

**ARGENTINA. PROGRESS REPORT ON CETACEAN RESEARCH, APRIL 2004 TO MARCH 2005
WITH STATISTICAL DATA FOR SEASON 2004/05**

Compiled by
SECRETARIA DE AMBIENTE Y DESARROLLO SUSTENTABLE
MINISTERIO DE SALUD Y MEDIOAMBIENTE DE ARGENTINA
San Martín 459 (1004) Capital Federal ARGENTINA
TEL: (54 11) 4348-8200 FAX: 4348-8300

This report summarises information obtained from:

AQUAMARINA-CECIM - Centro de Estudios en Ciencias Marinas - Pablo Bordino. Email: bordino@aquamarina.org.

Centro Nacional Patagónico (CENPAT), Laboratorio de Mamíferos Marinos - Dr. Enrique Crespo. Boulevard Brown s/n (9120) Puerto Madryn, Chubut ARGENTINA. Tel.: 54 2965 45-1375/01 – Fax: 54 2965 45 1543.

Fundación Cethus - Iñíguez, Miguel, C.J. de Haro, J. Belgrano, C. Calió, C. Gasparrou, M. Failla, M. Hevia, A. Tomsin and V. Tossenberger. Juan de Garay 2861 Dto "3", Olivos (B1636AGK), Buenos Aires, Argentina. E.mail: cethus@house.com.ar.

Fundación Ecocentro - Dr. Rodolfo Werner (Science Coordinator). Julio Verne 3784 (U9120OJA). Puerto Madryn - Chubut - Argentina Tel/Fax 02965 - 457470-73. E-mail: rodolfo Werner@ecocentro.org.ar. www.ecocentro.org.ar

Instituto de Conservacion de Ballenas (ICB) & The Whale Conservation Institute / Ocean Alliance (Wci/Oa) - Mariano Sironi (msironi@icb.org.ar), Victoria Rowntree (rowntree@biology.utah.edu), Luciano Valenzuela (valenzuela@biology.utah.edu), Marcela Uhart (muhart@satlink.com), Luciano La Sala (lucianolasala@hotmail.com). Miñones 1986 - Bajo Belgrano. Capital Federal - Buenos Aires – Argentina. www.icb.org.ar

Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Laboratorio de Ecología y Comportamiento de Mamíferos Marinos y Estación Hidrobiológica de Puerto Quequén (MACN-CONICET) - Dr. LUIS CAPPOZZO - Av. Angel Gallardo 470. C1405DJR Buenos Aires, ARGENTINA. Tel: 54-11-4982-6670 ó 4982-6595 int. 159 Fax: 54-11-4982-5243 / 4982-4494 / 4982-1154. E-mail: cappozzo@macn.gov.ar

1. Species and stocks studied

AQUAMARINA

Common name	Scientific name	Area/stock(s)	Items referred to
Franciscana dolphin	<i>Pontoporia blainvillei</i>	Buenos Aires coast	2.1.1/2.1.2/ 3.1.3./4.2/4.3/ 4.4//7.1/7.2/9
Burmeister's porpoise	<i>Phocoena spinipinnis</i>	Buenos Aires coast	2.1.2/4.2/4.3/7.1/9

CENPAT

Common name	Scientific name	Area / stock	Items referred to
Dusky dolphin	<i>Lagenorhynchus obscurus</i>	Northern Patagonia	2.1.1, 2.2, 3.1.1, 4.2, 9
Common dolphin	<i>Delphinus delphis</i>	Northern Patagonia	4.2, 9
Commerson's dolphin	<i>Cephalorhynchus commersonii</i>	Northern, central and southern Patagonia	2.1.1, 2.2, 3.1.1, 4.2, 9
Peale's dolphin	<i>L. australis</i>	Central Patagonia	2.1.1, 2.2, 3.1.1
Fraser's dolphin	<i>Lagenodelphis hosei</i>	Erratic individuals not distributed in the area	4.3, 8
Bottlenose dolphin	<i>T. truncatus</i>	Northern Patagonia	3.1.1, 4.3, 8, 9
Franciscana	<i>Pontoporia blainvillei</i>	Abundance, Distribution range	2.1.1, 9
Shepherd's b w	<i>Tasmacetus shepherdi</i>	Southern Patagonia	8

Cethus

Common name	Scientific name	Area / stock	Items referred to
Franciscana	<i>Pontoporia blainvillei</i>	Northern Patagonia	2.1.1, 5, 8, 9, 11.2
Commerson's dolphin	<i>Cephalorhynchus commersonii</i>	Southern Patagonia	2.1.1, 2.2, 3.1.1, 3.2., 4.1, 4.4., 5, 9, 11.2
Peale's dolphin	<i>Lagenorhynchus australis</i>	Southern Patagonia	2.1.1, 2.2, 3.1.1, 3.2, 9
Killer whale	<i>Orcinus orca</i>	Northern Patagonia	2.1.2., 3.1.1
Sei whale	<i>Balaenoptera borealis</i>	Southern Patagonia	2.1.2
Minke whale	<i>Balaenoptera acutorostrata</i>	Northern Patagonia	4.3; 6.2.1; 8
Southern right whale	<i>Eubalaena australis</i>	Southern Patagonia	2.1.1, 6.2, 6.2.2, 9, 11.2

