



The River Mile Network: Connecting Watershed Educators & Students with Resources & Opportunities

Janice Elvidge
Founder, The River Mile
Retired Education Specialist, NPS Lake Roosevelt NRA

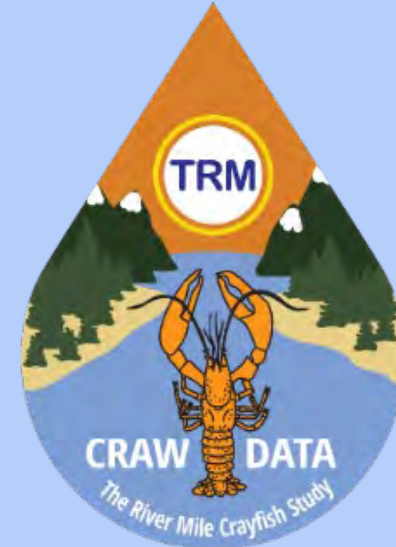


 *Engaging Every Student*

The River Mile Network



Crayfish Study + Much More!





Why Participate?

- Not much known about crayfish in Northwest – students can help
- Opportunity to collect & submit accurate data to researchers
- Increase understanding of positive/negative roles of native & invasive crayfish
- Power to monitor invasive species to improve health of local watershed



Problems with Invasive Crayfish

- Outcompete
- Eat eggs



- Burrowing and foraging behavior can lead to cyanobacteria blooms; less oxygen

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Investigating Crayfish + Freshwater Ecosystems

*Hands-On Science Lessons
Adaptable for Grades 2-12
Aligned to NGSS + CCSS*



Teacher's Guide

therivermile.org/network-projects/the-river-mile-crayfish-study

CRAYFISH STUDY TRAINING

Crayfish Observation Training Module

View Training Module details

TRM Executive Director · March 26, 2019

+30 enrolled

Complete

TRAINING MODULE INCLUDES

- 6 Lessons
- 23 Sections
- 6 Quizzes
- Training Module Certificate

TRAINING MODULE DISCUSSION GROUP »

Each of the 6 lessons in this module contain sections. Mark each section complete to continue on. At the end of each lesson, or set of sections, you will take a quiz, and upon finishing 80% of the answers correctly you can proceed to the next lesson. Once all 6 lessons are complete and you've passed the quizzes you'll receive a certificate of completion.

You can view your progress and the lesson and section titles to the right. New students

Self-paced Training

<https://therivermile.org/crayfish-observation-training-module/>





Crayfish Trap

Native & Invasive Crayfish

Join The River Mile Network's Crayfish Study

Collect data about what crayfish species are found in the Columbia River Watershed and beyond. Share what you learn with researchers to help protect our freshwater ecosystems from invasive species. Just don't move any crayfish—even natives—to other water bodies where they can cause a lot of trouble!

Invasive

- White River Banded Crayfish** (*Pacifastacus leachii*)
- Red Swamp Crayfish** (*Procambarus clarkii*)
- Bullhead Crayfish** (*Pacifastacus asperus*)

Note: The smallest crayfish without legs on its tail can be a can.

Native

- Signal Crayfish** (*Pacifastacus inermis*)
- Snake River Pileus Crayfish** (*Pacifastacus carolinensis*)
- Pileus Crayfish** (*Pacifastacus pileus*)

Visit therivermile.org to learn more and get help identifying crayfish.

Heroes or Villains?

Crayfish are omnivores that eat dead and living animals and plants. This helps keep their freshwater ecosystems clean. They are also important food for many animals. Unfortunately, invasive crayfish can out compete native species for food and space. This, combined with their eating of many fish and amphibian eggs, reduces biodiversity.

Key

- Plant food source
- Animal food source
- Decomposition

Learn more at therivermile.org



Dissecting
invasive crayfish



Measuring Board

Substitute Teacher
Funding

Poster



Transportation

Water Quality Testing



Today we connect with



The River Mile Network



TRM Crayfish Study Data Collection Form 2021

The River Mile Network
An Education Program of the National Park Service



TRM Crayfish Study Short Form 2021

This form is designed for observations with or without set traps, but not an in-depth study.

Group Information

Date of Submission*

 5/24/2021	 12:00 PM
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Site Identification*

Please provide the unique site identification for the area of collection. This is not the same as the data point. For example: Spring Canyon Day Use Area.

This is not the specific location/data point of where you collected each specimen.

Collector Identification*

The River Mile Network

An Education Program of the National Park Service



This survey is for training purposes only.

TRM Crayfish Study Long Form 2021

This data collection form for The River Mile's Crayfish Study is for those participating in the full study. It can be used with any method of data collection.

You do not have to report all data. Location and species are required. If you do not know the species, please submit a photo and we will identify for you.

Required Identification Information

Date of Submission*

 5/25/2021	 12:53 PM
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Site Identification*

Please provide the unique site identification for the area of collection. For example: Spring Canyon Day Use Area.

This is not the specific location/data point of where you collected each specimen.

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Data

- therivermile.org
- [Crayfish Data Map](#)





North Bend Middle School



[Crayfish Study Resources –
The River Mile](#)



The River Mile Network



Lewiston High School



The River Mile Network



Columbia High School



Northern (Virile) Crayfish

Faxonius virilis



The River Mile Network



The River Mile Management Team

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Engaging Every Student
-
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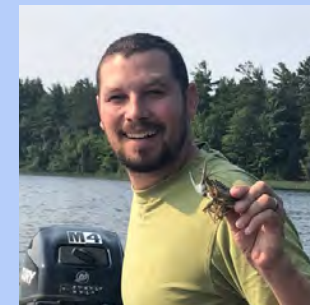
Retired Educator
Columbia School
Hunters, WA

Pauline Schaffer

The REACH Museum

Dr. Eric Larson, Ph.D.

Asst. Prof., Univ. of Illinois
TRM Crayfish Study
Supervising Scientist



Eric Larson



Q&A



 *Engaging Every Student*

The River Mile Network



Thank you!

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therivermile.org

Native Signal Crayfish

Pacifastacus leniusculus



Native Signal Crayfish

Pacifastacus leniusculus



Northern Crayfish

Faxonius virilis



Invasive Rusty Crayfish

Faxonius rusticus



Pilose Crayfish

Pacifastacus gambelii



Snake River Pilose Crayfish

Pacifastacus connectens



Red Swamp Crayfish

Procambarus clarkii



The River Mile Network



Key Partners Include...

- *National Park Service, Lake Roosevelt NRA*
- *Lake Roosevelt Forum*
- *Engaging Every Student*
- *University of Idaho Extension*
- *University of Idaho Master Water Stewards*
- *Environmental Protection Agency*
- *The REACH Museum*
- *University of Illinois*
- *Pacific Education Institute*
- *Siuslaw Watershed Council*



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View Training Module details ▾



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Complete



You've earned a certificate!

Download Certificate

100% Complete

Last activity on June 12, 2019

Complete

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Self-paced in The River Mile Community
therivermile.org/community