Event description: all cases were of animals sighted alive. Nine cases were of adults and one of a calf. All adults' cases all but one consisted of a piece of fishing net attached to the head callosities; one adult had a rope over the mid dorsal region of body. The calf had a piece of fishing net hang from the inside of the mouth. In all cases there was no evidence of lesions related to the entanglement. No cases of dead animals were reported related to these cases. Three cases of identified adult whales were later sighted free of the entanglement.

Source: Karina Groch

MIT-02: develop and implement a strategy to minimize kelp gull harassment

-Workshop Puerto Madryn, Chubut, August 2013.

On 28 and 29 August 2013, Dirección de Fauna y Flora Silvestre (Ministerio de Agricultura, Ganadería, Bosques y Pesca), Subsecretaría de Turismo y Áreas Protegidas, Administración de Parques Nacionales and CENPAT-CONICET hosted a workshop on mortality of Southern right whale in Puerto Madryn.

Several federal and provincial governmental and non-governmental institutions attended the workshop.

The main objective of the workshop was to explore the best way to properly disseminate the information on this species to be used by the public media and update results on SRW and mortality events.

The participants highlighted the importance of this workshop and it was agreed to meet annually in order to consolidate the work done to date. This provides a framework for establishing the best actions to develop and strengthen the future work of the institutions involved, reinforcing and enhancing the quality thereof.

-Workshop Puerto Madryn, Chubut, August 2014

Solving the kelp gull harassment problem is a priority action within the CMP developed for this region.

An IWC Workshop to develop and implement a strategy to minimize kelp gull harassment on southern right whales will be held in Puerto Madryn, Chubut in August 2014, 5-7. Funding for this workshop was secured last year at the IWC 65a SC. It is organized with the province of Chubut authorities. Results will be presented to the IWC 66 Scientific Committee.

--ICB/OA

In September of 2013, researchers from the Right Whale Program (ICB / OA) continued the long-term monitoring (began in 1995) of gull attack frequency on right whales at Península Valdés. Gulls aim the vast majority of their attacks at newborn calves, which raises concerns about the impact that this parasitic behavior has on the health and welfare of this highly sensitive age class.

A workshop to analyze scientific data on the southern right whale die-offs at Península Valdés was organized during the Annual Conference of the International Association for Aquatic Animal Medicine (IAAAM) on 23 April 2013, hosted by The Marine Mammal Center, Sausalito, California. Workshop participants noticed the strong signal of kelp gull attacks as a unique, increasing, and acute element of the lifecycle of young right whale calves at Península Valdés, and agreed that a hypothesis should be developed to guide evaluation of the possible contribution of gull attacks (Thomas, 1988; Rowntree et al., 1998; Sironi et al., 2009) to the ongoing calf mortality. A preliminary statement of this hypothesis is: *“high levels of harassment by kelp gulls that peck on a calf’s exposed skin and then feed on the underlying blubber, cause significant physical injuries, energetically expensive avoidance behavior, and reductions in suckling time. This syndrome may result in, inter alia, decreased food intake, increased energy expenditure, exhaustion, catabolism, dehydration, and thermoregulatory stress, with cumulative and cascading effects that can lead to calf death”* (Thomas et al., 2013).

MIT-03: establishment of an expert advisory panel

An expert advisory panel was established, with the following terms of reference:

- Members of the Panel serve in their individual capacity as experts and not as representatives of governments or organizations.

- The Panel will consist of a core group of no more than 10 scientists (2 nominated by each range state + 2 IWC Scientific Committee representatives). Members will serve for a maximum period of 5 years.
- Its primary role is to assist the Steering Committee to address scientific and technical issues as requested.
- The Panel will identify additional expertise as required.

The expert advisory panel was confirmed as follows:

- Argentina: Dr. Enrique Crespo and Dr. Marcelo Bertelotti
- Brazil: Dr. Karina Groch
- Uruguay: Dr. Federico Riet and Dr. Paula Costa
- IWC: Dr. Greg Donovan

MIT-04: develop mitigation actions to address major threats identified through the Sensitivity Atlas

-- Information reported on ship strike from 2011

--Argentina

2011: One female calf (102411PV-Ea49) (out of 61 dead whales), found dead at Punta Pardelas, Península Valdés, Lat S 42 37 5.7 Long W 64 15 49.3. The whale had a large hematoma in the left lung and abundant digested blood in its stomach. These findings suggest a traumatic cause of death, potentially a ship collision or a strong blow from another whale.

2012: Of the 116 dead southern right whales examined in 2012 by the Southern Right Whale Health Monitoring Program (SRWHMP) in Argentina, one had lesions that were most likely caused by a ship strike. It was a 5.37 m-long female calf, ID 072512PV-Ea08. The case was analyzed by specialists who concluded that the most likely source of the wounds was a large ship propeller. The observed incisions could have been caused by two successive blade contacts with the right and then left sides, or vice versa.

A second case in 2012 was another female calf, 6.6 m long, ID 092312PV-Ea67. It had a hematoma in the left lung and blood clots in the stomach. This suggests violent trauma that could have contributed to the death of the animal, although a ship strike could not be confirmed.

--Brazil

Event description: The only case of ship strike in Brazil in recent years is already reported to the IWC ship strike database: an adult female sighted in 2012, presenting large open cuts on the dorsal peduncle (the animal was alive, accompanied by a calf, and resighted for two months). There is no information on time of the collision or type of ship.

Source: K. Groch

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