Ecocentro

Common name	Scientific name	Area/stock(s)	Items referred to
-------------	-----------------	---------------	-------------------

Southern right whale	<i>Eubalaena australis</i>	Northern Patagonia	2.1.1
----------------------	----------------------------	--------------------	-------

ICB

Common name	Scientific name	Area/stock(s)	Items referred to
Southern right whale	<i>Eubalaena australis</i>	SW Atlantic, N Patagonia	2.1.1, 3.1.1, 4.1, 4.3, 4.4, 6.2.1, 6.3, 8, 9, 10, 11.1, 11.2

MACN-CONICET

Common name	Scientific name	Area/stock(s)	Items referred to
Franciscana	<i>Pontoporia blainvillei</i>	Southwestern Atlantic Ocean	2.1.1; 2.1.2; 2.2; 4.3; 5; 11.1
Hector's beaked whale	<i>Mesoplodon hectori</i>	Southwestern Atlantic Ocean	8; 11.1

2. Sightings data

2.1 Field work

2.1.1 SYSTEMATIC

AQUAMARINA

Systematic sightings of Franciscana dolphins were recorded from land stations and boats surveys along coastal Buenos Aires and Rio Negro Provinces at Bahia Samborombon, Cabo San Antonio, Bahia Blanca, Bahia San Blas, Viedma, and Golfo San Matias. Studies were conducted for recording Franciscana dolphin distribution, abundance, and behaviour.

CENPAT

- Coastal aerial surveys for small cetaceans (franciscanas, dusky, common and Commerson's dolphins) in the coast of Buenos Aires Province and Chubut (Northern Patagonia).
- Sightings distribution of dusky dolphin groups from tourism boats at Golfo Nuevo (Northern Patagonia).
- Sightings distribution of Commerson's dolphin from tourism boats at Bahía Engaño (Northern Patagonia).
- Sightings from cliff-tops of Commerson's dolphin at Chubut River mouth area and southern Santa Cruz Province.
- Sightings distribution of Peale's dolphin groups at Bahía Camarones (Central Patagonia) and southern Santa Cruz Province.

Cethus

Sightings of Peale's dolphin at Playa La Mina, Santa Cruz, are being carried out since 1996, studying behavior, patterns of movements, group size and main activities of Peale's dolphin in the area. Fieldwork consists of observation from shore.

Sightings of Peale's dolphins are carried out since January 2001 at Ría Santa Cruz. The general goal of this project is to study the behaviour, ecology and biology of Peale's dolphin. The main objectives are to estimate the number of individuals in the population, and to determine their movements in the study area, in order to compare the different populations studied. Observations are made from shore and from vessels. Photoidentification technique is being developed.

Studies of Peale's dolphins at Cabo Vírgenes are being carried out since 1992. During the 2004/2005 season, registration of specific data about foraging strategies and its association with kelp beds (*Macrocystis pyrifera*) were done.

Monitoring activities of petrel activities in the study area were followed in order to estimate the impact of these activities on Peale's dolphins habitat.

New observations of Peale's dolphin were done at the south of the mouth of Ría Gallegos. Data of group size and composition, movements, and behaviour were recorded in order to increase the knowledge about Peale's dolphins and to compare these data with studies carried out at Cabo Vírgenes. Observations were made from shore and from vessels.

Sightings from shore of Peale's dolphin at Golfo San Jorge, Santa Cruz, are being carried out since 2003, studying behavior, patterns of movements, group size and main activities of Peale's dolphin in the area.

In all areas, the observations on Peale's dolphins were made according to Ad libitum and Animal Group Focal methodology.

Ecology and behaviour of Franciscana dolphin is being studied at Río Negro Province. The Ad libitum and Animal Group Focal methodology are used. Surveys are made from shore and from vessels.

Research on population numbers, group distribution, use of habitat, socioecology, behaviour, interaction between mother-calf of Commerson's dolphins are being done at Bahía San Julián. Studies are carried out from land and vessel. The Ad libitum and Animal Group Focal methodology are used. Photoidentification technique is being developed, using marks, scars, and pigmentation patterns.

