

## 2016 Overwintering Spruce Budworm Larval L2 Samples – Maine Protocol

This is a coordinated effort between northern Maine landowners/managers, Maine Forest Service and the Cooperative Forestry Research Unit (CFRU). Sample locations on property you own or manage are based on a prioritized scientific sub-sample of 2015/16 pheromone trap locations. Having accurate GPS locations of where the L2 samples are collected is important. Sampling should be completed by December 20<sup>th</sup>. The CFRU will cover the cost of sample processing in the lab.

At each pheromone trap location, sample one dominant branch from each of three balsam fir trees within a roughly 30-foot radius. The sample branches should not be overlapping. Each branch should come from the mid-crown of trees representative of the stand (i.e. half-way up the living portion). Take one GPS point, centrally located at the pheromone trap location.

Use pole pruners (with extensions if needed) to cut off a branch. On the ground, trim each branch to exactly 30 inches long, measured from the tip along the midline. For standardization, measure and record the width of the branch (not the diameter of the stick) at the widest part to the nearest inch.

Once the measurements have been recorded, place each branch into a separate, individually labeled paper bag (one branch per bag). Branches may be cut so they easily fit into the bag. The CFRU has standard bags you can use (contact CJ Langley: (207)610-9206, [cjlangley6@gmail.com](mailto:cjlangley6@gmail.com)). On the outside of each bag (three per location) record the following information with a sharpie:

- Township:** Could be more than one location per township
- Pheromone Trap ID:** Unique identifier for each trap location
- Latitude & Longitude:** Decimal degrees to four decimal places (i.e. 44.8968°, -68.6672°)
- Map Datum:** i.e. NAD83, WGS84
- Tree #:** Assign a unique number to each tree sampled (1, 2 or 3)
- Width:** Branch width at the widest point in inches
- Sample Date:** Date samples collected

Fold/roll each bag, seal with staples and bundle all three bags per location together with flagging tape. Samples need to be stored in a cold, shaded, dry location (<40F), until they can be transported to a central holding facility in Old Town/Orono, ME. Contact CJ Langley, or Allison Kanoti (MFS, (207)827-1813, [allison.m.kanoti@maine.gov](mailto:allison.m.kanoti@maine.gov)) to arrange sample pick-up/drop off.

Finally, record all data into a spreadsheet containing one row for each tree sampled for your organization.

Samples will be processed at the Canadian Forest Service (CFS) lab in Fredericton and results will be available in late February.

### **Supplies:**

Pole pruners & clippers

Paper bags, 3 per location – CFRU has a supply or you can order here: <http://tinyurl.com/znemdje>

Stapler

Permanent marker

GPS unit