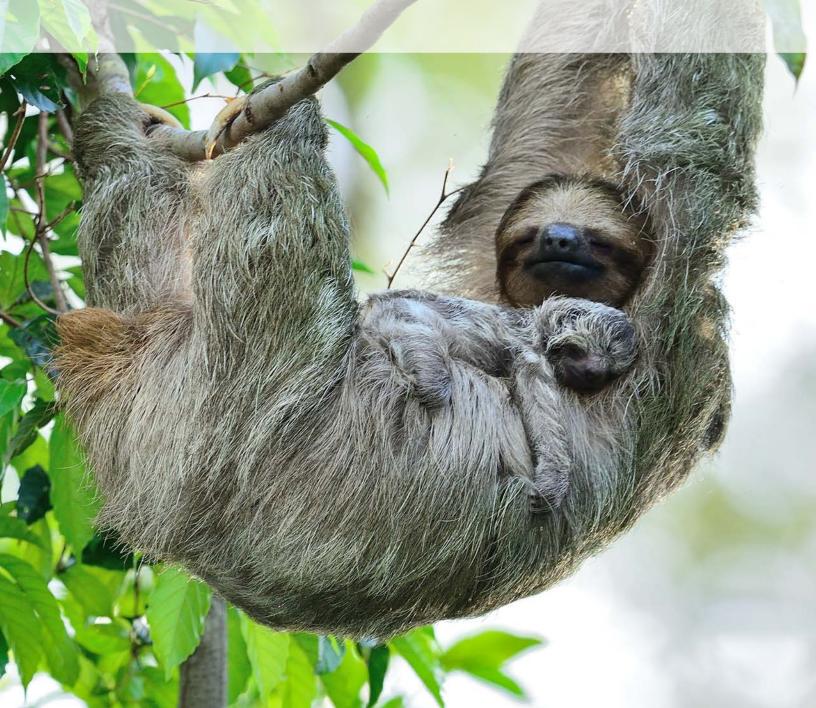


PASO PACÍFICO

MAKING CONNECTIONS FOR CONSERVATION





A Passage for Wildlife

PASO DEL PACÍFICO



Since its founding, Paso Pacífico's mission has been to restore and connect dry tropical forest and coastal marine habitats throughout the Mesoamerican region. This idea might sound ambitious, but it is both necessary and achievable. In order to address issues of poverty, climate change, and biodiversity loss, we must find ways to protect nature where people live, even in historically fragmented habitats. For over a decade we have tested our model in the Paso del Istmo biological corridor, with impressive results. Now, we are making plans to expand our impact and move closer to the grand vision of a Paso del Pacífico.

Front cover: A three-toed sloth (*Bradypus variegatus*) hangs with her baby in the Nicaraguan forest. Photo by José Gabriel Martinez Fonseca.

Dear Friends.

This is an exciting time at Paso Pacífico. Last month, we held our annual board retreat in the dry tropical forest of El Salvador. There, we met with individual landowners and local conservation groups who have made significant progress in protecting El Salvador's biodiversity.

During our time, we noticed many parallels to our work in Nicaragua. Poaching has decimated animal populations in many dry forest patches, but communities are coming together to protect wildlife like nesting sea turtles. One major difference from where we work in Nicaragua is the topographical variation in El Salvador, leading to diverse ecosystems in a small area. Similar to Nicaragua, El Salvador has very rich marine areas, yet there are limited conservation efforts and little information about the marine biodiversity there. As we sustain our programs in Nicaragua during turbulent times, we are uplifted by new opportunities to replicate our model and expand biological corridors across the region.

Thanks to your support, we can be strategic and proactive during this time of change. We are grateful to you and we want to keep you up to date with the latest developments. Stay tuned in the coming months as we roll out new programs in new locations!

Thank you,

Sach

Sarah M. Otterstrom, Ph.D. Founder & Executive Director







Marlon Sotelo, M.Sc. Biodiversity Coordinator Paso Pacífico

Marlon is a Nicaraguan biologist who leads our programs focused on animals. He holds a master's degree in tropical forest management from the Centro Agronómico Tropical del Investigación y Enseñanza (CATIE) in Costa Rica.



