ARGENTINA. PROGRESS REPORT ON CETACEAN RESEARCH, JUNE 2002 TO APRIL 2003, WITH STATISTICAL DATA FOR THE SEASON 2002/3

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1. Species and stocks studied

AQUAMARINA

Common name	Scientific name	Area/stock(s)	Items referred to
Franciscana dolphin	*Pontoporia blainvillei*	Buenos Aires coast	2.1.1/2.1.2/4.2/4.3/4.4/7.1/7.2/9
Burmeister's porpoise	*Phocoena spinipinnis*	Buenos Aires coast	2.1.2/4.2/4.3/7.1/9
Humpback whale	*Megaptera novaengliae*	Buenos Aires coast	4.3
Killer whale	*Orcinus orca*	Buenos Aires coast	2.1.2

CENPAT

Common name	Scientific name	Area/stock(s)	Items referred to
Dusky dolphin	*Lagenorhynchus obscurus*	Northern and central Patagonia	2.1.1, 2.2, 4.2, 9
Common dolphin	*Delphinus delphis*	Northern Patagonia	2.2, 4.2, 7.1, 9
Commerson's dolphin	*Cephalorhynchus commersonni*	Northern, central and southern Patagonia	2.1.1, 2.2, 3.1.1, 4.2, 7.1, 9
Peale's dolphin	*L. australis*	Central Patagonia	2.1.1, 2.2, 3.1.1, 9
Bottlenose dolphin	*T. truncatus*	Northern Patagonia	3.1.1, 9
Franciscana	*Pontoporia blainvillei*	Distribution range	2.1.1, 9
Cuvier's beaked whale	*Ziphius cavirostris*	Erratic individuals not distributed in the area	4.3
Hourglass dolphin	*L. cruciger*	Erratic individuals not distributed in the area	4.3
Spectacled porpoise	*A. dioptrica*	Northern Patagonia	4.3

Cethus

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

Southern right whale	*Eubalaena australis*	Southern Patagonia	2.1
Franciscana	*Pontoporia blainvillei*	Northern Patagonia	2.1.1., 11.1
Commerson´s dolphin	*Cephalorhynchus commersonii*	Southern Patagonia	2.1.1, 2.2, 3.1.1, 3.2., 4.2, 4.4., 5, 7.1, 9.
Peale´s dolphin	*Lagenorhynchus australis*	Southern Patagonia	2.1.1, 2.2, 3.1.1, 3.2., 9
Killer whale	*Orcinus orca*	Northern Patagonia	2.1.2., 3.1.1., 11.1
Spectacled porpoise	*Phocoena dioptrica*	Southern Patagonia	4.3, 5, 8

ICB

Common name	Scientific name	Area/stock(s)	Items referred to
Southern right whale	*Eubalaena australis*	SW Atlantic, N Patagonia	2.1.1, 2.2, 3.1.1, 6.3, 9, 10, 11.2

UNMdP

Common Name	Scientific Name	Area/Stock	Items referred
Southern Right Whale	*Eubalaena australis*	Northern Argentina	2.1.1 // 9
Franciscana	*Pontoporia blainvillei*	Northern Argentina	2.1.1 // 4.2 // 4.4 //5 // 8 // 9
Striped Dolphin	*Stenella coeruleoalba*	Argentine Sea	2.2 // 4.2 // 9
Short beaked common dolphin	*Delphinus delphis*	Argentine Sea	4.2 // 4.4 // 9
Bottlenose dolphin	*Tursiops truncatus*	Northern Argentina	9
Killer whale	*Orcinus orca*	Northern Argentina	9
Burmeister's porpoise	*Phocoena spinipinnis*	Northern Argentina	9
Cuvier's beaked whale	*Ziphius cavirostris*	Northern Argentina	9
Pigmy sperm whale	*Kogia breviceps*	Northern Argentina	9
Sperm whale	*Physeter macrocephalus*	Northern Argentina	9

2. Sightings data

2.1 Field work

2.1.1 SYSTEMATIC

AQUAMARINA

Systematic sightings of Franciscana dolphin were recorded from land stations in Bahia San Blas and Cabo San Antonio (Buenos Aires coast) since 1992. Also, boat surveys were conducted for recording Franciscana dolphin distribution and behaviour. Since 1996, strip and line transects were used to evaluate Franciscana abundance in San Blas and Cabo San Antonio areas.

