

Township of the Archipelago Forest Health Update – Spring 2011



By

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July 2011

Front cover photo: Great blue heron nesting site, a heron rookery.

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Introduction

Forest health surveys were carried out this year at the end of May across the Township of the Archipelago. The timing of spring was more in line with what we normally expect to see in this part of Ontario. At the time of this visit, all hardwoods had fully developed foliage, except for some of the black ash trees, however, they were not far behind. The new growth on most conifers was starting to grow as well. Overall, throughout the Township, the trees surveyed adjacent to the roads were in good condition.

The forest insect damage observed during this visit was caused by the larch casebearer and the eastern tent caterpillar. As is usually the case this time of year, the foliage on pine adjacent major roadways was red due to the desiccation caused by winter road salt. Outside the Township boundary, near the north junction of Highways 69 and 612, damage caused by the birch casebearer was present again this year, but at reduced levels.

Weather

Overall, temperatures in the first five months of 2011 were 7% below average. The Muskoka area enjoyed a pleasant spring, however, as temperatures in April and May were 4% and 11% above average, respectively (Figure 1).

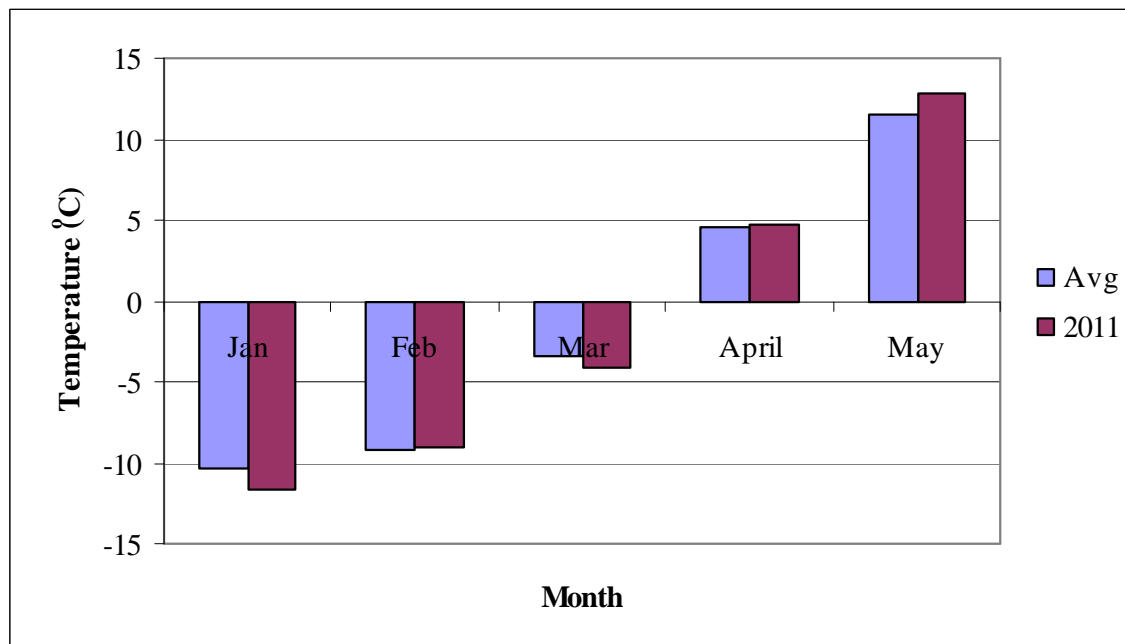


Figure 1. Thirty-year temperature averages and 2011 monthly temperature averages for the Muskoka area.

Precipitation was 63% below average between January and March of 2011 (Figure 2). Precipitation in February alone was 91% below average. Lack of water in the first three

months was somewhat countered by a wetter than normal April. Precipitation in April was 60% above normal. Above average precipitation in April, coupled with slightly warmer than average temperatures in April and May, likely contributed to the good tree health observed during our spring survey of the Archipelago. Remember, however, that overall precipitation was 28% below normal in the first five months of 2011, so it will be important to keep trees watered if conditions appear to be dry.