Studies on Commerson's dolphins to estimate the number of individuals in the population, groups distribution alongside the study area and their movements and behaviour are carried out on the population that inhabits Ría Santa Cruz, Santa Cruz Province, Argentina. The Ad libitum and Animal Group Focal methodology are used. Photoidentification technique is being developed. Surveys are made from shore and from vessels. Movements and behaviour of Southern Right Whales are surveyed along the coast of Santa Cruz province. Field work consist of shore observation and boat observation. Data on time, tide, Beaufort scale, number of animals, behaviour and movements in the study area using *Ad Libitum* and *focal sampling techniques*.

Ecocentro

Systematic sightings of southern right whale were recorded from land stations and tourism boats in Golfo Nuevo (Northern Patagonia). Photoidentification.

ICB

Aerial survey of southern right whales off the coast of Peninsula Valdes, Argentina, September 20 and 21, 2004. Purpose of the survey: photoidentification of the callosity patterns of all right whales encountered along the perimeter of the Peninsula.

Total whales counted: 271 (including 89 calves).

Final results of photoidentification not yet available.

MACN-CONICET

Survey of distribution and abundance of small cetaceans in coastal waters of southern Buenos Aires Province (Estación Hidrobiológica de Puerto Quequén- MACN). As part of an integral study of coastal fisheries that operate along the southern coast of the Buenos Aires Province (between 38° to 40 ° S). The principal aim of the study with small cetaceans is estimate the total mortality produced by a consequence of incidental mortality caused by guillnet or other fishing arts. Other subjects of our objectives include studies on biology and ecology of dolphins (diet, sexual maturity, pollutants, etc).

This study (discontinued) is carried out since 1998 in the area mentioned (L. Cappozzo) and is compared with previous studies carried at the same area by other researchers. During the last six years we worked interacting with fishermen and carrying out a small programme with observers on board of the same coastal vessels.

2.1.2 OPPORTUNISTIC, PLATFORMS OF OPPORTUNITY

AQUAMARINA

Sightings of Burmeister's porpoise were recorded from fishing boats and Coast Guard vessels along the Buenos Aires coast.

CENPAT

Sightings records from fishing vessels

Cethus

Data on killer whales sightings were obtained during March - April 2005 through observations carried out at Peninsula Valdés.

Opportunistic observations on Sei whale were obtained during August 2004 and March 2005 along the coast of Southern Patagonia.

MACN-CONICET

Sightings records from fishing vessels (from 1998 to 2001) of small cetaceans and recovery of carcasses (since 1998) of dolphins for other systematic studies from incidental mortality, with the collaboration of Quequén fishermen. Sightings records from fishing vessels through projects developed from Estación Hidrobiológica de Puerto Quequén (EHPQ) and information gathered from the fisheries observers program, coordinated by the EHPQ (MACN-CONICET), carried on during four years. Actually fishing trips of the vessels from the Puerto Quequén fleet are more longer than in the past (2-3 days). We only recovered some carcasses from some known vessels.

2.2 Analyses/development of techniques

CENPAT

a) Aerial surveys are being used in density / abundance estimations by means of distance sampling methods for dusky dolphins, Commerson's dolphins, Peale's dolphins and common dolphins (see Schiavini et al., 1999 and Pedraza et al in review, Crespo et al., submitted).

b) Habitat use and seasonal local abundance are being evaluated from data gathered onboard tourism boats for dusky and Commerson's dolphins.

Cethus

Study of Peale's dolphin at Playa La Mina, Santa Cruz. Data analysis is intended to show the proportion of real sighting time related to sampling effort, activity patterns, associated behaviors and use of habitat in the study area according to its features.

Data analysis consist in studying the proportion of time sighted related to sampling effort, the proportion of time dedicated to each main behaviour, and the use of habitat by Commerson's dolphins at Ría Santa Cruz. Photo-identification technique is also being carried out, using marks, scars, and pigmentation patterns.

Data analysis consists in studying the proportion of time sighted related to sampling effort, the proportion of time dedicated to each main behaviour, and the use of habitat by Peale's dolphins at Ría Santa Cruz. Photo-identification technique is being developed, using marks, scars, and pigmentation patterns.

MACN-CONICET

Data concerning fishing activities in the different localities and the mortality of dolphins by different gears were obtained by interviewing fishermen from each localities. Our past experience in southern Buenos Aires Province has proven this method to be relatively successful to get data on marine mammal incidental mortality, both in terms of the effort and the information obtained, but in general, underestimate the data.