CENPAT

a) Coastal aerial surveys in the coast of Chubut Province (Northern and central Patagonia).
b) Sightings distribution of dusky dolphin groups from tourism boats at Golfo Nuevo (Northern Patagonia).
c) Sightings distribution of Commerson's dolphin from tourism boats at Bahía Engaño (Northern Patagonia)
d) Sightings of Commerson's dolphins from cliffs at Chubut Rivr mouth area.
e) Sightings distribution of Peale's dolphin groups at Bahía Camarones (Central Patagonia).
f) Aerial surveys of Franciscana in the Argentine coast.

Cethus

Ecology and behaviour of Franciscana dolphin along Buenos Aires coast. The Ad libitum and Animal Group Focal methodology are used. Surveys are made from shore and from vessels.

Population numbers, group distribution, use of habitat, socioecology, behaviour, interaction between mother-calf of Commerson´s dolphins 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. Surveys are made from shore and from vessels.
Observations of Commerson´s dolphins were also made from shore and vessels at the mouth of Ría Gallegos and
from this mouth to 30 kilometers south of it, recording the presence of calves and feeding behaviour.
Movements and behaviour of Southern Right Whales along the coast of Santa Cruz. Field work consist of shore observation. Data is taken in daily sheets with information about time, tide, Beaufort scale, number of animals, behaviour and movements in the study area using *Ad Libitum* and *focal sampling techniques*.
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 seasonal movements in the study area, in order to compare the different populations studied. Observations are made from shore and from vessels.
Studies of Peale´s dolphin at La Mina and Cabo Curioso, Santa Cruz are being carried out since 1996, studying
the ecology and behavior of Peale´s dolphin in the area. A photoidentification study is also developed since 1996. Field work consists of shore and vessel observation.
Studies of Peale´s dolphins at Cabo Vírgenes are being carried out since 1992. In this season specific data about foraging strategies and its association with kelp beds (*Macrocystis pyrifera*) were registered mainly.
In order to detect the presence of Peale's dolphin in other areas of South Patagonia, monitoring activities were carried out at Caleta Olivia and 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 dophins and to compare these data with studies carried out at Cabo Vírgenes. Observations were made from shore and from vessels.
In all areas the observations on Peale´s dolphins were made according to Ad libitum and Animal Group Focal methodology.

ICB
Aerial survey of southern right whales off the coast of Peninsula Valdes, Argentina, on September 24-28, 2002. Purpose of the survey: photoidentification of the callosity patterns of all right whales encountered along the perimeter of the Peninsula.
Total whales counted: 481 (including 135 calves).
Final results of photoidentification not yet available.

UNMdP
Systematic coastal surveys are conducted in the northern coast of Argentina; the basic target is Southern Right Whale sightings and Franciscana entanglements and strandings.

2.1.2 OPPORTUNISTIC, PLATFORMS OF OPPORTUNITY

AQUAMARINA
Sightings of Burmeister's porpoise and Killer whale were recorded from fishing boats along the Buenos Aires coast.

CENPAT
Sightings records from fishing vessels.

Cethus
Sightings records from coast and vessels were carried out along Santa Cruz province.
Data on killer whales sightings were obtained during November - December 2002 through observations carried out at Peninsula Valdés.

Species	Area/stock	Calendar year/ season no. collected	No. reported	Contact person/institute
Southern Right Whale	Santa Cruz coast	July 2002 – May 2003	1	Fundación Cethus

UNMdP
Non systematic surveys include the record of occasional strandings in northern Argentina.

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

Cethus
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 Commerson´s dolphins at Ría Santa Cruz. Photo-identification technique is also being carried out.
Study of Peale´s Dolphin at La Mina and Cabo Curioso, Santa Cruz. Data analysis is intended to show the proportion of time sighted related to sampling effort, behaviors most commonly sighted and use of habitat in the study area. Since 1996 a photoidentification of individuals were done using notches and scars on the dorsal fin and body scars.
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.

