

CENTRO DE CONSERVACION CETACEA  
Report to Rufford Small Grants Foundation

ALFAGUARA PROJECT  
*Marine Conservation Through Marine Ecotourism*



**RSG Innovation Award**  
August 2006 – January 2008



## INTRODUCTION

Between August 2006 and January 2008, ©Centro de Conservacion Cetacea (CCC) successfully conducted the ©Alfaguara Project, "*Marine Conservation through Marine Ecotourism*" in Puñihuil, a coastal community located in the northwestern area of Isla de Chiloé, southern Chile.

The ©Alfaguara Project, which names comes from the ancient term used by former Chilean whalers to identify blue whales, is oriented to promote the non lethal use of cetacean species in Chilean waters. It also seeks to give a new meaning to the term *Alfaguara* by comprising conservation of blue whales and its ecosystems.

The ©Alfaguara Project continues to effectively combine long term scientific research and educational/capacity building programs with the aim to develop innovative marine conservation proposals that are based in the active and informed participation of coastal communities.

With the official sponsorship of the **Chilean Navy**, the **Ministry of Foreign Affairs** and the **Ministry of Education** the ©Alfaguara Project has consolidated as a project of national interest for cetacean and marine conservation.

The activity included in the stage of the ©Alfaguara Project "Marine Conservation through Marine Ecotourism" was the result of three years of cooperation work with local communities. Therefore they represent the concerns, interests and conservation goals of people that are dependent of the ocean and that have experience firsthand the negative consequences of the irrational exploitation of marine biodiversity.

The successful results achieved have been possible thanks to the invaluable support of the **Rufford Small Grants Foundation**, **Marisla Foundation**, **Global Ocean**, **Cetacean Society International**, **Ford Foundation**, the **Chilean Navy (DIRECTEMAR)**, the **Ministry of Foreign Affairs**, the **Ministry of Education**, the **Municipality of Acud** and the cooperative work conducted with **local communities and authorities of Puñihuil, Pumillahue and Acud**.

The present report describes the activities developed under the ©Alfaguara Project "*Marine Conservation through Marine Ecotourism*" between August 2006 and January 2008, its results and financial statement.

## ACTIVITES

### *Alfaguara Scientific Research Program*

Our scientific research program is oriented to monitor the status of the *Alfaguara* or blue whale (*Balaenoptera musculus*) population present off Isla de Chiloe with the aim to propose effective marine conservation measures to guarantee the recovery of this endangered species.

From February to April 2007, we conducted the fourth field season of the scientific research program with the important collaboration of cetacean specialists, **Dr. Carole Carlson and Dr. Robert L. Brownwell Jr.**



In 2007 the field season also included a volunteer internship program that counted with the participation of seven university students from veterinary and biological sciences. All of the volunteers conducted scientific research and community based work during their stay in the island.

*The Alfaguara volunteer internship program is oriented to consolidate a platform of national scientists strongly committed with marine conservation and community involvement.*

In order to begin the 2007 field season and actively involve the community in this stage of the project we invited the people of Puñihuil to celebrate the christening of the new research vessel *Alfaguara* that was made according to local traditions oriented to bring good luck and success to the vessel and its crew.



*Christening of the Alfaguara Research Vessel in Puñihuil Beach*

# CENTRO DE CONSERVACION CETACEA

Report to Rufford Small Grants Foundation



*Individual photo-identification of blue whales was conducted during marine surveys.*

Marine surveys were mainly oriented to conduct **individual photo identification** of the whales found in the area (blue and humpback whales.) **Biological samples** (faeces and zooplankton), **sound recording**, measurements of **environmental parameters**, and collection of relevant data about individual behaviour were also recorded.

Of a total of 17 marine surveys, **142 groups of blue whales** comprising of **188 individuals** were individually photo identified. **Humpback whales** (*Megaptera novaeangliae*) and **risso's dolphins** (*Grampus griseus*) were also recorded, making 2007 Alfaguara scientific research season the best one since the project began.



*Alfaguara's project coastal sighting station*



**Land based observations** were conducted from a coastal platform constructed specifically for the project. Trained observers who conducted land observation for a total of 39 days recorded an average of **19 individual whales** each day.

Thanks to the support of the Chilean Navy and in attention to the recommendations made by **Scientific Committee of the International Whaling Commission (IWC)**, we successfully conducted the **first aerial survey for estimating blue whales abundance and determining its distribution in southern Chile**. This historical survey covered more than 800km (from 36°S to 44°S) and we were able to record the presence of blue whales, sperm whales (*physeter macrocephalus*), Risso's dolphins (*Grampus griseus*) and southern right whale dolphins (*Lissodelphus peronii*).



# CENTRO DE CONSERVACION CETACEA

Report to Rufford Small Grants Foundation



*In order to present the scientific results at the 59<sup>th</sup> annual meeting of the International Whaling Commission, the analysis of blue whale data was conducted simultaneously with the field season research program.*

The hard work was compensated by the results obtained by our organizations: our blue whale photo ID catalogue is comprised of 159 individuals; we have documented the highest sighting rate of the species for all the southern Hemisphere<sup>1</sup>; and we also have calculated a 15% overall annual return area of the whales to the area. These significant findings highlight the importance of the waters off northwestern Isla de Chiloe as long-term feeding area for this population.