3. Marking data

3.1 Field work

3.1.1 NATURAL MARKING DATA

CENPAT

Species	Feature	Area/stock	Calendar year / season / no. Photographed	Catalogued Y/N	Catalogue total	Contact person / institute
Commerson's dolphin	Dorsal fin scars and anomalous coloration patterns	Northern, Central and Southern Patagonia	1998 – 2001 / year round/ 50	Y	140	E.A.Crespo (CENPAT)
			Southern Patagonia	Y	26	
Dusky dolphin	Dorsal fin scars	Central Patagonia	2001 –2005 Northern Patagonia	N	-	E.A.Crespo (CENPAT)
Bottlenose dolphin	Dorsal fin scars	Northern Patagonia	2001- 2004 Northern Patagonia	N	-	E.A.Crespo (CENPAT)
Peale's dolphin	Dorsal fin and body scars	Central and Southern Patagonia	2002	Y	10	E.A. Crespo (CENPAT)

Cethus

Species	Feature	Area/stock	Calendar year / season / no. Photographed	Catalogued Y/N	Catalogue total	Contact person / institute
Commerson's dolphin	dorsal fin and along the back and sides of the body	Santa Cruz Coast	1996 and 1997 (summer time); 1998-2005/year round	Y	70	Fundación Cethus
Peale's dolphin	Dorsal fin and body scars	Santa Cruz Coast	January 1996 – April 2005	Y	14	Fundación Cethus
Killer whale	Dorsal fin, body scars	Península Valdés	1985-2005	Y	18	Fundación Cethus

ICB

Species	Feature	Area/stock	Calendar year/season/no, photographed	Catalogued (Y/N)	Catalogue total	Contact person/institute
Southern right whale	callosity pattern	SW Atlantic, N Patagonia	2004	Y	Approx. 1,900 individuals, currently under analysis	V. Rowntree / ICB-WCI/OA and University of Utah

3.1.2. ARTIFICIAL MARKING DATA

3.1.3 TELEMETRY DATA

AQUAMARINA

A capture/release, tagging and tracking component is being developed to document the population structure and movement patterns, something that has not been done before with Franciscana dolphins. Three female franciscana dolphins were captured, tagged with a small VHF radio, and released in Bahía Samborombon, Buenos Aires, in March 2005. Tracking is currently running.

3.2 Analyses/development of techniques

CENPAT

Photo ID by means of dorsal fin scars is being used to study the capture / recapture history of the individuals identified. This data are providing information to develop capture recapture models for the estimation of population parameters such as abundance, birth, mortality and emigration-immigration rates; as well as social structure and group dynamic.

Cethus

Use of habitat at different months, tide and times of the day by Commerson's dolphins are studied at Bahía San Julián using GIS software are plotted to determine the habitat use.

Photo - identification technique is being developed for both species Commerson's dolphins and Peale's dolphins in the different study areas, using marks, scars, and pigmentation patterns.

4. Tissue/biological samples collected

4.1 Biopsy samples

Cethus

Species	Area/stock	Calendar year/season no. collected	Archived (Y/N)	No. analyzed	Total holdings	Contact person/institute
Commerson's dolphin	San Julián	2004/2005	Y	4	4	Fundación Cethus
Commerson's dolphin	Ría Deseado	2004/2005	Y	5	5	Fundación Cethus

ICB

Species	Area/stock	Calendar year/season no. collected	Archived (Y/N)	No. analysed	Total holdings	Contact person/institute
Southern Right Whale	SW Atlantic, N Patagonia	2004 / 82 skin and blubber samples	Y	61	132	Luciano Valenzuela / Instituto de Conservacion de Ballenas and University of Utah

4.2 Samples from directed catches or bycatches

AQUAMARINA

Species	Area/stock	No. collected	Archived	Tissue type	Contact person
Franciscana dolphin	Buenos Aires coast	88	Y	Muscle, liver, glands, lung, kidney, teeth, skin, etc	Pablo Bordino
Burmeister's porpoise	Buenos Aires coast	6	Y	Muscle, teeth	Pablo Bordino

CENPAT

Species	Area / stock	Calendar / year Season total	Archived Y/N	Tissue types	Contact person Institute
Common dolphin	Northern Patagonia	1999 / 2005	Y	Gastrointestinal helminths	E.A. Crespo CENPAT

MACN-CONICET

Species	Area/stock	Calendar year/season total	Archived (Y/N)	Tissue type(s)	Contact person/institute
Franciscana	Southern of Buenos Aires Province	22 (1998 – 2004) (bycatches)	Y	Skin, blubber, stomach content, skeleton	Luis Cappozzo

4.3 Samples from stranded animals

AQUAMARINA

Species	Area/stock	No. collected	Archived	Tissue type	Contact person
---------	------------	---------------	----------	-------------	----------------

Franciscana dolphin	Buenos Aires, Rio Negro coast	24	Y	Muscle, teeth	Pablo Bordino
---------------------	-------------------------------	----	---	---------------	---------------

CENPAT

Species	Area / stock	Calendar / year Season total	Archived Y/N	Tissue types	Contact person Institute
Tasmacetus shepherdii	Southern Patagonia	2003	Y	skin samples	E.A. Crespo CENPAT

Cethus

Species	Area / stock	Calendar / year Season total	Archived Y/N	Tissue types	Contact person Institute
Minke whale	Northern Patagonia	1	Y	skeleton	Fundación Cethus

ICB

The following samples were obtained from a total of 13 southern right whales that stranded dead along the shores of Península Valdés between June 1 and December 10, 2004:

Baleen plates: 4

Skin / Blubber: 7

Muscle: 3

Internal organs: 3

Urine: 2

Blood: 1

4.4 Analyses/development of techniques

AQUAMARINA

DNA and histopathology studies were carried out on samples from Franciscana dolphins. Analysis of age structure of by-caught and stranded Franciscana dolphins is still in revision. DNA studies from Burmeister's porpoises are still in revision.

