The Rufford Small Grants Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Matilde Alfaro
Project title	Isla Verde: the only nesting site of Royal Tern and Cayenne Tern in Uruguay
RSG reference	RSG 15.08.06
Reporting period	July to December 2007
Amount of grant	£4991
Your email address	matilde.alfaro@gmail.com
Date of this report	June 2008

1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Study the interactions between Kelp Gull and breeding Terns, and evaluate those with human activities	X			We could not make enough behavioural observations of the colony during de 2007 breeding season. The colony was settled on a small and rocky Island behind Verde Island, called Coronilla islet and the access to this Island is very difficult. In addition, the sea conditions were frequently unfavourable during the hole season and we could reach Coronilla Islet only three times
Determine the breeding population size and breeding success of Kelp Gull on Isla Verde.			X	We could access more frequently to Verde Island so we could study the breeding biology of the Kelp Gull on this island.
Study the breeding ecology of the mixed Tern colony, monitoring their breeding success, spatio-temporal dynamics, population size and their regional movements.			X	Since we could not access frequently to Isote Coronilla, we flight over the colony during the season in order to take pictures of the colony and asses the population size and the spatio-temporal dynamics. In two of the visits to the colony we could band 84 chicks that is a very important result to improve the knowledge about the regional movements of these species.
Environmental Education and diffusion of our project in "La Coronilla" and "Punta Del Diablo" Towns			X	We decided to concentrate the educational efforts in La Colonilla School, because it is bigger than Punta del Diablo School and congregates thousands of children from many towns and places of Rocha Department. We worked coordinated with ARENAS Project (see question 4)

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

The main unforeseen was that the colony location changed from Verde Island in 2005 to Coronilla Islet in 2007. Coronilla Islet is a very small mainly rocky island behind Isla Verde. The access to this

islet is very difficult and dangerous because of the hard streams and rocks all around. We had to wait for very good sea and weather conditions for landing.

To tackle with this problem we decided to make more flights over the Island in order to take more aerial photos all over the breeding season. These pictures gave us very good results about the size of the breeding colony and its spatio-temporal dynamics.

Because of this problem, we could not record behavioural observations of the interactions between Kelp Gulls and terns.

3. Briefly describe the three most important outcomes of your project.

1. The two banding campaigns carried out were successful for our Project. We could band 84 chicks, 83 Royal Terns and 1 Cayenne Tern. This difference was because of the relationship between the populations sizes of both species. Royal Terns were the most abundant with ca. 400 pairs and Cayenne Tern was less numerous with only ca. 30 pairs. At the moment we already had visual re-captures of two banded chicks along the Uruguayan coast. One occurred in the mouth of the Pando River, 250 Km west from Coronilla Islet, and the other in La Paloma Port, 150 Km west from Coronilla Islet. We are monitoring the coast to re-capture more banded terns. We published and distributed 200 posters along the entire coast of Uruguay and in the region, containing information about our project and how to report a banded bird to us, in order to recollect more sighting information from observers along the coast (see attached file "Poster.jpg"). With the information gathered from the banding campaign we will assess the age of first breeding and the site fidelity to the breeding ground, but the most important output is to know the regional movements of these species and their connection with other regional populations. We work in straight contact with researchers in Brazil and Argentina who are studying other populations of these species and we work together in the detection of banded birds. We are taking part of the Tern's International Monitoring and Conservation Programme managed by Dr. Marcio Efe (IBAMA-CEMAVE, Brasil). Dr. Pablo Yorio and Lic. Alejandro Gatto (CENPAT-CONICET, Argentina) are also involved in this Programme.

2. The knowledge about the breeding biology of the Royal and Cayenne Terns is increasing a lot with the results of our projects. With the information obtained in 2007 we now know more about the reproductive cycle, breeding effort, population size and breeding susses of Terns in Uruguay.

3. Finally, other of the main results of this study is that we could collect a lot of information about the breeding biology of Kelp Gulls in Isla Verde. This information is very important to know if this species is increasing in number or not. There are some hypotheses about an increasing population size of this species in the region, especially in Argentina, because of human activities. This species is taking advantage of Municipal trash cans areas as food resources, and in consequence their population size is increasing. This could be a problem for other species like terns because of competition for nest site and food. Our study about the breeding biology of Kelps Gulls is starting, so these results are very important to continue working with this species in Uruguay.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

Educational activities during the development of the project were done in conjunction with ARENAS project. ARENAS project is an educational project coordinated by three different associations: Averaves, Karumbe and Cetaceos Uruguay. The main objective of the project is to help school professors improving the national school programme with subjects about environmental education. During 2007 ARENAS project was working with many coastal schools, including La Coronilla School, and the main issue was the coastal-marine ecosystem. Our project was collaborating with these activities and with the elaboration of a school manual about environmental education for professor at schools. This manual will be distributed in all the schools and will be used as part of the educational programme. ARENAS project received financial support from: Yacu-Pacha, BP Conservation Programme, Columbus Zoo and Aquarium Found, SeaWorld and Bush Gardens Conservation Found.

5. Are there any plans to continue this work?

Yes. We are very interested in continuing working with this project. This project is a long term project about the population status and dynamics of two species of terns and the Kelp Gull. We have many questions to answer about the ecology of these species and how they interact. We considerer very important to continue with these project every year and we are planning to do that. Now with more experience and knowing the challenges of this project we are more prepared to continue and to perform better methodologists for the study of these birds. Aerial surveys are a powerful tool for the study of these species. Additionally we will have to improve the ship conditions to go to the island. We need a better ship in order to better deal with the bad conditions of the sea and the weather, and to have the possibility to visit the island more frequently during the season.

We also considerer very important continue working with schools. Professors and children are very grateful with us, because they are learning a lot and we also are learning a lot with them. It is very important lo work in contact with local people and children, because they live very close to wildlife and they want and need to know about it.

6. How do you plan to share the results of your work with others?

The results of our project were presented in national and international conferences:

- Lenzi J., M. Alfaro, D. Caballero, S. Jiménez, P. Laporta, F. García. Isla verde, a key site for bird conservation. *5º Encuentro Nacional de Ecoturismo Y Turismo Rural y IV Congreso Nacional de Áreas Naturales Protegidas.* Flores, Uruguay. April 2007

- Lenzi, J., S. Jiménez, M. Alfaro, D. Caballero-Sadi, P. Laporta. Breeding biology of Royal Tern (*Thalasseus maximus*) and Cayenne Tern (*T. sandvicensis eurygnatha*) on Isla Verde island, Uruguay. *North American Ornithological Congress*. Veracruz, México. October 2006.

- Lenzi J., S. Jiménez, M. Alfaro, D. Caballero-Sadi, A. Lanfranconi, P. Laporta, R. Seguí, L. Ziegler y N. Zaldúa. Some aspects of the breeding biology of *Thalasseus maximus* and *T. sandvicensis eurygnatha* (Aves, Laridae) in Isla Verde (Rocha, Uruguay). *Actas VIII Jornadas de Zoología del Uruguay.* Montevideo, Uruguay. October 2005.

We are also planning to publish the results of our study in international scientific journals. We are now preparing the first manuscript.

As part of the educational activities we were doing workshops and talks with local communities around the study area shearing and discussing the results of our project. We had a very good experience so we are planning to continue doing these activities.

7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?

We used the RSG during April 2007 to April 2008. The duration was longer than we had expected. This was because we organize some pilot field work before the beginning of the 2007 breeding season in order to improve our field work and to perform better field techniques. That was very useful for the development of the project.

The project also last longer. This was because some educational activities were delayed, and we had to do it after the anticipated end of the project.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Travel expenses	834	360	474	We save money using ours cars for transportation instead of buses.
Surveys (Flights and boat expenses)	612	895	-283	As mentioned before, we had to do more flights over the island.
Field expenses	684	669	15	
Equipment	1719	1749	-30	
Other supplies and materials (including office)	511	437	74	
Workshops and educational materials	250	309	-59	
Telephone and communications	81	77	4	
Diffusion (T-shirts, posters, stickers)	200	257	-57	
Miscellaneous	100	111	-11	
TOTAL	**4991**	**4951**	**127**	

9. Looking ahead, what do you feel are the important next steps?

We think that the most important next step is to continue working and monitoring the breeding colony each year. It is a long term study so we need a base of at least five years of continue data set to start answering some of the populations status and distribution questions.

We also think that it will be very important to publish a first manuscript describing the basic parameters of this Tern colony which has never been published in Uruguay.

10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

Yes. We made T-shirts and stickers in which it is shown both the project and the Rufford logos. We also made posters with information about the project and the banding campaign and showing the Rufford logo. Theses posters have been distributed in many different cultural institutions and schools along the coast of Uruguay. Our organization "Averaves" has a web page in which there is information about this project and it also appears the Rufford logo. The web page is: http://averaves.fcien.edu.uy

11. Any other comments?

Our team is actually integrated by 4 people: Javier Lenzi, Sebastian Jimenez, Maritn Abreu, and Matilde Alfaro.

This work also needed the help of many other people that we would like to mention here: Carlos Romero (the fisherman who drive the boat), Laura Mauco, Felipe Garcia Olaso, Luciano Liguori, Natalia Zaldua, Diego Caballero, Marian Rios, Paula Laporta, Maria Nube Szephegyi, Micaela Trimble, Lucia Franco, Marcio Efe, Pablo Yorio and Alejandro Gatto.

There is a remittent of £127. We would like to use this money for more diffusion about the project during the next months.