For second consecutive year, **Miss Barbara Galletti, president of CCC, participated as representative of the government of Chile at the Scientific Committee meeting of the IWC.** She presented three papers prepared by CCC related to the **status of the population of blue whales in Chile<sup>2</sup>** (SC/59?sh1), the **presence of skin lesions in blue whales of southern Chile<sup>3</sup>** (SC/59?SH21) and recommendations for the guidelines/regulation to conduct whale watching<sup>4</sup> operations with blue whales and other cetacean species in Chile (SC/59?WW15).



**IWC Scientific Committee members in Alaska (including Barbara Galletti).**

As a result, the **IWC Scientific Committee** congratulated and encouraged the **continuation of CCC blue whale research program.** The scientific results presented by Miss Galletti also raised the Scientific Committee concerns over the **health status of Chilean blue whale population** since many of the whales recorded were skinny and/or presented skin lesions. Finally the Scientific Committee **endorsed the blue whale watching guidelines prepared by CCC and presented by Miss Galletti.** This information can be found in the scientific Committee report and its annexes<sup>7</sup> ([www.iwcoffice.org](http://www.iwcoffice.org)).

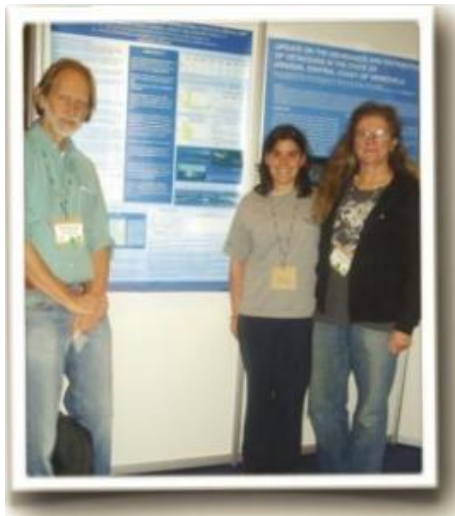
In December 2007 Miss Galletti was invited to give an oral presentation at the blue whale expert workshop conducted under the **17<sup>th</sup> Biennial Conference on the Biology of Marine Mammals** (South Africa, December 2007). Miss Galletti also presented two scientific posters during the international conference.



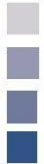
# CENTRO DE CONSERVACION CETACEA

Report to Rufford Small Grants Foundation

*Dr. Robert L. Brownwell Jr., Barbara Galletti (CCC) and Dr. Carole Carlson during the SMM Conference in South Africa*



As in the IWC Scientific Committee, the presence of skinny blue whales and blue whales with skin lesions raised the concern of the expert panel over the health status of the Chilean blue whale population. Additional conservation measures were proposed to reduce anthropogenic impacts on the vessels speed and traffic routes, and the reduction of coastal pollution generated from fish farming in southern Chile.



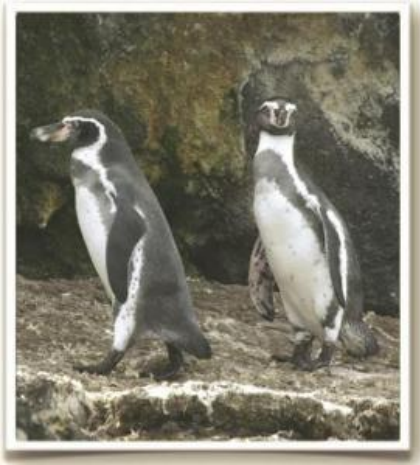
During the Conference, Miss Galletti also proposed the establishment of an **inter-regional collaborative blue whale photo-identification catalogue** that was welcomed by the blue whale expert panel. As a result of her proactive initiative, Miss Galletti was designated by the blue whale expert panel as **coordinator of the South East Pacific Blue Whale Photo ID Catalogue** that included blue whales from Gulf of California, Eastern Tropical Pacific and South America.

The work conducted during the 2007 research field season, the scientific results presented at an international level and the attention raised over important issues such as the **need to effectively regulate whale watching activities and address identified threats to the Chilean blue whale population**, demonstrate that the **Alfaguara Research Program** is essential for promoting and strengthening marine conservation measures in southern Chile.

## *Footnotes of this section of the report*

1. Branch et al. 2007. *Past and present distribution, densities and movements of blue whales Balaenoptera musculus in the Southern Hemisphere and northern Indian Ocean*. Mammal Rev. 37 (2): 116-175.
2. Galletti Vernazzani, B., Carlson, C., Cabrera, E., and Brownwell Jr., R.L. *Status of blue whales off Isla de Chiloé, Chile, during 2007 field season*. Paper SC/59/SH1 presented to the IWC Scientific Committee, May 2007 (unpublished). 7pp. [Available from the authors].
3. Brownwell Jr., R.L., Carlson, C., Galletti Vernazzani, B. and Cabrera, E. 2007. *Skin lesions on blue whales off southern Chile: Possible conservation implications?*. Paper SC/59/SH21 presented to the IWC Scientific Committee, May 2007 (unpublished). 6pp.