CENPAT

Samples of Commerson's, common, dusky and Peale's dolphins for genetic studies are being analysed at the University of Durham UK by Dr. A. Rus Hoelzel. Samples from dusky dolphins are used for phylogeographic analysis in a cooperative work with the Free University of Brussels.

Cethus

Diet of Commerson's dolphins captured in gillnets in Santa Cruz Province

Studies on skull measurements of Commerson's dolphins from La Angelina and Ría Santa Cruz.

Genetic assessment on population structure of Commerson's dolphins in Santa Cruz Province is being carried out (Fundación Cethus & Conservation Genetics Laboratory, San Francisco State University). New biopsy sampling techniques for small cetaceans is developing.

ICB

Biopsy samples will be used for the following analyses:

Genetics: Sequencing of mtDNA control region to reveal different haplotypes and estimate genetic diversity, population genetic structure and gene flow. DNA fingerprinting using microsatellite loci for individual identification, paternity assessment, estimation of population structure, gene flow and assessment of social systems.

Stable Isotopes analyses: ^{13}C and ^{15}N isotope ratios of the skin to estimate trophic level and geographic location of feeding areas.

Samples from necropsies will be used to assess the health condition of the Península Valdés right whale population.

MACN-CONICET

Biological studies: age determination, parasites, diet analysis, reproduction and physical maturity diseases of Franciscana of southern of Buenos Aires Province (L. Cappozzo, EHPQ-MACN).

5. Pollution studies

AQUAMARINA

Several tissue samples of by-caught franciscana dolphins were collected to identify potential contaminants, and to evaluate the potential as a sentinel species. Analysis is still on going.

Cethus

Fundación Cethus stores samples of blubber from Franciscana, Commerson's dolphins and Spectacled porpoises for pollution studies.

MACN-CONICET

Studies of heavy metal contamination on franciscana dolphins of South Buenos Aires.

6. Statistics for large cetaceans

6.1 Direct catches (commercial, aboriginal and scientific permits)

6.2 Non-natural mortality

6.2.1 STRANDINGS OR DEAD WHALES ENCOUNTERED AT SEA

Cethus

Species	Area/stock	Season total	Contact person
Minke whale	Northern Patagonia	1	Fundación Cethus

ICB

Whale species	Sex	Location	Cause of death	Det.	Source or contact institution, contact name and telephone and/or e-mail
A. Southern right whale	F	42 31 86.0 S 64 21 14.5 W	U	U	Org.: WCS / FPN / WCI / ICB Contact: Marcela Uhart and Vicky Rowntree E-mail: muhart@satlink.com rowntree@biology.utah.edu
B. Southern right whale	M	42 35 82.5 S 64 49 10.2 W	U	U	Same as above
C. Southern right whale	M	42 33 55.4 S 64 18 54.4 W	U	U	Same as above
D. Southern right whale	F	42 40 19.0 S 64 14 55.8 W	U	U	Same as above
E. Southern right whale	F	42 25 60.2 S 64 07 57.2 W	U	U	Same as above
F. Southern right whale	F	42 24 34.7 S 64 05 98.2 W	U	U	Same as above
G. Southern right whale	M	42 24 40.6 S 64 06 02.9 W	U	U	Same as above
H. Southern right whale	M	42 47 46.6 S 64 58 64.9 W	U	U	Same as above
I. Southern right whale	F	42 20 97.5 S 64 02 55.2 W	U	U	Same as above
J. Southern right whale	M	42 25 01.8 S 64 15 61.2 W	U	U	Same as above
K. Southern right whale	M	42 34 93.6 S 64 15 98.6 W	U	U	Same as above
L. Southern right whale	F	42 37 35.9 S 64 12 89.6 W	U	U	Same as above
M. Southern right whale	M	42 42 73.0 S 64 14 71.3 W	U	U	Same as above

6.2.2 OBSERVED OR REPORTED SHIP STRIKES

Cethus

The following data was recorded on August 2003 but as the IWC requested through resolution to report every record of ship strike we decided to include it.