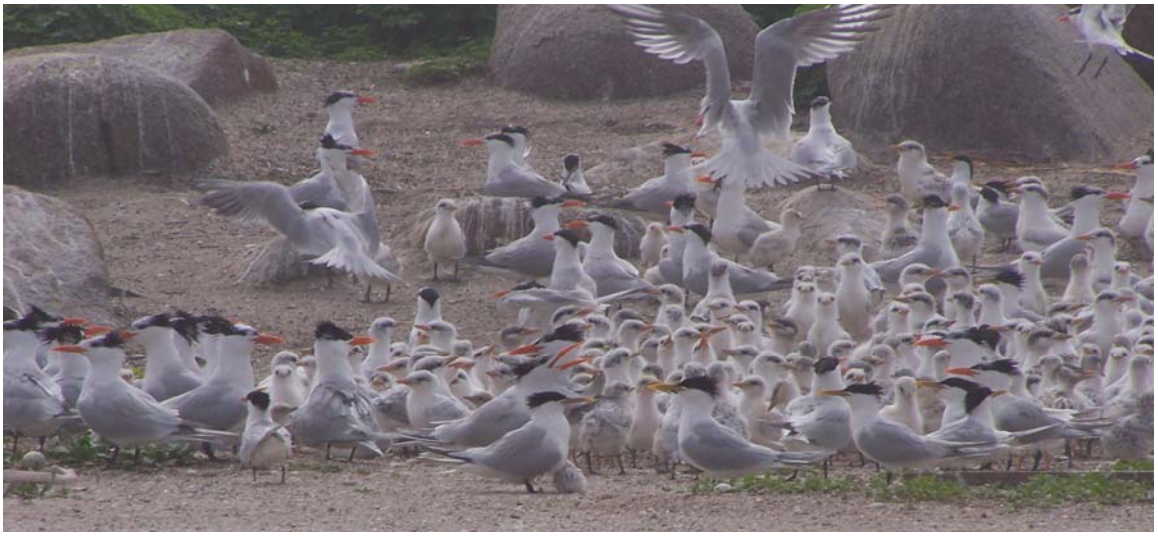
Sterna Project

In this document we present some pictures about our work with the Terns and Gulls.

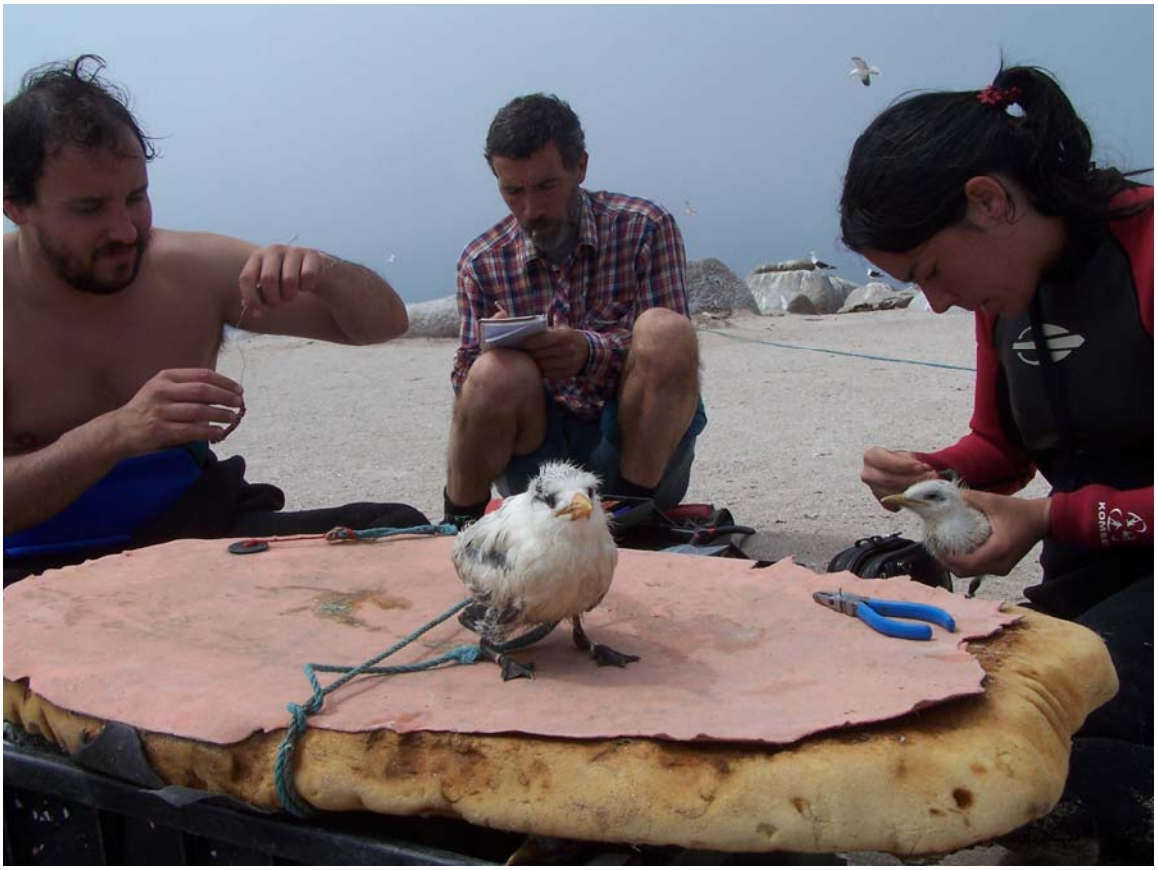
CORONILLA ISLET.

Crech of Royal and Cayenne Terns.

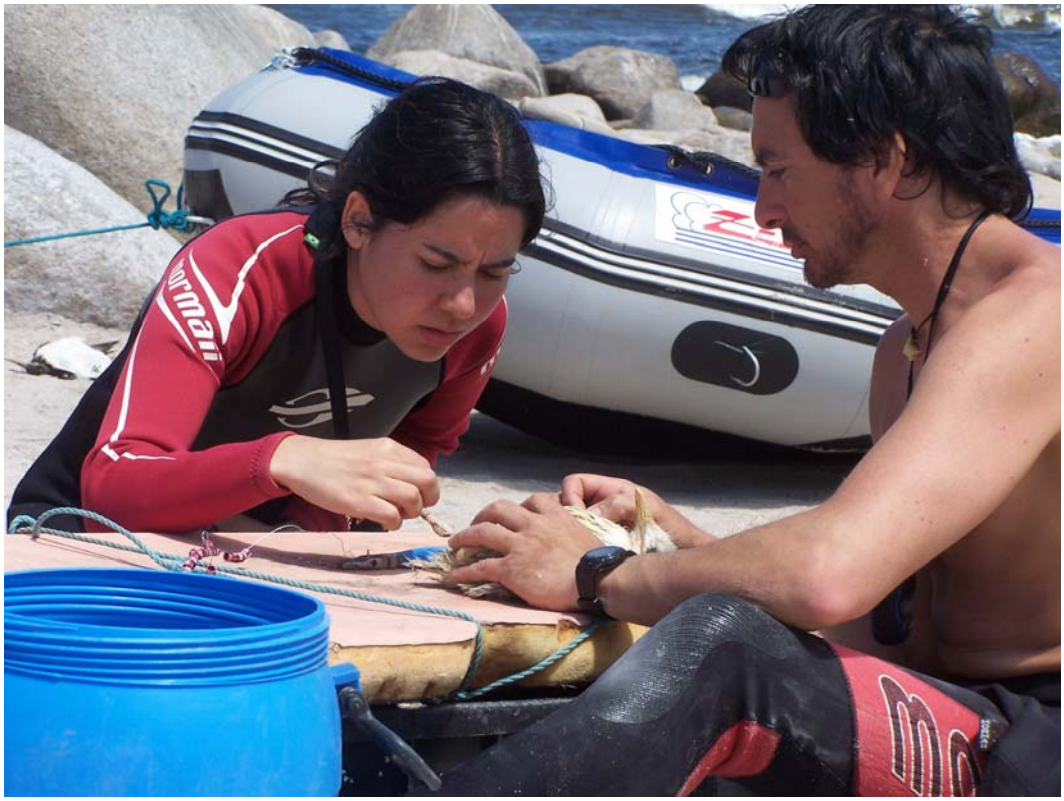
Crech of Royal Terns and Cayenne terns.