Miguel Ordeñana, M.Sc.
Carnivore Biologist
Natural History Museum of
Los Angeles County
Miguel loves urban mammal ecology and
environmental outreach. Since 2012,
he has served as a scientific advisor to
Paso Pacífico's jaguar programs.

FROM THE FIELD

Since we first photographed a jaguar eight years ago, much has changed. At that time, jaguars had not been seen in the Paso del Istmo in over twenty years, and large forest mammals were a rare sight. Now, we see more signals of better forest health every month, both in person and through the lenses of the dozen camera traps strategically positioned in the forests and farmland of the Paso del Istmo. With each batch of videos, the story of returning biodiversity continues to unfold.

The story is one of resilience and recovery. Over time, we have seen an increase in wildlife sensitive to hunting, including peccaries, armadillos, and the large forest rodents known as pacas. We have also documented the greater grison, the first recorded observation of this species in the Paso del Istmo. This carnivorous mammal is related to other mustelids such as the badger and wolverine and is considered threatened in Nicaragua due to its rarity.

Carnivores rebound as the number of prey increases. When we began working in the Paso del Istmo, white-tailed deer populations were so depleted from hunting that they were nearly impossible to detect. Now, we often encounter their tracks on trails and capture them on camera. The white-tailed deer of Central

America is the same species as the North American deer, but it is much smaller and only half the weight of its northern cousin. While these cervids are somewhat common in the United States, they have been rare in the Paso del Istmo. Their return is crucial for the recovery of the jaguar.

Every prey animal, including small mammals such as the forest rat and the agouti, is an important food source for predators. In just the past two months, we have captured numerous images of ocelots and margays. These strikingly beautiful felines are yet another reason to believe that these degraded ecosystems can return to health.

Perhaps the most impressive sign of recovery is the reappearance of the region's largest terrestrial mammal, Baird's tapir. For the past two years, we have photographed this endangered mammal within the northern border of the Paso del Istmo biological corridor. This large nocturnal forest grazer, which can weigh up to 800 pounds, is both shy and slow moving. Tapirs are vulnerable to hunting by humans and large predators such as jaguars. Its populations take a long time to recover since the gestation period for a tapir is 400 days! Although we have few records of tapirs in the Paso del Istmo, their mere presence is a sign of hope.



Camera traps and their footage help teach young Junior Rangers about the wildlife of the dry forest ecosystem.



Ocelots like this one are appearing more often in our camera traps, signaling increased prey populations and a healthier forest.

It's hard to pinpoint a single factor leading to such a dramatic increase of wildlife. We believe that direct action by landowners and Paso Pacífico's community rangers have played an important part. In the areas where the rangers patrol and monitor wildlife, we have seen significant increases in populations of endangered black-handed spider monkeys and yellownaped Amazon parrots.

Habitat restoration has also made a difference. In the past decade, we have planted more than a million native trees in the Paso del Istmo. With our new Million by 2020 campaign, we have pledged to plant that many more. Our tree-planting program includes fruit-bearing trees, and so our efforts provide not only much-needed shelter but also food for wildlife.

The process of ecosystem recovery is the ultimate collaborative effort. It takes a system of supporters and partners. The Los Angeles Zoo has long been the primary funder of the jaguar and camera trap monitoring program, and we have been fortunate to receive support from others such as the USFS International Institute of Tropical Forestry, the Disney Conservation Fund (for arboreal camera trap monitoring of primates), the Woodland Park Zoo, the Association of Zoos and Aquariums, and the Iris and Henry Englund Foundation.

You, the donors, are such a big part of this recovery. From supporting our reforestation programs to sharing our wildlife posts online, you help build momentum. In thanks, we invite you to watch some recent camera trap videos at pasopacifico.org/2018cameratraps.

"The melody of the forest finds an echo in my heart."

