

# ANNUAL REPORT 2019



**Fauna del  
Noroeste**

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# Message from our director

Leading an organization like Fauno is like getting on a roller coaster. Your body gets adrenaline-filled as you get on the cart and you're looking forward to the journey. But you are not alone, you have your friends and work associates by your side, talented professionals, dedicated to finish the journey with you to achieve a joint mission, bringing creativity, determination, and great effort, but mostly great friendship and total dedication. You don't know exactly what the road will be like, but you're sure there'll be ups and downs, some long ones, some that will make you want to give up the trip.

In Fauno, we just started the course, we climbed the mountain and advanced a few meters, not without first realizing that we had to tighten our seat belts a bit more. In 2019, we launched our membership program, held our first fundraising event (which was a success in creating connections), increased our revenue from services, and conducted several research, conservation and education projects. But we also experienced roller coaster drops, as our revenue from proposals decreased (which taught us the importance of proper timing and priorities management) and we discovered a great need to improve management, fundraising, social media, and marketing. However, we found that even though Fauno is a small organization, and although we often feel like David vs Goliath, with the right help we can make a positive impact, and we can be a "remarkable little organization".

We are committed to completing the journey, working for "our" species and their conservation, preventing their disappearance, and spreading our passion for nature to society.

I cannot be prouder of what we have achieved this year and although I do not know what 2020 will bring, I assure you that we will continue to work hard until we complete the journey that will lead us to the achievement of our objectives. I hope that as you read this report, you can realize the work and effort done, and feel inspired to join us on this journey that is just beginning.



**Anny Peralta García**  
Executive director



## FAUNO'S TEAM

**Dra. Anny Peralta García**

Executive director

**M.C. Jorge H. Valdez Villavicencio**

Research Coordinator

**M.C. Andrea Navarro Tiznado**

Restoration and Conservation Coordinator

**M.C. Salvador González Guzmán**

Environmental education Coordinator

**Biol. Zhenia Y. Sainz Beltrán**

Project auxiliar

**Biol. Norma Selene González Gutiérrez**

Project auxiliar

## BOARD MEMBERS

**Jeff Alvarez - President**

The Wildlife Project

**Bradford Hollingsworth**

San Diego Natural History Museum

**Sula Vanderplank**

Suva Research

**Richard Erickson**

LSA Associates Inc.

**Oscar Flores Villela**

Universidad Nacional Autónoma de México

**Elia Benítez Reyes**

El Nido Taller

**Denis Navarro Tiznado**

Cracia Comunicaciones





# Mission

Promote the proper management of natural resources through scientific research, restoration, education, and collaboration. To seek solutions to preserve the flora and fauna in northwestern Mexico through the development of scientific information and community engagement.

## What we do?

In Fauna del Noroeste, we are concerned about the current situation of our diversity and seek to reduce the threats that have led to the extinction of species. For this, we have developed three lines of work:

### Research



### Restoration and Conservation



### Education



# Conservation status of the Todos Santos Kingsnake



The *Todos Santos island Kingsnake* (*Lampropeltis herrerae*) is endemic to Todos Santos south island off the coast of Ensenada, Baja California. **This species was strongly threatened by illegal pet collectors** in previous years, very little is known about its natural history, and even less of its current population status. The small size of the island, predation by introduced cats, and illegal collecting have put the species' survival at risk. Along with Judith Pampa (UABC master's student), Conservacion de Islas, and volunteers, we made six expeditions to the island from May to October 2019 in search of this snake.



Our surveys involved 30 days of search throughout the island. **Only eight individuals were found**, from which we obtained microhabitat and morphological data. The few individuals observed indicate low abundance and hence, the need to take conservation actions that allow the recovery of the population. Project in collaboration with GECI, SDNHM, USGS.



# Reproductive success and current habitat conditions at California Least Tern colonies in Baja California



This year we determined the current status of historical colonies of this seabird on the Pacific coast of Baja California. By assessing habitat and monitoring reproductive success we seek to promote conservation actions. Three historical sites were visited: **Estero de Punta Banda, Laguna Figueroa, and Punta Azufre, San Quintín**. Nests and chicks were counted weekly from May to August. Additionally, we placed fences around nesting sites.