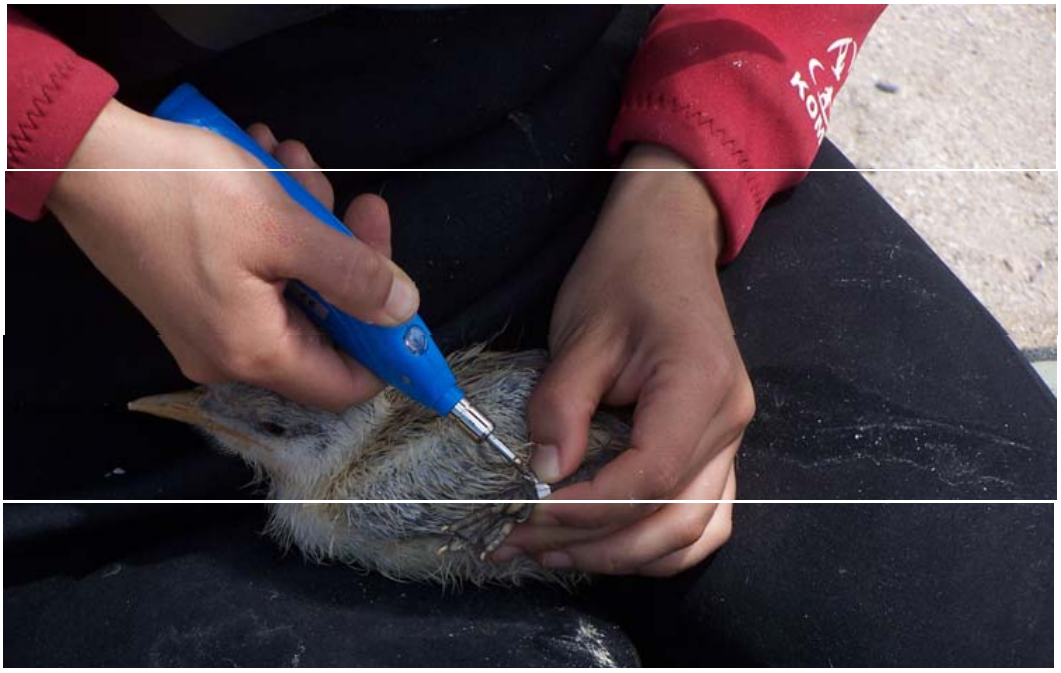
Adults taking care of the chicks of Cayenne Tern and Royal Tern.



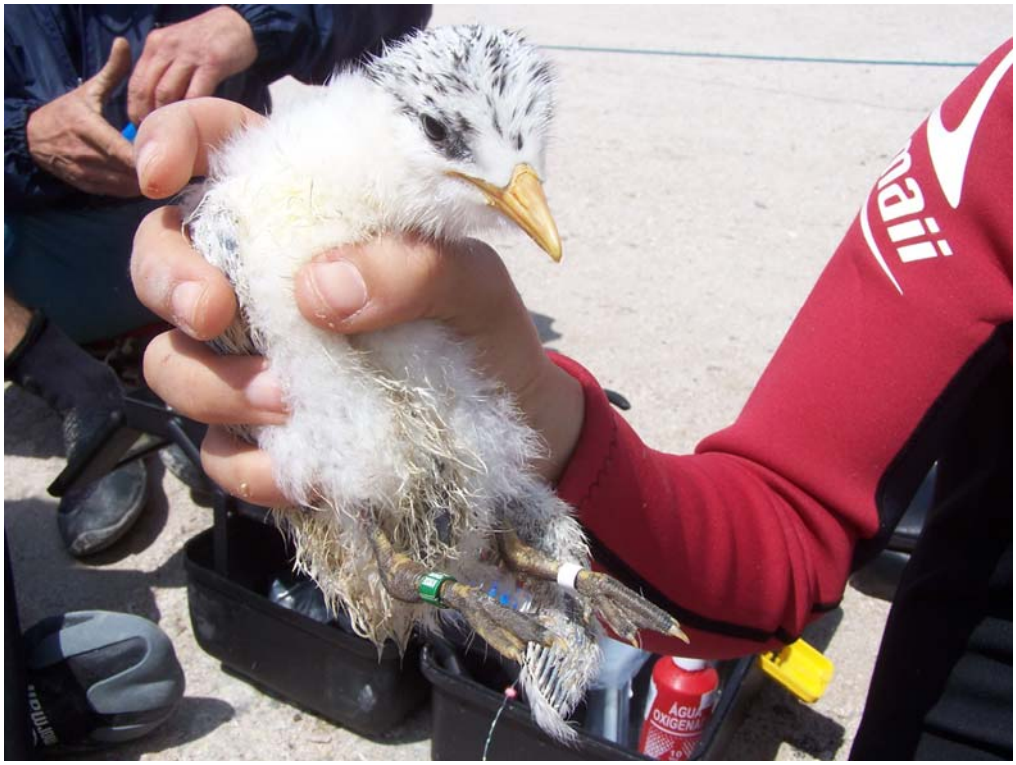
Banding chicks. From right to left: Matilde Alfaro, Carlos Romero and Javier Lenzi. Photo by: Martin Abreu. Carlos Romero is the fisherman from La Coronilla who helped us with our Project since 2005.



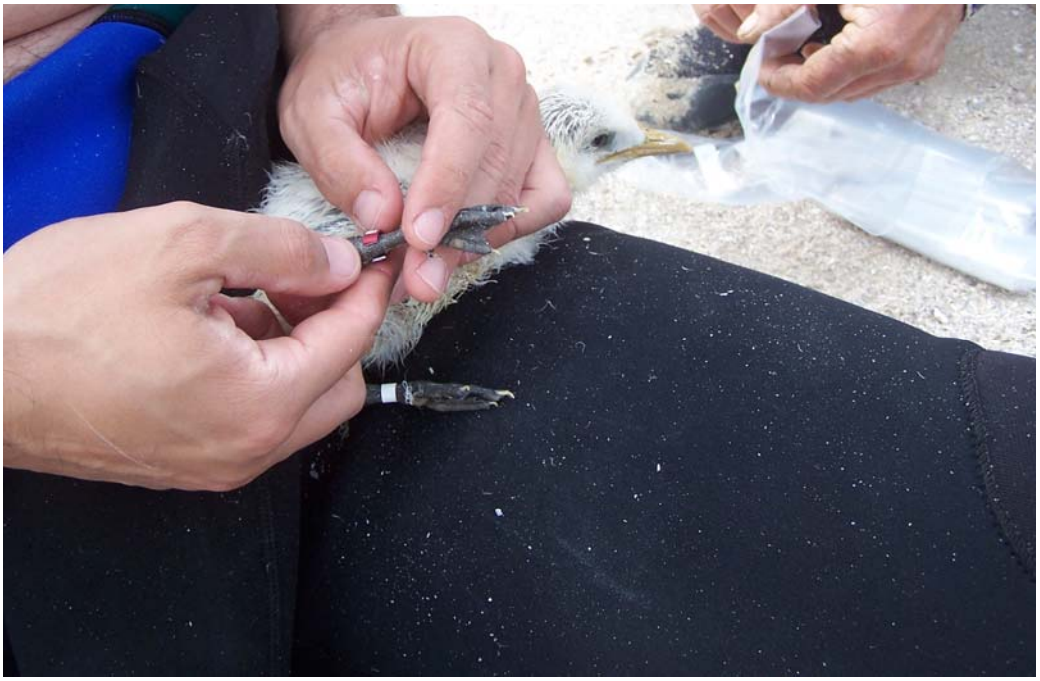
Matilde and Martin checking the band of a chick.



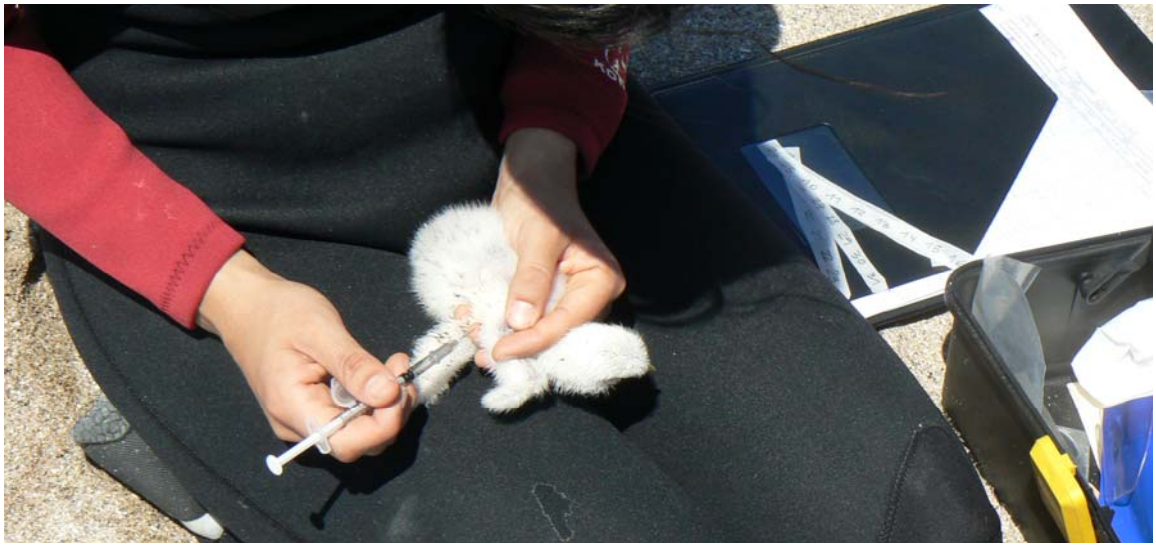
Matilde soldering a plastic band.



