

Version 22 de Junio de 1998

SOCIO-ECONOMIC ASPECTS OF WHALE WATCHING IN ARGENTINA

Miguel A. Iñíguez ¹, Ana Tomsin ¹, Chantal Torlaschi ^{1,2} and Lorena Prieto ¹

(1) Fundación Cethus - P.O.Box 4490 - (1001) - Buenos Aires - Argentina.

E-mail : cethus@houseware.com.ar

(2) “Los Vikingos” – Estrada 1275 - (9050) - Puerto Deseado -

Santa Cruz - Argentina. E-mail : forti@houseware.com.ar

Abstract

Whale watching activities began on a small scale in Peninsula Valdes, Argentina in 1983 but it did not take off until 1992 it had expanded to the towns of San Julian bay, Ria Deseado, and Rio Gallegos in the Province of Santa Cruz. Information on how valuable whale watching is to a community in terms of conservation, education, public awareness and economic impact were collected by interviewing to Provincial and Town Council Agency officials, local fishermen, local and national tour operators and visitors. The objective of this paper is to present the socio-economic aspects of whale watching in Argentina. A positive social aspect for all the three areas is increased public awareness resulting from whale watching activities. The main negative environmental cost perceived was waste. Even though at San Julian and Ria Deseado, low impacts have been observed because of the low intensity of the activity, it is recommended a management plan become necessary to regulate it.

Introduction

Whale watching is defined as “watching cetaceans in the wild. Almost invariably, it is conducted from a platform (e.g., ship, shore, aeroplane). It also includes it with a commercial element and ad hoc amateur whale watching” (IFAW, Tethys Research Institute and Europe Conservation, 1995). This activity started properly in the winter of 1955 when a fisherman called Chuck Chamberland, organized trips to watch Grey whales (*Eschrichtius robustus*) near San Diego, California for \$1 US per person (Hoyt, 1992). Soon, other fishermen began to take tourists out to see Grey whales that migrated along the coast of southern California every year and it was the beginning of this worldwide incipient industry (Hoyt, 1992). This activity expanded very quickly through North America first reaching other areas of California, then New England and later Canada and Mexico. Commercial whale watching did not take off until the early 1980s outside the US when it reached Gibraltar, Argentina, South Africa, Sri Lanka and Antarctica (Hoyt, 1995). During the late 1980s and early 1990s, whale watching grew explosively and reached diverse and remote areas all over the world (Hoyt, 1995). He reported that in 1994 no fewer than 50 different countries and 15 overseas territories had commercial whale watching operations, that involves nearly 300 communities. Hoyt estimated that 5.4 million people went whale watching in 1994, generating total estimated revenues of \$504.3 million US. The International Whaling Commission (IWC) has followed the development of whale watching for more than a decade and, at its 1993 Annual Meeting, held in Kyoto, Japan, resolved to “recognise whale watching as an expanding tourist industry which contributes significantly to the economies of a number of countries” and to recognise “the contribution which whale watching makes to education and to furthering scientific knowledge”. The first whale watching activities, in South America, started in Peninsula Valdes, Argentina, in 1983 during the southern right whale (*Eubalaena australis*) breeding season when local tour operators started to offer tours and continues today. Even though the number of