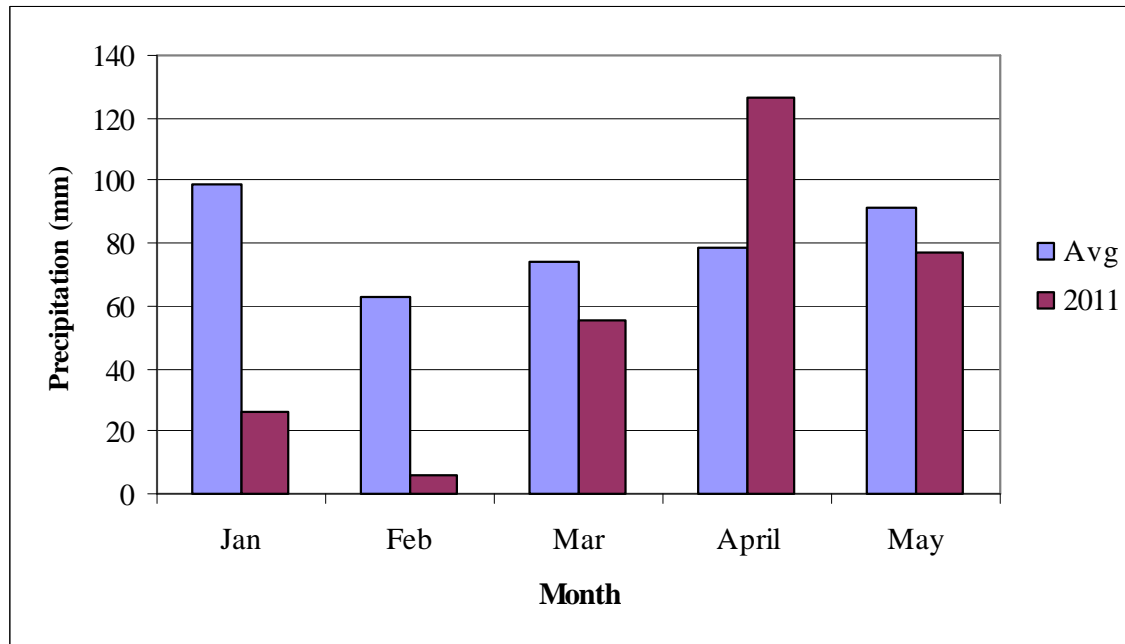


Figure 2. Thirty-year precipitation averages and 2011 monthly precipitation averages for the Muskoka area.

Larch Casebearer (*Coleophora laricella*)

A small infestation of larch casebearer was found at the south end of the Skerryvore Road. Approximately a half hectare of 12 to 15 meter tall tamarack had taken on a light brownish hue as a result of the insect feeding (Figure 3).

Larch casebearer is an invasive insect from Europe. It was first recorded in North America in Massachusetts in 1886. It quickly spread into eastern Canada and, by the mid-1960s, was found in British Columbia.

Insects overwinter in cases constructed of needles. The larvae, with cases attached, resume feeding in the spring, as soon as foliage begins to appear. The damaged needles look as though they have been bleached or scorched (Figure 3). Pupation occurs inside the cases and moths lay their eggs in mid-summer. The newly hatched larvae burrow into needles and feed until the end of summer. As a result of this late season feeding, damage will often be noticeable in the same stands infested earlier in the season.



Figure 3. Damage caused by larch casebearer on tamarack.

Eastern Tent Caterpillar (*Malacosoma americanum*)

Population levels of the eastern tent caterpillar were up in 2011, compared with what was observed last year. Numerous tents were present in roadside cherry, particularly along the roads in the southern portion of the Township. Varying degrees of larval development were observed on many of the tents (Figure 4). Small trees generally had one insect colony, where some of the larger ones had multiple tents (Figure 5).

This insect overwinters as an egg, which is laid in distinctive masses that encircle the smaller twigs. The larvae hatch from the eggs in spring, just as the cherry leaves start to emerge. The young caterpillars gather at a branch fork or crotch and begin to build a silk tent, which they use for shelter. As the caterpillars grow, so does the size of their tent. As the feeding period comes to an end, the caterpillars move off in search of places to spin white cocoons. The adults emerge in July and lay eggs for the generation that will hatch next spring.



Figure 4. Eastern tent caterpillar larvae. Note different sizes.



Figure 5. Eastern tent caterpillar damage in cherry.