## Recreational Carrying Capacity Study



*Puñihuil Natural Monument is a breeding ground for Humboldt (in the image) and Magellan penguins*



In 1999 three islands located at 300m from the Puñihuil beach were designated as the *Puñihuil Natural Monument*. The islands are an important breeding area of two penguin species: **Magellan and Humboldt penguins** (*Spheniscus magellanicus* and *Spheniscus humboldti*) that stay in the islands from September to March. These islands are among the most southern breeding areas of Humboldt penguins and are also the most southern breeding area for **sooty shearwater** (*Puffinus griseus*). Additionally, the islands also register the presence of the endangered **marine otter** (*Lontra felina*).

Between **September 2006 and April 2007**, we conducted a **recreational carrying capacity study** in the Natural Monument of Puñihuil oriented to **characterize bird watching operations** and **propose management recommendations** to guarantee the conservation of the biodiversity while ensuring the long term sustainability of marine tourism activities. The study was assigned to the **Chilean scientists** Dr. Cristian Perez, MSc medical veterinary and expert in penguins and Dr. Gabriel Lobos, PhD medical veterinary.

With the cooperation of local tourist operators, our team of experts was able to collect the necessary information to define the carrying capacity. The work was done through **active and passive observations** of the penguin colonies, passive recording of the **procedures** made by the tour operators during penguin watching operations and the development of **surveys and interviews** with local people, tourist operators, fishermen and tourists.

The recreational carrying capacity was defined as the **maximum number of visits** recommended in an area. The area comprises the **breeding and resting grounds** of the penguins and it also includes the area cover by the vessels that conduct tourism around the islands.



*The endangered marine otter is a permanent resident of Puñihuil Natural Monument*



The maximum number of visits obtained was later **corrected** to consider several factors such as the effective length of the sighting route, the peak times for penguins and tourist, and level of **management capacity** (described as management plan for the area, service facilities implemented in the Puñihuil beach, available gear of the tourist vessels and educational information given by each operator to the tourists, among others).



## CENTRO DE CONSERVACION CETACEA

Report to Rufford Small Grants Foundation

Considering the current management capacity and level of information given to the tourists, the **maximum number of boat roundtrips** recommended by the carrying capacity study around Puñihuil Islands was determined as **30 per day**. One of the most interesting results of the study is that it revealed that the **management capacity** is low and **that there is an urgent need to improve it**. The study also proposes several alternatives oriented to raise the tourist operation standards and highlights the need to **systematically monitor biological and ecological aspects** of Humboldt and Magellan penguin species as well as their relations with tourist activities and artisan fishing operations carried out in the area.

The recreational carrying capacity results were presented in April 2007 to local operators, with a **very positive response** to the proposed conservation measures included in the final report. One of the best results obtained from the study was an **agreement** between three of the four tourist operators to work as an **association** in the penguin watching operations.

The associative system has helped **organized and reduce the number of trips** around the islands and maximize the economical incomes generated from the activity. Another achievement of the carrying capacity study was the agreement of all tourist operators to **implement the voluntary code of conduct for penguin watching operations** that is included in the final report of the study.



*The recreational carrying capacity results have been fundamental y improving the standards of the tourist services.*

Thanks to the information collected from the carrying capacity study, local **tourist operators have significantly raised the service standards** by improving their vessels (new vessels with 4T engines, VHF radios and water suits for tourists) and the educational information given to the tourists. The community is also positively involved in the implementation of service facilities in the Puñihuil beach that will enable them to improve their management capacity and comply with international standards for marine ecotourism. As a result, one of the **most important travel agencies** in southern Chile **congratulated the achievements** made by the local operators and is currently planning to include them in an international catalogue.

Finally, our organization was invited to become a member of the **Consultant Council of the Natural Monument Puñihuil** that, thanks to the results obtained by the recreational carrying capacity study, is currently working towards regulating the number of tourist marine vessels that visit the Monument.

## *Design of a Land Use Proposal*

*The land use proposal is a fundamental part of the project since it allows the community to plan their activities with a conservation oriented approach.*



Between **March 2007 and January 2008**, a group of experts designed a **land use proposal for the Puñihuil beach**. The proposal is oriented to promote the harmonic development of the area and to protect the coastal/ marine environment and its biodiversity.

This phase of the project begun with a consultative meeting where **all stakeholders and local authorities** actively participated (representatives of **fishermen unions, tourist operators, maritime authorities** of Ancud, fishing and tourist authorities of the **Municipality of Ancud, National Forest Corporation and Otway Foundation**), ensuring a strong support for the agreements reached. **Ivan Daiber**, a recognized Chilean architect and sculptor, also attended the meeting and was appointed to design an architectural proposal for the centre of artisan fishermen and pathways for Puñihuil beach.

Two cartographers, Juan Luis Ramirez and Marjorie Tapia, were assigned to **set the guidelines for the proper zoning** of the area based on the **current land uses, tourist attractions and terrestrial patterns**. After visiting the area in November 2007, the cartographers identified **five zoning areas**. The information was later integrated to a Geographical Information System (GIS) using Argis 9.2 and descriptive ID guides of each zone were developed in order to provide a comprehensive understanding of each area and its uses to the stakeholders.