tourists has increased since the beginning, it had expanded to the towns of San Julian, Ria Deseado and Rio Gallegos where dolphin-watching tours were opened up to see mainly Commerson's dolphins and Peale's dolphins from boat and land since the mid-90s (Fig. 1). New areas may soon start to operate from San Blas village to watch the rare Franciscana (*Pontoporia blainvillei*) from boats and land. Tourist activities in Chubut are concentrated at Puerto Piramides, Puerto Madryn and Trelew. The main cetacean species observed during 2 hour trips during austral winter through spring are southern right whale (*Eubalaena australis*) and sporadically dusky dolphins (*Lagenorhynchus obscurus*) and orcas (*Orcinus orca*). The attention of whale watchers was also caught by the famous orcas from Patagonia at Punta Norte Nature Reserve, Peninsula Valdes during the end of austral summer and the beginning of the autumn. Orcas and Southern Right Whale also sporadically visit Punta Bermeja Nature Reserve (La Loberia) at Rio Negro province during austral winter and attract mainly local tourists. On July 10, 1992 at least 1500 persons visited Punta Bermeja to watch a Southern Right Whale mother and calf group. Since the mid-90s, dolphin watching tours opened to see mainly Commerson's dolphins (*Cephalorhynchus commersonii*) and Peale's dolphins (*Lagenorhynchus australis*) at San Julian, Ria Deseado and Rio Gallegos. Two tour operators "Los Vikingos Turismo Aventura" and "Gipsy Tour", offered a half-day nature trip along Ria Deseado. Los Vikingos Turismo Aventura started nature trips in 1995, using mainly 8 person inflatable boats, powered with an outboard engine of 50 HP. They offered 5 different choices of trip lengths: 1, 2, 3 hours and half-day trips. In all these four trip, Commerson's dolphins could be sighted. A fifth choice is a day sport fishing trip. The other nature tour operator is "Gipsy Tour", the oldest tour operator of Deseado, starting in 1993. They have three boats (a 6-person inflatable boat powered with an outboard engine of 55 HP, a 60-person boat with an inner engine of 270 HP and a 12 people inflatable boat with an engine of 115 HP). They also offer 5 different nature

trips. The cost of the trip depends on the destination, trip duration, and additional services. Prices vary between \$22 US for 1.3 hr trip to \$115 US for 1 or 2 day trips to Isla Pingüino (Penguin Island). This nature trip is also offered by “Los Vikingos”. In San Julian, there is only one nature trip operator (“Excursiones Pinocho”) with an 8-person inflatable boat powered by an outboard engine of 55 HP. They organize 2 hour trip to see Commerson’s dolphins, Blue-eyed cormorants (*Phalacrocorax atriceps*), Magellanic penguins, Kelp gulls (*Larus dominicanus*) and Dolphin gulls (*Leucophaeus scoresbii*).

The cetacean watching industry is growing very quickly along the Argentine coast. This report presents information on the socioeconomic values of whale watching activities at the three oldest whale watching locations : Peninsula Valdes, Ria Deseado and San Julian.

Studies area and Methods

Since 1995, a study to determine the socio-economic and educational values of whale watching activities were carried out along the Argentine coast. Several different locations were monitored, the main research was concentrated in Peninsula Valdes (42°00'S, 64°00'W), Playa Union(), Ria Deseado(47°44'S, 65°55'W), San Julian(49°18'S, 67°42'W), Rio Gallegos () and Cabo Virgenes(). Even though Punta Norte is situated inside Peninsula Valdes, it was considered separately for our analysis. A workshop on the socio-economic aspects of whale watching was held in Kaikoura, New Zealand in December 1997. To present a report for this workshop we collected information by interviews with local fishermen, the head of the Tourism Departments of provinces of Chubut and Santa Cruz officials and tour operators involved in whale watching activities in Argentina as well as we compared with historical available information. We asked the following questions: How valuable is whale watching to a community in terms of education, science, recreation, conservation and economically; Where does the money from tourism expenditures go and how does it flow through a community – who benefits and who loses?; What are the multiplier effects and how much “leakage” is there outside; What is the net economic value on a whale-watching tour? What are the environmental impacts of whale watching and how can these be addressed through mitigation, visitor taxes and other means? What are the social impacts from whale watching?.

Study Areas

Patagonia is a vast area situated at the southern tip of Argentina, covering an area of 765,720 km² (referencia.....) Three areas on the sea coast of this place were selected for our study.

1. Peninsula Valdes, Chubut

1.1 Peninsula Valdes Tourist Reserve

It was created by law n° 2161 in 1983. It is situated 165 km north from Puerto Madryn town and 1300 km south of Buenos Aires. It is known worldwide for its southern sea lion (*Otaria byronia*) and southern elephant seal (*Mirounga leonina*) rookeries and the seasonal presence of Southern Right Whales in the surrounding waters. Tourism Department of province of Chubut provided us with information on number of whale watching licenses, number of boat, number of tourist, number of whale watchers and historical data. To determine incomes from the admission fees at Peninsula Valdes and considering all the 3 different prices entry fees, an averaged \$3 US fee were considered. Each whalewatching operator can have only two boats in operation. Today, 6 companies are operating in the area, 4 of them are working together. “Ebano viajes” is a tour operator set in Buenos Aires and specializes in educational trips for school students, including a nature trip to Peninsula Valdes with whale watching activities. We interview Mr. R. Cucchi Colleoni (one of its executive director) and summarized information on its Peninsula Valdes nature trips.

