



# LAKE TITICACA + LAKE JUNIN FROGS

The Lake Junin frog is one of the world's largest and most endangered aquatic amphibians.

## Help for Endangered Amphibians of the High Andes

The Lake Titicaca frog (LTF) and Lake Junin frog (LJF) are indicator species, which means biologists can use these animals' health to measure the condition of the aquatic ecosystems in which they live. So, when two of the world's largest aquatic frogs were classified as endangered by international conservation authorities, it became clear that these biologically important bodies of water—and their endemic wildlife—were under threat.

## Our Challenge

Denver Zoo's Peruvian field conservation efforts began in 2008 (Year of the Frog) as all of our programs begin—with painstaking research to understand the specific problems these animals are facing. Our conservation scientists found that both frog species were facing three key threats:

### #1 POLLUTION

caused by nearby mines and municipal wastewater

### #2 POACHING

for human consumption, or part of a local delicacy of frog smoothies

### #3 INTRODUCED SPECIES

including trout and the infectious amphibian fungus, chytrid

Smoothies made from blended Lake Titicaca frogs are only one of the threats facing the endangered species.



Denver Zoo field conservation staff works with local graduate students to gather data on the shores of Peru's Lake Titicaca.



# Our Solution

As a zoo-based conservation organization, we understand that long-term change requires a spectrum of holistic conservation efforts in the communities we serve. Here's a quick overview of the approaches we take to achieve conservation solutions.



## FOUNDATIONAL RESEARCH

Denver Zoo uses ecological and social science to better understand the ecology and range of human threats related to the Lake Titicaca and Junin frogs. We train Peruvian colleagues to monitor frog populations and identify which species are being sold illegally. A team led by our veterinarians documented the first case of chytrid on the Peruvian side of Lake Titicaca.



## CONSERVATION BREEDING



In partnership with Lima's Huachipa Zoo, we brought a small breeding population of 20 LTFs descended from frogs confiscated from the illegal wildlife trade, to our Tropical Discovery exhibit. More than 250 LTFs have been sent to zoos and aquariums in the U.S. and Europe.

## CAPACITY BUILDING

Ccori Ampara, a local women's cooperative, makes frog-festooned handicrafts to raise awareness and support their community.

Denver Zoo partners with key conservation authorities, from Peruvian zoos, universities and nature reserves to the International Union for the Conservation of Nature (IUCN). We were proud to co-author the first published conservation strategies for LTF and LJFs.

## LOCAL + GLOBAL OUTREACH

Our collective efforts to raise awareness through Species Awareness Days, Eco-Brigade volunteer groups and more are working! The Peruvian government has declared LTFs and LJFs as species of priority and mandated the development of regional conservation plans.

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Schools near Lake Junin involved in frog conservation efforts led by Denver Zoo and our partner Grupo RANA

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Community members engaged in frog conservation programming hosted by Denver Zoo and our partners

10M .....

LTF coins minted by the Peruvian government as part of an endangered species awareness series

## Scalable Success

Lake Junin is a globally important habitat for many species. As we continue to elevate endemic amphibians as top conservation priorities here, Denver Zoo will also expand our work with other at-risk Andean species, including Chilean flamingos. We're currently engaged with Peruvian non-profit ECOAN and Junin National Reserve, conducting critical research so that a long-term flamingo conservation strategy may take shape—and soon, take flight.

