

Pacific Seabird Group - 2017 Craig Harrison Conservation Grant



Credit: © Y.Murillo/PGTC

FINAL REPORT

Title: Building Capacity for Conservation of Ringed Storm-Petrels Affected by Light Attraction in Peru

Author: Yovana Murillo
Ringed Storm Petrel Project (PGTC) - Peru
Email: yovana.murillo@gmail.com

Goal: Increase participation of citizens in the conservation of Ringed Storm-petrel (*Hydrobates hornbyi*) affected by light pollution.

1. Proposed activities/actions

a) *Promote the Ringed Storm Petrel Facebook page for three months (April to July) of the year 2017, prioritizing the “hotspots areas” in Lima Metropolitan*

From 2013 to 2016, the Proyecto Golondrina de la Tempestad de Collar (PGTC), or Ringed Storm-Petrel Project as an English name, documented more than 500 fallen ringed storm petrels in different urban areas in seven regions along coastal Peru, where the main reports of were registered in Lima (Capital of Peru with more than 10 million inhabitants). To increase the rescue actions in urban areas, the PGTC promotes the use of social media networks such as Facebook to citizens' call to action on identification, rescue, and reporting storm petrels encountered in urban areas in Lima during the landings season (between March to August) where we recorded this oceanic birds.

Since 2013, PGTC has had a Fan page on Facebook. Under this page, we developed and shared information about: (i) the project contact information, (ii) photos to recognize the species and (iii) information on how to give first aid care on finding birds, and (iii) citizen action on rescuing a seabird.

With the Pacific Seabird Group (PSG) and American Bird Conservancy (ABC), we paid for the dissemination of the message in five districts (*Santiago de Surco, Pueblo Libre, El Callao, Santa Anita, and San Borja*) in Lima, which we had detected previously as landing hotspots from six months, April to August in 2017.

<https://www.facebook.com/ProyectoGolondrinaDeLaTempestadDeCollar/>



Image 1: PGTC project Facebook Fan page disseminating messages to the citizens on the 2017 rescue season.
Credit: © Y.Murillo/PGTC

- b) Print diffusion material such as stickers with the message “I rescued a seabird,” giving it to people whose help in rescue activities and print a diffusion poster with statements such as “I got lost” with an identifiable Ringed Storm Petrel to be placed in public and concurred areas of the city, that includes contact information to the rescue program**

The “I rescued a seabird” stickers were printed and delivered to the citizens who kindly helped with rescue activities in Lima. In addition, a diffusion material to our partners in Lima, Arequipa, and Tacna was delivered during the workshops/meetings activities. Until December 2017, we provided more than 300 stickers, around 500 posters saying, “I got lost,” and more than 100 information flyers.



Image 2: Boxes with the sticker “I rescued a seabird.” People received diffusion materials (stickers) when they rescued a seabird.
Credit: © Delgado/PGTC



Image 3:Transport storm petrels’ boxes with the sticker “I rescued a seabird” and posters “I got lost” delivered under the workshop with the Wildlife and Forestry National Authority (SERFOR) in Tacna in November, 2017. Credit: © Delgado/PGTC

These outreach materials reinforce the importance of the species and the citizen's actions and communicate the message throughout their neighborhoods with posters, stickers, and even more widely through social media.

In addition, we have designed a brochure to describe different storm petrel species encountered in urban areas. In this material, we have included information about i) light pollution, ii) the biology of storm petrels, and iii) contact PGTC project and authorities' information. The brochure was developed with the support of different Peruvian wildlife experts and ABC, PSG, IFAW, and Ricardo Palma University (URP) support. The final design was delivered to the government (SERFOR) to validate and use the information as part of their outreach activities. This material was not included in the original proposal but based on our records with different storm petrel species found in urban areas, the development material with this information was necessary.