1.2. Punta Norte Tourist Reserve, Chubut

It was created in 1967 as a Provincial Faunistic Reserve to protect southern sea lion and southern elephant seal rookeries. It is located at 42° 05´S, 63° 46´W. In 1983, it is established to be considered as a Tourist Reserve by Provincial law 2161. This area is visited by orca watchers during summer-autumn time. A preliminary study to know the social aspect of Punta Norte visitors were made from March 1st to 27th 1997 during our fieldwork on orcas. All visitors were interviewed and information on origin, age categories (adults and childrens) and transportation were made. For this paper by children we understand all visitors less than 12 years old.

2. Ria Deseado Nature Reserve, Santa Cruz.

The Ria Deseado Nature Reserve was created by Provincial Decree 1561/77 to protect natural and cultural features. Since the mid-90s nature trips, including Commerson’s dolphin watching

activities have been operating from Ria Deseado and San Julián, Province of Santa Cruz. At Ria Deseado and San Julian, we did not study trip expenditures, but we just considered tour operator benefits. Information on any extra income not related to tourist activities as film crew assistance, particular job for the Deseado Town Council and farmer transfers for Los Vikingos are not included in this paper.

3. Bahía San Julian Nature Reserve, Santa Cruz.

The reserve was created in 1990 to protect sea bird colonies, southern sea lion rookeries and Commerson's dolphins which inhabit the area. The Reserve extends along 20 km of shore line including Bahía San Julián, Cabo Curioso and La Mina.

Results

Economical aspect

Peninsula Valdes

Each 2 hour whale watching trip costs \$20 – 25 US. The Provincial Tourism Department received 10 or 12% of the whale watching tickets sold. Puerto Piramides is a small village of approximately 100 people that depends entirely on tourism, operates six whale watching boats. Multiple pricing policies have been implemented at Peninsula Valdes by the Tourism Department of the Province of Chubut: \$1 US for local people, \$3 US for Argentine students and retired people and \$5 US for other people, including Argentine nationals and residents, and foreigners. Another important sourced income for the Tourism Department of the province of Chubut is a daily film permit fee. As of 1990, by Provincial Law N°3258, the Government of province of Chubut must regulate film crew activities. Foreign film crews must pay a daily fee of \$300 US and national film crews must pay \$100 US. Observers from the Tourism Department must control film crew movements and they have to pay for observers expenses \$50/day US. Film crews have to pay a \$600 US deposit which will be returned to them upon receipt of a copy of the edited film version to the Tourism Department. Most of the groups spend 20-25 days in the area and most of them film southern right whales, orcas, southern sea lions, southern elephant seals and Magellanic penguins (*Spheniscus magellanicus*). Sometimes the Tourism Department accepts equipment donations for the same value of the daily fee and this equipment is used in the maintenance of the Provincial Reserves. As the Tourism Department belongs to the provincial Department of Commerce, the money enters directly to the provincial treasury and sometimes does not return to the Reserves. Even though we do not have accurate data on this operation yet, we believe the Province of Chubut revenues are substantial from film companies. It was estimated that 130,138 people went to Peninsula Valdes in 1996,