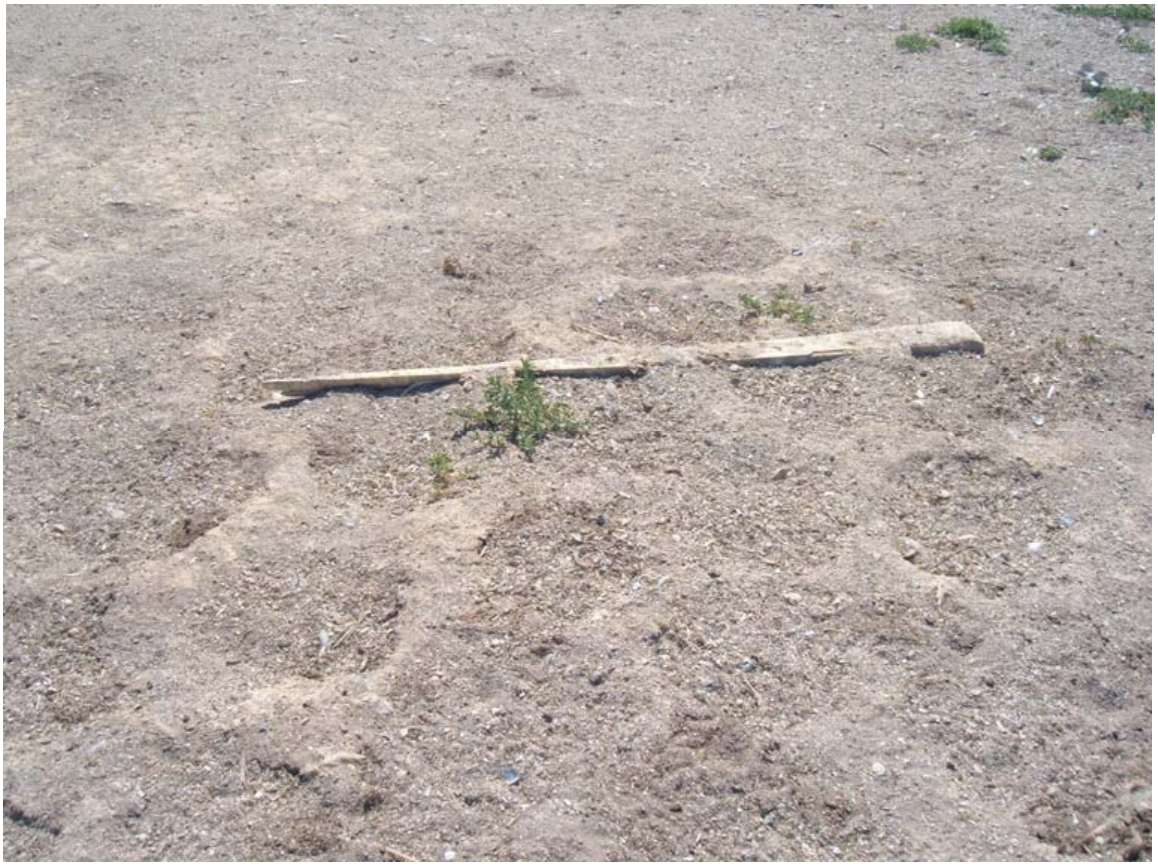
The only Cayenne Tern chick banded.



Javier banding a Royal Tern chick.

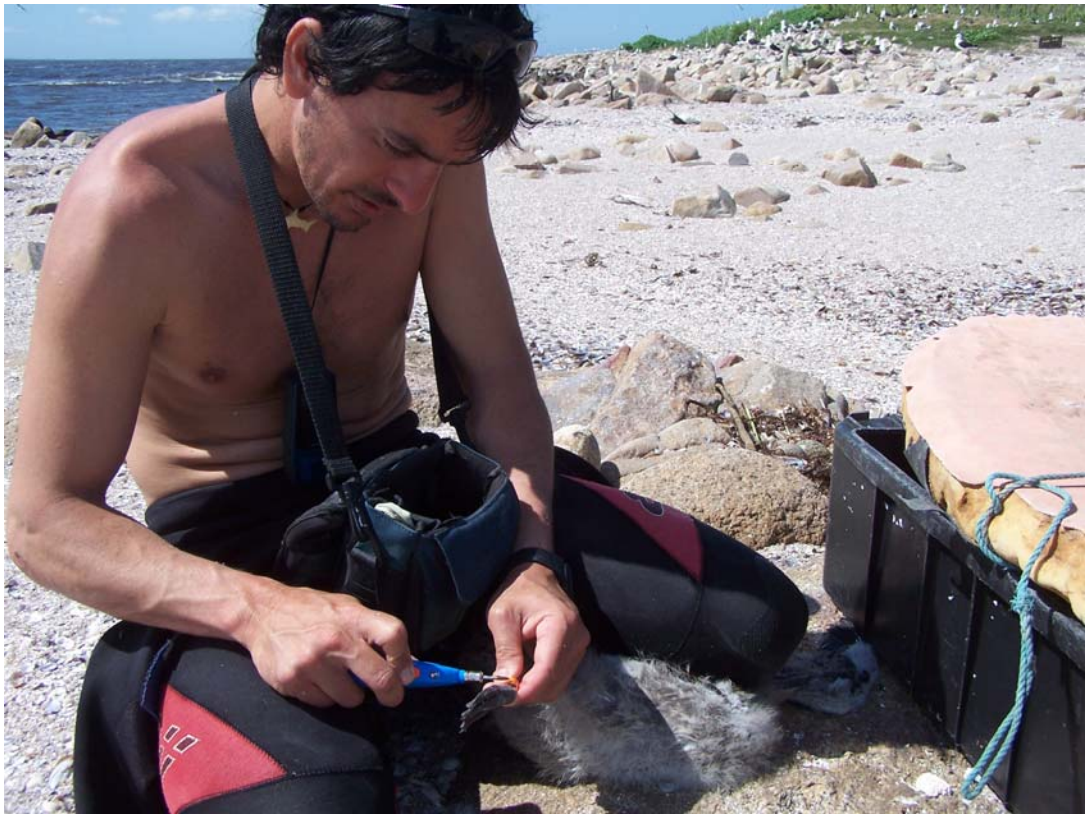


Matilde taking blood samples from a banded Royal tern chick.



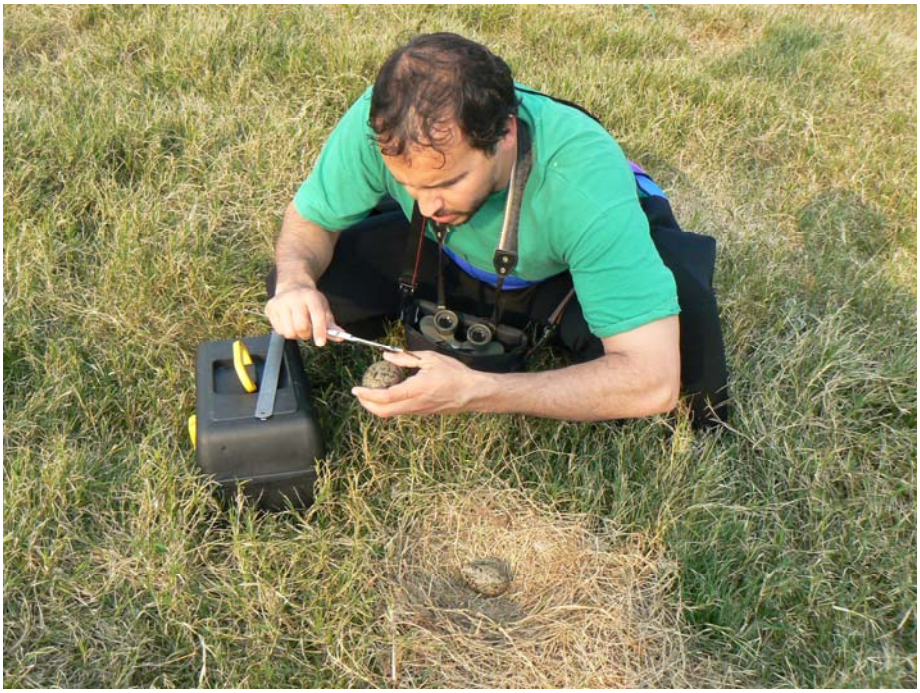
The breeding season was over.

VERDE ISLAND.



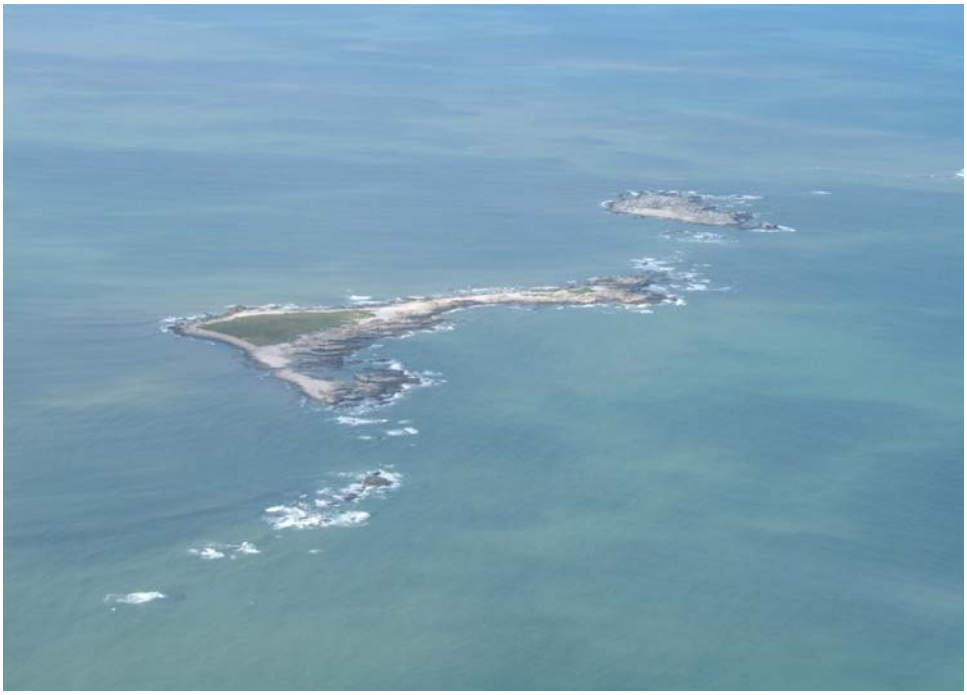
Martin banding a Kelp Gull chick with plastic band.

