

Invasive bullfrogs linked to spread of deadly fungus in western US

April 19 2018, by Patrick Sullivan

Scientists have uncovered a strong historical link between the introduction of the American bullfrog into the western United States and the emergence of the deadly chytrid fungus, a pathogen that has caused declines and extinctions of amphibians around the world.

Today's study in the journal *Plos One* highlights the need for states like California to adopt stronger policies protecting imperiled, native amphibians against the spread of disease from [invasive species](#). California imports about 2 million live bullfrogs a year, many of which are sold at live food markets.

"Our findings underscore the serious disease risk imported bullfrogs pose to native amphibians in states like California," said Tiffany Yap, the study's lead author and a staff scientist at the Center for Biological Diversity. "This deadly fungus is a threat that wildlife officials have to take seriously. Amphibians are good indicators of how healthy our environment is, and we need to protect them."

The bullfrogs, native to the eastern United States, likely coevolved with the deadly fungal pathogen, *Batrachochytrium dendrobatidis* (Bd), and brought it with them when the bullfrogs were introduced as a food source in the West and later traded throughout the world.

The study also identifies areas where amphibians are at greatest risk of disease spread by bullfrogs.

As invasive species and disease vectors, bullfrogs continue to threaten [amphibian](#) populations that may have no defenses against Bd, including endangered species like the mountain yellow-legged frog and the California tiger salamander.

In 2016 the Center petitioned the California Fish and Game Commission to ban the importation of live bullfrogs into California. While state officials acknowledged the significant negative impacts of bullfrogs to California's wildlife, the commission has yet to take final action on the petition. Oregon and Montana have prohibited [bullfrog](#) imports.

More information: Introduced bullfrog facilitates pathogen invasion in the western United States. *PLOS One*
doi.org/10.1371/journal.pone.0188384

Provided by University of California - Berkeley

Citation: Invasive bullfrogs linked to spread of deadly fungus in western US (2018, April 19)
retrieved 9 May 2024 from
<https://phys.org/news/2018-04-invasive-bullfrogs-linked-deadly-fungus.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.