Whale species	Sex	Date	Location	Vessel type	Speed	Fate	Source or contact
Southern Right Whale	U	August 2003	Caleta Olivia, Santa Cruz	Unknown	Unknown	I	Fundacion Cethus

6.2.3 FISHERY BYCATCH

6.3 Earlier years' statistics

ICB

Cooke, J.G., Rowntree, V.J. and R. Payne. 2001. Estimates of demographic parameters for southern right whales (*Eubalaena australis*) observed off Península Valdés, Argentina. *J. Cetacean Res. Manage.* (Special Issue)2:125-132.

7. Statistics for small cetaceans

7.1 For the calendar year

AQUAMARINA (April 2004-March 2005)

		<i>Incidental mortality</i>	<i>Live capture</i>
Species	Area/stock	Reported / Est. total/ Source	Reported
Franciscana dolphin	Coastal Buenos Aires	Over 250/ Over 900/ Gillnets-Driftnets	4
Burmeister's porpoise	Coastal Buenos Aires	Gillnets	0

7.2 Earlier years' statistics

AQUAMARINA

Dolphin bycatch for coastal Buenos Aires in 2004 was estimated over 900 individuals through independent observers on board program covering around 8% of the total fleet. The increasing annual incidental Franciscana dolphin mortality recorded in coastal Buenos Aires during last year (2004) is consequence of the increasing of gillnet fishing effort.

8. Strandings

AQUAMARINA

Pablo Bordino / Diego Albareda (AquaMarina-CECIM)

Cethus

Species	Area/stock	Season total	Contact person
Minke whale	Northern Patagonia	1	Fundación Cethus

ICB

Between June 1 and December 10, 2004, 13 southern right whale calves stranded dead along the shores of Península Valdés.

MACN-CONICET

Species	Contact person/institute
Ballenas Picudas de Hector	Luis Cappozo

9. Other studies and analyses

AQUAMARINA

Tesing longlines in coastal Buenos Aires: At least two cetaceans, Franciscana dolphin and Burmeister's porpoise, are currently incidentally caught in coastal fisheries from Buenos Aires. This study attempts to promote the use of bottom longlines as an alternative fishing practice. Twelve local fishermen were randomly selected in 2004 to use longlines and gillnets. Landings of both fishing gear were compared. Fishing boats carried independent observers recording geographic position, depth, and biomass of fish categorized by species, sex and size. Landings of bottom longlines and gillnets were similar; however, longlines mainly targeted commercial species and sea lion interactions and damage to fishing gear were substantially lower than that of gillnets. Interaction with sea birds and marine turtles were not recorded with longlines. Longline fishermen save money because their fishing gear lasts longer. Thus, bottom longlines could be implemented as a fishery management strategy in the study area.

CENPAT

Current: southern right whale, dusky dolphin, Commerson's dolphin and common dolphin

Species	Area / stock	Calendar / year	Studies	Contact person Institute
Dusky dolphin	Central Patagonia	2000 - 2005	stock size behaviour and short term reaction to whalewatching parasites	E:A: Crespo (CENPAT)
Commerson's dolphin	Central and southern Patagonia	2000 - 2005	stock size behaviour short term reaction to whalewatching parasites diet	E:A: Crespo (CENPAT)
Common dolphin	Northern Patagonia	2000 - 2005	Parasites diet age reproduction	E:A: Crespo (CENPAT)
Franciscana	Distribution range	1999/2004	Abundance and Conservation status	E:A: Crespo (CENPAT)
Southern right whale	Península Valdés	2005-2006	Monitoring of stock by aerial surveys	E:A: Crespo (CENPAT)

Cethus

Species	Area / stock	Calendar / year	Studies	Contact person Institute
Commerson's dolphin	Southern Patagonia	2004 2005	Stock size. Photoidentification (since 1996)	Fundación Cethus
Peale's dolphin	Southern Patagonia	2004 2005	Stock size. Photoidentification (since 1996)	Fundación Cethus
Southern Right Whale	Southern Patagonia	2004 2005	Stock size.	Fundación Cethus
Franciscana	Northern Patagonia	2004 2005	Stock size.	Fundación Cethus

ICB

Kelp gulls at Península Valdés feed on the skin and blubber of live southern right whales. Observations of the interactions between kelp gulls and southern right whales have been done annually since 1995. In 2004, 111 mother-calf pairs were followed for 86.8 h over 26 days. Gull attack frequency decreased from a high of 47% of the time whales were under observation in the year 2000 down to 16% in 2004. Monitoring and controlling gull harassment problem has become a joint project with other NGOs and local governmental officials in Chubut Province.

MACN-CONICET

Studies undergoing by Cappozzo's research team, EHPQ (MACN).

Incidental mortality and fisheries interactions with small cetaceans. Conservation status of Franciscana in its distribution range, monitoring continuously along southern Buenos Aires Province coast. Parasites, diet, Skeletal development and physical maturity age and reproduction of Franciscana in southern Buenos Aires Province. Ziphid identification by analysis of mtthocondrial DNA sequence, and morphological studies.