The micro zoning proposal of the Puñihuil beach includes a **river/wetland ecosystem and native forest** that account for nearly 50 per cent of the area. The proposal recommends that this area should be **protected from human intervention**. The zoning also identifies **areas of risk for constructions, areas for recreational purposes** that may be used to improve tourists' services and a **mixed area where artisan fishermen activities and properly planned constructions could be developed**.

The land use proposal was complemented by an **architectural proposal for local fishermen houses, walking paths with informative panels, resting areas and garbage collectors**.

Some of the priorities identified by the land use proposal are: implementation of garbage collectors, construction of walking paths with informative panels in order to minimize the negative impacts of increasing number of tourists in the beach and the **relocation of the parking lot outside of the Puñihuil beach** in order to avoid negative impacts generated from the increasing car traffic in this delicate area.

The implementation of the land use proposal will significantly improve the **management capacity** of the area, the **life conditions** of the local fishermen and would guarantee the **conservation of the Puñihuil beach** and its natural beauty. To do so, it is necessary to **continue conducting a systematic work** at a governmental and community level.



## *Design of a Community Based Management Plan*

A **management plan** should promote the **conservation of an area** while providing the **necessary resources** to maintain **appropriate facilities for visitors**, **raise public awareness**, **restore any damage that visitors might produce** and demonstrate the **long term economic value of conservation** by generating tangible benefits for local communities.

To do so, we developed a **community based business proposal** between **November 2007 and January 2008**, oriented to **provide economical incomes** for the **administration and maintenance of the area (Management plan)**.

Cristobal de la Maza and Sebastian Elgueta, Civil Engineers from the Catholic University of Chile, were assigned for the task that included an **estimation of the current number of tourists** that visit the Puñihuil beach, a **projection of the tourist growth** for penguin watching operations and a **feasibility study** to initiate **whale watching operations** in the area.

With the information provided by CCC, tourist operators and The National Institute of Statistics, the number of tourist that visited Puñihuil to participate in penguin watching tourism in the 2006/2007 season was estimated in **sixteen thousand**. The stabilized **annual growing rate** of tourists was calculated in about **2%**.

Different scenarios, data obtained from other countries as well as a specially design survey conducted in Puñihuil were used in conjunction with CCC blue whale research information to estimate the feasibility of conducting whale watching tourist operations in Puñihuil and also to calculate the annual growing rate for this activity. The total number of **potential whale watchers** was estimated between **3.400 and 8.000**. The annual **growing rate** estimated was calculated in **70%** for the first year, with a significant decrease during the following years. The **annual growing rate** calculated **for the next 12 years** was about **five per cent**.



*Because of its geographical location, potential boat-based whale watching operations in Puñihuil will be limited by weather and ocean conditions.*

However, it is important to consider that boat-based whale watching operations will be **limited by weather conditions** and **vessel types**. Under this scenario the annual number of whale watchers was calculated at **one thousand**. The study also shows that the **initial investment** to implement an adequate whale watching vessel specially design for the maritime conditions of the area could be recovered in approximately **seven years**. The proposal recommends that local tourist operators establish an **association** to request a credit for the vessel and initiate whale watching activities as one company.

Additionally, the economical incomes of the tourist activities currently conducted in the area and the projected growing rate of tourists were used to plan **investments oriented to improve the conservation** of the area, increase its **management carrying capacity** and responsibly **control the expansion of the tourism industry** in order to minimize any negative impacts generated from these activities.



## CENTRO DE CONSERVACION CETACEA

Report to Rufford Small Grants Foundation

The business proposal also calculates the **current sustainability of penguin tour operations** and proposes a **system to organize boat trips** to ensure that the carrying capacity is not exceeded.

Finally, the proposal includes management alternatives oriented to help generate funds to conserve and maintain the area, such as the selling of tickets to enter the area, the inclusion of a “**conservation fee**” for tourist activities and car parking fees. The proposal also states that the rest of the costs to conserve the area should be assumed by the government authorities and private sector.

The conclusion of the community based management proposal is a **fundamental step to promote the conservation of the area** and an essential tool for local tourist operators to project their activities with a long term view and proactively seek funding sources to implement whale watching activities and improve the management capacity of the area.

*The community based management plan was conducted to promote the conservation of the area through sustainable activities.*



## Capacity Building Program

### International Experience Exchange

With the support of the **Rufford Small Grants Foundation**, the **Municipality of Ancud** and **Channel 13 TV**, between October 2nd and 8th, 2006, five representatives of the local organization “**Ecoturismo Puñihuil**” and Constanza Poduje from CCC travelled to Puerto Madryn and Puerto Pirámides, Argentina with the objective of experience firsthand the social, environmental and economical benefits of responsible ecotourism. The experience became a valuable opportunity to strengthen views regarding the importance of marine conservation and was permanently guided by Mr. Goitia, an Argentinean wild life expert that has worked for more than 20 years in the area of Chubut, Patagonia Argentina.



