

## **Seneca Lake Geology 101**

Don Duggan-Haas, Craig Carlson and Lisa Hallgren

Don Duggan-Haas is the Director of Teacher Programs at The Paleontological Research Institution and its Museum of the Earth & Cayuga Nature Center in Ithaca, NY. Don has a BA in Physics from SUNY Geneseo, an MS in Earth Science Education from SUNY Cortland and a Ph.D. in Curriculum, Teaching and Educational Policy from Michigan State University. He has taught at Colgate, Cornell, and Michigan State Universities, Kalamazoo College, and Tapestry and Norwich (New York) High Schools. As part of the PRI's Marcellus Shale team, Don co-authored the book, *The Science Beneath the Surface: A Very Short Guide to the Marcellus Shale*, and has given many public presentations on hydraulic fracturing (a.k.a., "fracking"), providing scientific information about unconventional drilling in the Marcellus Shale and contextualizing it in the larger energy system. The book, like the associated presentations and educator professional development is done without advocating for or against fracking. Don is a nationally regarded expert in place-based and technology-rich Earth and environmental science education and has served as Chair of the Geological Society of America's Geoscience Education Division. Over years of commuting through the Finger Lakes, he has enjoyed many a journey around Seneca Lake and especially lingering at Watkins Glen and Seneca Lake State Parks.

Craig Carlson is an Earth Science teacher at Dundee High School.

Lisa Hallgren is co-owner of Ravines Wine Cellars in Geneva. Ravines is known for producing focused, mineral-driven Rieslings.