generating \$390,414 US by entry fees that entered directly to the Economic Department of the Province of Chubut. The number of visitors to Peninsula Valdes increased by an average of 1% every year between 1992 and 1997. 1996 revenues from Peninsula Valdes are estimated at \$13,259,500 US, based on 53,038 whale watchers. The number of whale watchers increased 11.9% between 1987 and 1996, an average of 1.3% every year. 1996 Direct revenues from ticket sales alone were \$1,060,760 US. Comparing the number of tourists between June and October 1996 and 1997 show an increase of an average of 1.3% every month. Fig. 2 shows the annually percentages of whale watchers per total number of tourists. money enters directly to the provincial treasury and sometimes does not return to the Reserves. In 1997, “Ebano Viajes” sold nature trips to 12 schools from Buenos Aires, carrying 550 students. Fig. 3 summarizes the number of pupils carried by “Ebano Viajes” to Peninsula Valdes since 1993. Transportation is by bus and plane; 350 students travelled by plane and 200 students by bus during 1997. A nature trip by bus cost \$420 US and by plane \$610 US, totalling \$84,000 US by bus and \$213,500 US by plane. Trip costs also included Reserve entry fees. At least \$119,000 US (40%) of the economic benefits linked to tourist expenditures went to Buenos Aires city (travel tickets, salaries, insurance) and the other 60% (\$178,500 US) stayed in towns of the province of Chubut through the sale of consumer goods (local field-guides, hotel accomodations, bus rent, food, drink, film, souvenirs, etc).

Punta Norte

We interviewed 1646 visitors. 1123 (?) respondents were Argentine (75.5%). Of these most originated from Buenos Aires city and Greater Buenos Aires (65%), resulting in an average one way travel distance of 1400 km. The remaining 12% were local or nearby visitors, with 16% from Santa Fe, Cordoba and the nearby province of Rio Negro (Fig. 4). Three hundred twenty seven foreigners visited Punta Norte; 17% came from Germany, followed by Italy (12%) and USA

(11%)(Fig. 5). An average of 61 whale watchers of total tourists visited Punta Norte each day. Considering all the visitors, daily there is a 5.13% of tourists that have visited Punta Norte previously. Of orca's watchers 87.6% were adults and 12.4% were children (<12 years old). For transport 1481 tourists (90.6%) used their owned car and just 153 (9.4%) used tour operators to travel to Punta Norte. Orcas were sighted 13 days of 27 days studied. At present, except for a small company which advertise orca watching trips, tour operators make no effort to advertise and attract orca watchers, because even though orcas are sighted during March about 15-18 days, nobody could guarantee sightings.

Ria Deseado

In the 1996/97 summer season, 9330 people visited Ria Deseado for pleasure or religious purpose. Approximately 98% were Argentine (mainly from Buenos Aires city - Greater Buenos Aires and Puerto Deseado). Foreigners visitors came principally from Brazil and Europe, primarily U.K. and Germany. Trip prices were based on a minimum of 4 persons; each additional person pays an extra fee. A total number of 1483 (15.9% of total) choiced nature trips. In 1996, Los Vikingos offered a promotional trip for \$50 US/4 persons for 1 hour trip. Family groups have a discount of and children (< 12 year olds) are free. Locals pay \$50 US for 2 hour trips, including island landing. Los Vikingos carried 283 persons (19% of 1483 tourist), 97.9% of which were Argentine, of which nationals (71%) and locals comprised (26.9%). Only 10 foreigners from Italy, USA, France, Sweden, Spain and China travelled by Los Vikingos. In 1997, total income were \$4,303 US, with a total costs of \$3,782 US, leaving net revenues of \$521 US,. Major costs included gasoline (19.3% of total), insurance policy (14.5%), maintenance (14.2%), equipment (21.1%), promotion (25.1%) and others (5.7%) (Table 2). Compared with the two previous years, 1997 leakages went to Buenos Aires are higher but it was caused by the lack of succes boat maintenance and equipment and the lack of good quality

printers at Puerto Deseado town. Table 2 summarizes data on the evolution and number of trips carried out by “Los Vikingos” and choiced by tourist between 1995 – 1997. Table 3 shows total ticket revenues between 1995 and 1997. In 1995, main revenues came from Sport fishing trips with 35.2% followed by a 3 hour trip (22.4%). A year later, 41% of incomes came from 1 hour trips, and in 1997, 42.1% of incomes came from 1 hour trips. “Gipsy Tour” carried 1,200 visitors, 90% of the nature trip market, and almost 90% of the total tourist were local and nationals. The 1996/97 summer season incomes for nature trips were \$15,000 US approximately.