ICB
Analysis of behavioral data of juvenile southern right whales collected between 1997 and 2001 is being carried out at present by Mariano Sironi, researcher with ICB. Data include over 1,100 shore-based scans of all whales and over 280 hours of continuous observation of the behavior of juvenile whales at the study site in Península Valdés.

UNMdP
We reviewed (Publication 4) the distribution and occurrence of striped dolphins in northern Argentina, including new information about strandings, incidental catches and sightings. *S.coeruleoalba* is found from 70 to 420 S, although most of the sixteen records were found between 300 and 400 S. Seventy percent of the dolphins were single stranded animals, and in the cases that sex was determined, all of them were juvenile to adult males (205-242cm). A total amount of 10 skulls are deposited in museum collections of Brazil, Uruguay and Argentina (CBL 402-471 mm). The sightings were concentrated in late spring and summer (October-February), comprising small groups (1-4 dolphins) in relatively shallow water (30-100m). Only a single incidental catch was recorded, being a male associated with common dolphins feeding on anchovies in northern Patagonia. The colour pattern found was bluish grey in stranded animals and brownish in live dolphins, with the characteristic combination of lateral stripes and spinal blaze. The southbound warm Brazil Current may influence in the presence of striped dolphins in Uruguay and Argentina during austral summer, even tough some animals were found during winter in waters of temperatures below 200 C clearly associated with the northbound cold Current.

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 and Central Patagonia	1998 – 2002 / year round / 50	Y	140	E.A. Crespo (CENPAT)

Peale´s dolphin	Dorsal fin and body scars	Central Patagonia	December 1999 and December 2000/02	Y	10	E.A. Crespo (CENPAT)
Bottlenose dolphin	Dorsal fin and body scars	Northern Patagonia	2000-2002	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); 1998-2003/year round	Y	64	Fundación Cethus
Peale´s dolphin	Dorsal fin and body scars	Santa Cruz Coast	January 1996 – April 2003	Y	12	Fundación Cethus
Killer whale	Dorsal fin, body scars	Península Valdés	1985-2002	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	2002	Y	currently under analysis	V. Rowntree / ICB-WCI/OA

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

4.2 Samples from directed catches or bycatches

AQUAMARINA

Species	Area/stock	No. collected	Archived	Tissue type	Contact person
Franciscana dolphin	Buenos Aires coast	65	Y	Muscle, liver, glands, lung, kidney, etc	Pablo Bordino
Burmeister's porpoise	Buenos Aires coast	3	Y	Muscle	Pablo Bordino

CENPAT

Species	Area/stock	Calendar year/ Season total	Archived (Y/N)	Tissue types	Contact person
Commerson's dolphin **	Central/southern Patagonia	2001 / 2002	Y	Gastrointestinal helminths	E.A. Crespo CENPAT
Dusky dolphin		1990 / 1995	Y	Gastrointestinal helminths	E.A. Crespo CENPAT
Common dolphin	Northern Patagonia	2001 / 2002	Y	Gastrointestinal helminths	E.A. Crespo CENPAT

** See references Beron Vera et al (accepted for publication)

Cethus

Species	Area/stock	Calendar year/ Season total	Archived (Y/N)	Tissue types	Contact person
Commerson's dolphin	San Julian	1	Y	Muscle, skin, blubber, glands,	Fundación Cethus

				stomach content, skeleton, teeth	

UNMdP
Tissue (blubber, muscle, liver & kidney), stomach contents and skulls of Franciscanas. Skeletons of common and striped dolphins.