—Rubén Darío, *Cuentos y Poesías*



The **Word** of the Season

"el verano"

El verano is the word for the dry season in Central America. This season lasts from November to April, and its drought conditions have led to unique plant adaptations in the dry forest. For example, drought-resistant succulents like cacti and bromeliads are common in the understory and many trees lose their leaves.

Stepping Up for Sea Turtles

In August, wildlife crime struck La Flor Wildlife Refuge, a legally protected reserve that contains one of just seven mass nesting beaches worldwide for olive ridley sea turtles. During nesting season, thousands of sea turtles come ashore to nest, and government soldiers usually protect them from egg poachers. However, Nicaragua has been experiencing political and civil turmoil. In August, the Nicaraguan government left the beach completely unprotected when thousands

of turtles were coming in to nest. Sadly, poachers who came from inland cities took advantage of the situation. These people (see right) plucked hundreds of sea turtles from the waves and forced them to lay eggs outside of the nests. While stealing the eggs, the poachers badly mistreated the turtles and even killed several of them.

These illegal acts of cruelty horrified people worldwide. A video of the event first shared on Facebook was watched millions of times after being picked up by the *Daily Mail*, a major British newspaper.

During these difficult times in Nicaragua, more people need dignified jobs. Community rangers are an effective line of resistance against attacks on wildlife. We wanted to hire more sea turtle rangers, but how?

We launched an emergency campaign to raise money for our ranger program. Thanks to our supporters, and with matching funds from SEETurtles.org, we raised over \$8,500—doubling our goal. As a result, we have hired two additional rangers from local communities to protect sea turtles full time.







RECENT HIGHLIGHTS

- More than 20 Junior Rangers in Ostional helped approximately 400 newly hatched sea turtles reach the ocean this September. Some of these hatchlings were critically endangered hawksbill sea turtles.
- With more than 5000 oysters under production, the Ostional women's oyster cooperative made another win for conservation: together, they stopped foreign commercial fishers from harvesting natural oyster beds in the area.
- Ruchi Patel, a graduate student from Penn State University, spent two months this summer researching new corridors in El Salvador. Her research culminated in a trip to the country, where she met with experts and potential partners. We are grateful for her help and look forward to sharing the results of her work in the future.
- We have planted the first 1350 trees in our Million by 2020 campaign! An additional 7000 trees have been obtained from our partners at Lost Canyon Nature Reserve and are ready to plant. You can help us plant these by donating to the campaign here: tiny.cc/MillionTrees.
- Our work is drawing increased attention from news media. The environmental news outlet Mongabay featured our women sea turtle rangers. Major bee magazines recently profiled our bee programs, described in our last seasonal newsletter. KCLU, a major Los Angeles radio station, just featured our jaguar project with the LA Zoo.

- Paso Pacífico was pleased to participate in the IX International Parrot Conference. Over 20 of the world's foremost parrot experts presented. A highlight was learning from Dr. José L. Tella. His twenty-year research shows that parrots are critical ecosystem engineers in tropical forests. Dr. Tella's findings underscore the ecological value of our yellow-naped Amazon conservation efforts.
- The Paso Pacífico ranger program was awarded a grant from the Thin Green Line Foundation. The grant includes crucial first aid supplies and new uniforms for our ranger team. It is an honor to receive this recognition from a group that supports wildlife rangers around the world.
- We were delighted when two familiar sea turtles came ashore to nest. These female green sea turtles had visited our rangers once before, in 2012. At that time, our rangers tagged the turtles and so we quickly recognized them when they arrived this season. We are happy to report that they have safely returned and seem to be thriving.
- Paso Pacífico participated in the International Coastal Cleanup for the tenth year running! We are still tallying the results coming in from across the country.
- Deployment is underway for the InvestEGGator egg. One of these artificial sea turtle eggs was recently stolen from a nest in Costa Rica and tracked all the way to a market in the capital city.







