NAGT – New England 2019 Report

August 2019

Submitted by T. Weiss

Leadership 2018-2019: (leadership terms are now 2 yrs.)

President, Tarin Weiss  tweiss@westfield.ma.edu
Vice President 1, Melissa Lombard melissalombard@alum.rpi.edu
Vice President 2, Susan Meabh Kelly susankelly.ct@gmail.com
Secretary/Newsletter, Richard Little RDLITTLE2000@aol.com
Treasurer, Steve Winters science_matters@yahoo.com
Past President/OESTA Chair, Lori Weeden Lori_Weeden@uml.edu
Counselors, Tom Vaughn tvaughn17@comcast.net, Karen Kortz kkortz@ccri.edu

2018-2019 Events:

The NAGT-New England Annual Meeting November 10, 2018 (held in conjunction with the Gem and Mineral Show at Greenfield Community College), Greenfield, MA

Theme of Day: Celebrating the past, present & future of the Connecticut River Valley

Highlights:

- 2019 OESTA Award Presentation to Melanie Cutlter
- The Hole Truth: The stories behind Meteorite Craters (Peter Scherff)
- From Fossils to Feathers: The Dinosaur-Bird Connection (Steve Winters)
- GCC's Geology Path Tour presentation (GCC Professor Emeritus Richard Little)
- Walking Tour of Turners Falls Geology (Steve Winters)
- Gems, Rocks & Fossils Show & Sale
- Jurassic Roadshow
- NAGT-New England lunch and business meeting

Note: The Fall 2019 annual meeting (2019) is in the planning stages.
The GSA Northeastern Section 54th Annual Meeting, March 2019, Portland, ME

NAGT-New England hosted a theme session at the 2019 GSA Northeastern Section’s 54th Annual Meeting in Portland, ME. The session, chaired by Tarin Weiss and Lori Weeden, was titled T4. Best Practices in Geoscience Education. The engaging oral and poster presentations resulted in lively discussions full of engaging ideas for immersing students in meaningful science learning experiences. NAGT also hosted a lunch meeting to continue discussions of teaching and learning and, joining forces with colleagues from NAGT-Eastern Division, to make plans for our presence at the March 2020 GSA Northeastern section meeting in Reston, Virginia.

An Earth Educators Rendezvous (July 15-19 in Nashville, TN) Presentation: Beyond the 3 Dimensions: Integrating Identity and Interest in NGSS Geoscience Investigations
Susan Meabh Kelly (Connecticut State Department of Education) presented her research related to the NGSS and student identity/interest at the EER in Nashville. Presentation abstract: A Framework for K-12 Science Education (National Research Council, 2012) outlines research-informed ways to support more equitable engagement in science learning. This research suggests students should have opportunity to investigate issues of personal and community relevance, leveraging the diverse knowledge and skills they possess. In this way, science activities elicit and build upon students' prior interests and experiences, fostering students' identity as competent learners of science. This session outlines two high school geoscience investigations that are designed to fully reflect the framework's vision of "science for all".

A Professional Development Workshop for K-12 Teachers, July 22 & 23, University of Massachusetts – Lowell

The workshop, Incorporating Climate Change into Your Classroom, was sponsored by the University of Massachusetts-Lowell’s Climate Change Initiative (CCI), and supported by NAGT-New England Division. Lori Weeden organized the well-attended and engaging workshop for 25 teachers interested in learning more about climate change. On Day 1, Lori and members of the CCI interdisciplinary team overviewed the science of climate change (why it matters, snow days in a warmer world) and focused on the following topics: climate change through food, place-based activism, energy and engineering solutions, and the intersection of politics, power, and climate change. Two students presented their climate-related works; Can We Drag an Iceberg to the Equator to Fix Climate Change? (undergraduate project) and No More Fossil Fuels! (8th grade science fair project). Day 2 immersed teachers in the World Climate Model UN Exercise with Climate Solutions, which “provides an interactive role-play experience through which participants [explore the dynamics and geopolitical implications of climate change] using a scientifically sound climate policy simulation model” (https://www.climateinteractive.org/wp-content/uploads/pdfs/World-Climate-final-ms-131111.pdf). The simulation was impressive and impactful! Teachers were able to receive 10 pdps for the 2 day workshop and highly rated their experiences.
Upcoming Events

Wild & Scenic Westfield River Committee’s Watershed Blitz, September 28, Cummington, MA

As part of the Watershed Blitz, Tarin Weiss is leading a geology hike focusing on the geologic history and bedrock of the Westfield River in the Cummington area. NAGT members welcome to attend (there is small fee for the Wild & Scenic Westfield organization). For more information about the Blitz and the hike, contact the organizer Meredyth Babcock (westfieldriver@gmail.com).

A NAGT-New England sponsored theme session at the Geological Society of America’s Joint Annual Southeastern/Northeastern Section Meeting, March 20-22, 2020, Reston VA

Tarin Weiss and Lori Weeden are presiding over a geoscience education-themed session titled Active Learning and the Use of Technology in the Geoscience Classroom at the 2020 GSA-SE/NE section annual meeting.

Session description: With today’s focus on active learning in the STEM classroom it is imperative to try out and use a variety of teaching approaches that promote student interaction and engagement. The use of technology to accommodate successful learning is key to this effort. In this session, a range of effective technology-infused learning strategies for the geoscience classroom will be shared in order to stimulate our understanding of how to increase meaningful student learning with the use of online tools, gadgets, and instruments.

Abstracts for the session are due December 10 (visit https://www.geosociety.org/GSA/Events/Section_Meetings/GSA/Sections/se/2020mtg/home.aspx).

People of Note

Thank you Julia and Steve! Julia Daly (University of Maine - Farmington) turned over the role of NAGT New England division treasurer to Steve Winters this winter. Julia’s over a decade-long tenure in this position has been much appreciated and little recognized. Thank you Julia for your years of service and Steve for stepping in and taking over this critical post.

Welcome Susan! VP#2

Susan Meabh Kelly (VP#2), a high school science teacher in Danbury, Connecticut, (certifications in Earth Science, General Science, and Physics) joined our executive committee last fall, bringing a wealth of science education knowledge and energy to our group. She is experience with many agency-sponsored teacher-research efforts (e.g. NASA/GISS NYCRI, NASA/JPL Spitzer Research Program for Teachers), has served as New England Director of the National Earth Science Teachers Association since 2016, and is a member of the NAGT Teacher Education and Geoscience Education Research groups. She has also convened sessions dedicated to partnership work at AGU and GSA and recently founded the science + education collaboratory (introduced at 2018 Earth Educators’ Rendezvous).
NAGT 2018 Outstanding Earth Science Teacher Award NE Section Winner - Melanie Cutler

Melanie Cutler has been teaching Environmental Science and Biology at Andover High School for 14 years. She has a BS in Biology from Bates College and a Master of Environmental Management degree from the Yale School of Forestry and Environmental Studies. Her true passion is teaching Environmental Science, especially focusing on the positive actions that we humans can take to improve our environment. In her Environmental Sustainability Internship Course, each student is paired with a community member to work on a project that improves sustainability in their town. In addition to teaching, Melanie also advises the school’s Environmental Club, started the AHS Sustainable Garden Project, and is a member of the town's Green Advisory Board.

First Edition of textbook Focus on Geology

Last March, Karen Kortz (Rhode Island Community College) and Jessica Smay (San Jose City College) announced the publication of their textbook, Focus on Geology. Their textbook was written and organized based on cutting edge research into how students learn geoscience. Congratulations to Karen and Jessica!