*Constanza Poduje (CCC) with local tour operators from Punihuil, during their experience exchange in Chubut, Patagonia Argentina.*

The tourist operators from Puñihuil visited several natural protected areas located at Peninsula Valdes. The small urban and pristine places that have been maintained for over 30 years caught their attention as well as the coastal platforms, paths and facilities constructed in harmony with the environment to improve wildlife watching experience. Participants also recognized the **educational value of interpretative signs** and didactic information given to tourists regarding the importance of having a respectful approach towards nature and its biodiversity.



Participants also distinguished the economic value of nature for ensuring **sustainable local development** while maintaining the natural environment and promoting the cultural heritage of local people. This issue was highlighted when visiting the small local stores (full of souvenirs, posters of marine fauna and local traditional handcraft artisan) and services (such as Argentinean restaurants and hotels).



*Local operators learned firsthand the social, environmental and economical benefits of responsible marine ecotourism*

# CENTRO DE CONSERVACION CETACEA

Report to Rufford Small Grants Foundation

Additionally, local entrepreneurs of Puñihuil had the chance to conduct whale watching of southern right whales and compare the great differences of the sea conditions from those found at the north-western Isla de Chiloé. They also became familiar with **Argentinean whale watching regulations** and the importance of the educational factor in marine ecotourism.

*Local operators were able to experience firsthand, the whale watching industry conducted in Argentina*



During their visit, participants also held meetings and exchange points of view with, Mr. Mario Muro, **Director of Protected Areas and Conservation** of the Province of Chubut, researchers from the **Whale Conservation Institute** of Argentina and **local whale watching operators**. During the meetings, local operators from Puñihuil shared their experiences and understood the necessity of conducting cooperative work between NGOs, government and entrepreneurs.

In conclusion, the experience helped participants to broaden their views and have a better understanding about **concepts** such as **sustainable marine ecotourism**, the importance of **educational and conservation components**, the **diversification** of tourist **services** to avoid high pressure on one specie, the effectiveness of **cooperative work**, and the benefits of consolidating a **local identity** with its marine biodiversity. This was fundamental to demonstrate the advantages of developing sustainable and **regulated wildlife watching activities** and to strengthening the commitment of the Chilean local operators to develop **responsible marine ecotourism**.

The first action taken by the participants after returning from their **First Hand Experience Exchange** with Argentina was to implement **garbage containers** in Puñihuil Beach in order to maintain it clean. The containers were given by the **Municipality of Ancud**.

This activity was later replicated by the **Isla de Chiloé Local Government**, to include more communities that have whale watching potential and near 40 local operators and local authorities travelled to Argentina to learn about whale watching tourism. Since one of the main objectives of the **©Alfaguara Project** is to be **replicated in other coastal areas** of Chile, this was certainly a great outcome of the project.



*Local operators held meetings with representatives from the Argentinean government, NGO, scientific institutions and whale watching entrepreneurs, during the international experience exchange.*



### *Ecotourism Workshops*

The **social survey** conducted by CCC during **February 2006** among local tourist operators and fishermen of Puñihuil and Pumillahue - as well as social information collected from the communities during three years of work—revealed that there was an urgent need to develop **workshops on ecotourism** in order to strengthen the educational level of the community in issues related to marine conservation.

In accordance with the **cooperative spirit promoted by CCC**, Chilean experts and specialists from highly recognized **Chilean NGOs** conducted the workshops and were attended by all tourist operators and other people associated to the fishery and gastronomy fields.

#### Workshop on the Current State of the Marine Environment



Between October 27 and 28, 2006, a two-day workshop was conducted by Juan Carlos Cardenas, Executive Director of the **Chilean NGO Centro Ecoceanos** and expert in fishery issues, regarding the current state of the marine environment and the fragile interrelations between marine species and its ecosystem.

The workshop focused mainly in **marine ecosystem processes** as well as the negative impacts of intensive fishery and **aquaculture** activities. Participants were local tourist operators and artisan fishermen. They expressed great interest in the issues and most of them stated they did not know about the critical status of fisheries worldwide, nor the negative social and environmental impacts that the aquaculture industry is generating in southern Chile, particularly in Isla de Chiloé.

The workshop was fundamental to **broaden the view of the local community** regarding the negative impacts suffered by coastal communities worldwide due to over exploitation and the development of unregulated activities. It was also essential to **raise real and long-lasting support towards the implementation of conservation measures** for the Puñihuil area in the future.



## Workshop on Responsible Bird-Watching

A three-day workshop was conducted between November 23 and 25, 2006, regarding responsible bird watching. The workshop included two lectures and a field practice made by Juan Aguirre, director of the Chilean NGO “Aves de Chile” (Chilean Association of Ornithologists) and the biologist Antonio Canepa.



Both experts presented general concepts on biology, conservation status and behaviour of the bird species that are frequently found in the area of Puñihuil (seasonally or resident). The field practice was mainly oriented to teach about the methodology to develop **high quality bird watching** and to monitor the general status of the species in the long term.