Kelp Gull chick banded.

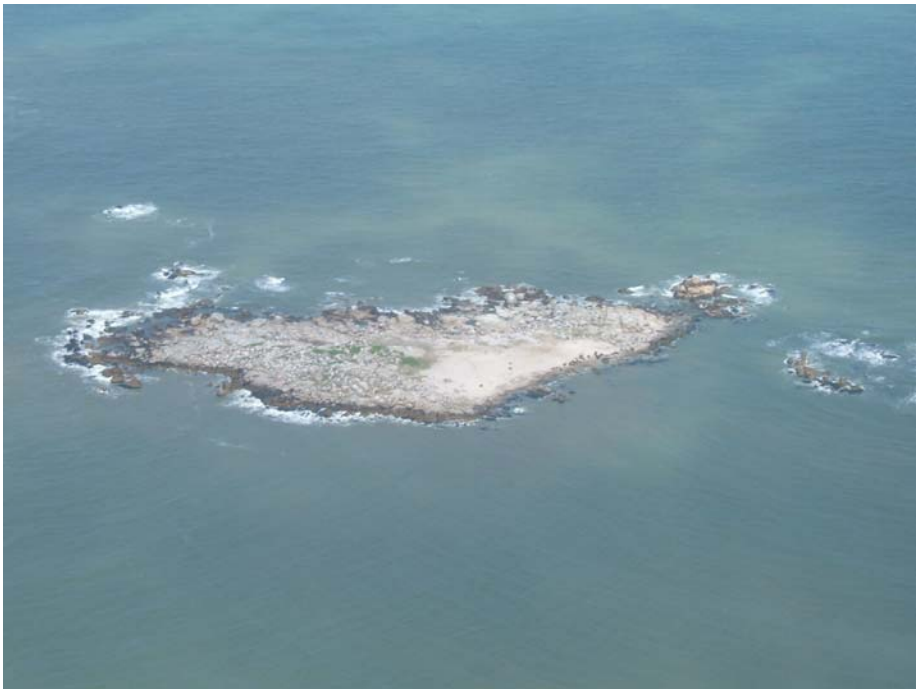


Taking egg measurements of Kelp Gull on Verde Island.

AERIAL PICTURES.



Verde Island(front) and Coronilla Island (behind).



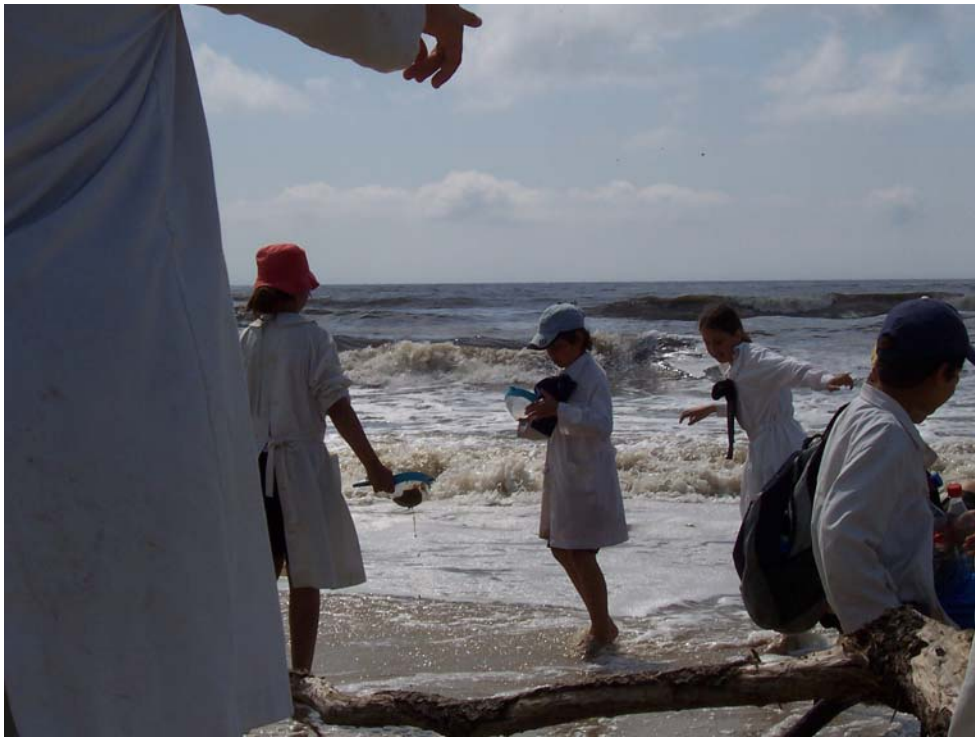
Coronilla Islet.

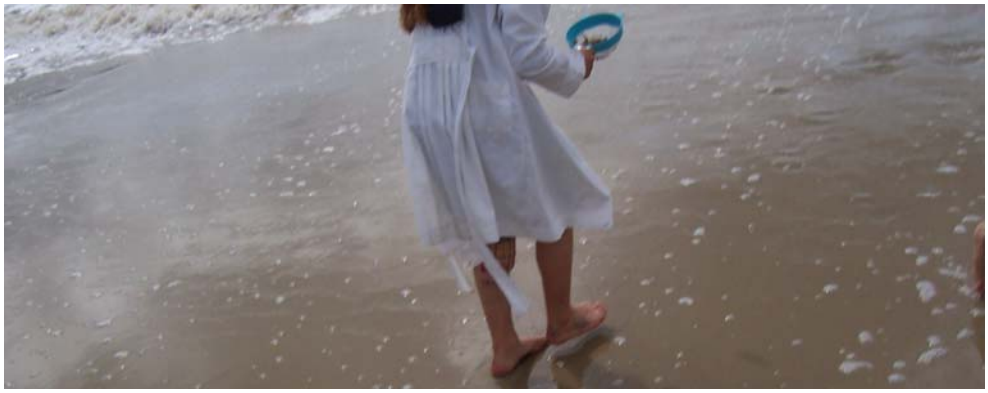
Tern colony seen from the air on Coronilla Islet. These pictures were very important to determine population sizes and abundance patterns of the colony.

Sterna Project

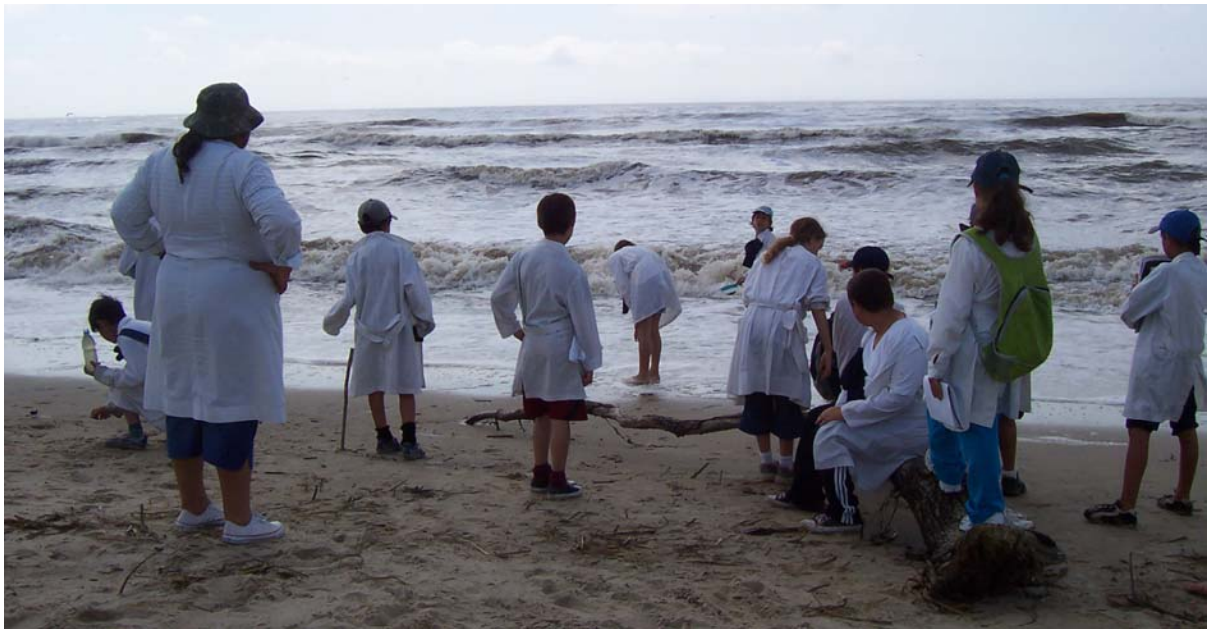
In this document we present some pictures of our work with the school children.