DONOR SPOTLIGHT

Vana Guidotti and Kevin Wells

Paso Pacífico is truly fortunate to have the friendship of Vana Guidotti and Kevin Wells. The two have supported our mission for nearly a decade and were drawn to it because of their love for the outdoors and the environment. What began as casual support for our programs has turned into a strong belief in our mission and a consistent pattern of giving.

The couple cares deeply about animals and their welfare, both abroad and at home. Their two dogs, Wilson Larkin Wells and Casey Monroe Wells, are an important part of their family. They adopted Wilson from a local animal shelter and also gave Casey a forever home when she needed it.

Kevin and Vana are in careers that rely heavily on science, and they appreciate Paso Pacífico's science-based approach. Kevin is a mechanical engineer and Vana is a physician of emergency medicine who has been practicing throughout Ventura County for over 20 years. Last year, one of her patients supported our work as a way to honor her outstanding care. We are delighted to have helped him thank her in this manner.

Vana has been particularly interested in our Junior Ranger program, where we have provided young children with binoculars in exchange for their slingshots. During a recent visit with Vana, she stated, "It's such a simple idea, but it has a profound and lasting impact. These kids really are going to be the environmental leaders of tomorrow."

We are grateful to Vana and Kevin. Their sustained gifts remind us that individuals can make a big difference for good.

Top: Kevin Wells (left) and Vana Guidotti (right). Photo courtesy Vana Guidotti and Kevin Wells.

Middle: To join the Junior Ranger program, children exchange their slingshots for binoculars.

Lower: Binoculars enable Junior Rangers to participate in citizen science and experience nature at a closer, more joyful level. Photo by Bismarck Picado.



Who Funds Our Projects?

The Waitt Foundation has supported Paso Pacífico's efforts to develop women-run oyster aquaculture. In 2014, they awarded us a Rapid Ocean Conservation (ROC) grant that enabled us to explore aquaculture with the women fishers of Ostional. Based on the great potential found in that first phase, our partnership has grown to include technical training and support for two women's oyster cooperatives.

Sustainable fisheries are key to the Foundation's mission to restore and protect ocean health. The Waitt Foundation is a unique partner because it works closely with grantees to provide technical assistance, give strategic advice, and connect them with cutting-edge marine science. For example, they helped Paso Pacífico develop strong relationships with aquaculture researchers from USC and Santa Barbara Mariculture. These partners provided the women fishers with specialized training that enabled them to pilot new ocean farming techniques.



DID YOU KNOW?

- Mangrove trees are extraordinary: they can survive in saltwater, freshwater, and even no running water during seasonal droughts.
- Every year, Paso Pacífico monitors migratory birds in mangroves in partnership with USFS-IITF. We are using this data to build support for protecting mangrove sites.
- Hawksbill sea turtles, reef fish, and other wildlife thrive in mangroves because they provide nutrient-rich habitat with many places to hide.
- Mangroves store carbon, help filter pollutants from inland, and even buffer coastlines from natural disasters.





CELEBRATING SEA TURTLES

We recently celebrated our second annual Turtle Friend Beach Party, held in Santa Barbara, California. Guests had fun in the sun playing beach games, exploring the touch tank, and instant messaging with Paso Pacífico turtle rangers. Chatting with rangers in Nicaragua was made possible through LetzChat, a local company that provides simultaneous translation during digital conversations. Turtle Friend inventors Matson and Jonas, now II, presented a humorous skit about how Turtle Friend was founded. Attendees also enjoyed an authentic Nicaraguan meal and learned about the InvestEGGator.

Once an eight-year-old's dream, Turtle Friend is now a growing movement, connecting people from all over the world to sea turtle conservation. Thank you for helping spread our message and for being a Turtle Friend!



THIS SEASON'S EVENTS

Follow us on social media (@pasopacifico) and sign up for our e-newsletter to stay up to date.