*Two presentations and a practical instruction were included in the bird watching workshop*

The participants of this workshop were highly interested in learning every aspect of bird biology and conservation and were invited to **continue working cooperative with CCC and Aves de Chile** to increase the general knowledge of the species. One concerning issue that was raised by Aves de Chile and the community was the increasing number of Kelp gulls (*Larus dominicanus*), probably due to garbage disposals and fishing by-catch that was left in the beach. Since this could generate **negative impacts** on the **breeding penguin populations**, participants evaluated possible solutions to the problem, such as keeping the Puñihuil beach clean and discarding by-catch in open ocean.

Afterwards, local tourist operators held a meeting with local authorities to request, among others, the regular collection of garbage from the Puñihuil beach. Discussions were also held with local fishermen to discard by-catch fishery in the ocean (away from the beach). As a result, the garbage collector truck is regularly going to Puñihuil (every 15 days) and fishermen have been supportive in discarding their by-catch away from the beach. Nevertheless, there is a need to improve the collection of garbage during the summer season (high season) and work with the artisan fishermen to reduce the level of bycatch species and mitigate any negative impacts.

Thus, the workshop was fundamental to **raise the standard of the tourist service and involve the fishermen in conservation actions.**



*Local operators were able to learn several aspects of penguins and other bird species such as the marine goose.*



## Workshop on Local Gastronomy



*After the workshop, participants enjoyed the culinary creations made with local ingredients.*

Between November 15 and 16, 2007, a two-day **hands-on workshop** regarding local gastronomy was conducted by Lorna Muñoz, a local professional chef that is highly known for rescuing chilote (name given to the people of Isla de Chiloe) gastronomic traditions by using local ingredients and combining old recipes with contemporary cooking. The purpose of the workshop was to **enrich the view of the local cooks** that work at the restaurants located in Puñihuil and increase the variety of dishes offer in the menus.

The workshop included hands on cooking recipes and information regarding the origin of the ingredients and their history in the context of the Isla de Chiloe. The innovative presentations and the use of common ingredients that are not usually offered to tourist, as different types of algae, were received with enthusiasm by the participants.

The workshop was fundamental to learn the **variety of culinary possibilities** available with local ingredients and help them **increase their identity with their local traditions and culture**.



On 16 November, 2007, Mr. Renato Cardenas, **Director of the Chiloé Historical Archive** and one of the most knowledgeable people in Chiloé regarding cultural heritage, gave an interactive lecture on **Chiloé myths and traditions** related to marine fauna.

Historic narrations of species used in wildlife watching such as **whales, penguins, cormorants, sea lions and marine otters**, were presented by Mr. Cardenas in a round table while he invited participants to relate their own experiences with local fauna and its traditions.

The workshop increased the **traditional narrative capacities of the participants**, particularly local tourist guides, and allowed them to rediscover several aspects of their rich cultural heritage. This is highly important since one of the major aspects of **ecotourism** activities is related to the **conservation and promotion of the local culture and traditions**. The workshop also helped increase a **sense of belonging with a culture that is struggling to survive in a globalize world**.

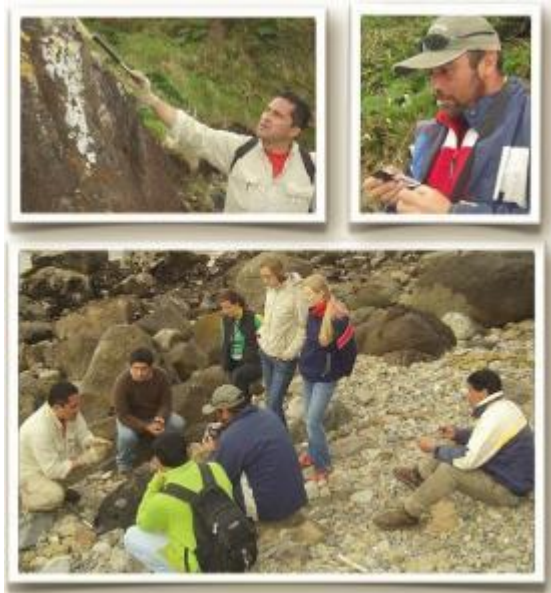
## Workshop on Geomorphology of Isla de Chiloe



Between November 14 and 15, 2007, professor José Ulloa, a **chilote historian**, conducted a two-day workshop on geomorphology of Chiloe. The workshop included a **one-day presentation and a one day field class** that were oriented to understand the geographical origin of Isla de Chiloe. Participants learned to recognize different sediments, rocks and fossils that are easily seen in the Puñihuil area.

The workshop was very interesting for local tourists guides who learned that Isla de Chiloé was formed by both **glacier in the inlets** and **volcanic activity** in the west side. In particular, the Puñihuil area was the southern part of a volcanic crater that erupted about 14 million years ago.

Local guides were able to learn how to identify the distinctive geographical areas of Puñihuil that define different geological eras. The **information will enrich the educational content** given by local guides. It will also be included in future informative panels that will be posted along the trekking path proposed in the land-use proposal.



*The information given during the workshop on geomorphology will improve the educational aspects of local tourism*

## Children Activities



Nearly 200 children participated in several children presentations made by CCC on whale biology and marine conservation



During 2007, CCC made three presentations to nearly **200 schoolchildren**, between 8 and 15 years old, from the cities of **Ancud** and **Castro** and the coastal community of **Puñihuil**.