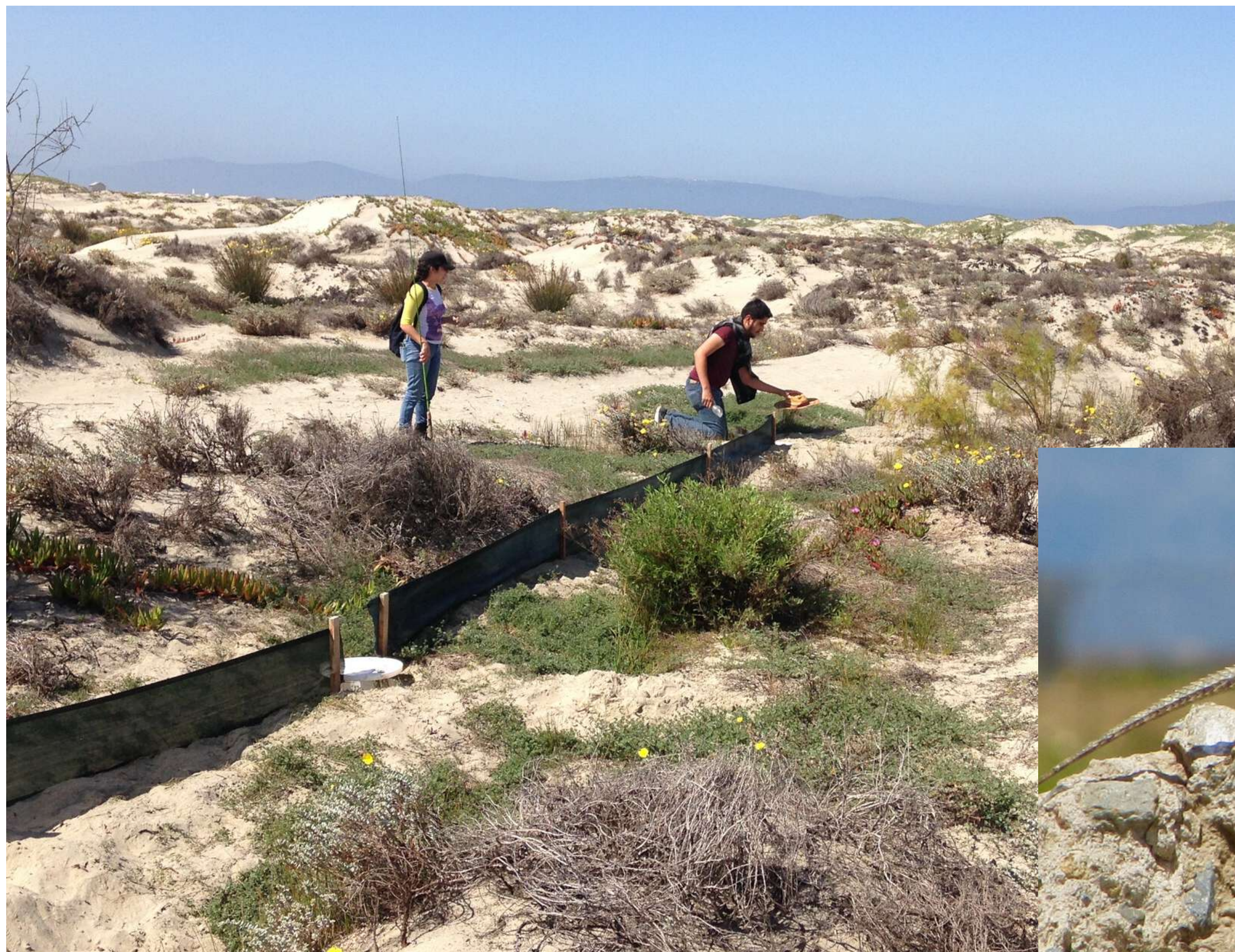
Nevertheless, there was very low reproductive success due to extraordinary tides and predators. We recommended continuing systematic monitoring for at least five years to document trends for these populations. This project was a collaboration with Pro Esteros.



# Amphibian and reptile diversity at Estero de Punta Banda



This project was carried out with the purpose of documenting the amphibian and reptile fauna of **Punta Banda Estuary, a Ramsar site** near Ensenada, Baja California. The site is under threat in various ways. The amphibians and reptiles there have not been formally studied, so we wish to catalogue all species present and identify their conservation needs. In total, 14 surveys were done and **14 species were recorded**. Additional records from scientific collections increased the number of species present to 23. This project was a collaboration with Pro Esteros and the UABC Herpetology Club.





# Current nesting status of the Tricolored Blackbird in Mexico



Enrique Zamora

The highly colonial Tricolored Blackbird (*Agelaius tricolor*) is on **the verge of extirpation in Mexico**, where it occurs only in Baja California. In 2019, Sonoran Joint Venture provided funding for extensive surveys. Aerial surveys were conducted thanks to the support of LightHawk, with the intention of locating wetlands and potential nesting sites. Subsequent ground surveys were conducted throughout the historical range in Baja California. Nesting was confirmed at only one site near the US-Mexico border.

Drought, industrial agricultural practices (e.g. increased groundwater pumping), and residential development are undoubtedly having an impact, but declining numbers in the core of the species' range in California, **make conservation efforts in Mexico mostly futile**. This project was a collaboration with CICESE, Terra Peninsular, and bird experts Richard Erickson and Enrique Zamora.