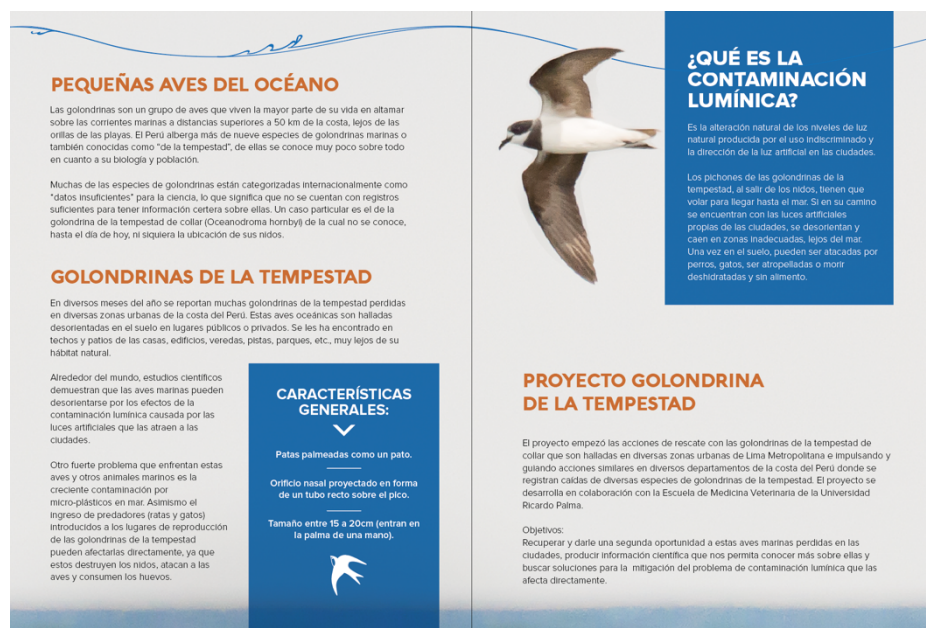




Image 4: Brochure developed to ID different storm petrels encountered in urban areas. Credit: © Y.Murillo/PGTC

- c) **Share through social networks the actions taken by the citizens who rescued the birds; by this, the citizen can publish his own experience and share with their contacts about this conservation task and the seabird's problems with light attraction and grounding.**

At the end of 2017, we obtained more than 5k followers, which received information about the ringed storm petrels landed. This year, the first landing report in Lima Metropolitan was in March, and the landing season was finalized in August. By this period, the PGCT has rescued, only in Lima, more than 160 individuals of ringed storm petrels through urban people support. On social networks like Facebook, we have shared the online version of materials developed con activity b.

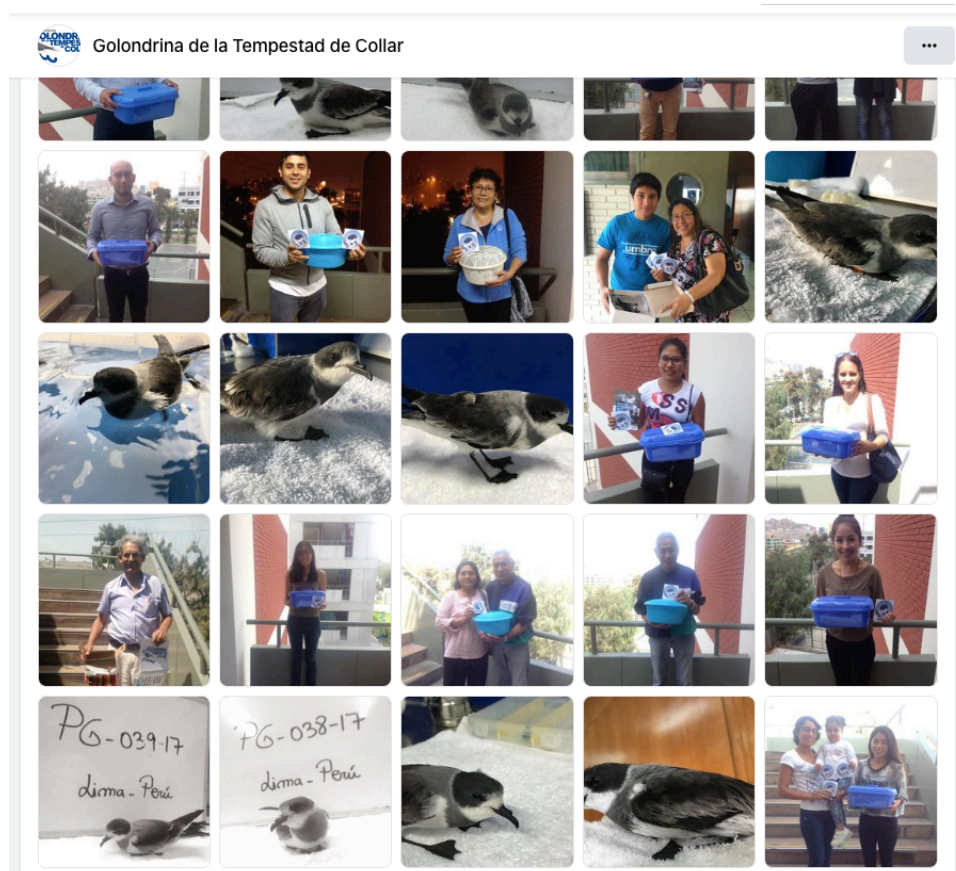


Image 4: Example of the PGCT project Facebook fan page activity during the rescue season in 2017. Credit: © Y.Murillo/PGTC

d) Elaborate T-shirts and caps for volunteers

We made more than 70 t-shirts. We decided to prioritize t-shirts instead caps. We have matched funds from IFAW to complete the costs. We provide these T-shirts to the volunteers, so they will identify with the project and use them while carrying out their activities.