Bahia San Julián

Based on about 1500 nature watchers per summer season, and a ticket price of \$15 US, “Excursiones Pinocho” incomes were estimated \$22,500 US. The net profit was \$7,000 US per summer season, deducting the fixed expenses.

Social aspect

A number of social aspects were reported by interviewing 8 tour operators and Tourism Department staff. All the three areas studied have increased public awareness after whale watching activities started. The main and direct beneficiaries are the tour operators, the lodging places, restaurants, bars, gas stations, souvenir shops, travel agencies and all those related to the transport of the tourists to the nearby localities and main cities. The ecotourism activity is carried out with a new perception of nature with goals of conservation and the minimal impact on the environment. At Deseado and San Julian, the trips are arranged in small groups (< 6 paxs) that are easily controlled and with whom tourists feel comfortable and at ease. At Deseado, some local people are unhappy with any tourism development because access to parts of the nature reserve have been forbidden, in order to preserve the biodiversity of the area. Villagers can no longer fish or camp on any of the reserve’s islands. Such restrictions were not

only established to preserve biodiversity because of the developing ecotourism activity, but because of the important increase in the numbers of boats that allows everybody to land on any island of the reserve, many of which are the main place of nesting marine birds. To increase the nature trips socioeconomic value, the Puerto San Julian Town council Tourism Area is developing concrete actions: a) The opening of an Information and Tourist Center (CenTur) located in a strategic place of the town, and with a wide working schedule (from 7 am to 1 am). b) Setting good quality colour picture signs in the national road nº3 (8m x 4m) to promote the different natural resources of the region, being the notably the Commerson's dolphins. The national road nº3 connect Buenos Aires city with Ushuaia (3000 km south of Buenos Aires) c) National and Local banks supporting micro entrepreneurs related to ecotourism, which not only will allow to increase the number of transported people by trip, but also to operate under unfavourable meteorological conditions. At Deseado, the Town Council Department of Tourism will start an important promotional campaign of River Deseado tourist resources.

Environmental costs

For all areas, the only perceived cost affecting the environment is garbage, mainly in the picnic areas. At Ria Deseado and Bahia San Julian, the main impact is caused by harbour activities garbage and not by the incipient tourist industry. Deseado Town council keep an yearly coast cleaning programme to remove waste.

Discussion and Conclusions

Whale watching activities are growing up year after year along the Argentine coast. An increased of 1.3% every year in the number of whale watchers were observed between 1987 and 1996 at Peninsula Valdes. The Tourism Department staff are seriously considering an increase in the entry fees, but keeping the multiple pricing policie. Whale watching activities are regulated by Provincial Regulation N°916/86 that permits up 5 licenses in Golfo Nuevo. Whalewatching operators must be Province of Chubut residents for at least 2 years. The low number of children (12.4% of total) that visited Punta Norte may be explained because school started on March 10th. Based on the information presented in the paper it's necessary to make a manage plan for all the areas involved in nature trips with whale watching activities as well as Ria Deseado and Bahia San Julian must regulate this activity properly. Presently, ecotourism activities have a discrete incidence on the gross local product, but have an important potential, as a sustainable use of the resource is carried out at San Julian and Deseado. Each location must use their specific facilities and encourage the development of this activity advertising the types of wildlife, including cetaceans, that can be watched specifically at these places. For all areas, there will be promotional campaigns of the different species of cetaceans that can be seen in their natural habitat, together with an appropriate legislation about appropriate viewing methods and the controls that must exist to ensure that no animal will be harmed. Designation a warden of the reserve with police and baning authourity is of great importance to stop vandalism on wildlife. Whale watching trips must become part of an interpretative nature trip. Some areas like Ria Deseado and Punta Norte could promote Commerson's dolphin and orca watching respectively. One of the strategies for Town council and provincial political agencies is to promote the accesibility of seeing cetaceans along the Patagonia seacoast. The Tourism Department reported for the Province of Chubut, tourism is the third most important industry,

after Oil exploitation and fishing industry. In some places on Peninsula Valdes area, the tourism industry is the principal industry (as Puerto Pirámide and Trelew) or second place after fishing industry in Puerto Madryn. Some local communities are not aware of how valuable the resources within the limits of all the Reserve are. Slowly, by means of different activities carried out by NGO's, the community started to understand and be concerned about the importance of the fauna in general, not only because of the place they occupy within the ecosystem but for the importance it has at the tourism level. Because nature trips are a relatively new activity (5 years approximately), the incomes are designated to the improvement of equipment, publicity, training, spreading of information material and promotion trips, returning to the Community in the service's improvement and the conscientiousness of the activity.