# San Basilio Expedition and Bioinventory

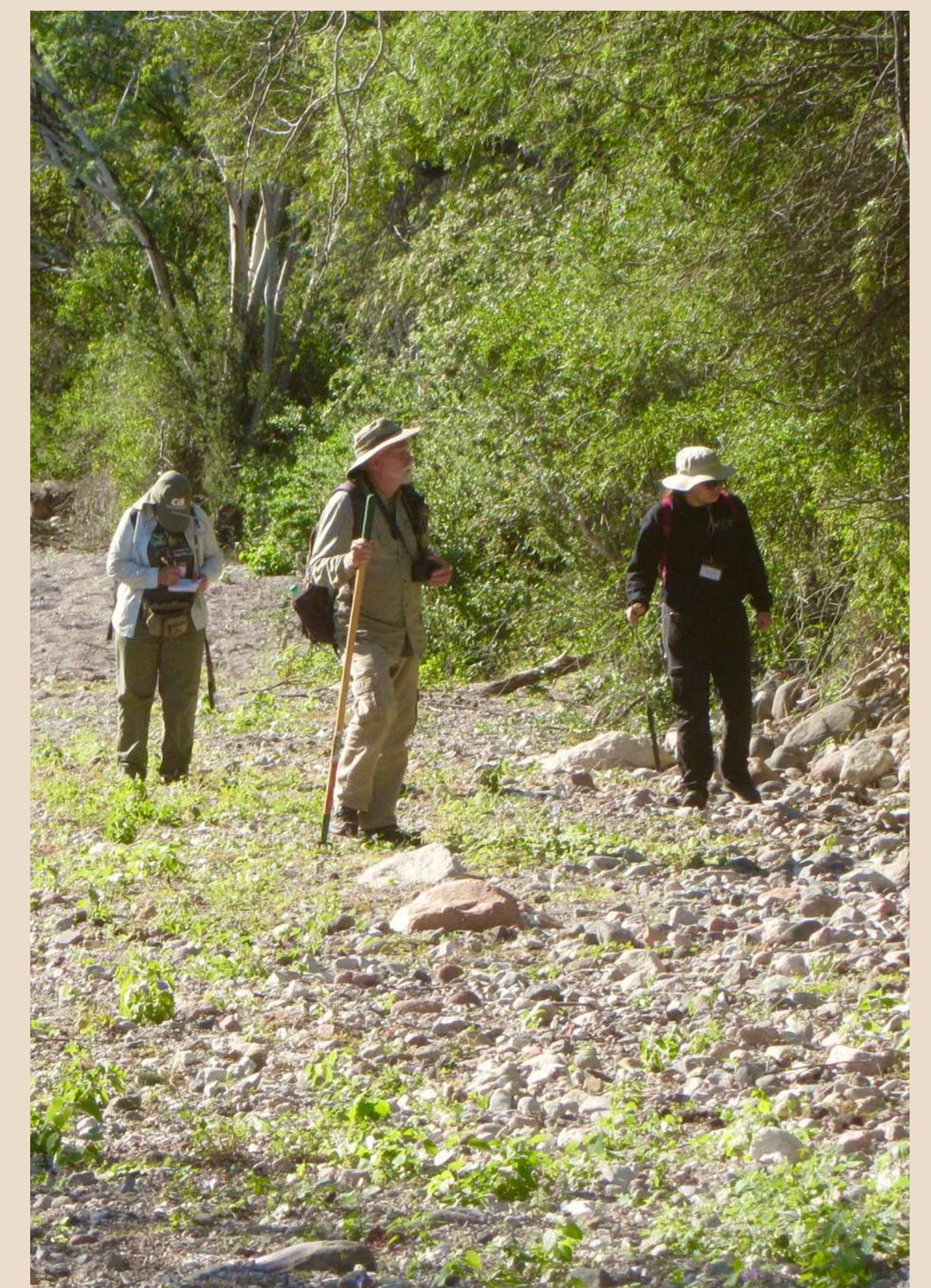


The San Basilio Bay area, north of Loreto, Baja California Sur, has a mix of dunes, beaches, riparian, and estuary habitats and interesting geological formations. Because it is under pressure from proposed mining and mega-development, it is important to identify conservation targets in the area. Because the area is little known to science, the first step was to investigate the biodiversity of the area and then identify conservation priorities.

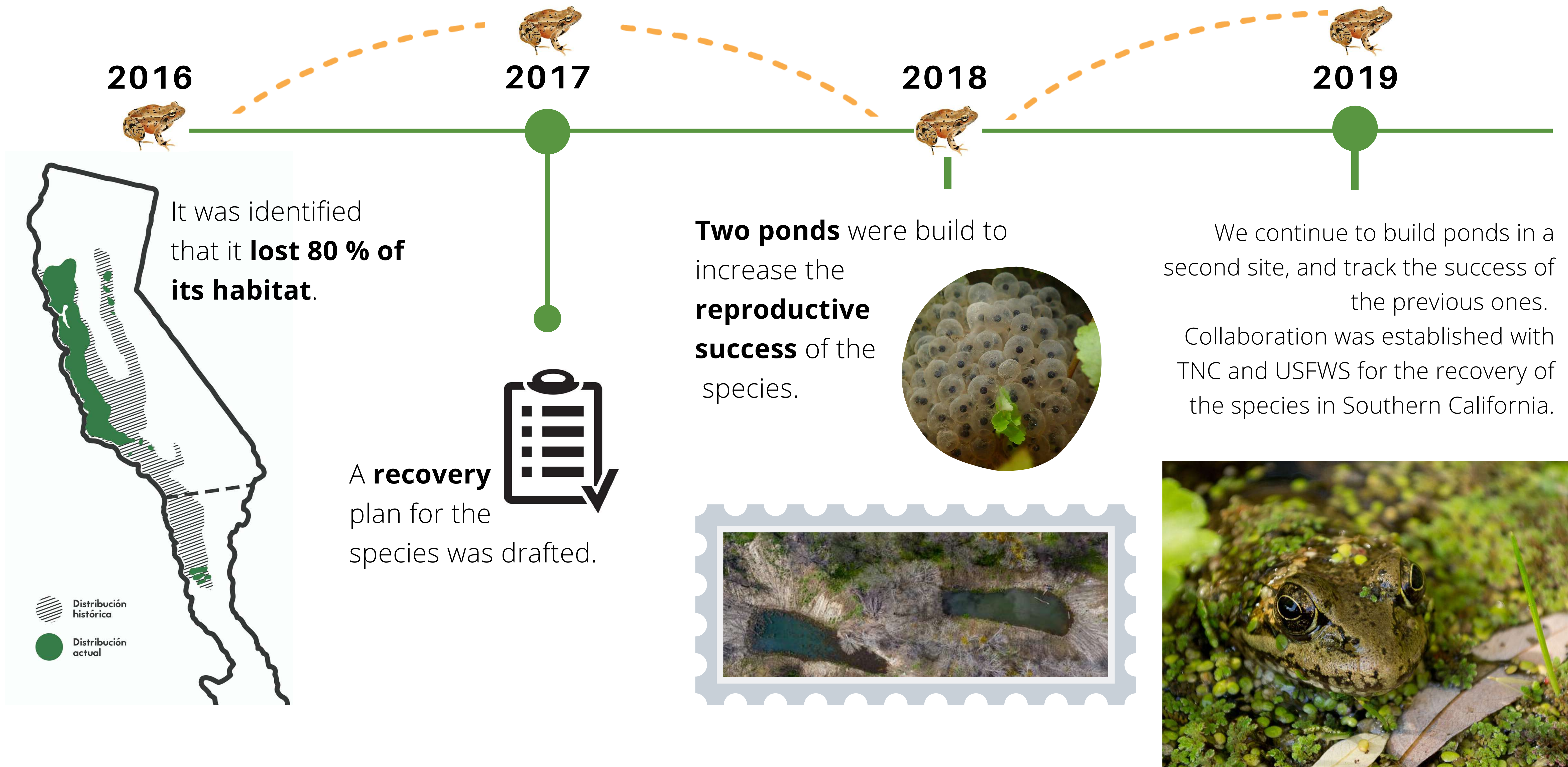
For this, more than 40 scientists gathered, including Fauno staff members who spent seven days documenting the biological richness of different habitats. In our case, we participated with the team of herpetologists to document the diversity of amphibians and reptiles, of which we found 30 species of amphibians and 28 of reptiles. This information will help us propose appropriate conservation strategies.