Image 5: PGTC T-shirt design. Credit: © Y.Murillo/PGTC



Image 6: PGTC volunteers disseminating information and materials at a local event in Lima. Credit: © Y.Murillo/PGTC

e) Hiring an assistant to help rescue, gather data, and coordinate volunteer activities.

The project has volunteers that help with rescue and rehab activities; most of them are veterinary and biology students from URP University. In collaboration with this institution, we continued rescue and rehab activities in the 2017 season. As part of this collaboration, we promoted further research and studies with the participation of the students using the data collected from the Ringed Storm-petrel's urban landings in Lima. In addition, the PGTC researchers have participated in developing a global manuscript about light pollution affecting seabirds. The research and studies developed under the project include:

- Thesis entitled: Medidas y Relaciones Biométricas de *Hydrobates hornbyi* (Gray 1854), “golondrina de la tempestad del collar” (Procellariiformes: Hydrobatidae), Caídas en la Ciudad de Lima entre los años 2013 – 2016. This was published on: <https://repositorio.urp.edu.pe/handle/20.500.14138/2/browse?type=author&value=Gallegos+Carrillo%2C+Ana+Lorena>

- Scientific manuscript on Conservation Biology: “A global review of seabird mortality caused by land-based artificial lights”(Rodríguez et al. 2017).
<https://conbio.onlinelibrary.wiley.com/doi/abs/10.1111/cobi.12900>

An assistant was hired for five months. The assistant hired also supported action to strengthen rescue, release, and data gathering capacity. To complete costs, we used to match funds under the ABC grant.

Primary information from 2017 (including Lima and other cities along the Peruvian coast) data

- In coordination with local authorities, we registered 160 storm petrels rescued in 2017.

Species reported	Quantity
<i>Hydrobates hornbyi</i>	154
<i>Oceanites oceanicus</i>	5
<i>Oceanodroma tethys</i>	1
Total	160

- The six hot spots (grounding areas in Lima) prioritized in previous years continued. Of 120 birds rescued in Metropolitan Lima in 2017, 46.7% (56/120) birds were found on the street, 25% (30/120) in houses/buildings, 9.2% (11) in public places as, stores, or malls and 16.7% (20) had no reported data.
- In Arequipa and Tacna, the local authorities, PGTC guidance rescued more than 45 landed Ringed Storm Petrels from July to September.
- As in previous years, we have registered landing reports of three storm petrel species, *Hydrobates markhami*, *Oceanites oceanicus*, and *Oceanodroma tethys*, in regions such as Lima, Ica, and Ancash (Chimbote city) from September to November.
- The 100% of landed birds have complete feather cover, apparently having gone through a complete molt before their admission to the project.



Image 7: Ringed Storm petrel rescued in Lima, Peru - 2017. Credit: © Y.Murillo/PGTC

The assistant supports different authorities' training sessions in Ancash, Tacna, and Ica under the ABC grant: Management and rescue action of storm petrels in urban areas held on October 17-19, in Tacna (2017), November 10-11 in Lima (2017), and in March in Arequipa (2018). The URP University coordinated the workshops with local authorities in Tacna, Lima, and Ica.

Through two workshops, we provided information and new skills to more than 60 staff from relevant agencies responsible for wildlife management from Lima, Ica, Tacna, and Arequipa. The agencies included staff from the Peruvian National Police (PNP), Wildlife and forestry wildlife authority (SERFOR), Natural Protected Area (ANP) Paracas and islands area. Topics covered have included (i) seabirds' biology, (ii) Species identification, and (iii) rescued storm petrel's initial care. In addition, we distributed the printed materials, including the recent brochure identification, protocols, and diverse formats and guidelines, among others.



Image 8: Workshop at the Ricardo Palma University with the Wildlife and Forestry National Authority, Government Environmental authority, and natural protected areas authorities from Ica and Lima. November. Lima, Peru - 2017. Credit: © Y.Murillo/PGTC



Image 9: Workshop invitation developed by the Wildlife and Forestry National Authority (SERFOR). Arequipa March 2018. Credit: © B.Delgado/PGTC

In addition, we held different meetings with the Wildlife and Forestry National Authority (SERFOR) in Lima, where we presented the upload project activities, including the proposed protocols to give the first care, evaluate and release the landing storm petrels along the coast of Peru.