An strong environmental educational campaign and more waste buckets are needed especially in those places where great numbers of people are expected to solve waste problem.

Acknowledgements

This project was financial supported by the Whale and Dolphin Conservation Society, England and Fundación Cethus. We are grateful to the following people and institutions who provided valuable information on ecotourism and whale watching activities: C. Gasparrou, A. Perez Carrera, M.L. Rodríguez, A. Alvarez, Subsecretaria de Turismo - Province of Santa Cruz and Prefectura Naval Argentina. At Puerto San Julián: P. Walker and L. del Valle de Lombardich (Area Turismo), D. Gardonio and O. Quintana (San Julian Town Council), R. Patterson, “Excursiones Pinocho”. At Puerto Deseado: C. Temporelli (“Los Vikingos” Turismo Aventura), R. Bogetti and people of the Town Council Department of Tourism, R. Pérez (“Gipsy Tours”). At Province of Chubut: Organismo Provincial de Turismo, N. García, M. Giacardi, H. Casin, G. Moreno and P. Ledesma (Organismo Provincial de Turismo - Pcia. de Chubut), Rubén Cucchi Colleoni (“Ebano Viajes”), “Pinino Aquatours” Whale Watcher Operator. V. P. Tossenberger, E. Hoyt, G.T. Hvenegaard, A. Smith and C. Wood helped us during the preparation of this manuscript and provided very useful comments.

References

Hoyt, E. (1992). Whale watching Around The World: A report on its value, extent and prospects” *International Whale Bulletin*, no.7, summer, 1-8.

Hoyt, E. (1994). Whale watching and the Community : The Way Forward. Whale and Dolphin Conservation Society, Bath, UK, 1-29.

Hoyt, E. (1994). The Potential of Whale Watching in latin America and the Caribbean. Whale and Dolphin Conservation Society, Bath, UK, 1-48.

Hoyt, E. (1995). The Worldwide Value and Extent of Whale Watching : 1995. Whale and Dolphin Conservation Society, Bath, UK, 1-36.

Hvenegaard, G.T. (1991). *Economic Values of Wildlife : definitions, magnitudes and potential benefits to wildlife. 2nd Endangered Species and Prairie Conservation Workshop. G.L. Holroyd, G. Burns, H.C. Smith eds. Natural History Occasional Paper N°15, The Provincial Museum of Alberta, Edmonton, Alberta, Canada.*

IFAW, Tethys Research Institute and Europe Conservation. (1995). Report of the Workshop on the Scientific Aspects of managing Whale Watching, Montecastello di Vibio, Italy, 1-40.

IFAW, WWF and WDCS. (1997). Report of the International Workshop on the Educational Values of Whale Watching, Provincetown, Massachussets, USA, 1- 40.

Wells, M.P. (1997). Economic Perspectives on nature Tourism, Conservation and Development. Report of the World Bank. 1-54.

Figures and tables

Fig. 1. Map showing the study area

Fig. 2. Total number of tourists vs whale watchers at Peninsula Valdes from June to December (1992-1993)

Fig. 3. Number of pupils carried by “Ebano Viajes” to Peninsula Valdes.

