Freeport High School Science Students Partner with L.L.Bean to establish FIG Plots

On May 13th, two science classes from FHS worked together with Project Learning Tree State Coordinator,Pat Maloney, L.L.Bean forester, Steve Gettle and Maine State forester, Shane Duigan to establish permanent FIG (forest inventory growth) plots in the L.L.Bean forest on Desert Road in Freeport. Earlier in the year, Steve Gettle and Shane Duigan came into both science classes and talked to students about forestry as an occupation, the mission of forestry and what a typical day of work looks like for each of them. In addition to this, they talked about how they use FIG plots in the real world and how exactly they are used to learn more about forests. Both men were very interactive with the students and, as a result, students had detailed discussions that connected forestry to environmental science and the world around them. Also attending the meeting was Pat Maloney, who introduced Project Learning Tree and shared its mission with students. She also discussed the benefits of service-learning. Her enthusiasm for the organization sparked interest and eagerness in the students.

FIG (Forestry Inventory Growth) are small plots that represent a large forest. Data, in the form of measurements and observations, is taken from FIG plots and is used to assess the large forest area. These FIG plots are commonly used by foresters to get an idea of the health and usefulness of the forest. FIG plots prevent foresters from having to take measurements from the whole forest and are very accurate representations of a forest in general. The two classes that went into the L.L.Bean forest generated two FIG plots. With the assistance of Steve Gettle and Shane Duigan, the students took accurate measurements of heights, widths, and other observations about trees using various forestry tools. In the following years, students from Freeport High School will return to these plots and take additional measurements, monitoring the changes and growth of the plots.

After working in the FIG plots, Steve Gettle explained to the class what he had been working on that morning. He had been putting signs that identified trees that are rare for the area or that provide many benefits for the species that inhabit the forest. He also took the class to a vernal pond that forms during the winter and dries during the summer. This pond was full of little “clouds” that Shane explained were salamander eggs.

It was great to apply what we learned in class out in the real world. By doing this project everybody involved was able to use real forestry equipment. Getting acquainted with these tools helped the class become better acquainted with forestry. The data collected is similar to the data that hired foresters would use to understand the health of a stand. This service learning project will continue with Freeport High School environmental science classes. By starting this project students will not only learn about forestry, but continue to collect data so that the forester can help update and advise LL Bean about the health of their forestry land. The data will continually be analyzed. It is great to know that our efforts will continue to help students learn in the future and that we can help LL Bean manage their forests so that they remain healthy and can be used for recreational purposes.

Some student quotes:
Ethan: “Overall, I found the trip to be very interactive and informative. After learning about the environment in the months before, it was great to be able to apply what we had learned to the real world. Steve and Shane were so nice and informative, I couldn’t have asked for better advisors.”

Shelby: “I really enjoyed being able to show what I learned in the classroom through real-world application. Both of the foresters were really friendly, enthusiastic and patient with all of us”.

Anto: “I enjoyed this field trip so much! I was great to go to the L.L Bean forest with the class and learn how to collect data that will be useful for the foresters and to know that our work will be continued for the future Environmental Science classes. Steve and Shane were so nice and taught us so many things throughout this project”

Travis: “It was interesting to see how much data is analyzed before choosing to harvest a forest. This trip was able to give me a new perspective on how much work goes into harvesting a forest sustainably.”