Finally, from March to December 2017, we provided the local authorities with some first aid materials to rehabilitate the storm petrels, such as rescue boxes, management materials, basic protocols, and diffusion material as stickers and brochures. We delivered around 200 rescue boxes and 30 kits for each local and regional office in Lima, Ica, and Tacna. We made the boxes under IFAW and ABC support and included stickers “I rescued a sea bird” made under PSG and other donors.



Image 10: Wildlife and Forestry National Authority (SERFOR) workshop in Tacna November 2017. Credit: © Delgado/PGTC

2. Actual activities/actions

The PGTC continues action to:

- Strengthening of the rescue network based on citizen involvement
- Building capacity of authorities in cities reported as landing hotspots along the Peruvian Coast
- Support with technical information (about storm petrels) under the efforts to develop a legal frame about light pollution and its consequences.
- Developing efforts to promote the inclusion of the ringed storm petrel on the country's red list species to increase the attention and commitment to their conservation.
- Looking for a local effort to encounter nesting sites to promote the protection of these areas in coordination with authorities.

3. Subjective/objective evaluation of the effectiveness of their actions in conserving seabirds, including detailed quantitative information, when possible (e.g., “discovered and censused XX seabird colonies,” with numbers of each bird species and locations of seabird colonies provided in the report)

We do not have information on nesting sites yet. However, various hypotheses indicate possible nesting sites in the Andes. We will prioritize future actions to achieve this finding. In addition, we will work to promote its inclusion in the list of threatened/red species list in Peru.

4. Comparison of proposed and actual expenditures of money/use of donated materials

The budget section details the total costs (number 7). The PSG complements different efforts developed with other donors such as ABC and IFAW.

5. Suggestions for further work or improvements to the completed project design

- Improve the actions to reduce the light pollution threat.
- Increase citizen participation in rescue and report actions, primarily in the fall season. These actions allow the collection of primary morphological, biological, and others for this species. Citizen participation also raises awareness of the population and offers an opportunity to disseminate information about problems and needs on the conservation of seabirds.
- Continue working with the authorities to properly increase their capacity to care for these ocean birds after the rescue actions.
- Develop a methodology and action to search for the nests of the species in Peru in coordination with Peruvian authorities and researchers.

6. Budget information:

Concept	Details	ABC Support	PSG Support	IFAW Support
Tacna Workshop		975		
Airfare (Project researcher and Assistant/volunteer)	2 airfare x \$140 per person	U\$280.00	---	----
Terrestrial transportation from Moquegua to Tacna	\$35 per ticket x 2 tickets (two ways)	U\$70.00	-----	----
Meals and local transportation	\$75 per day x 1 day's x 4 person	U\$300.00	----	-----
Accommodation	\$40 per day x 1 day's x 4 person	U\$160.00	----	----
Workshop set-up (projector, room and coffee break)	\$165 per day	U\$165.00	----	----
Lima Workshop		1121		
Terrestrial transportation from Ica to Lima	\$55 per ticket x 7 tickets (two ways)	U\$385.00	----	----
Terrestrial transportation from Paracas to Lima	\$68 per ticket x 2 tickets (two ways)	U\$136.00	---	----
Accommodation in Lima	\$40 per day x 1 day's x 9 person	U\$360.00	----	----
Meals and coffee break	\$12 per person x 1 day x 20	U\$240.00	---	----
Arequipa Workshop		404		
Airfare (Project researcher and Assistant/volunteer)	2 airfare x \$140 per person	U\$280.00		
Accommodation in Arequipa	\$31 per day x 2 day's x 2 person	U\$124.00		
Meals	\$20 per person x 2 days	-----	---	--
Outreach materials		2065		
Photocopies and veterinary care materials for training session	Multiple materials	U\$100.00	----	---
Promoting Facebook	Announcement x 6 months	U\$170.00	U\$40.00	---
Print diffusion material as stickers "I rescued a Seabird" and poster "I got lost"	300 stickers, 500 posters, 500 flyers	U\$200.00	U\$290.00	U\$100.00
Materials, equipment for rescue activities and transport to release (examples: towels, boxes, syringes, gasoline, among others)	Transport boxes, care kits attention.	1,100.00	U\$800.00	U\$500.00
Design and distribute brochure with five species of storm petrels	Consultancy for design x 1 product	U\$20.00	U\$195.00	U\$100.00
T-shirts for volunteers	72 units of t-shirts (6 dozen)	----	U\$200.00	U\$300.00
Assistant to support with coordination, rescue, data gathering and volunteer activities	Consultancy x U\$225.00 per month x 4 months	U\$450.00	U\$450.00	----
Bank fees		U\$25.00	U\$25.00	U\$25.00
Total expended		U\$4565.00	U\$2000.00	U\$1025

*ABC support were under the project entitled: Advancing Conservation of Ringed Storm-petrels in Peru I and II

*URP University supports rehabilitation activities under their facilities.