Fig. 4. Origin of national tourism

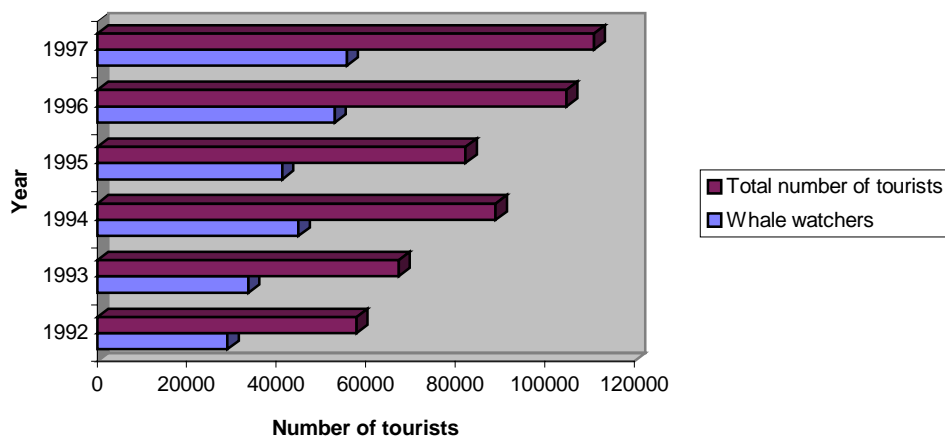
Fig. 5. Foreigners Percentage discriminated by procedence that visited Punta Norte (1-27 March, 1997)

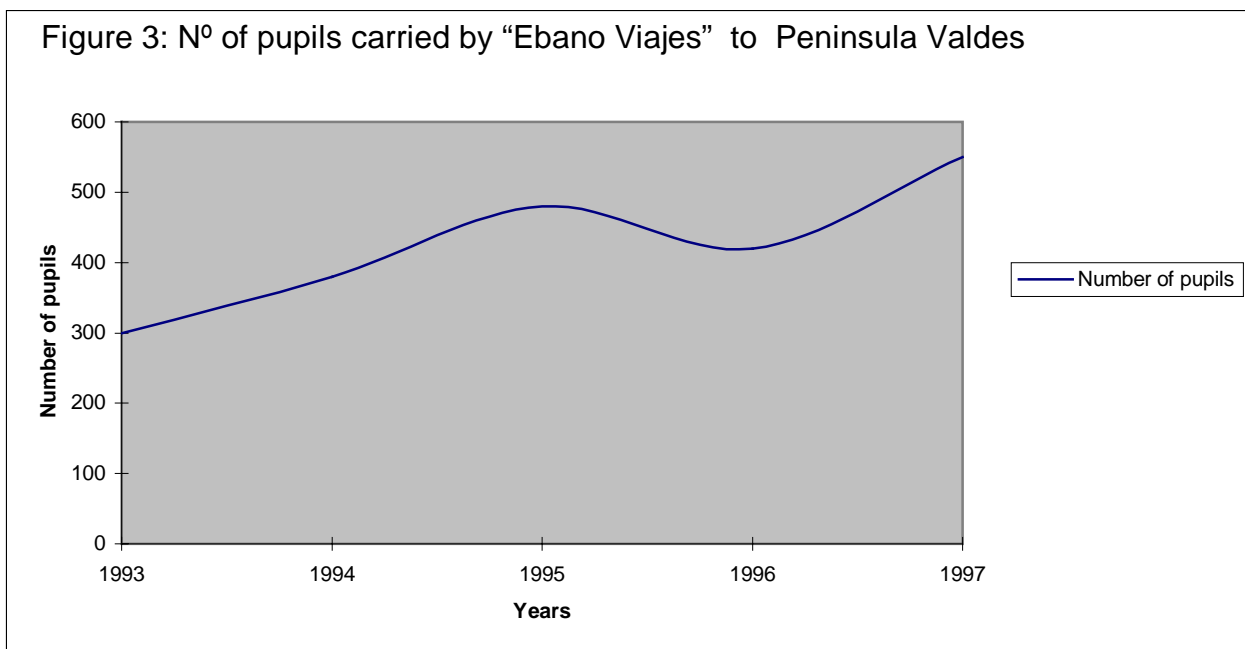
Table 1. Costs and leakage (in percentage) for “Los Vikingos”.

