Welcome Henry Whittemore

In February The Maine TREE Foundation Board of Directors announced that Henry Whittemore was hired as the new Executive Director following the retirement of Sherry Huber. Henry’s 30 years of forestry experience both nationally and globally will benefit our education, research and forestry programs. Marcia McKeague, President of the MTF Board, noted that “Henry is familiar with the Maine woods from landowners, wood manufacturers, logging companies and small non-industrial owners all of which comprise the complex system of Maine’s forest economy.”

He served as senior director of an international timberland investment fund and was Northeast Regional Manager of a Boston-based firm that managed lands in Maine, New Hampshire, Vermont and New York. Henry has served on many non-profit boards including Northern Woodlands, The Forest Society of Maine, Kennebec Land Trust and others. He and his wife, Darcy (who once served on the MEPLT Steering Committee) live in Readfield and together they own and manage a 62 acre woodlot in Mt. Vernon.

Within a couple of weeks as the ED with MTF, Henry attended a Forest Inventory/PLT workshop at Lee Academy and participated in recent discussions about next steps for FIG! He has demonstrated his sincere interest in learning about PLT’s program, meeting the outstanding educators and natural resource people who make up our MEPLT network and Henry looks forward to joining the two upcoming Summer of Maine Teachers’ Tours.

We welcome Henry and wish Sherry Huber many years of a healthy and peaceful retirement.

Maine PLT rolls out e-units from National PLT

By Pat Maloney

What is an e-unit? Each of three units is a self-contained unit of instruction found on line with multi-disciplinary hands-on and engaging lessons. All e-units include step-by-step lesson plans, student pages, assessment tools and evaluation rubrics. All lessons contain interactive connections to academic standards and literature connections while providing links to websites, videos and other related resources.

E-units are constructed around targeted performance expectations of the Next Generation Science Standards (NGSS) and support learning as a developmental progression. Units are designed around the 5E Instructional Model which fosters learning through a planned sequence of instruction. The 5E model engages, explores, explains, elaborates, and evaluates.

How is Maine spreading the word about these current curriculum changes from PLT? We began by bringing together teachers and natural resource professionals to practice the 5E approach in order to gain an understanding of the e-units. The group came prepared to dive into the PLT curriculum and work with others from our state network. Despite driving through a snow storm, the positive energy melted away memories of snow covered roads to Kieve and we quickly broke into three teams to explore and evaluate how PLT’s e-units differ

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Enjoy our first STUDENT SPOTLIGHT written by Jill and Lucia!

For the Love of Opportunity
By Jill Brigham, Unity College Sophomore

I grew up in the concrete jungle of New York City, not what one typically thinks of when they hear that I’m studying Parks and Forest Resources and Adventure Based Environmental Education. How does one take such a large step? Well, by use of stepping stones and the wonderful gift of opportunity. My career path is headed toward that of an educational interpreter for the natural world.

I was homeschooled and used the city as my experiential classroom. My interest in interpretation began at age 14, while I was an intern at The River Project (a marine science field station) leading and assisting with field trips for people ages five to college. One day while working with a group of first graders, I realized how much I loved teaching. But... not in the traditional sense. I enjoyed using the great outdoors to provoke inquiry and facilitate connections for lifelong learners. There’s something about showing a 7-year-old a seahorse, and watching the wonderment in their eyes. I first recognized the term interpretation while vacationing at national parks with my family. After talking to many interpretative rangers, I knew what I wanted to be.

Thus, my interest in outdoor education continued to grow, stepping stone by stepping stone. In the fall of 2015 I completed an adventure semester in Colorado—sometimes living off the grid in the high desert mountains of Paonia. I worked with the Ranger Conservation Corps of Central Park for three years and was part of a competitive science research mentoring program at the American Museum of Natural History. My two favorite work experiences so far have been working as a Youth Conservation Corps enrollee in Yellowstone and as a Summit Steward in Acadia. Both provided me with an awareness of professional interpretation methods and goals, knowledge about interacting with a diverse visiting public, and how to resolve conflict and challenges with visitors. My stepping path just continued to grow, leading me....

To the present. To supplement my work experience, I seek out professional development opportunities and certifications. As of right now I am a Certified Interpretive Guide, Leave No Trace Trainer, First Aid/CPR/AED, & soon to be a Wilderness First Responder. This past fall I attended both the NOLS Wilderness Risk Management Conference, as well as the National Association of Interpretation Conference in Spokane. Both were invaluable in providing knowledge and professional development.

Through my time in college, I have truly discovered the value of connections and mentors. This past fall, I was lucky enough to attend the Maine Emerging Environmental Changemakers Gathering, where I met numerous people and am thankful to have met, among others, Olivia Griset and Pat Maloney. Meeting Pat has led to even more stepping stones in my environmental education path. Attending the PLT Transition and Immersion gathering at Camp Kieve in February would probably not have happened, had I not met Pat at the Changemakers Gathering. As I progress in college, I cannot acknowledge enough how much I have grown through being part of Maine’s environmental education network. Thank you, thank you, thank you, and to everyone reading this never underestimate the power of opportunities, and the stepping stone path complete with personal growth, challenges and beautiful places.