In **February 2007** we conducted the activity a *Message to the Whales* in the Puñihuil beach oriented to actively involve local children in the christening of the **Alfaguara research vessel** and to inform them about the conservation goals of the whale studies made by CCC in the north-western area of Isla de Chiloe.

In **October 2007**, we made the presentation *Krill and Whales, Protecting the Smallest to Preserve the Biggest* in the **Regional Museum of Ancud** oriented to raise the awareness of local school children and teachers about the need to protect species that are not as charismatic as cetaceans but that are essential for the survival of the whales and the correct functioning of the marine ecosystem.

In **November 2007** we were invited to make a children presentation in **Castro** (capital city of Isla de Chiloe) during the commemoration of the **25th anniversary of the National Forest Corporation** that is in charge of managing the **Chiloe National Park**. A presentation named *ABCetaceos* (or the A, B and C of the cetacean world) was made and it included general information on the **biology of cetaceans**, the many **species** present in Chilean waters, current **threats** faced by these marine mammals and their **conservation** needs. A brief review of the **©Alfaguara Project** was also made to local authorities participating in the activity.



## *Local Conservation Actions and Achievements*



*Pablo Ossio, Mayor of Ancud and Barbara Galletti during the signature of a cooperation agreement to consolidate Ancud as the entrance of high standard ecotourism activities in Isla de Chiloe.*

Regular meetings with local communities and authorities were conducted throughout the year in order to promote the project and its results, plan future activities and move forward in conservation measures.

In April 2007, CCC also signed an **agreement of cooperation with the Municipality of Ancud** to position the north-western area of Isla de Chiloe as the entrance of **marine ecotourism** in the island and implement **trekking paths and coastal platforms** for viewing marine and coastal wildlife, among others. Currently we are working with the Municipality of Ancud to find the best locations for the coastal platforms and trekking paths.

In August 2007, we presented to regional authorities and tourist operators the **results of the penguin carrying capacity study** and the recommendations for **whale watching guidelines** in the blue whale area. The tourist operators agreed to **implement a voluntary code of conduct** for future blue whale watching operations (before they also had agreed to implement a voluntary code of conduct for penguin watching operations). As a result, the **National Tourist Service (SERNATUR)** committed to advance in the development of a **certification system for marine ecotourism** activities at a national level and the **Chilean Navy of Ancud** distributed a communication in the Puñihuil area regarding the **guidelines to conduct penguin and whale watching** operations. Both recommendations are based on the results of the carrying capacity study and the blue whale watching guidelines made by CCC.

In September 2007, CCC was invited by **SERNATUR** to give a presentation of the **blue whale watching guidelines** to the head authorities of **Los Lagos Region** in order to advise them on how to better address the future development of the activity in the area. The authorities received very well the guidelines and expressed the need to **implement them not only in Puñihuil but at a national level**.

As a result of the **capacity building program**, tourist entrepreneurs of Puñihuil are now planning to **diversify** their tourist **services** to include activities such as trekking and horse riding and **promote** their **culture** as an integral part of marine ecotourism. This will **reduce the pressure** generated on local fauna such as penguins and will help control the increasing pressure to implement whale watching operations. They are also planning to construct an **interpretative/educational centre** and informative panels to promote local species, the conservation of the area and local culture/traditions.

The local outcomes of this stage of the ©**Alfaguara project** represent an important achievement towards the conservation of this fragile area and are fundamental to advance in the consolidation of an **innovative model for coastal community development**.

## *National Conservation Actions and Achievements*

Between November 13 and 16, 2006, CCC was invited to participate at the **First International Seminar of Marine and Coastal Protected Areas** conducted in Caldera, northern Chile. The seminar was organized by the **Global Environmental Fund—Marine Project** (Proyecto GEF-Marino) that is oriented to address several current problems faced by Marine Protected Areas, such as the total lack regulations for destructive activities in protected areas.

Ms. Barbara Galletti gave a presentation regarding the importance of the local involvement to ensure an effective MPA, emphasizing the importance of the **©Alfaguara Project** as an innovative and effective approach of cooperative work with coastal communities that seek to be a model to be replicated at a national level.

In this regard, CCC also held several meetings with governmental authorities regarding the need to effectively protect the Chilean blue whale population. During a meeting with the **Technical Committee of Marine Protected Areas**, we stressed the urgent need to consider **all the available scientific information** to understand the blue whale critical habitat and **design a sound strategy for the conservation of this endangered species**. Some of the proposals presented by CCC in this regard include the establishment of an **international working group of experts** and the development of an **open and participative process** that includes local **coastal communities** and stakeholders in order to ensure the compliance of future conservation measures.

Most outstanding, the results of the **©Alfaguara project** have certainly increased the interest of the public and authorities in marine conservation. The wide support given to conservation proposals promoted by CCC at a governmental and parliamentarian level, such as the creation of a **National Whale Sanctuary** and the development of a **National Policy on Conservation and Non Lethal Use of Cetaceans**, demonstrate that the local goals established in the **©Alfaguara project** have a multiplicative effect that will surely benefit marine and cetacean conservation in Chile.