4.3 Samples from stranded animals

AQUAMARINA

Species	Area/stock	No. collected	Archived	Tissue type	Contact person
Humpback whale	Buenos Aires coast	1	Y	Muscle and skin	Pablo Bordino

CENPAT

Species	Area / stock	Calendar / year Season total	Archived Y/N	Tissue types	Contact person Institute
Hourglass dolphin	Erratic specimen	2001 - 2002	Y	Whole specimen	E.A. Crespo CENPAT
Ziphius cavirostris	Erratic specimen	2001 – 2002	Y	Whole specimen	E.A. Crespo CENPAT
Spectacled porpoise	Northern Patagonia	2001 – 2002	Y	Whole specimen	E.A. Crespo CENPAT
Common dolphin	Northern Patagonia	2001 – 2002	Y	Whole specimen	E.A. Crespo CENPAT
Southern bottlenose whale		2002	Y	Whole specimen	E.A. Crespo CENPAT

Cethus

Species	Area / stock	Calendar / year Season total	Archived Y/N	Tissue types	Contact person Institute
Spectacled porpoise	Erratic specimen	2003 / 1	Y	Muscle, skin, blubber, glands, stomach content, skeleton, teeth	Fundación Cethus

UNMdP
Skulls. Skeletons of striped dolphins.

4.4 Analyses/development of techniques

AQUAMARINA
DNA and histopathology studies were carried out on samples from Franciscana dolphin. DNA studies are still in revision on samples from Burmeister's porpoise and Humpback whale.

CENPAT
a) Samples of dusky dolphins for genetic studies are being analysed at the Free University of Brussels, Belgium, by Dr. Michel C. Milinkovitch and Dr. Koen van Waerebcek in order to study differences between stocks of southern Atlantic and others. Samples of common, dusky and Commerson's dolphins are being studied at the University of Durham, England, by Dr. A. Rus Hoetzel in order to study stocks within the Argentine coast and kinship between individuals.

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 Ria Santa Cruz.

UNMdP
Stomach contents of 110 Franciscanas (*Pontoporia blainvillei*), from northern Argentina were analysed (Publication 27) in order to improve our knowledge about the feeding habits of this species and to better characterise the lactation period. The samples included calves, juveniles and adults of both sexes. Evidence of predation by Franciscanas is seen at a very young age (2.5-3 months), with a transition diet composed by both milk and solid food, mainly represented by crustaceans. Weaning seems to begin by April, when Franciscanas are about 6-7 months old. Franciscanas inhabiting two different habitats were analysed in this study: a brackish water estuary and an adjacent marine coastal system. The diet of *Pontoporia blainvillei* in northern Argentina was composed by a total of 26 prey species: 20 teleosts, 4 crustaceans and 2 cephalopods. Based on

the Index of Relative Importance (IRI) the main prey species were *Cynoscion guatucupa*, *Micropogonias furnieri*, *Loligo sanpaulensis* and *Urophycis brasiliensis*. Estuarine Franciscanas preyed mainly on *Micropogonias furnieri* (dominant species), *Cynoscion guatucupa*, *Odonthestes argentinensis* and *Macrodon ancylodon*, while dolphins from marine areas preyed mainly on *Cynoscion guatucupa* (dominant species), *Loligo sanpaulensis* and *Urophycis brasiliensis*. Our results confirm that Franciscanas prey mainly on juvenile fish (< 8cm) and small loliginid squids, in close agreement with previous results obtained in southern Brazil and Uruguay. Qualitative and quantitative differences observed in the diet of dolphins from each habitat emphasise the need to discriminate between samples from different habitats and environmental parameters.

We studied (Publication 18) the main patterns of physical development and maturity in common dolphins of the Argentine sea, through the analysis of skeletons of thirty individuals. The relations size/age, length/weight and the morphometric relations of the skull were characterised, in order to understand the ontogenetic development and to detect potential sexual dimorphism. The degree of fusion in skull sutures and vertebral and hioideal epiphysis were studied to estimate the age of physical maturity. Body growth adjusted to a Gompertz model, with asymptotic lengths close to 215 cm for both sexes, whereas the body mass adjusted to a potential model. Condilobasal length increases linearly with standard length, but relation was found with age. Eleven cranial sutures were relevant to determine the physical maturity, which was acquired at approximately 11 GLGs (Growth Layer Groups). Three age classes were defined according to suture fusion: I (0-4 GLGs), II (5-10) and III (>11). Hyoid fusion was present at ages > 10 GLGs. Cranial maturity was prior to skeletal maturity, and sexual dimorphism was detected by discriminant analysis of 8 skull measurements. Common dolphins from the Argentine Sea were similar in size to those from the rest of the Atlantic Ocean, but bigger than those reported from the Pacific Ocean.