September 20: International Coastal Cleanup, Paso del Istmo, Nicaragua

October 4: Reception—A Portrait of Paso Pacífico. Santa Barbara. California

October 13: Paso Pacífico tables at Fall Wildlife Conservation Expo, San Francisco

November 13: Dr. Otterstrom presents to the Ventura Audubon Society, Ventura, California

November 21: Paso Pacífico presents during the Mesoamerican Parrot Symposium, Panama City

November 25: Paso Pacífico presents during the Mesoamerican Primate Symposium, Panama City

November 27: Giving Tuesday, online event

January 4–5, 2019: Christmas Bird Count, Paso del Istmo, Nicaragua



THANK YOU, RECENT DONORS!

Tamara Adams
Wolfgang Bechstein
Linda Beers
Felice Berenson
Florence Blecher
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Nan Busse & Tobey Kaplan
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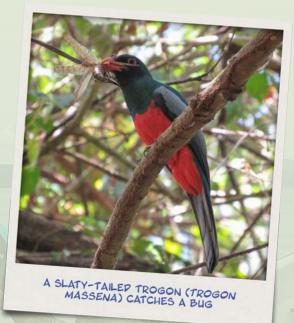
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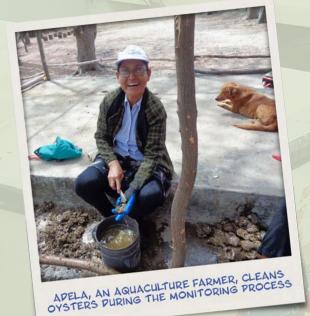
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Patricia Wells-Turnage
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Michael Whitaker
Roger Williams
Kim Williams-Guillén
David Wolstencroft
Susan Wolstencroft
Eliza Woolley
Ginger Woolley

This list includes those who supported us from mid-June through October 2018.



DISCOVER YOUR POWER TO SAVE NATURE!



INTRODUCING LAURA REYNOLDS AND BEN FRYER

Earlier this year, Laura Reynolds, a medical student, and Ben Fryer, a lawyer, celebrated their wedding with family and friends in the high sierras of northern California. Ben served in the Peace Corps for two years in Nicaragua and has a degree in forestry. Laura previously worked on public health projects serving communities in Honduras and Ecuador. At their wedding, they generously invited their guests to celebrate their marriage with a donation to Paso Pacífico.

We are delighted and grateful to have been included in their special day in this heartwarming way. Ben and Laura raised over \$1000 for Paso Pacífico—enough to help sustain a ranger in the field for three months! This is an example of the power you have to multiply your passion for the environment beyond your personal giving abilities.

THE SECRET: YOUR COMMUNITY

You have a quest to save nature. We have created an online platform to help you connect with friends around tropical conservation. Together, you can help save nature.



Share! Share Paso Pacífico materials, your favorite projects, your experiences in nature and in the tropics—anything your friends might like.



Plan. Decide how you will save nature. Will you donate your birthday? Race for sea turtles? Visit **pasopacifico.org/discoveryourpower** to learn how to set a goal and create your own giving page.



Invite. Invite people you know to help, either in person or through email or social media! Remember to include the link to your giving page and why their support matters.



Thank! Follow up with every person who has helped you save nature. Publicly or privately, help them know how grateful you are!

Paso Pacífico has been touched by community campaigns that have helped save nature while honoring your birth-days, anniversaries, and holidays. A big, hearty *thank you* to all of you who have stepped forward with your special occasion this year!

Birthdays

Ninoska Garcia Paz Frederick Janka Madison Wilson Lilo Zarate

Sing for America

Terry and Mary Vogt

Summer Lemonade Stand

Holly, Quincy, Violet, and Waverly

Weddings

Kim Williams-Guillén and Paul Buzzard Ben Fryer and Laura Reynolds



Making connections for conservation

USA

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FEATURED STAFF

This season, our list includes the names of our U.S. staff and collaborators, who contribute greatly to conservation.

Paso Pacífico U.S. Staff

Dr. Sarah Otterstrom

Executive Director, Paso Pacífico

Nicole Salazar

Alice O'Connor

Eliza Woolley

Interns

Jacob Farner

Ashley Clow

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