

Dear US Fish and Wildlife Service,

On behalf of SAVE THE FROGS! (www.savethefrogs.com) and our members throughout the USA, I am writing in support of the USFWS ruling restricting the importation and interstate transportation of 201 salamander species (Docket ID: FWS-HQ-FAC-2015-0005).

I am an ecologist with 13 years of professional experience in amphibian conservation and disease ecology. I spent four years exclusively researching and authoring original publications on the chytrid fungus *Batrachochytrium dendrobatidis* (www.savethefrogs.com/chytrid), a close relative of *Batrachochytrium salamandrivorans*. Both of these fungi have been found in captive amphibians and have been linked to rapid and drastic population declines in amphibians. I have visited many locations on several continents where amphibian communities have been decimated by chytrid fungi. Many streams worldwide are now entirely without amphibians due to the arrival of chytridiomycosis. There are no known ways to eradicate chytrid fungi from wild amphibian communities, and many species can be driven to complete extinction within months of the arrival of *Batrachochytrium*. Preventing the spread of *Batrachochytrium* is the only way known to protect amphibian populations from its devastating impacts, which have been documented in hundreds of peer-reviewed scientific publications over the past 18 years.

The chytrid fungus spreads due to the intercontinental trade and transport of approximately 100 million amphibians each year. The primary trade purposes of amphibians are for pets, food, bait, zoos and laboratory usage. The vast majority of the total trade in amphibians is for non-essential purposes and most Americans do not take part in amphibian trade.

Without proper restrictions on trade, chytrid fungi and other pathogens would inevitably enter into the United States and lay waste to our native amphibian populations. This USFWS ruling is an extremely important step toward preventing *Batrachochytrium salamandrivorans* from entering the USA and from spreading across the nation. As such, this ruling will undoubtedly prevent the extinction of American salamander species.

Some opponents of this ruling claim that the ruling is not necessary because the disease is not known to exist in the USA. However, the USA being potentially free of *B. salamandrivorans* is actually an excellent reason for this ruling to exist, as the ruling helps maintain the health of our native amphibians by keeping them free of the fungal infections.

Another claim is that breeders have healthy amphibians and thus should be exempt from such a ruling. However, I know of no breeder who tests every one of their amphibians for every known amphibian disease, and I have never heard of any breeder who tests for *B. salamandrivorans*.



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Further, even if every amphibian got tested, disease would still be likely to spread, as there does not exist any test for disease that is without false negatives. Furthermore, there are many amphibian diseases that have yet to be discovered, and this ban helps prevent the entry of those as yet unidentified diseases.

Yet another misconception is that pet trade salamanders are used for conservation purposes; they are not. Pet trade salamanders are destined to lives in tanks, as their owners generally have no plans for their release into the wild, and even if they do have plans for release, they likely have not taken steps to remove the threats that drove the wild populations to endangerment; this then would likely lead to unsuccessful releases as the threats have not been ameliorated. Even if the well-intentioned breeder did have a release plan, their released amphibians would have a high chance of spreading diseases into the wild, as breeding facilities are hotspots of disease due to the potentially large number of individuals living in close quarters and the large number of geographical regions from which the amphibians were sourced.

Another misconception put forth by those who buy and sell live amphibians is that to educate people about amphibians requires pets; this is thoroughly false. I have never owned a pet frog or salamander, yet I have successfully educated over 3,000,000 people about amphibians via online and printed educational materials, and through live presentations and hikes to amphibian habitats to see local, native, wild amphibians. Having visited wild amphibian populations throughout the world, as well as captive breeding facilities and zoo exhibits on multiple continents, it is my experience that truly inspirational amphibian experiences occur when humans come across wild amphibians, not captive amphibians.

Another common misconception is that this ruling will prevent Americans from keeping and breeding salamanders. This ruling does not in any way prevent or restrict an American from buying, selling, possessing or breeding species within their own state. In an age where infectious diseases have laid waste to amphibian populations in America and worldwide, there is no valid reason why an American should be importing salamanders from other countries and/or shipping them across state lines. Responsible pet ownership implies focusing only on local species so that known diseases as well as diseases not yet identified by science do not travel and infect formerly healthy amphibian populations.

Yet another misconception is that the keeping in captivity of amphibians against their will is ethical. A large percentage of amphibians die en route to the end consumer due to harsh travel conditions, and when the amphibian arrives at the home or laboratory of the buyer they tend to die prematurely due to the difficulties in maintaining the amphibians' proper food and climate needs. On a more fundamental level, no amphibian signed up for a life in captivity, and just as no human has the right to keep another human in captivity against their will and solely for their own personal entertainment, there is no logical reason why the keeping in captivity of amphibians for non-essential purposes should be considered ethical or acceptable in the 21st century. Amphibians

deserve to live free and healthy in their native habitats. As such, federal rules should be designed to protect the amphibians, not those who intend to buy, sell and hold amphibians captive against their will.

One primary difference between *Batrachochytrium* and SARS, Zika, West Nile, Ebola and an array of other emerging infectious diseases is that *Batrachochytrium* is, in terms of its total impact on species, far more harmful than any of the human diseases listed. As such, federal action as outlined in this ruling is completely warranted and should be supported by all lovers of nature and wildlife. I applaud the USFWS for taking action for amphibians.

On behalf of all who care about wild salamander populations, thank you for saving the salamanders!

Sincerely,



Kerry Kriger, Ph.D.

SAVE THE FROGS!

Founder, Executive Director, Ecologist & Salamander Enthusiast

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