5. Pollution studies

Cethus

Fundacion Cethus stores samples of blubber from Commerson's dolphins and Spectacled porpoise for pollution studies.

UNMdP

We conducted a study of the heavy metals contents in Franciscanas (Publication 17). The aims of the study were to (i) assess the heavy metal concentration and burden distribution in different Franciscana age classes and sex, and to (ii) evaluate both the accumulation processes and the transplacental transference of zinc, cadmium, copper and total mercury. Heavy metal concentrations (wet weight) were determined in eighteen dolphins by Atomic Absorption Spectrophotometry (AAS), by the cold vapour technique (mercury) or with air/acetylene flame (cadmium, zinc and copper). Liver showed the highest concentrations of mercury (max. 8.8 mg/g), zinc (max. 29.7 mg/g) and copper (max. 19.0 mg/g), whereas the highest cadmium concentrations (max. 6.7 mg/g) were found in kidney. Adults contained the highest concentrations for all heavy metals, followed by juveniles and calves in decreasing order, suggesting an age-related accumulation. No differences ($p<0.05$) were found between sexes within each age class. Organ burden distribution followed the same pattern for all metals and age classes: liver tissues contained maximum burdens. Mercury concentrations were higher than those of cadmium in both foetuses and newborns; and neither metal could be detected in the foetus. The extent of placental transference of metals appeared to differ between metals. The analysed data suggested differences in the placental transference between metals, being significant for mercury and almost null in the case of cadmium. We can conclude that Franciscana accumulates heavy metals and, due to its coastal distribution, it may be considered as a biomonitor of its environment.

6. Statistics for large cetaceans

6.3 Earlier years' statistics

ICB

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

Cooke, J.G., Rowntree, V.J. and R. Payne. 2001. Estimates of demographic parameteres 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 2001-2002

AQUAMARINA

		Incidental mortality	Live capture
Species	Area/stock	Reported / Est. total/ Source	Reported
Franciscana dolphin	Cabo San Antonio	52 / 215 / Gillnet-Drifnet	1
Burmeister's porpoise	Cabo San Antonio	10-Feb	0

7.1 For the calendar year July 2002- April 2003

Cethus

		Directed catch		Incidental mortality			Live-capture
Species	Area/stock	Reported	Est. total	Reported	Est. total	Source*	Reported
Commerson's dolphin	Santa Cruz province	0	0	1		gillnet	0

7.2 Earlier years' statistics

AQUAMARINA
The annual incidental Franciscana dolphin mortality recorded during last two years (2000-2002) suggests that the impact of the Cabo San Antonio fishery has increased, although the fishery effort has been the same or lower than previous years. Historic average of 10 dolphins caught per fishermen per season was reported through interviews. However, dolphin bycatch increased to 17 individuals per fishermen per season when recorded through independent observers on board. It is likely that Franciscana dolphin bycatch along the Buenos Aires coast has been underestimated for several years.

8. Strandings

AQUAMARINA
Pablo Bordino / Diego Albareda (AquaMarina-CECIM)

Cethus

Species	Area/stock	Season total	Contact person
Spectacled porpoise	Erratic specimen		Fundacion Cethus

UNMdP
A mean of 5-10 Franciscanas are stranded annually in our area.

9. Other studies and analyses

AQUAMARINA
A double blind experiment in the Cabo San Antonio gillnet fishery was conducted to determine the effectiveness of acoustic deterrents (pingers) at reducing dolphin bycatch in the area. Pingers showed promise as a management tool for reducing Franciscana dolphin bycatch, although a long term study is necessary to evaluate viability for these electronic devices in small artisanal fisheries.

