

NO BOUNDARIES AWARD

PASO PACÍFICO

Nonprofit hatches plan to save sea turtles

By Chris Officer  
Staff Writer

After getting inspiration from a couple of hit cable TV dramas, and some creative help from a Hollywood prop designer, a Ventura-based nonprofit is taking gigantic steps toward combating the poaching of vastly endangered sea turtle eggs in Central America.

As a teen, Paso Pacífico CEO Sarah Otterstrom spent time visiting family in Costa Rica, where she developed her passion for forests and the outdoors. After studying tropical biology at a Costa Rican university, and later earning her doctorate in ecology from UC Davis, she returned to Central America to study forest fires in Nicaragua. It was there Otterstrom was confronted with a different danger, one where she knew she could make a more significant impact.

What Otterstrom saw was wildlife issues, in particular sea turtles, a species that poachers destroy more than 90 percent of their nests to sell the eggs in the illegal wildlife trade. Otterstrom said in the communities where most of the poaching was taking place, there was mostly talk, but little action taken place.

This drove Otterstrom to launch Paso Pacífico in 2005, a nonprofit that focuses its work on the conservation of sea turtles and other endangered species, such as the Amazon parrot, jaguars and black-headed spider monkeys.

At first, in its efforts to protect sea turtle eggs, which are considered a culinary delicacy, Otterstrom said Paso Pacífico deployed rangers working full time to protect sea turtle nests throughout the country, even hiring the wives of local poachers to keep better tabs on nesting areas. But with a vast amount of area to cover and low resources, the organization was unable to protect a majority of the nests. With little to no concern from local government, Paso Pacífico was forced to find a different solution.

Otterstrom said a main problem was not being able to track the routes the middlemen take to transport eggs — a key component to stopping the illegal wildlife trade. The organization then came to the realization that it could, in fact, just track the eggs.

It was a brainchild of conservation biologist Kim Williams-Guillén, who said she came up with the InvestEGGator technology after seeing similar methods of tracking done in hit TV shows like “Breaking Bad” and “The Wire.” What she designed was a synthetic replica engineered to look nearly identical to real sea turtle eggs. With the help of an implanted tracking device, Paso Pacífico hoped to use the fake eggs to track poachers and their intricate routes.

At first, Otterstrom said, they started manufacturing the eggs using a mold

and a Bluetooth device to track it. But the device was too big for the egg, which also felt too artificial. That led the team to look at 3D printing and a smaller GPS technology to track the egg. Otterstrom said they then hired a Sherman Oaks-based products and sets producer for Hollywood productions to create a textured paint that goes over the egg.

“That enabled us to get the weight and the suppleness of a real sea turtle egg,” she said. “It’s a multistep process.”

Then, in 2016, Paso Pacífico was awarded by the United States Agency for International Development at the Wildlife Crime Tech Challenge in the transit category. This propelled the organization to deploy the fake egg for testing in Costa Rica. The replicas, which last one week and do not harm or damage any real eggs in the nest it contacts, were successful during testing and have since



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Paso Pacífico

Headquarters: Ventura

Industry: Nonprofit

Employees: 45

Executive Director:  
Sarah Otterstrom

Revenue: \$1.2 million

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PHOTO COURTESY PHOTO

One of Paso Pacífico’s missions is to protect 120-plus-million-year-old sea turtles from poachers by planting synthetic 3D-printed eggs that track illegal poaching.

been brought to Nicaragua and been in practice ever since.

Otterstrom said its main goal is to end the illegal poaching of sea turtle eggs, however the poachers themselves aren’t the targets. In developing countries such as Nicaragua, the community relies on exporting eggs for its livelihood. Instead, Paso Pacífico aims to uncover the middlemen in the sea turtle exchange, and teach poachers other ways to drive income, such as training farmers in aquacultural projects, teaching them how to farm oceans, and eventually turning the area’s largest sea turtle population into a tourist attraction to generate revenue.

Currently, Paso Pacífico — with nine employees — working on sea turtle preservation is the only employer in the Nicaragua fishing town it’s based in.

“Everything is centered on a biological corridor we’re looking to build,” Otterstrom said.

Operating as just a nonprofit, Otterstrom said its hands were tied as far as taking direct action against those facilitating illegal sea turtle egg shipments. But she also said she hopes to cast a black cloud over the poaching practice and detour others from continuing it.

“In our case, we’re a nonprofit and we are not law enforcement,” she said. “We

are information gatherers. We present our info to law enforcement and blow out the market through PR and marketing.”

Currently with 45 employees and around \$1.2 million in annual revenue, Otterstrom said it hopes its InvestEGGator technology can propel Paso Pacífico to new heights and make an even more significant change.

“We are hoping to develop a social enterprise and sell (our fake) eggs to other organizations,” she said. “We want to make eggs available to the public, like zoos, something to generate revenue. Hopefully, then attract some impact investors.”



# Sarah Otterstrom

*Executive Director*

Paso Pacifico

Ventura



Sarah Otterstrom is a conservation scientist and social entrepreneur who has been working in Central America for more than two decades. As a doctoral student she learned of the unique beauty of tropical dry forests and Pacific coast habitats and decided to dedicate her life to protecting them.

In 2005, she founded Paso Pacífico, a non-governmental organization that builds wildlife corridors by strengthening communities, restoring habitats, and protecting the region's most endangered biodiversity. Otterstrom was named an Ashoka Fellow in 2015. Otterstrom is currently most excited about Paso Pacífico's project supporting the women's oyster cooperative because it is emblematic of its work in habitat restoration; empowering women and children, and improving economic livelihoods.