Isaí Domínguez Guerrero



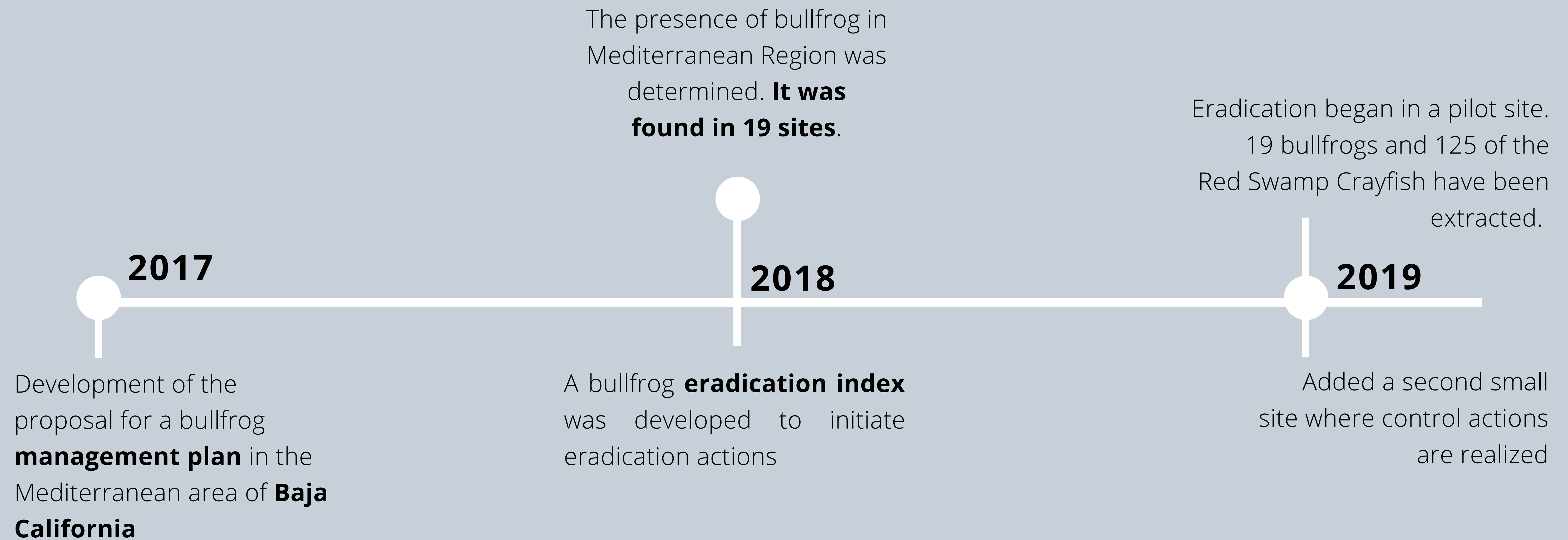
# California Red-legged Frog recovery plan



# Bullfrog control plan in the Mediterranean region of Baja California



This project has a long-term objective of restoring wetlands in the Mediterranean region of Baja California. This project is a **collaboration with The Wildlife Project**.



## 2020

Next year we will continue with the surveys of native fauna and continue the eradication of bullfrog in two sites, and extend these actions to other sites such as La Mision.



J.A. Soriano

# Citizen science



We promote and support projects related to bringing society in general towards science and involving them in the knowledge of biodiversity, as well as contributing to scientific knowledge.

