



2022 Eagle Hill Institute Online Natural History Seminars

office@eaglehill.us 207.546.2821 Ext.4 www.eaglehill.us

Introduction to Tardigrade Study and Identification

Dr. Emma Perry

January 30th – February 27th, 2022

Using my ongoing work in Maine to give examples, I will introduce you to tardigrades and their diversity. Beginning with an overview of their biology and their relationships within the Animal Kingdom, we will learn how to collect tardigrades from a range of habitats and methods of identification. I will use a variety of images I have taken from my slide collection and prerecorded videos along with 3d models of various structures to demonstrate the various features and methods I am sharing with you.

As we are continuing to identify and characterize new species of tardigrades, there are few complete keys to species of a genus. Instead I will share with you the tools to identify and describe the important taxonomic traits of any tardigrades you find, how to identify them to genus and what resources you need to complete your identification.

Tardigrade biogeography is poorly documented in many places including Maine. There is only one publication describing tardigrades from a handful of moss collected off a tree in the grounds of a hotel in Bar Harbor, Maine. So far I have found 22 additional species just near campus with my students and I am currently describing a freshwater species from near my home. There is so much opportunity for you to get involved, even with tardigrades from your back garden.

Scheduling Details

Jan 30, Feb 6, 13, 20, 27
1–3PM ET

Participants need to have a Zoom account (<https://zoom.us> sign up for zoom is free). You will receive a secure link to join the instructor before each class. Classes will be recorded so participants can review them or make up missed ones.

For more information regarding seminar costs and registration please visit: <https://www.eaglehill.us/programs/sems-online/general-info.shtml>

About the Instructor

Dr. Emma Perry (emma.perry@maine.edu) of the University of Maine, completed her undergraduate degree in Biology at Exeter University, Britain, where she was born and raised. For her senior thesis, she studied habitat preference by the burrowing brittle star *Acrocnida brachiata*. After graduation, she moved to Tampa, Florida to do a Ph.D. on echinoderms with Dr. J. Lawrence and Dr. L. Robbins. She became interested in the process by which echinoderms, especially sand dollars, constructed their intricate three-dimensional skeletons. Since then, she has become more generally interested in the biology and systematics of lesser known marine invertebrates, especially tardigrades.