SAMPLING…

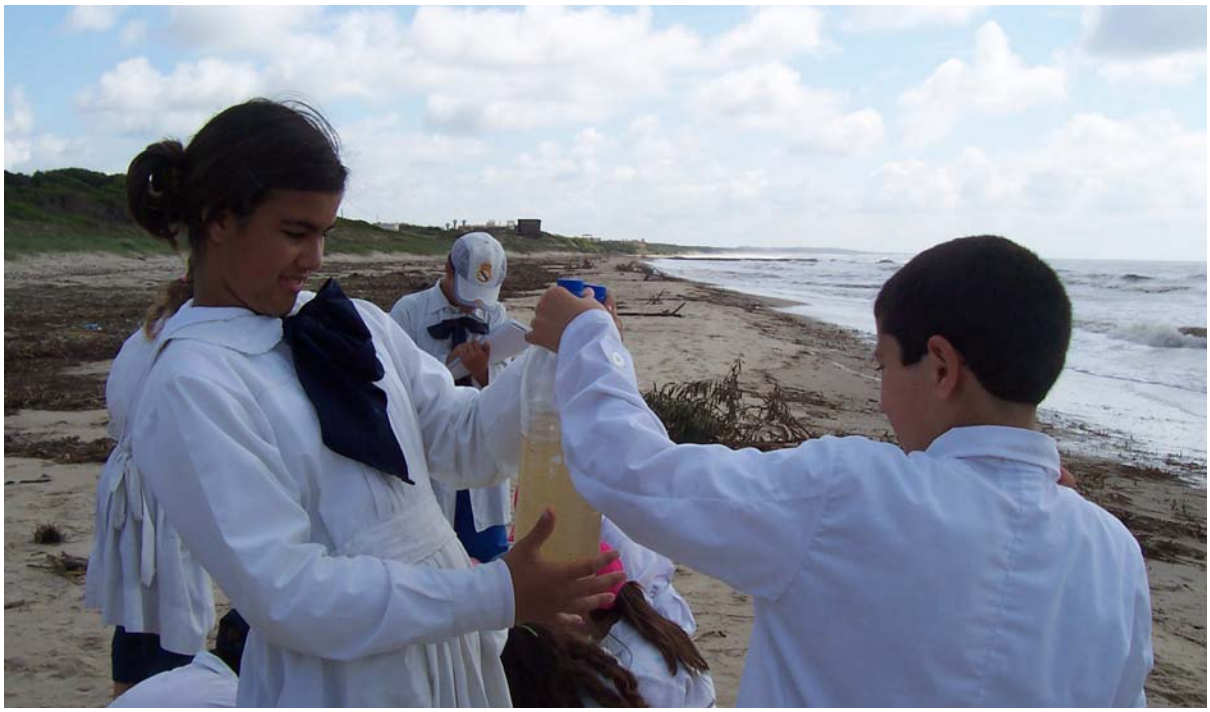




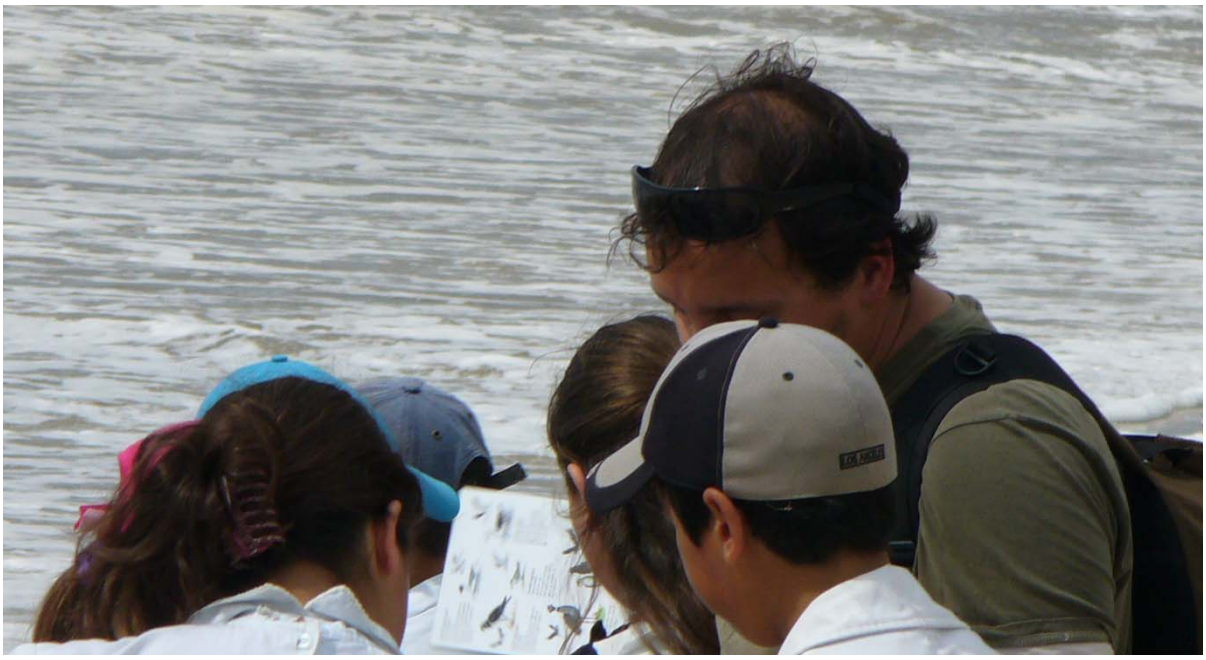
Sampling intertidal invertebrates.



Sampling intertidal invertebrates.



Sampling water in the estuary of the Andreoni Canal.

