



Crayfish Conference!

June 1, 2023

Presentation Descriptions

9:00 AM

Keynote Address: Eric Larson, Ph.D., University of Illinois

*Is the signal crayfish a single crayfish? Updating taxonomy of *Pacifastacus leniusculus* in western North America*

An overview of recent morphological and molecular work on unique lineages of signal crayfish (*Pacifastacus leniusculus*) in the Pacific Northwest.

Several recent scientific studies have reported high mitochondrial DNA divergence of signal crayfish (*Pacifastacus leniusculus*) populations in the Pacific Northwest region of western North America, potentially meriting elevation to species status. I report in-progress work leveraging nuclear genomics and morphological assessments to evaluate whether two lineages currently recognized as signal crayfish should be described as separate species.

10:00 AM

Jamie Morton, Teacher, Lewiston High School, ID

Ky Turner, Teacher, and Columbia School Students, Hunters, WA

Inspiring and impactful K–12 school programs

11:05 AM

Jim Ekins, Ph.D., University of Idaho Ext. / IDAH₂O Master Water Stewards

The Confluence Project: High School Watershed Science, FieldSTEM, and Youth Water Summit

Year-long exploration of our watershed Series of field experiences Collect real data with real scientists Present a research project at the YWS.

The Confluence Project is a year-long, place-based, hands-on water science education model implemented in North Idaho high schools. We provide watershed curriculum (aligned with both Next Generation Science Standards and Common Core State Standards), funding and logistics support for field experiences, and a coordinated research conference for all participating students.

Kim Holzer, Ph.D., Research Associate

Smithsonian Environmental Research Center

Invasion pathways: The (crayfish) hitchhiker's guide to North America

An overview of pathways for the introduction of aquatic invasive species

Crayfishes arrive to new locations both accidentally (hitchhiking) and intentionally. Species introduced to new areas have the potential to become invasive, meaning they may cause harm to the environment, economy, 'One Health', or to wildlife and wildlife resources. The various pathways for the introduction of aquatic invasive species will be discussed using crayfish as a model taxon. Lastly, let's explore challenges and opportunities for limiting and responding to new crayfish introductions.

12:20 PM

Susan "Susie" Adams, Ph.D., USDA Forest Service

Aquatic Conservation and Ecology Team

Stacy Schmidt, Montana Fish, Game & Parks

Aquatic Invasive Species Supervisor

A Plague on Both Your Lakes and other mysteries from the Montana crAy Team

There's so much we don't know. Such as why there are crayfish plague outbreaks and which species are native where in MT. I'll share what we do know.

We found severe lesions on crayfish in two Montana lakes in 2021. After we started paying more attention, we found lesions (often minor) in at least 60 sites in the state. I'll discuss crayfish plague, why people haven't been concerned about it in North America, and why we might want to start paying attention to it. I'll also talk about the challenges of figuring out what species are native where in the state given the lack of historic data--and why it matters.

2:30 PM

Darren Sinko, Teacher, North Bend Middle School, OR

The \$5 crawfish trap: Make one to take one home—materials provided!

Will show the attendees at the Crawfish Conference how to make a cheap crawfish trap.

Using materials from the Dollar Tree, I will show the attendees step by step how to make a cheap but effect crawfish trap. The plan is to have the materials on hand so that everyone who wants to participate can build a trap and take it home to use with their school, organization, or club. I anticipate that I will need about 35 mins. to complete this task and materials to make 24 traps.