We hosted **9** **workshops** on the use of the platform  to **276** people in **3** cities in Baja California

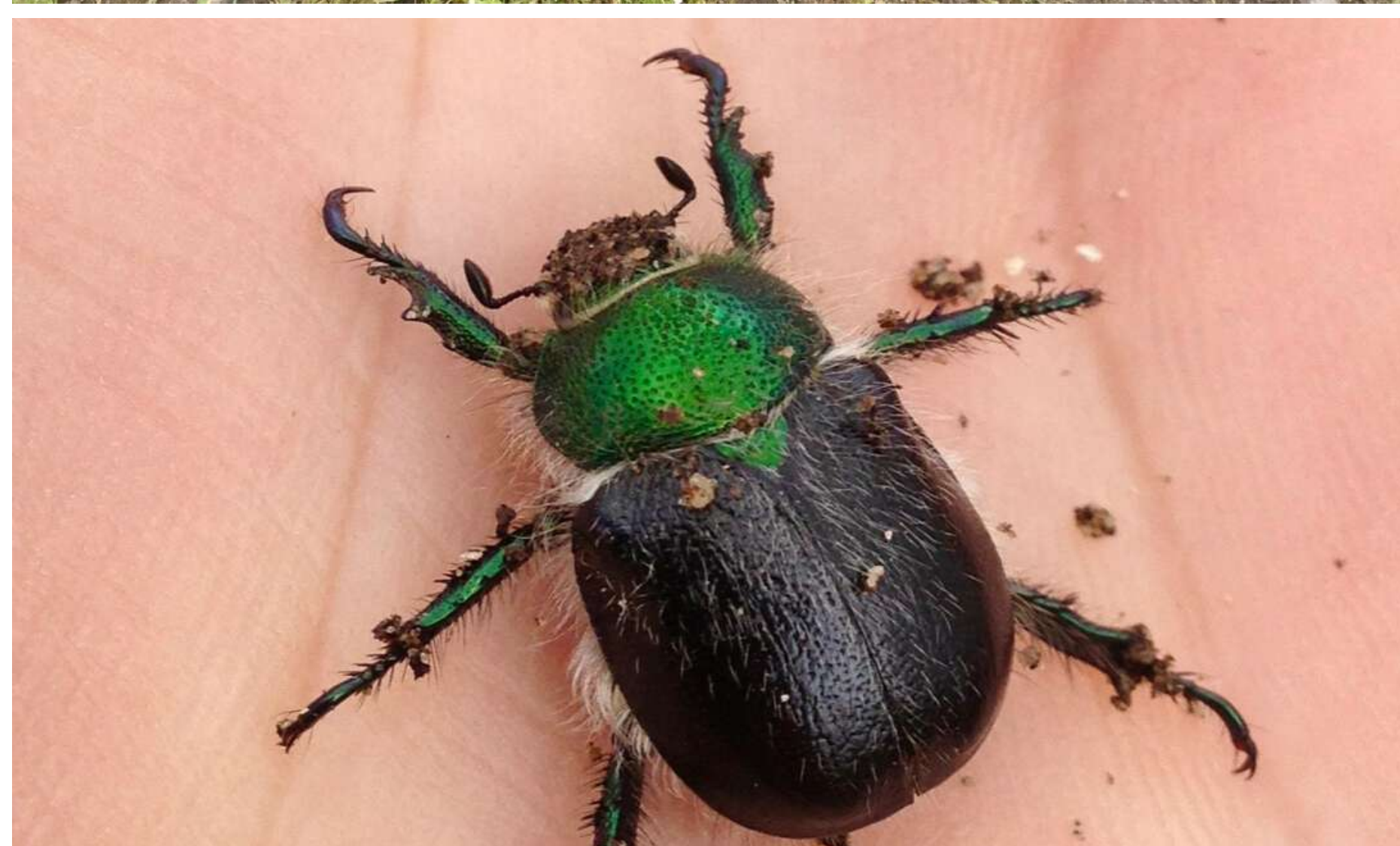
Participate in **3** **BioBlitz**



# Border BioBlitz



This event is an effort to **record biodiversity** of the **border area** between Mexico and the United States. It is a coordinated event by the New Generation of Sonoran Desert Researchers (N-Gen), which takes place every year in March.





# City Nature Challenge 2019



The City Nature Challenge is a worldwide competition to register urban biodiversity by **photographing nature**, for a period of 4 days. It is an event coordinated by the California Academy of Sciences and the Los Angeles Natural History Museum. In 2019, **160 cities from 27 countries** around the world participated, and for the first time we participated representing Ensenada.



**11,173** observations

4th Place nationally  
26th Place worldwide



**1,402** species

3rd Place nationally  
29th Place worldwide



**250** participants

6th Place nationally  
45th Place worldwide



PROYECTO EN COLABORACIÓN:



# 2019 BIO BLITZ

📍/La Misión



This event bring 7th grade students to closer to their community's biodiversity. With the collaboration of local researcher, we gave workshops to 60 students from Telesecundaria No. 4 of La Misión. Guided hikes were conducted to **observe and photograph the local fauna and flora**. At the end a mural was constructed with the best photographs taken by the kids. This event was supported by Nat Geo Explorer Led Youth Outreach program. We ranged **1st place among 22 participating cities in the world.**



1,204 observations

259 species

60 participants

Francisco Buelna





# Outhreach materials

Thanks to the funding from several research projects, we have designed and printed different environmental education materials with the aim of informing society about the projects and species we work, the threats and ways in which they can be involved or support conservation.

## Informative signs

### RANA DE PATAS ROJAS

California Red-legged Frog  
*Rana draytonii*

Es la rana nativa más grande en el oeste de Norteamérica. Este sitio alberga una de las cuatro poblaciones remanentes en México, y es por ello que se están realizando acciones de conservación para evitar su desaparición.

This is the largest native frog species in western north America. This site supports one of four remaining populations in Mexico, and this is why conservation actions are being conducted to avoid its disappearance.

Coloración rojiza en la parte ventral de las patas.  
Red coloration under the hind limbs.

Pliégue lateral desde el ojo hasta las patas traseras.  
Lateral fold from the eye to the hind limbs.

Hocico puntiagudo.  
Nose is pointy.

Dedos alargados.  
Long toes.