CENPAT
Current: sourthern right whale, dusky dolphin, Commerson's dolphin, common dolphin and Peale's dolphin

Species	Area / stock	Calendar / year	Studies	Contact person Insititute
Dusky dolphin	Central Patagonia	2001 - 2002	Stock size, behavior and short term reaction to whalewatching, parasites	E.A. Crespo (CENPAT)
Commerson´s dolphin	Central and Southern Patagonia	2001 - 2002	Stock size, behavior and short term reaction to whalewatching, parasites, diet	E.A. Crespo (CENPAT)
Common dolphin	Northern Patagonia	2001 2002	Stock size, parasites, diet, age, reproduction	E.A. Crespo (CENPAT)
Peale´s dolphin	Central Patagonia	2001 2002	Stock size, photoidentification	E.A. Crespo (CENPAT)
Bottlenose dolphin **	Northern Patagonia	2001	Diseases, photoidentification	E.A. Crespo (CENPAT)
Franciscana	Distribution range	2001 2002	Conservation status, abundance, stock, identification, behavior	E.A. Crespo (CENPAT)

Cethus

Species	Area / stock	Calendar / year	Studies	Contact person Insititute
Commerson´s dolphin	Southern Patagonia	2002 2003	Stock size. Photoidentification (since 1996)	Fundacion Cethus
Peale´s dolphin	Southern Patagonia	2002 2003	Stock size Photoidentification (since 1996)	Fundación Cethus
Commerson´s dolphin	Santa Cruz	2002 2003	Interaction between artisanal fisheries and cetaceans	Fundacion Cethus

ICB

The most recent model for the Valdés population of southern right whales (based on resightings of previously identified whales from 1971-90) makes the following estimates: population increase at 6.9% per year; mean calving interval of 3.35 years, mean age at first calving 9.1 years; adult female annual mortality rate 0.019 and reproductive female population size at 328 animals (Cooke et al. 2001).

Changes in the geographic distribution of southern right whales in this nursery ground are described in: Rowntree, V.J, Payne, R.S. and D.M. Schell. 2001. Changing patterns of habitat use by southern right whales (*Eubalaena australis*) on the nursery ground at Península Valdés, Argentina, and in their long-range movements. J. Cetacean Res. Manage. (Special Issue)2:133-143.

UNMdP

We reported (Publication 28) the extraction of DNA from formalin-fixed *Pontoporia blainvillei* tissues. Following the Vachot and Monerot (1996) protocol, fragmented DNA (300-700 bp) was extracted in more than 95% of liver and muscle samples. DNA yield in liver samples was significantly higher than in muscle ones (4.574 ± 1.169 µg DNA/mg versus 0.808 ± 0.297 µg DNA/mg). Similar results were obtained from other nine species of Cetaceans (*Delphinus delphis*, *Tursiops truncatus*, *Stenella coeruleoalba*, *Orcinus orca*, *Phocoena spinipinnis*, *Ziphius cavirostris*, *Kogia breviceps*, *Physeter macrocephalus* and *Eubalaena australis*) and five species of Pinnipeds (*Arctocephalus australis*, *Arctocephalus tropicalis*, *Arctocephalus gazella*, *Otaria flavescens* and *Mirounga leonina*). It is of special interest to have a method that allows the utilisation of museum specimens not originally preserved for genetic studies, which may include rarely available, declining or extinct species.

10. Literature cited

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.

ROWNTREE, V.J, PAYNE, R.S. and D.M. SCHELL. 2001. Changing patterns of habitat use by southern right whales (*Eubalaena australis*) on the nursery ground at Península Valdés, Argentina, and in their long-range movements. J. Cetacean Res. Manage. (Special Issue)2:133-143.

11. Publications

11.1 Published or 'In Press' papers only

1. ARIAS, A.; ROCHA J.; WEISKEL, H.W.; FIDELIX, L.; DE HARO C.; CREMER, M.; LÁZARO, M. and SICILIANO, S. 2002. Report of the Working Group on Legislation and Education. The Latin American Journals of Aquatic Mammals, Special Issue 1, Vol 1, (1):67-70

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