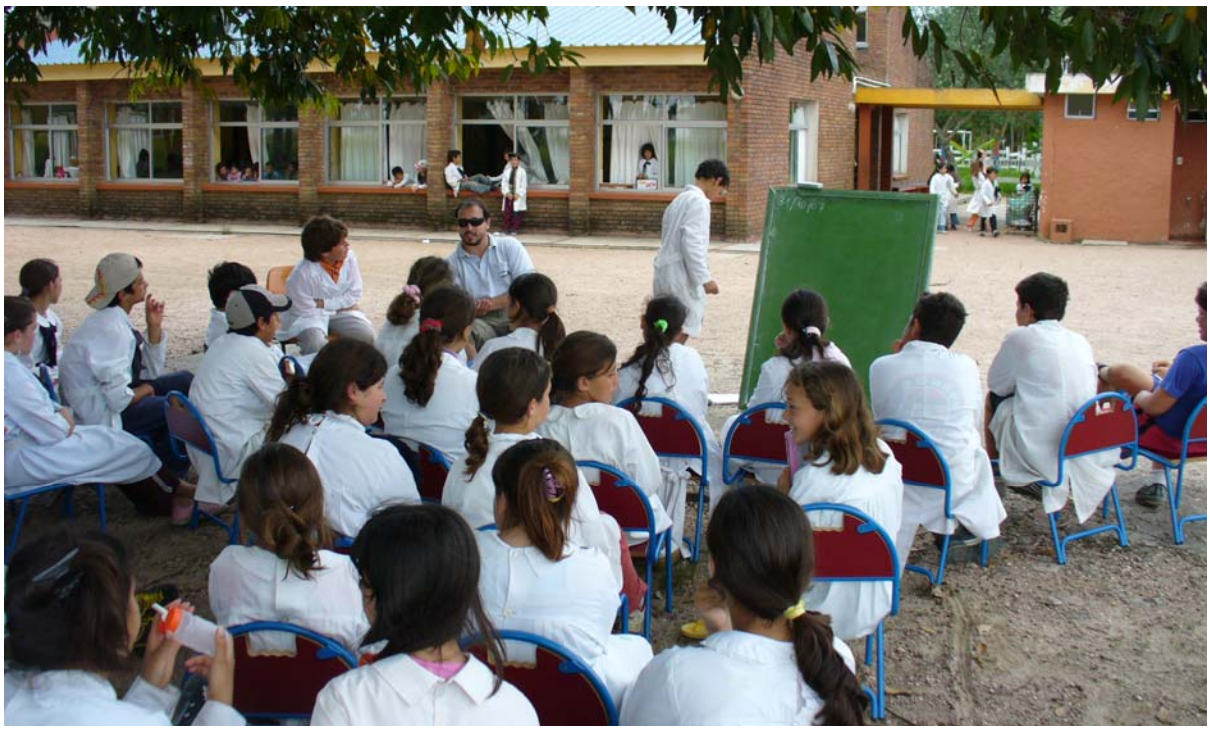


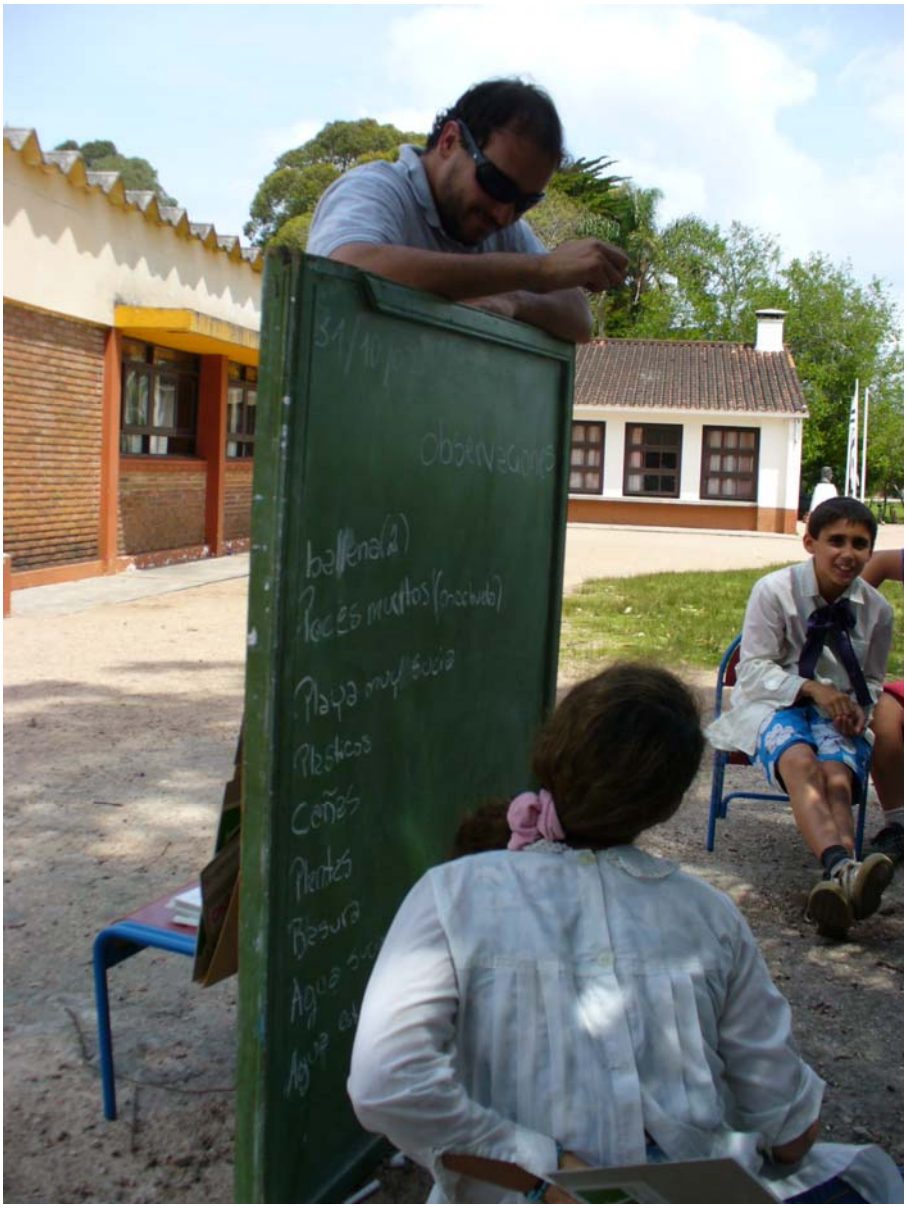
Identifying birds.

Andreoni Canal

Birds in the mouth of the Andreoni Canal. In the horizon are Verde Island. (right) and Coronilla Is. (left).

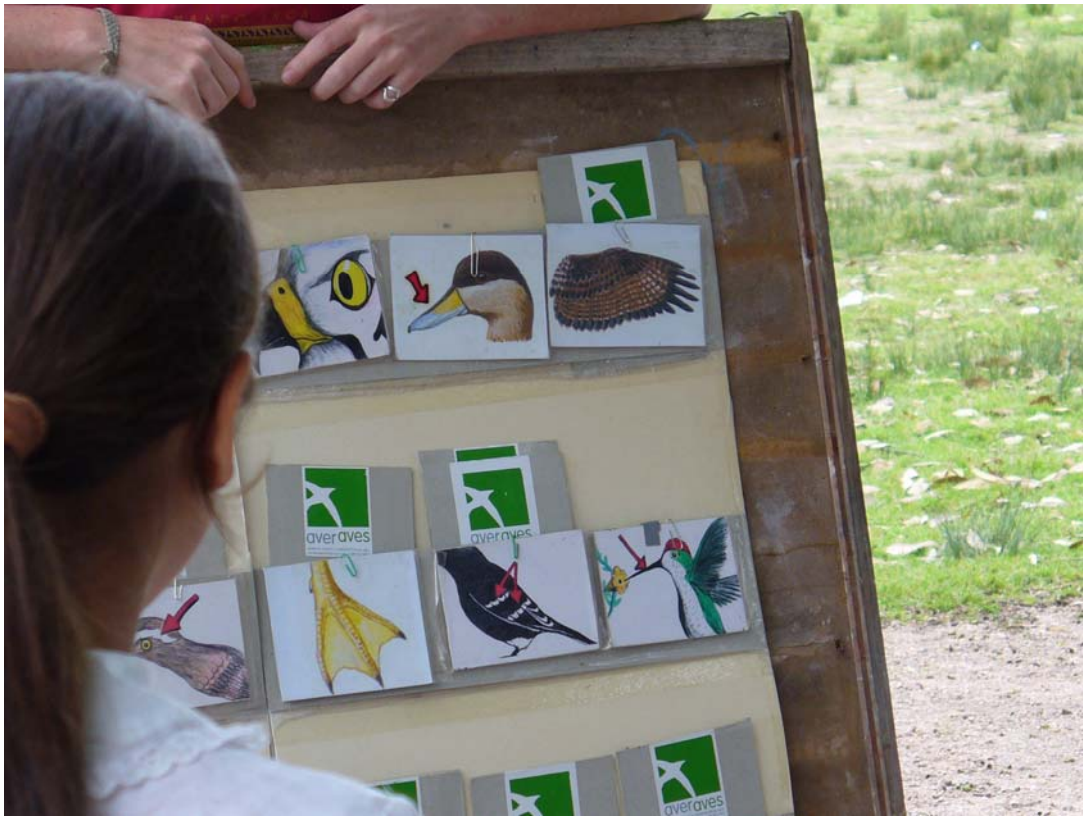
AT THE SCHOOL…



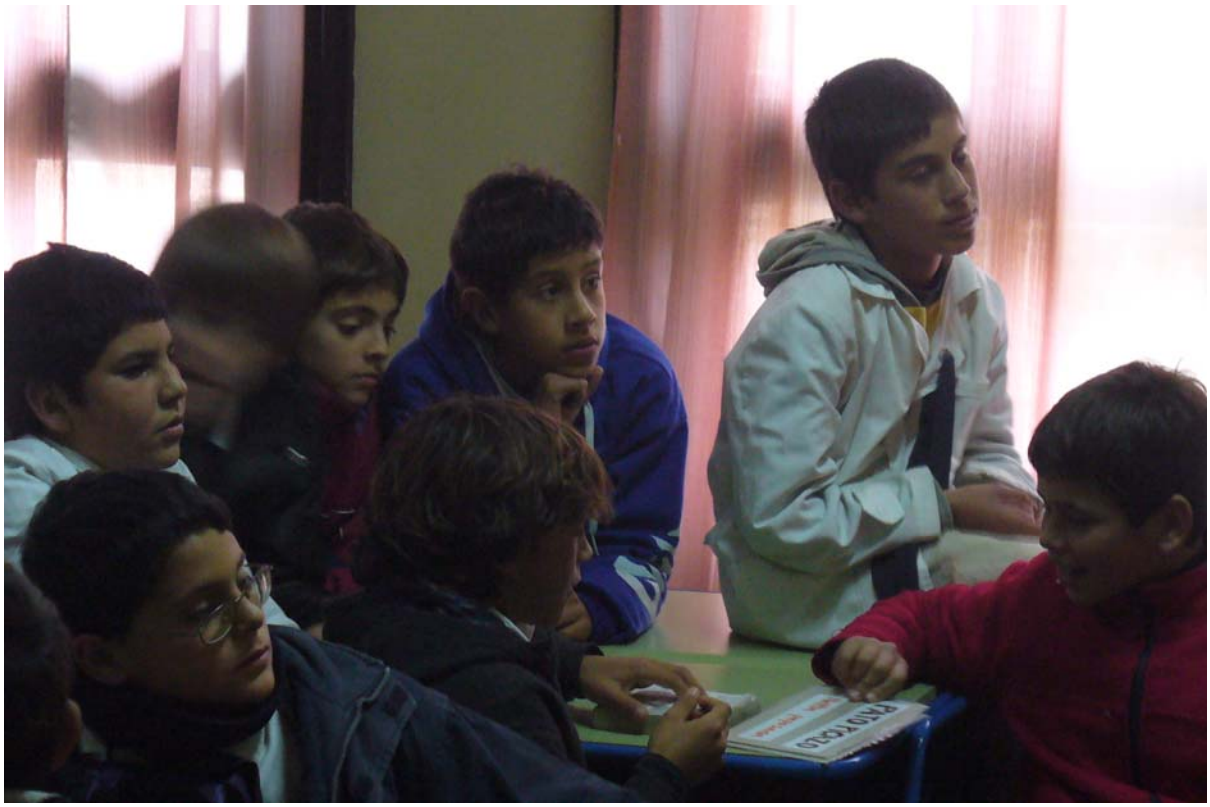


Listing the sampling characteristics (e.g. weather, sampling effort), field observations and bird species identified in the field.

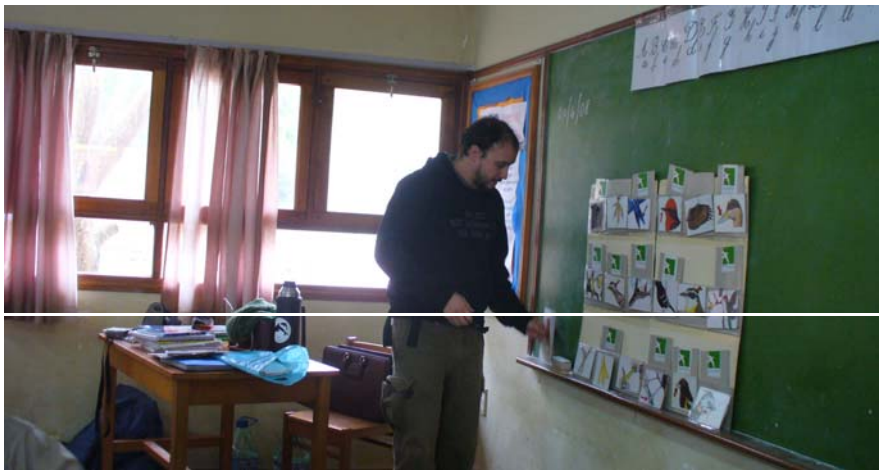
Playing the "Memory Game" in the courtyard.