**TAMAÑO**  
SIZE  
Llegan a medir hasta 13 cm.  
Can grow to 5 inches length.

**ALIMENTACIÓN**  
DIET  
Principalmente de insectos, pero debido a su tamaño pueden consumir roedores y ranas pequeñas.

**HÁBITAT**  
HABITAT  
Pozas, arroyos, humedales, lagunas.

**ESTATUS: AMENAZADA**  
STATUS: THREATENED  
Ha perdido 80% de su distribución los últimos 50 años.  
It has lost over 80% of its habitat in the last 50 years.

### FUNCIONAMIENTO DE UNA POZA

POND FUNCTION

Esta poza provee hábitat de apareamiento, hábitat para el desarrollo de larvas, y zonas de refugio y alimentación en sus primeras etapas del crecimiento, hasta que puedan migrar al arroyo y a otros hábitats cercanos.

This pond provides breeding and tadpole development habitat, feeds and shelters developing frogs until they can emigrate to the stream and nearby habitat.

**HÁBITAT**  
Las pozas brindan áreas de alimento y descanso a innumerables especies.

**HABITAT**  
Ponds provide areas of feeding and rest to many native species.

**INSECTOS**  
Limpien el agua y proveen alimento a anfibios y aves nativas.

**INSECTS**  
They clean the water and provide food to native amphibians and birds.

**PUESTA DE HUEVOS**  
La rana de patas rojas utiliza vegetación poco profunda para la puesta de huevos.

**EGG LAYING**  
Red-legged frogs use shallow vegetation to attach their eggs.

A lo largo del año la poza tiene agua cambiante, lo que permite a diversas especies de plantas, reproducción y crecimiento.

Through the year water levels change, allowing different species to use the pond to feed, breed, and to rest.

Considera apoyar la conservación de esta especie y de otras especies en situación similar, y recuerda que cada día tomamos decisiones que impactan en la naturaleza; por favor decide sabiamente.

Consider supporting the conservation of this species, and other species in similar situations. And remember that each day we make decisions that impact nature. please choose wisely.

¿CÓMO AYUDAR? WHAT YOU CAN DO

RECISTRO DE ESPECIES RECORD SPECIES

DONACIONES DONATIONS

VOLUNTARIADO VOLUNTEER

Logos: Fauna, theNAT, Sonora, México, Biotopo, USGS, JUI, MELINDA, EL NDO, DONACIONES, VOLUNTARIADO

## Snake Guide



### Cascabel moteada

*Crotalus pyrrhus*

1.3mts

Cascabel

Cabeza de forma triangular

Cola blanquecina con bandas negras irregulares

Cuerpo de color café-rojizo con manchas irregulares de color blanco y negro

## Brochures

# RANA DE PATAS ROJAS

*Rana draytonii*

Soy la rana más grande en el oeste de Norteamérica. Este rancho alberga una de las cuatro poblaciones remanentes en México, y es por ello que se están realizando acciones de conservación para evitar mi desaparición.

¿DÓNDE VIVO?

Me puedes encontrar en pozas, arroyos, humedales y lagunas.

SOY PARTE IMPORTANTE DEL ECOSISTEMA

Me alimento de bichos que pueden afectar tu bienestar. Sirvo de alimento para otras especies. Mis renacuajos ayudan a mejorar la calidad del agua.



### TORDO TRICOLOR

*Icterus tricolor*

Estado de conservación: Preocupante

Características

- ROJO BLANCO
- Pico: negro, grueso y afilado.
- Color: negro con tonos de color rojo y blanco.
- Las machos tiene el dorso café, con rayas del mismo color en el pecho.
- Tamaño: 18-24 cm

Habitat

- Praderas de
- Humedales
- Lagunas con
- agua

Andación

Temporada: Marzo- agosto.

Amenazas

- Pérdida de hábitat
- Condiciones climáticas extremas
- El uso de herbicidas
- La contaminación del agua.

Este ave es el único lugar donde nació en 2019. #torotrictorlms

## Stickers



Yo cuido la **Fauna Nativa**  
faunadelnoroeste.org

# Participation in workshops, congresses and publications

## 6 Outreach events

- Talk about amphibian and reptile conservation in Baja California in San Felipe
- Talk about biodiversity and the use of iNaturalist
- Talk about the conservation of the California Red-legged-frog in Baja California at Cafe Kaori
- Talk about the City Nature Challenge at Cafe Kaori
- Grítalo III
- Environmental Fair in Bahía de los Ángeles

## 4 Workshops and research talks

- Workshop Climate Science Alliance, Baja Working Group
- Talk about bullfrogs in Baja California and Fauno projects, at The Nat
- SSPM National Park Climate Change Adaptation Program
- Update of the Management Plan of the SSPM National Park

## 2 Scientific Congresses

- VI National Congress on the Research and Conservation of Amphibians and Reptiles, Zacapoaxtla, Puebla
- XIII National Congress Of Molecular And Cell Biology Of Fungi, Ensenada, Baja California

## 4 Research articles and notes

- *First record of incidentals mortality of Uta stansburiana in a wind farm in Mexico*
- *Effects of climate change on a wide distributed thermophilic lizard species (Dipsosaurus dorsalis): an ecophysiological approach*
- *Predation on Flat-tailed Horned Lizard (Phrynosoma mcallii) by Loggerhead Shrike (Lanius ludovicianus)*
- *Hemidactylus turcicus Geographic Distribution*





# Human resources

## Bachelor's and Master's Students

Fernanda J. Manrriquez Gómez  
Mayra L. Flores Cota  
Alexia Encinas Moreno  
Christian Valdez Ibarra  
Zhenia Y. Sainz Beltrán  
Judith T. Pampa Ramírez