Terra Matters – an environmental grassroots movement
By Lucia Daranyi, student, Casco Bay High School

Terra Matters is an organization created with the mission to bring young activists from all over the state of Maine to speak their voice and be heard. This idea was inspired by the work at King Middle School through their yearly marches to city hall.

Terra Matters provides opportunities for people to come together to work on projects that concern them the most around climate change; make an impact on climate change locally; and to meet people of all ages concerned about the planet.

Gus Goodwin, Portland teacher and the founder of Terra Matters, started by inviting Portland kids to a meeting to talk about the possibility for having a student led rally on Earth Day weekend. What came out of it were strong ideas created by a hopeful group of likeminded activists of all ages. Smaller groups were formed to plan the events.

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leading up to Earth Day and choosing a name for the group was born. “Terra” is a Latin word which translates to earth and inspired the name and the work of our group.

As the event gets closer and closer there is a feeling of hope and excitement from the many school groups who will be marching and celebrating Earth Day weekend. After the last Terra Matters meeting, young activists left the meeting feeling hopeful after hearing from adults who are participating and offering supportive energy and resource advice.

The following is an excerpt from the Terra Matters website and press releases:

What is it? Each Environmental team chooses a topic that concerns them most about climate change and turns that into a project. Projects must have a local connection and impact. Each team will work with a partner organization on the project to research their issue, find a solution that makes a local impact and create and communicate their message.

Forest Inventory Growth (FIG) program moving on and moving up!

Pat Maloney

Using a clinometer to measure tree height

Thanks to a dedicated group of FIG advisers, we have collected suggestions for improving the FIG website while simplifying delivery of this long term forest study program. We added a video created by Gorham Middle School students illustrating how they set up a plot and how much they enjoyed getting outdoors to explore, experience and work within the forest: http://mainefig.org/about-figmeplt/

Angela Gospodarek, their teacher, and Maine Forest Service district forester, Shane Duigan, provided resources and forest facts as students became engaged with their video production.

The advisory group raised the following questions and we’d love to hear from you. Please send your comments or responses:

What is the broader purpose? Have at least two essential questions on the home page: Examples - How does long term data inform change? How is the Maine forest changing and what are the impacts of climate change?

What data or forest facts might we add? For example: changes in beech tree populations; updates on the Eastern Ash Borer; and soils data entry.

Can we create a platform for students and teachers to add information and questions to share with other Maine schools that have entered FIG data?

If you’ve not yet perused the FIG site, here are two of the program objectives:

- Students will work as a collaborative team to establish a Forest Inventory Growth Plot in a local forest.
- Students will meet with a forestry professional who will guide plot set-up, support students as they learn and apply forestry skills, share his/her career path, and ensure quality monitoring efforts.

Following a FIG/PLT workshop at Lee Academy with PLT facilitator and Lee Science teacher, Susan Linscott, she shared a number of potential lessons that can be used with FIG:

Physics

PLT connections with our bridge/culvert project. We do several “building” projects where the students use recycled and repurposed materials (right now they are making instruments) and we get into energy conservation.

Math

The practice with different measurements is great for math, especially geometry. I think that teachers could apply algebra by having students develop equations for finding plot area, tree height, basal area, slope of the ground, etc. There are a lot of statistics applications when looking at tree health within a plot or comparing plots.

Environmental Science

We have a FIG plot where the students collect data for this class. Students need to develop their own research question regarding the plot which allows them to analyze changes over time or compare with another site. They then complete a study to address their question and present their study to the class.

Earth Systems Science

Ninth grade students complete the forest health activity from the PLT Focus on Forests guide. They predict if their study area will be “healthy” and graph and analyze their data.

Graphing and analyzing data can easily be incorporated across science and math courses.

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Kala Rush, Katahdin High School English teacher, attended the workshop and shared this comment on her evaluation:

The training on Friday was one of the more applicable trainings I have ever been to. It was very well done and I will be utilizing it in my classroom right away. Simply put, it was wonderful.

2018 MAINE PROJECT LEARNING TREE STEERING COMMITTEE

Anita Smith, Chair, Maine Master Naturalist
Henry Whittemore, Treasurer, Maine TREE Foundation
Barry Burgason, Wildlife Biologist
Kenny Fergusson, Huber Resources
Stephen Gettle, Woodland Investment Services
Laurie Haines, Lewiston High School
Betty MacWilliams, Tree Farmer and Former Science Teacher
Timothy Surrette, University of Maine, Augusta
Shari Templeton, Maine Department of Education
Bernie Welch, Former Teacher
Warren Whitney, Maine Coast Heritage Trust
Linda Woodard, Maine Audubon
Pat Maloney, Maine PLT Coordinator

OUR SEMIANNUAL ROUND OF APPLAUSE TO THE FOLLOWING PLT FACILITATORS & PRESENTERS EXTRAORDINAIRE:

Joanne Alex          Connie Ronco
Kevin Doran          Patrick Sirois
Olivia Griset        Tim Surrette
Laurie Haines        Jackie Stallard
Kris Hoffman         Shari Templeton
Susan Linscott

Sincere & special thanks to:

Loren Brown
FIG Advisory Committee
Jessica Leahy
MEPLT Steering Committee
National Project Learning Tree
S.F. Madden, Inc.
Sarah Medina

PLT goes from China, Maine to Shanghai, China

Bernie Welch, former teacher & MEPLT Steering Committee member, Shanghai, China

Alan with teacher Bernie Welch

Many years ago several teachers, administrators and a community member or two established the China Schools Forest across from China Lake in Kennebec County. Students, parents and community members celebrate the forest there on a variety of occasions. Much of the time, materials from PLT are used to encourage exploration and understanding this forest gift. Being from Vassalboro, just across the “pond” so to speak from China, I have enjoyed many such visits to the China Schools Forest.

But now when China and PLT come up it means Shanghai or Shenzhen to me. Our PLT materials fit perfectly into a two week “sprout up” STEM (science technology engineering and mathematics) program that is presented by the MaSTEM (master STEM) educators during traditional Chinese holidays. Over the Chinese break in February we introduced 60 international school students to the wonder of a walk in the “woods” Asian style with PLT lessons. We examined tree cookies and compared them to our lives. We explored in-town forest ecology and designed a green space, while all the time having fun. I have certainly learned that PLT transcends cultures and peoples. In China we experienced the forest and the trees with students who loved being in the woods.
Maine PLT rolls out e-units continued from page 1
from the traditional curriculum guides. Groups planned new workshop models to meet the needs of pre-service students and faculty and pre-school – 8 teachers.

Our primary goal for “new” models was to engage with online technology and create Maine specific resources for PLT e-units. One group planned a two day session as a community event leading up to an existing event like the Great Maine Outdoor Weekend. A pilot workshop site might be offered in the Augusta area for both UMaine at Augusta pre-service students and area teachers.

Creativity led one group to a design for Maine colleges and universities beginning with an in-class teaser followed by a four-hour workshop open to interested students and faculty. The session would utilize the K-8 PLT guide and Energy in Ecosystems e-unit. The proposed agenda includes delving deeper by including an outdoor component. An added attraction will be an invitation to professors to become PLT facilitators and incorporate PLT into their course guidelines.

Another Energy in Ecosystems e-unit group identified how key features support teaching using the 5E Instructional Model and connecting to Common Core, NGSS and The C3 Framework. The participant outcome from this training states: “participants use PLT activities to inspire students to learn about the natural world inside and outside the classroom.”

These are just a few of the hands-on, in-person and interactive workshops that the Kieve team designed. We would love to hear from you to talk about how your school or your community might benefit from these professional development opportunities. We’ll bring together trained facilitators, materials and expertise to make the session fun, informative and ready to use in your classroom. Oh and we don’t believe that these new PLT offerings have to be thought of as add-on’s but rather as threads in your existing curriculum tapestry.

Visit www.plt.org to learn about each of the exciting e-units:

**Treemendous Science! For Grades K-2**
Students explore and collect tree data to develop understandings of tree growth and the role they play in an ecosystem.

**Energy in Ecosystems for Grades 3-5**
Investigates ways in which organisms depend on each other. Students focus on forests and come to understand interactions present in ecosystems and begin to widen their circle of compassion to include all of nature.

**Carbon & Climate for Grades 6-8**
The topic of Climate Change challenges science teachers to accurately convey data, reveal assumptions, and engage critical-thinking skills. This e-unit provides activities and resources to help educators meet these challenges.

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The 2018 Summer Teachers’ Tours

Have you attended a Maine TREE Foundation and Project Learning Tree Summer Teachers’ Tour? If not, consider joining us on a 4-day tour of Maine’s forests and mills. The tour includes an introductory Project Learning Tree workshop, excellent field trips, visits with field foresters, small and large land owners, outdoor classrooms and time to share with colleagues. Learn about the Maine forest and experience the people who work there – all with connections to classroom ready lessons from National Project Learning Tree’s preK-12 curriculum.

**July 10 – 13  Poland Spring Resorts – Southern Maine**

**July 24 – 27  Leen’s Lodge – Grand Lake Stream**

Space is limited, so call or e-mail soon to receive an information/registration brochure. Contact us at 207-621-9872 or cj@mainetree.org For more details visit: www.mainetreefoundation.org

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Camp Kieve Group Photo
### Calendar of Events

Watch [www.mainetreefoundation.org](http://www.mainetreefoundation.org) for 2018 workshop updates.

If you are interested in hosting a PLT workshop in your school or community, please call Pat Maloney at 626-7990 or email pmaloney@meplt.org to make plans!

Visit us on Face Book: [https://www.facebook.com/MainePLT](https://www.facebook.com/MainePLT)

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<td>Nature Based Conference</td>
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