Table 2. Evolution and number of trips choiced by tourists between 1995-1997

Table 3. Total tickets sold revenues (in percentage) for each choice and per year

Figure 2: Total number of tourists vs whale watchers at Peninsula Valdes from June to December (1992-1997)





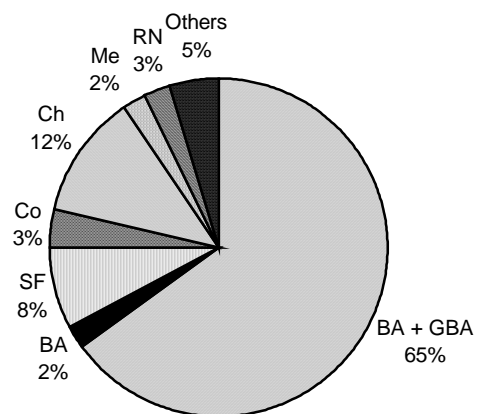


Figure 4: Origin of national tourism

Key : Buenos Aires city and Great Buenos Aires (BA + GBA), Buenos Aires Province (BA), Santa Fe Province (SF), Cordoba Province (Co), Chubut Province (Ch), Mendoza Province (Me) and Rio Negro Province (RN).

Figure 5: Foreigners Percentage discriminated by procedence that visited Punta Norte (1-27 March, 1997)

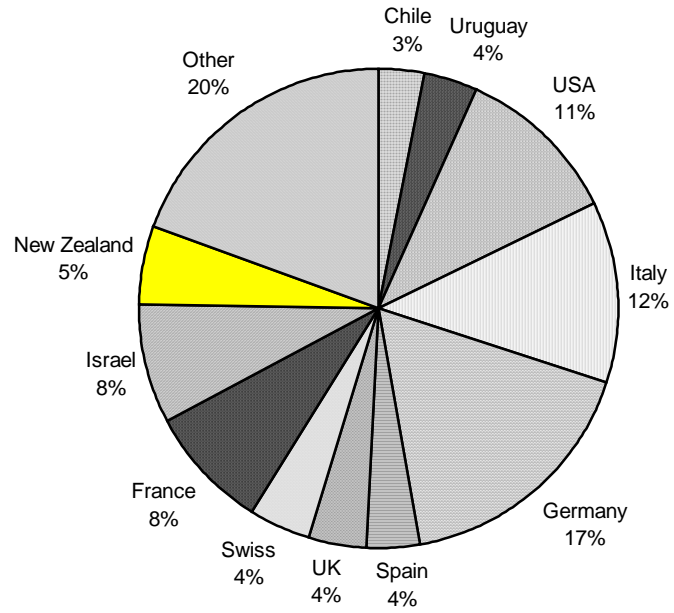


Table 1: Costs and leakage (in percentage) for “Los Vikingos”.

Key: Gasoline and Oil (G.O.), Insurance Policy (I.P.), Maintenance (M.), Equipment (Eq.), Promotion (Pm.) and Buenos Aires (*) where most of the leakage went.

Year	Total costs	G. O.(%)	I.P. (%)	M. (%)	Eq. (%)	Pm. (%)	Others (%)
1995	\$1200 US	61.1	0	16.66	0	13.91	8.33
1996	\$1100 US	25.63	49.91	9.1	0	15.36*	0
1997	\$3782 US	19.25	14.52	14.23*	21.14*	25.12*	5.74

Table 2. Evolution and number of trips choiced by tourists between 1995-1997

Kind of trip	N° of nature trips and percentage		
	1995	1996	1997
Isla de los Pájaros	8 (24.3)	9 (45)	34 (48.6)
Isla del Rey	5 (15.1)	4 (20)	17 (24.3)
Roca Lobos	5 (15.1)	1 (5)	2 (2.9)
Paso Marsicano	1 (3)	2 (10)	2 (2.9)
Sport Fishing	14 (42.4)	4 (20)	15 (21.4)
Total	33 (100)	20 (100)	70 (100)

Table 3: Total tickets sold revenues (in percentage) for each choice and per year

Excursions/year	1995	1996	1997
Isla de los Pájaros	16	41	42
Isla del Rey	16.5	22	37.4
Roca Lobos	22.4	1	5.5
Paso Marsicano	10	20	1.2
Sport Fishing	35.2	16	14
Total	100	100	100