## Social service

### Biology, UABC

Fernanda J. Manrriquez  
Karla E. Sánchez  
Jonathan A. Villarreal  
Melba Álvarez

### Communication sciences, UABC

Jazmín Benítez Reyes

## Volunteers

- Fernanda Manrriquez
- Jonathan Villareal
- Cristian Osorio
- Darcy Silva
- Frank Santana
- Judith Pampa
- Clark Mahrtdt
- Maximiliano Rivera
- Nicodemo González
- Santiago Valdez
- Karla Sánchez
- Noriko Caballero

# Collaborators

**Companies.** Hollie Bollen, JoJo Rústicos, Jardín de Tara, Rancho Madrigal, Rancho Meling, Rancho El Potrero, Rancho Ciénega Redonda, Rancho Angélica, Cafe Kaori.

**Sponsors in event.** Café La Churrería, Hollie Böllen, Cremería los Globos, Fiesta Planeta Verde, Hogaza Hogaza, La Casa del Acero. Grupo musicales: Pescado, The Bungalows, Paul Ingram and the K-99 Electric Band.

**People.** Alfredo Navarro, Imelda Choy, Esthela Solis, Concepción Anaya, Familia Martorell, Rolando Arce, Aldo Guevara, Tomas Rivas, Liliana Ortiz, Ivan Manríquez, Francisco Buelna, Cesar Garcia, Frank Santana, Elia Benitez, Sayuri Martínez, Denis Navarro, Sally House, Darlene Boza.

**Institutions.** The Wildlife Project, San Diego Natural History Museum, Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, Caracol Museo de Ciencias, Pro Esteros, Pronatura Noroeste, Club de Herpetología de la UABC, Sonoma Mountain Preservation Foundation.

**Thank you!!!**



# Members & Donors 2019



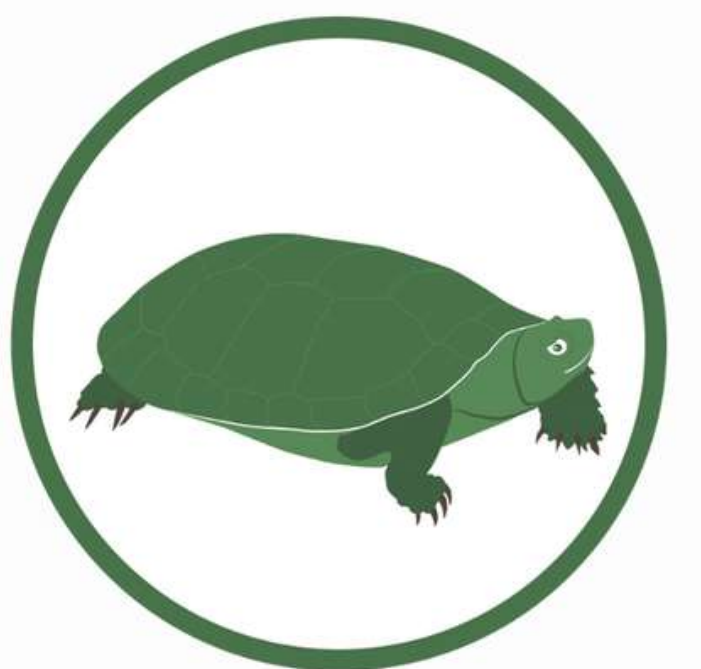
## Golden Eagle

Jeff Alvarez, Bradford Hollingsworth, Robert Fisher, Gonzalo de León Guirón, María Inés Tiznado Cota, Lauro E. Peralta Acuña, Jeff Wilcox, Andrea Adams, Bill & Mary Clark



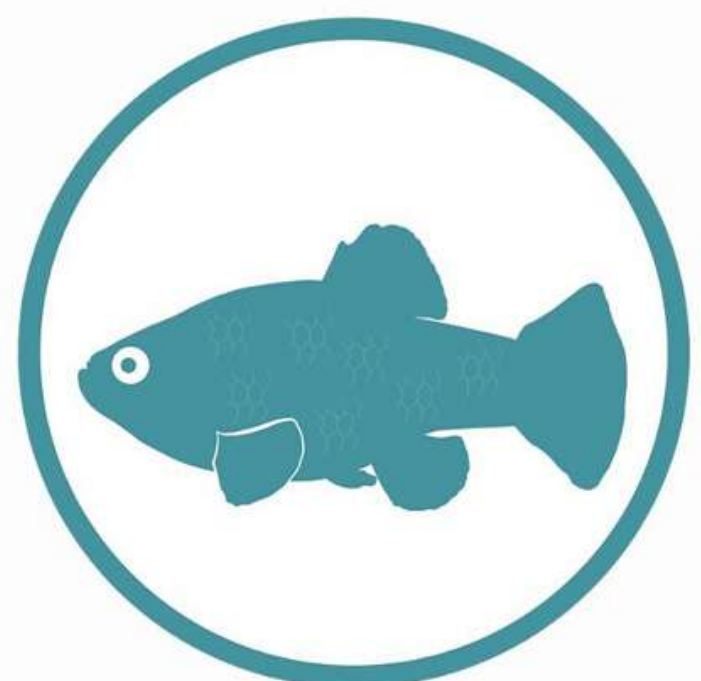
## California Vole

Richard Erickson, Dale Powell, Sula Vanderplank



## Pond Turtle

Ana Gatica Colima, Joaquín Ramírez Ramírez, Roy West, Lauren Elder, David y Valerie Ward, Casey Richard



## Desert Pupfish

William Levine



## Bumblebee

Edith Andrea Navarro Tiznado, Mariana Zérega Contreras, Natalia Rangel, Geovani Salgado, Michael Scaffidi, Victor Ávila, Rodrigo Gaitan, Brandt Muller, Jon Rebman, Liliana Ortiz Serrato, Maximiliano Rivera Merchan, Chris Vang y Henry Hwang

## Donors

Lauren C. Elder, Roy West, Anne McEnany, Clark Mahrtdt, Andrew Pattison Robert y Hannelore Lewis, Jonathan Campbell, David Ward, Jonathan Richmond, Kathy Musial, Selene González, Jeff Alvarez, Alan Harper y Carol Baird.