10. Literature cited

ICB

Cooke, J.G., Rowntree, V.J. Payne, R. 2001. Estimates of demographic parameters for southern right whales (*Eubalaena australis*) observed off Peninsula Valdes, Argentina. J. Cetacean Res. Manage. (special issue) 2:125-132.

11. Publications

11.1 Published or 'In Press' papers only

CENPAT

Dans, S.L., M. Koen Alonso, S.N. Pedraza & E.A Crespo. 2003. Incidental catch of dolphins in trawling fisheries off Patagonia, Argentina: are populations sustainable? Ecological Applications, 754-762.

Dans, S.L., M. Koen Alonso, E.A. Crespo, S.N. Pedraza & N.A. Garcia. 2003. Interactions between Marine Mammals and high seas fisheries in Patagonia under an integrated approach. In: Marine Mammals and Humans: Towards a Sustainable Balance. Ed: N. Gales, M. Hindell, R. Kirkwood. Melbourne Univ. Press.

Coscarella, M.A., Dans, S.L., Crespo, E.A. & Pedraza, S.N. 2003. Potential impact of dolphin watching unregulated activities in Patagonia. Journal of Cetacean Research and Management 5(1):77-84.

Reeves, R.R., B.D. Smith, E.A. Crespo & G. Notarbartolo di Sciara. (Compilers) 2003. Dolphins, Whales, and Porpoises: 2002-2010 Conservation Action Plan for the World's Cetaceans. IUCN/SSC Cetacean Specialist Group, IUCN Gland, Switzerland and Cambridge, UK. Ix + 139 pp.

- Fernández M., Berón-Vera B., García, N., Raga, J.A. & Crespo E.A. 2003. Food and parasites from two Hourglass Dolphins, *Lagenorhynchus cruciger* (Quoy and Gaimard, 1824), from Patagonian waters. *Marine Mammal Science* 19(4):832-836.
- Cassens I, K Van Waerebeek, P Best, E Crespo, J Reyes & M Milinkovitch 2003. The phylogeography of dusky dolphins (*Lagenorhynchus obscurus*): a critical examination of network methods of rooting procedures. *Molecular Ecology* 12:1781-1792.
- Crespi Abril, A., N.A. García, E.A. Crespo & M.A. Coscarella. 2004. Marine mammals' consumption by broadnose sevengill shark *Notorynchus cepedianus* in the northern and central patagonian shelf. *Latin American Journal of Aquatic Mammals*, 2(2):101-107.
- Ramos, R., F.C.W. Rosas, P.C. Simoes-Lopes, R.C. Zanelatto, S.L. Dans & E.A. Crespo. (En Prensa). Estimativa de idade. Chapter 6. *Biología e Ecología do Boto-Cinça* (Ed. Emygdio L.A. Monteiro-Filho).
- Crespo, E.A., Dans, S.L., Koen Alonso, M. & Pedraza, S.N. (En Prensa). Interacciones entre mamíferos marinos y pesquerías en la costa argentina. In: *El Mar Argentino y sus recursos pesqueros*, Tomo Ecosistema Marino. INIDEP.
- Crespo, E.A., M.N.Lewis & C. Campagna. (En Prensa). Mamíferos marinos: una revisión sobre la biología de las especies principales de pinnípedos y cetáceos del Mar Argentino. In: *El Mar Argentino y sus recursos pesqueros*, Tomo Ecosistema Marino. INIDEP.
- Pedraza, S.N., Schiavini, A.C.M., Crespo, E.A., Dans, S.L. & Coscarella, M.A. Abundance of Commerson's dolphins (*Cephalorhynchus commersonii*) in the coasts of Patagonia (Argentina). *En Revisión en Journal of Cetacean Research and Management*.
- Crespo, E.A., S.N. Pedraza, M.F. Grandi, S.L. Dans & G. Garaffo. Abundance of franciscana dolphins, *Pontoporia blainvillei*, in the argentine coast, from aerial surveys. Working paper submitted to the meeting of the International Whaling Commission, Sorrento, Italy, 29/6 to 10/7/04.
- Cassens, I., K. Van Waerebeek § , P.B. Best, A. Tzika, A. Von Helden, E.A. Crespo & M.C. Milinkovitch. 2005. Male dispersal along the coasts but no migration in pelagic waters in dusky dolphins (*Lagenorhynchus obscurus*). *Molecular Ecology*. 14:107-121.

