

## Project Update: June 2022

### **Objective No. 1. To estimate the distribution of the Neotropical otter in the study area.**

In April and May 2022, five field trips were made to search for traces (presence of feces, food remains, and footprints) of Neotropical otters in Laguna Bacalar and Laguna Guerrero. The field work was carried out with a motorized boat or kayak following transects of 1 and 3 km located on the banks of the bodies of water. In addition, we measure environmental variables such as water temperature ( $^{\circ}\text{C}$ ), depth (m) of the body of water, transparency (m), pH and salinity (%). As results, we obtained 12 sites with the presence of feces and food remains of otter. We also found five sites with the presence of footprints. However, we will consult with experts to confirm if the footprints correspond to the species. So far, in our study we have covered the dry season (March-May) and rainy season (June-September), pending the search for traces in the windy season (October-February). The next and last field trip to search for traces is planned for November 2022.



Fig. 1. Field activities carried out in Laguna Bacalar and Laguna Guerrero. © Fabiola Corona, Joel Osorio, José Negrete, Natalia Garcés y Kristel Guiet.

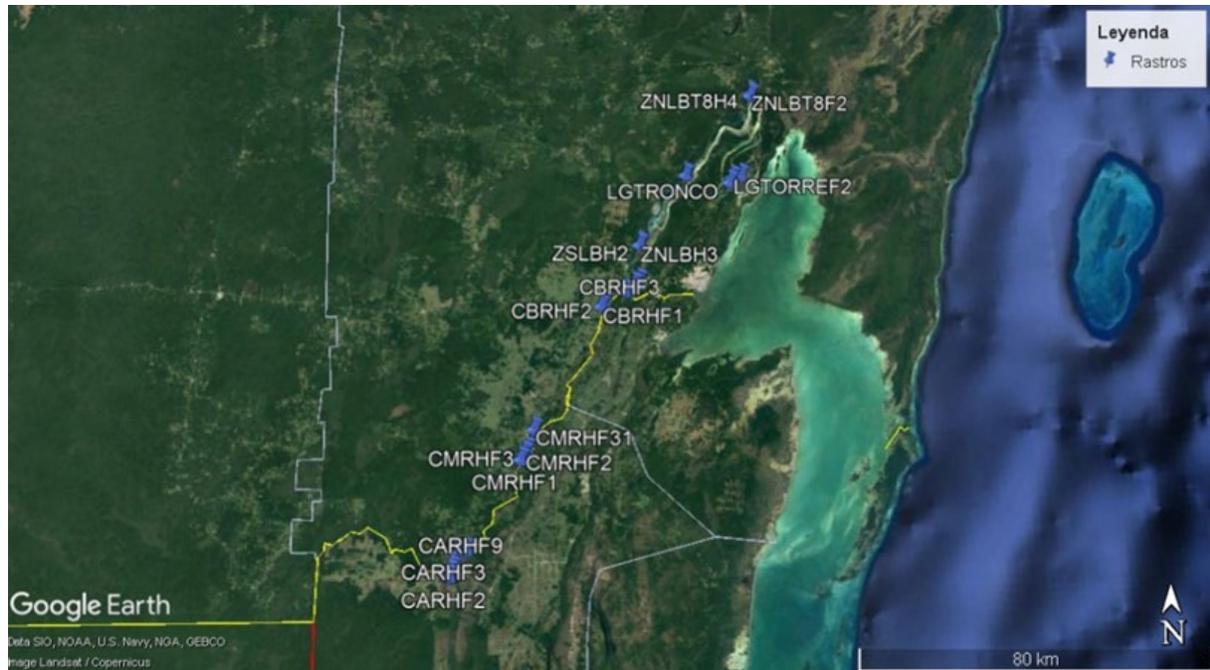


Fig. 2. Location of Neotropical otter tracks found in the Río Hondo basin and in the Bacalar and Laguna Guerrero lagoons, Quintana Roo, Mexico.

**Objective No. 2. To identify the components of the diet of the Neotropical otter.**

In April and May 2022, we found 12 sites with the presence of Neotropical otter feces in Laguna Bacalar and Laguna Guerrero. Most ( $n = 9$ ) of the feces were considered old, because they were quite dry and messy. However, three of the feces seemed recent, due to their shape and consistency, in addition to the fact that they were accompanied by anal gel. The feces samples were collected in airtight bags and stored in a freezer. The diet analysis will begin once the samples corresponding to the windy season (October-February) are available.



Fig. 3. Neotropical otter feces found during the dry season of 2022, in Laguna Bacalar and Laguna Guerrero. © Fabiola Corona.

**Objective No. 3. To describe local knowledge about the Neotropical otter and its habitat.**

Between January and July 2022, 45 semi-structured interviews were conducted with key stakeholders in the study area. In Guatemala, 14 interviews were conducted with technicians and park rangers from the protected areas of Naactún Dos Lagunas and Mirador Río Azul. And in Mexico, 31 interviews were conducted with local users of water

bodies, such as fishers, boat captains, and guardians of watering places. As of 2021, 39 interviews had already been conducted in Mexico. So far, there are now 84 interviews in total for this study. The information provided by the interviewees is currently being analyzed. In addition, it is planned to have a first draft of a scientific article for the first quarter of 2023.



Fig. 4. Interviews with technicians and users of the water bodies in the study area. © Jaime Cifuentes and Fabiola Corona.

### Other activities

- Dissemination: Within the framework of the International Day of the Otters (last Wednesday of May), three digital infographics were made on the species *Lontra longicaudis* in Guatemala. The infographics were produced for a wide audience and shared on social media throughout May 2022.

## La nutria neotropical (*Lontra longicaudis*)

¡El último miércoles de mayo es el **Día Internacional de la Nutria**!

Mi cola y mis bigotes son largos y mis patas son palmeadas

Es un mamífero semiacuático de la familia **Mustelidae**. Se encuentra en varios ecosistemas acuáticos y se alimenta principalmente de peces.

Juega un papel importante en los **ecosistemas acuáticos** porque mantienen el equilibrio poblacional de las especies de las que se alimenta.

Existen **13 especies en todo el mundo**, pero la nutria neotropical es la que se encuentra en Guatemala.




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## La nutria neotropical (*Lontra longicaudis*)

Esta especie también se conoce como **perro de agua** y puede encontrarse en arroyos, ríos, lagos y lagunas de Guatemala.

Varias personas las han observado en **Suchitepéquez** y en **Petén**, y han compartido sus observaciones desde la App de **iNaturalist**

¡Tú también puedes compartir tus observaciones en **iNaturalist**!

Foto: Gamaliel Chan

Foto: Don Marsille






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## La nutria neotropical (*Lontra longicaudis*) en colecciones biológicas

Los especímenes requieren de **cuidados especiales** para que perduren en el tiempo y de esto se encargan los curadores.

Las colecciones biológicas son como **bibliotecas de biodiversidad** que albergan ejemplares de especies tanto del país como de otras partes del mundo.

Actualmente hay dos ejemplares de nutria neotropical de Guatemala en el extranjero. Uno de estos está en la Colección de Mamíferos de la Universidad de Kansas y el otro en el Museo de Historia Natural de la Universidad de Yale.

Foto: University of Kansas Biodiversity Institute's Mammal Division

Foto: Yale University, Peabody Museum

Gracias al estudio de los especímenes en las colecciones podemos entender la importancia de conservar la naturaleza.





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Fig. 5. Outreach material on the neotropical otter in Guatemala.