## Institutions that financed our projects.

JiJi Foundation  
National Geographic Society  
Next Generation of Sonoran Desert Researchers  
International Community Foundation

**“Thank you all for influencing big changes in favor of the conservation”**

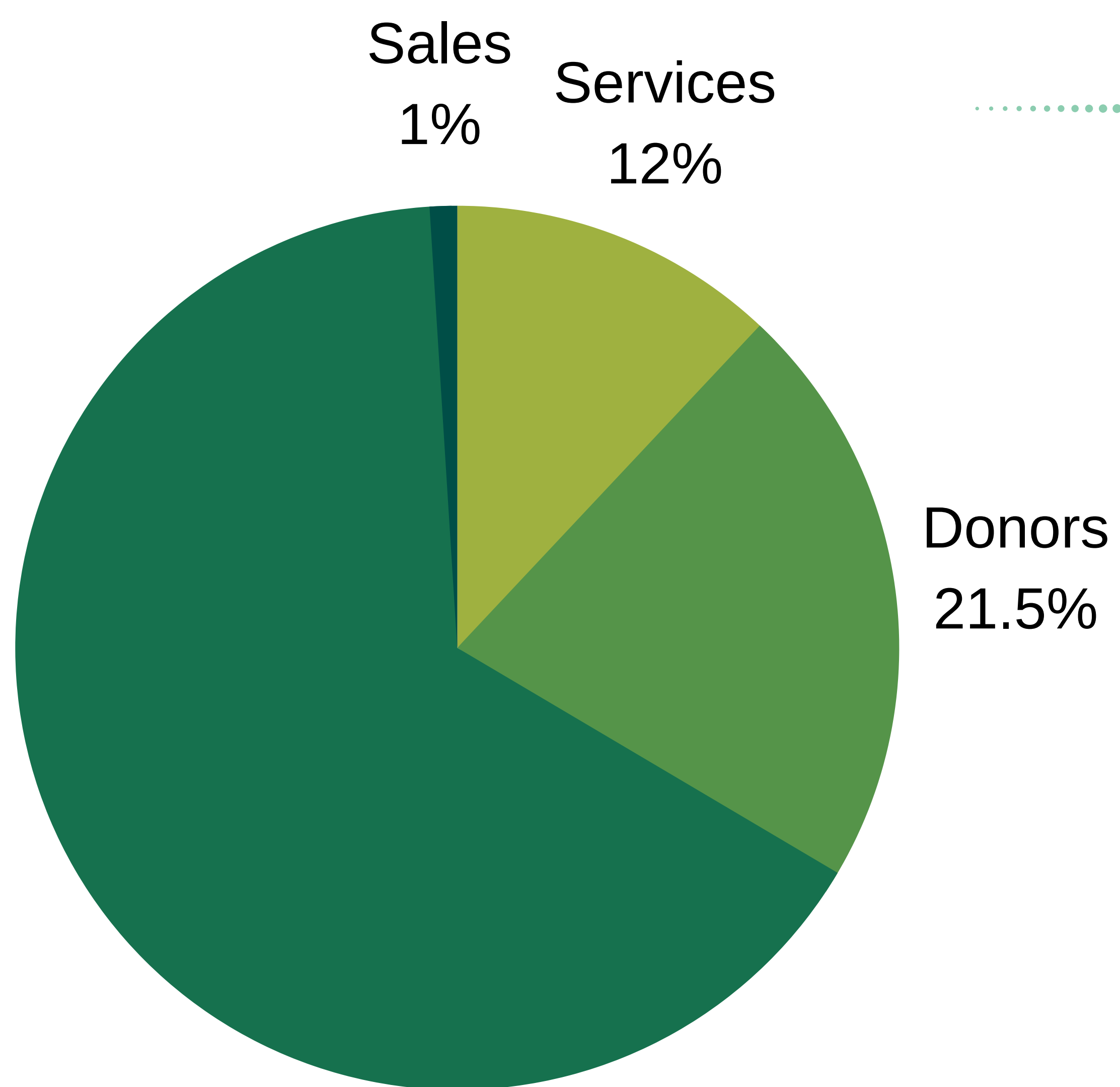


# Financial Report

Period from January to December 2019.

Exchange rate: 18 pesos per dollar.

Value in US dls,



<b>Balance 2018</b>	<b>\$</b>	<b>30,475</b>
<b>Income</b>	<b>\$</b>	<b>59,655</b>
<b>Expenses</b>	<b>\$</b>	<b>86,750</b>
<b>Balance 2019</b>	<b>\$</b>	<b>3,380</b>





*"Investigación para la  
conservación"*

**Learn more about us and  
discover how you can  
contribute to the  
conservation of regional  
biodiversity.**

**Visit our website and  
follow us on social  
medias.**



California Red-legged Frog egg mass  
from Rancho El Potrero, SSPM