*“Santu” the minke whale replica that is the icon of the National Whale Sanctuary proposal promoted by CCC with the support of more than 100 national and international organizations.*



*International Conservation Actions and Achievements*

*Elsa Cabrera (CCC) during the Buenos Aires Meeting Group, joined by governmental representatives of Brazil, Venezuela, Chile and Argentina.*



In November 2006, CCC was invited by the Chilean government to be representative of the Chilean official delegation at the **First Workshop on Anthropogenic Impacts in Marine Mammals in the Eastern South Pacific of the Action Plan for the Conservation of Marine Mammals in the Eastern South Pacific of the Permanent Commission of the South Pacific (CPPS) and the United Nation Environmental Program (UNEP)** conducted in Bogotá, Colombia.

Thanks to the support of Chilean government, the CPPS and the UNEP, Ms. Galletti assisted to the workshop and presented **two scientific papers**. One was oriented to **cetacean strandings** along Chilean coast from 1970 to 2005, and their associated cause of death, while the other was oriented to the **whale watching potential** in Chile.

In the presentations as well as during the discussion, Ms. Galletti raised the **need of develop conservation plans for each specie and areas** that are most negatively impacted in the country as well as address current and potential problems of blue whales and the **urgent need to establish effective regulations for destructive activities, such as salmon farming and trawl fishery, in any marine protected area created for the conservation of blue whales.**

Between December 1 and 2, 2006, Ms. Elsa Cabrera, executive director of CCC was appointed as **advisor of Chilean delegation** and participated in the **Buenos Aires Group** meeting that was held in Buenos Aires, Argentina. Governmental representatives and commissioners from the International Whaling Commission from 12 Latin American countries participated at the meeting and signed the **Second Buenos Aires Declaration** that stresses the **non-lethal use of cetaceans** as a permanent commitment of the countries of Latin American and reiterate their **firm commitment to the commercial whaling moratorium**, among others.

## Promotion and Media Coverage



Promotion of the project and the marine conservation goals of CCC have been widely covered by national and international media

All media coverage and public diffusion mentioned **Rufford Small Grants Foundation** as sponsor of the ©**Alfaguara Project** and its stage “**Marine Conservation through Marine Ecotourism**”.

In order to promote the ©**Alfaguara Project** and cetacean conservation while ensuring public diffusion, **10 radio interviews, 45 written articles, four TV interviews and four TV documentaries** were made during the period in local, national, and international media press (Argentina, Italy and Germany).

During field seasons, **2.000 educational leaflets** of the ©**Alfaguara Project** and **100 T-shirts** have been also distributed.

At an international level, more than **3.000.000 people in Italy** saw a documentary of the project (*The Return of the Whales*) that was made by the **Italian Radio and Television (RAI)**. Also, a six-minute documentary made by the **Public German Television**, regarding ©**Alfaguara Project scientific program**, the conservation status of blue whales in southern Chile and the environmental threats faced by this population, will be broadcast on February 3rd, 2008 in Germany.

At a national level, a **Chilean/Argentinean documentary** (*Giants of the Sea*) on **blue whales** that documents the ©**Alfaguara Project** was presented in the **Governmental Moneda Palace** in Santiago in May 2007. The documentary will be broadcast in a national channel (Chilevision) and has been presented in several national and international film festivals.

Also, **Channel 13 Television of Chile** made a program for a special series of documentaries (*Anonimos*) that describes the social aspects of the ©**Alfaguara Project** and emphasizes the innovative approach of the project to achieve marine **conservation and the sustainable development coastal communities**. The documentary was broadcasted once in May 2007 in national TV and several times in the international signal of the same channel that is transmitted at a national and international level.

CENTRO DE CONSERVACION CETACEA

Report to Rufford Small Grants Foundation

*Financial Statement*

This statement covers the costs related to the period **August 2006 to January 2008** ©Alfaguara Project, *“Marine Conservation through Marine Ecotourism”*

The exchange rate considered was **964 Chilean pesos per GBP for 2006 and 1004 Chilean pesos per GBP for 2007.**

Expenses		Incomes	
Item	GBP	Funder	GBP
Project Director	2,020	RSG Foundation	50,000
Coordinators & Field Assistants	3,333		
Account manager	165		
<b>Subtotal Personnel Costs</b>	<b>5,517</b>		
Office Supplies	1,259	Marisla Foundation	2,030
Internet & Communication	2,874		
Meals	6,084		
Lodging	6,385		
Aerial Transportation	4,214		
Marine Transportation	1,059		
Terrestrial Transportation	7,795		
Educational Materials	1,299	Ford Chile	3,786
Contracted Services	6,014		
Others	2,874		
<b>Subtotal Operational Costs</b>	<b>39,860</b>		
Marine equipment	10,382		
Bank Taxes	57		
<b>TOTAL</b>	<b>55,816</b>	<b>TOTAL</b>	<b>55,816</b>





CENTRO DE CONSERVACION CETACEA

Report to Rufford Small Grants Foundation



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