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# The Chytrid Fungus

Chytridiomycosis is a fungal disease that threatens amphibians worldwide. The chytrid fungus infects the skin of amphibians and can be fatal, killing some frogs and toads in a matter of weeks.

The newly discovered salamander chytrid fungus (*Bsal*) has caused dramatic declines in European salamanders. Though *Bsal* has not yet invaded the U.S., lab studies suggest that our native amphibians are also susceptible to infection by *Bsal*.

The Woodhams Lab at UMass Boston is working to develop probiotic therapies and a vaccine to protect wild amphibians against this devastating wildlife disease.

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## Native Amphibians

Massachusetts is home to 21 native amphibian species. One of the most widespread is the Eastern red-spotted newt (shown below) – a species susceptible to chytridiomycosis.



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## Our Project

The Woodhams Lab at UMass Boston is studying the Eastern red-spotted newt and other species to develop strategies to boost the immune defenses of native amphibians.

We will determine the occurrence of chytrid fungi in Massachusetts ponds, treat select ponds using probiotics (native beneficial cultures), and monitor infection in amphibians for two years post-treatment. Our findings will be used to inform wildlife agencies on how to best manage a *Bsal* outbreak and protect our native amphibian biodiversity.

This multi-state collaborative project is funded by a Competitive State Wildlife Grant by the Tennessee Wildlife Resources Agency (TWRA), and permitted by MA Fish & Wildlife.



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## Take Action

If you have a pond on your property with Eastern red-spotted newts, we are interested in hearing from you about potentially including your pond in a proactive disease management plan as part of our research.

## Contact Us

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