

2008

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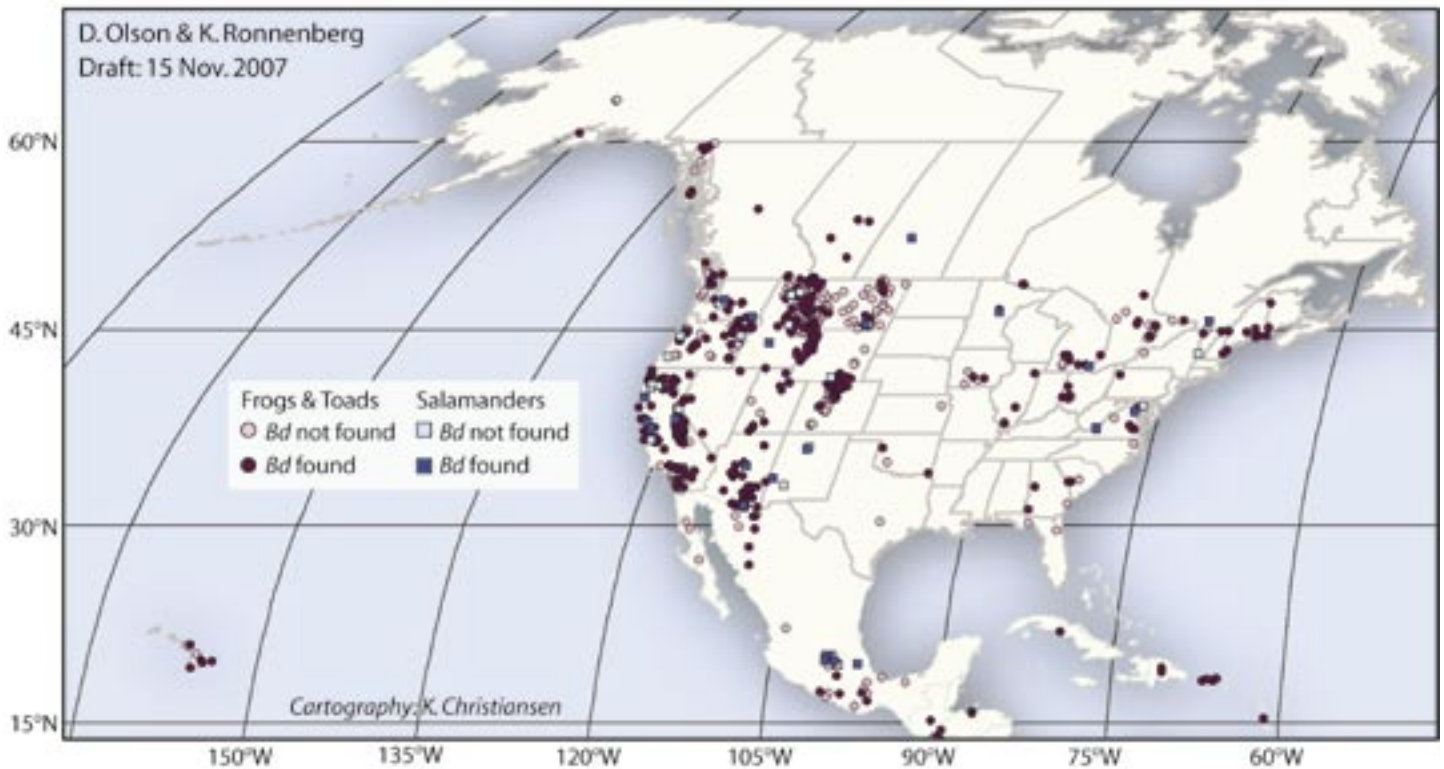
FROG

UNDERSTANDING AND RESPONDING TO *Bd*

Jennifer Pramuk, WCS' Bronx Zoo and Shelly Grow,
Association of Zoos & Aquariums



Representatives of the AZA community at the *Bd* Symposium.



PARC (Partners in Amphibian and Reptile Conservation) hosted a conference titled *Amphibian Decline and Chytridiomycosis: Translating Science into Urgent Action* from 5 through 7 November 2007 in Tempe, Ariz. In total, 200 participants from nine countries attended. Representatives from academia, the zoological community, NGOs, state and federal government agencies, and the pet trade were present. The roster of speakers and poster presenters embodied the world's leading experts in amphibian disease and captive management science. This unique forum provided the first opportunity for scientists and land managers to interact and discuss the specific research and management needs and challenges presented by amphibian disease.

Topics covered during the conference included the biology and implications of amphibian disease; disease prevention; and the natural history, ecology, worldwide distribution, and treatment protocols of *Batrachochytrium dendrobatidis* (*Bd*; the amphibian chytrid fungus). Additionally, guidelines for mitigating the spread of pathogens in the field and creating a repository of worldwide *Bd* genetic isolates to understand the origin and evolution of the disease as well as GIS mapping projects for disease distribution and hotspots were discussed.

Some of the more interesting topics included the role of *Bd* vectors in the environment such as the ubiquitous, often invasive bullfrog, as well as persistence of the pathogen in the environment, and the surprising ability of certain species to coexist with the fungus. Moreover, promising new treatments were discussed including exciting but yet unpublished data supporting the use of the antibiotic chloramphenicol to eradicate the disease in captive and possibly wild populations. Early reports also indicate that animals that survive *Bd* infection may be resistant to further infections.

On the last day, working groups discussed improving biosecurity in the field, developing a campaign to create *Bd* free animals in the pet trade, and mitigating spread of the disease through the effective management of fisheries. Participants agreed that areas warranting further discussion and research include public outreach and the translation of science into effective policy recommendations.

Phoenix Zoo held a reception, dinner, and a tour of the Arthur L. "Bud" Johnson and Elaine V. Johnson Conservation Center, which houses the critically endangered Chiricahua leopard frog and other endangered species including the narrow-headed garter snake and Three Forks and San Bernadino springsnails.

Representatives from 15 AZA institutions were present. The Phoenix Zoo, Houston Zoo and Columbus Zoo and Aquarium helped sponsor the symposium.

Presentation abstracts and additional information is available on the PARC Web site (www.parcplace.org).