



Lima, Mar 15, 2023

Mid-Term Report
Assessment of bycatch impact on sea turtle hatchlings in nesting sites in Peru
By Jannyna Mires and Cristel Cordero

Since the project started, the team developed the following activities:

- Preparation and design of rapid assessments, maps, and catalogs of species.
- Submission of the rapid assessment and informed consent to the Ethics Committee of the Universidad Científica del Sur (UCSUR) for its review and approval.
- Identification of allies: Leader fisher per community, Municipality of Lobitos, Pier Administration of Cancas, and touristic operators from Cancas.
- Presentation of the project in both communities: Cancas and Lobitos.
- Design of species identification guide and “lead fisher kit”.
- Conduction of workshops 1 and 2 in both communities.
- Delivery of the “lead fisher kit” to two main fishers of the communities involved for the collection of bycatch data.
- Dissemination of the project on social media and other scenarios.

Here you can find the description of the activities:

1. Rapid assessments (RA)

To assess the bycatch impact on sea turtle hatchlings in nesting sites in Peru, RAs were designed by the team members to be applied to fishers from Cancas and Lobitos. Since one of the questions is related to the areas of interactions, maps per each community were also designed on QGIS. Also, catalogues of species were designed to see if fishers can differentiate between sea turtle species.

RAs have a total of 57 questions divided into three sections: i) background (i.e. fishers information, vessel’s description, fishing gears, etc.), ii) sea turtles and their threats (i.e. information on nesting, sighting at sea, and bycatch of sea turtles, including hatchlings and juveniles or adult turtles), and iii) perception of sea turtles related to their abundance, importance for the community and conservation status. The last part of the survey includes a question for the interviewers about the degree of reliability of the fisher’s answers according to their own perceptions.

RAs were approved by the scientific director of the NGO ProDelphinus. Then they were tested with fishers from each community who have previously worked with the NGO. In this way, RAs were improved with the fishers’ feedback. RAs with informed consent documents were submitted to the Universidad Científica del Sur (UCSUR) ethics committee for their approval. It is worth mentioning that they are still under review.

2. Workshops

Permits to enter the piers and use facilities for the presentation of the project and workshops were previously requested from the administrators of each pier and the presidents of the fishers’ associations of Cancas and Lobitos.

It is important to mention that the Municipality of Lobitos was identified as a key ally to reach more fishers in the community and help each other to develop the following activities. The municipality has been posting about the activities of the project and inviting citizens to participate in them (Figure 1).



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Presentation of the project

The presentation of the project was held in both locations (Lobitos and Cancas), prior identification of allies to send invitations through social media (e.g., WhatsApp and Facebook, Figure 2). This activity was carried out in December 2022 and consisted of explaining project objectives, methods, and expected outcomes. The team also talked about the importance of sea turtles, their threats, and their conservation status (Figure 3).

In the case of Lobitos, the presentation was held at the Community Center of the Artisanal Fishermen Association of Lobitos, and it was attended by a total of eight participants among the staff of the Municipality of Lobitos (new allies), artisanal fishers, and local citizens. While in Cancas, it was carried out at the facilities of the Cancas' pier (DPA Cancas), with a total of nine attendees including local citizens, tourism operators (former and current fishers), and artisanal fishers.

Workshop 1: Identification of sea turtles distributed in Peru

Workshop 1 was a theoretical-practical session also held in December 2022 addressing the identification of sea turtles distributed in Peru (Figure 4). It had the same number of attendees per community (eight to nine people). Identification guides were designed for this workshop.

In order to assess the knowledge acquired, quizzes were conducted before starting the workshop and after. The quiz consisted of five multiple-choice questions. It is worth noting that, participants in Lobitos shared their concerns about threats of sea turtles' nesting activity because of the circulation of motorised vehicles on the shore, and the presence of dogs.

Workshop 2: Bycatch and data collection

Workshop 2 was a theoretical-practical session, too. It was held in February 2023, and it was focused on the sea turtles' bycatch and data collection. Team members presented data sheets that were previously developed to record bycatch of sea turtles and other megafauna species (e.g., seabirds, marine mammals, sunfish, elasmobranchs, etc.). However, the team also designed and presented a data sheet to record the presence of nesting activity based on the recommendations that attendees gave during workshop 1. This also led to the creation of a database in Excel to record these data.

In Lobitos, workshop 2 was attended by a total of six participants including personnel of the District Municipality of Lobitos, and in Cancas, by three participants (fishers and touristic operators). Quizzes at the beginning and at the end of the sessions were also taken.

Additionally, based on the attendees' shared concerns during the first workshop in Lobitos and their own initiative, team members decided to place wooden signs in strategic areas of the nesting beaches of this community in alliance with the District Municipality of Lobitos (Figure 5). The activity counted on the participation of fishers and other citizens. These signs informed about the municipal ordinances that prohibit both the movement of motorized vehicles (Municipal Ordinance No. 02-04-2018-MDL) and pets without leashes on the beach (Municipal Ordinance No. 01-04-2018-MDL).

The "lead fisher kit" was given to two fishers from Lobitos and Cancas so far. This kit consisted of a t-shirt, buff, a waterproof notebook, a pencil, stickers, sea turtle, and other mega-vertebrates species identification guides and data sheets for the collection of bycatch information.



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On the other hand, to complement the learning, a short 2-minute video was prepared as a summary of workshop 2 and it was shared with all attendees from both locations and those who were invited but could not attend.

3. Project Dissemination

Fieldwork activities and team coordination meetings have been posted as stories and posts on ProDelphinus social media (Instagram and Facebook), with the hashtag #seaturtleshatchlingsRuffordPeru.

For the celebration of Wildlife Day (March), the “United for Wildlife Fair” was organised by the National Forest and Wildlife Authority (SERFOR) where ProDelphinus was invited to speak about the conservation of sea turtles in Peru. In this event, the project and the activities that have been carried out so far were presented (Figure 6). This event took place in Campo de Marte in the District of Jesús María, Lima for more than 10 hours (9:00 a.m. – 7:00 p.m.). It was attended by hundreds of people of different ages.

4. Limitations

- *Social and political crisis:* The political and social instability of the Peruvian Government led to a wave of violence and the closure of highways which created a delay in the schedule of the project. However, activities were rearranged by the team efficiently when the situation in the country calmed down.
- *Engagement of fishers:* As some fishers are not attending the workshops, the team is preparing summary videos to reach more people through social media (e.g., WhatsApp).
- *Natural disasters:* Currently, the government established an emergency state due to the YAKU cyclon. Activities of the project will be restarted once the conditions are safe for fishers, and researchers involved.

5. Annexes



Figure 1. Post of the District Municipality of Lobitos about activities of the project (February 2023).



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TALLER PRESENCIAL



**TALLER DE INICIO DEL PROYECTO:
"EVALUACIÓN DEL IMPACTO DE LA CAPTURA INDICENTAL DE CRÍAS DE TORTUGAS MARINAS EN SITIOS DE ANIDACIÓN EN PERÚ"**

 **Lugar:** Auditorio DPA Cancas

Fecha: Lunes 19 de diciembre

Hora: 3:00 pm

***Habrá bocaditos**

Figure 2. Online invitation for the project presentation in Cancas (December 2022).



Figure 3. Project presentation in Cancas (December 2022).



Figure 4. Workshop 1 in Lobitos (December 2022).



Figure 5. Establishment of wooden signs on nesting beaches in Lobitos (February 2023).



Figure 6. Dissemination of the project at the "United for Wildlife" Fair organized by the National Forestry and Wildlife Authority (SERFOR) (March 2023).