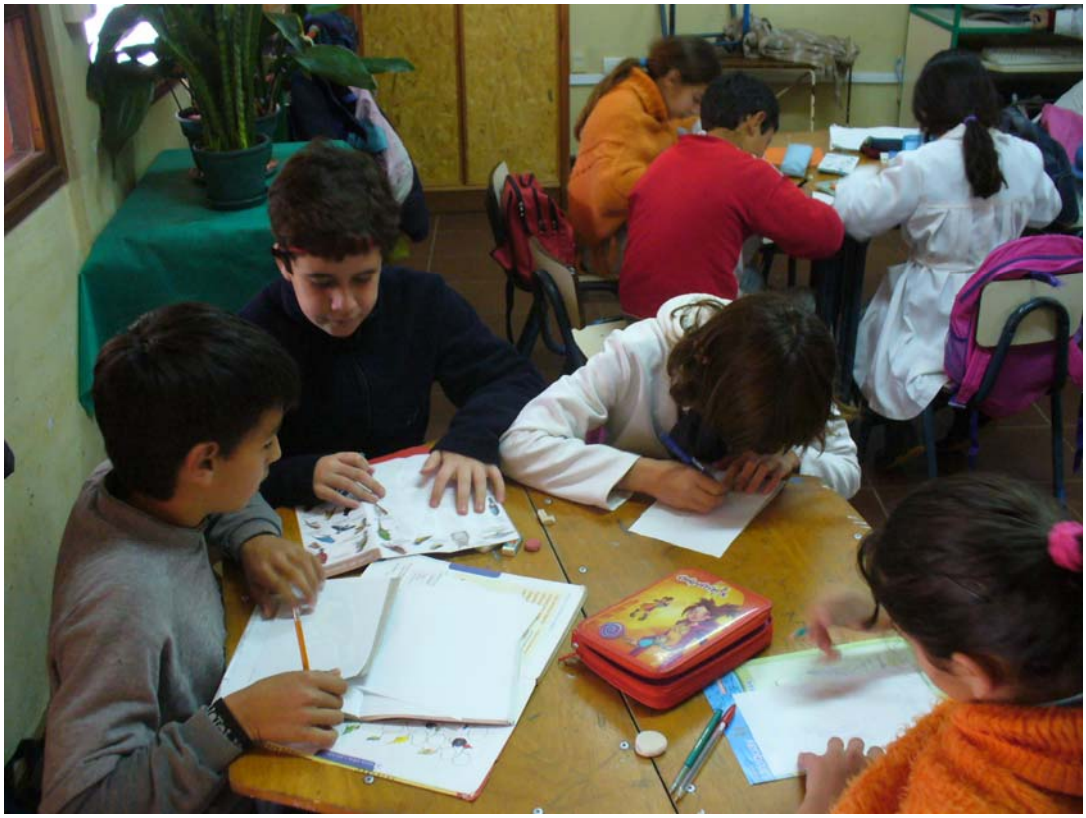


Playing the "Memory Game" in the courtyard.

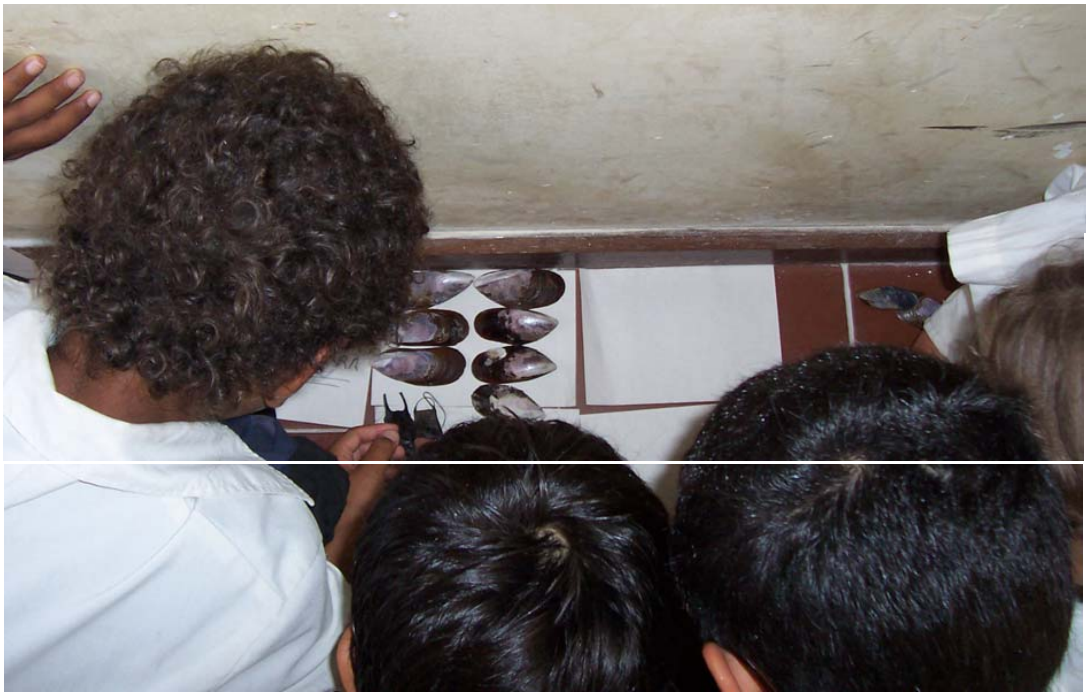


Playing the "Memory Game" in the classroom.





Time for drawing

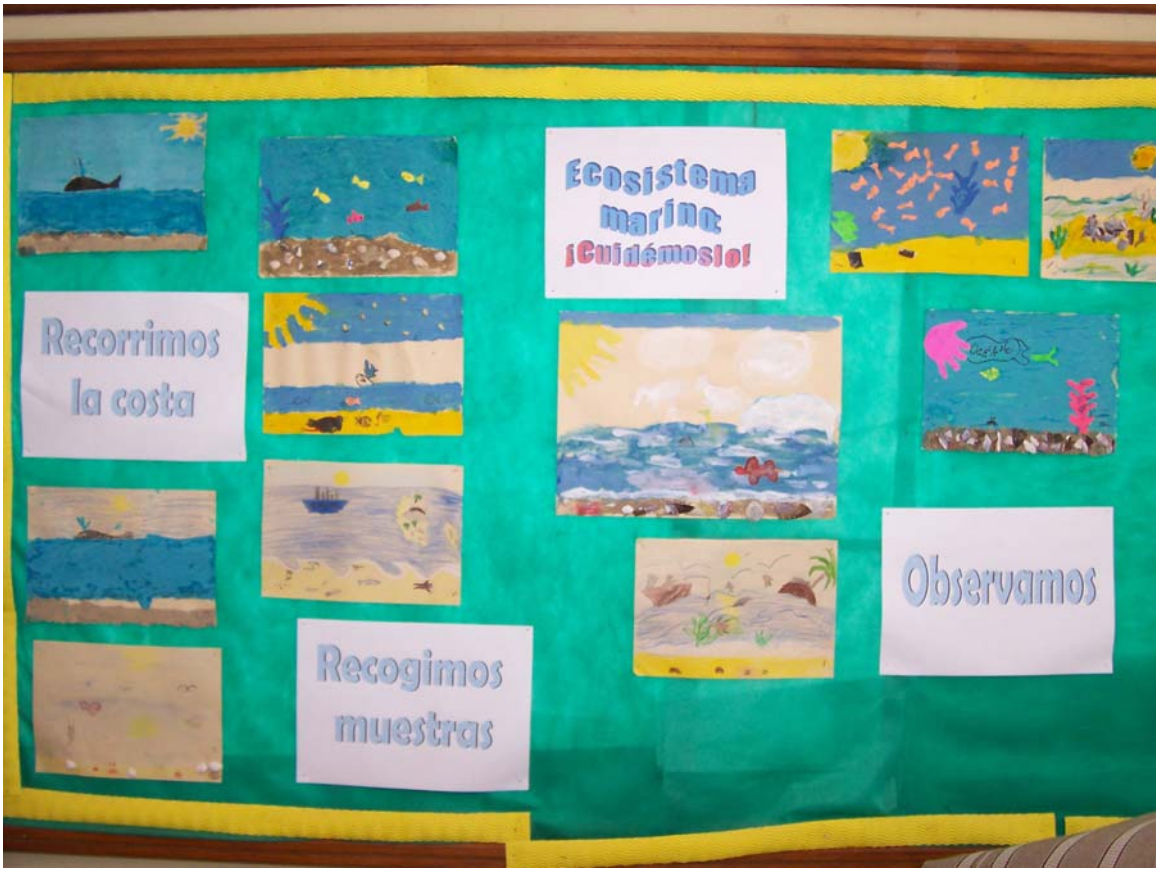


Arranging the samples obtained in the beach.

"Ecosystemic collage" with some of the samples.

Animals, sand and water samples ordered by sampling station (beach and the mouth of the Andreoni Canal).

Analyzing the results of the samples obtained.



Some of the children's art.