MACN-CONICET:

- Cappozzo, H.L.; Mahler, B.; Lia, V.V. y P. Martinez; 2004. Identificación de zífidos de la Provincia de Buenos Aires, Argentina, por medio del análisis de la secuencia del ADN mitocondrial. Resúmenes 11va. Reunión de Trabajo de esp. En Mamíf. Acuát. De América del Sur y 5to Congreso de SOLAMAC; Quito Ecuador, pág. 22 (Res. Nro. 15).
- Cappozzo, H. L.; Mahler, B.; Lía, V.; Martínez, P.; Giangiobbe, A. y A. Saubidet; 2004. Zífidos de la Provincia de Buenos Aires y su identificación por medio del análisis de la secuencia del ADN mitocondrial. Resúmenes XIX Jornadas Argentinas de Mastozoología, Puerto Madryn, Argentina; pág. 98.
- Negri, F.; Paso Viola, N.; Pérez, F. y H. L. Cappozzo; 2004. Madurez física y sexual del delfín franciscana capturado en redes de pesca en el sur de la Provincia de Buenos Aires. Resúmenes XIX Jornadas Argentinas de Mastozoología, Puerto Madryn, Argentina; pág. 96.
- Panebianco, V.; Botté, S.; Cappozzo, H. L y J. Marcovecchio; 2004. Contaminación por metales pesados en el delfín franciscana del sur de la Provincia de Buenos Aires. Resúmenes XIX Jornadas Argentinas de Mastozoología, Puerto Madryn, Argentina; pág. 98.

11.2 Unpublished literature

Cethus

- Belgrano J., Iñíguez M. and Gribaudo C. 2004. Observaciones preliminares de ballenas francas australes (*Eubalaena australis*) para las costas de Caleta Olivia y La Lobería - Santa Cruz, Patagonia Argentina (1988-2003). 11va Reunión de trabajo de Especialistas en Mamíferos Acuáticos de América del Sur. 5to Congreso de la Sociedad Latinoamericana de Especialistas en Mamíferos Acuáticos. 11 - 17 de Septiembre de 2004, Quito - Ecuador.
- Hevia M. and Gasparrou C. 2004. Observaciones preliminares de toninas overas (*Cephalorhynchus commersonii*) en la Ría Gallego, Santa Cruz, Argentina. 11va Reunión de trabajo de Especialistas en Mamíferos Acuáticos de América del Sur. 5to Congreso de la Sociedad Latinoamericana de Especialistas en Mamíferos Acuáticos. 11 - 17 de Septiembre de 2004, Quito - Ecuador.
- Failla, M.; Iñíguez, M.; Tossenberger, V. and de Haro, C. Bioecology of franciscana (*Pontoporia blainvillei*) in Northern Patagonia, Argentina. 2004. *Submitted to the International Whaling Commission SC/56/SM24*. 4pp.

Failla, M., Iñíguez, M.A., Fernandez-Juricic, E. and Tossenberger, V. 2004. Effect of vessel traffic on Commerson's dolphin (*Cephalorhynchus commersonii*) in Bahía San Julian, Patagonia, Argentina. *Submitted to the International Whaling Commission SC/56/WW7*. 5pp.

Palazzo, J.T., Iñíguez, M.A. and Hevia, M. 2004. A worldwide directory of whale watching research. *Submitted to the International Whaling Commission . SC/56/WW8*. 23pp.

ICB

Instituto de Conservación de Ballenas. 2004. Progress report of research, conservation and education activities of the Instituto de Conservación de Ballenas for the 2004 calendar year (in Spanish and English). **Contact:** icb@icb.org.ar

La Sala L., Pozzi L., Uhart M., and Rowntree V. 2004. *Southern Right Whale Health Monitoring Program Final Report, 2004 & Histopathology Results from Strandings in 2003*. **Contacts:** Luciano La Sala (Field Veterinary Program, Wildlife Conservation Society, Argentina) and Marcela Uhart (Field Veterinary Program, Wildlife Conservation Society, Argentina, and Universidad Nacional del Centro de la Provincia de Buenos Aires). Victoria Rowntree (ICB-WCI/OA and University of Utah).

REFERENCES

- International Whaling Commission. 1977. Chairman's Report of the Twenty-Eighth Meeting. *Rep. int. Whal. Commn* 27:22-35.
- International Whaling Commission. 1989. Report of the Scientific Committee, Annex I. Report of the Working Group on Progress Reports. *Rep. int. Whal. Commn* 39:130.
- International Whaling Commission. 1994. Report of the Workshop on Mortality of Cetaceans in Passive Fishing Nets and Traps. *Rep. int. Whal. Commn* (special issue 15):1-71.
- International Whaling Commission. 1997. Report of the Scientific Committee. *Rep. int. Whal. Commn* 47:59-257.
- International Whaling Commission. 2005. Report of the Scientific Committee, Annex J. Estimation of Bycatch and other Human-Induced Mortality. *J. cetacean Res. Manage.(Suppl.)* 7.
- International Whaling Commission. 2005. Report of the Scientific Committee, Annex M. Whalewatching. *J. cetacean res. Manage.(Suppl.)* 7.