

Aurora takes burning approach to tackling LDD caterpillars

Aurora this spring will be holding the torch high to battle the LDD moth.

The LDD's (*Lymantria dispar dispar*) pesky caterpillars were a bane of just about everyone who spent time outdoors last summer, but new measures to combat the bug will help bolster last year's efforts in Aurora.

New measures to keep the caterpillars at bay and save the leaves on local trees will include, in addition to the continued distribution of burlap banding kits to residents, the introduction of a NPV virus that targets the LDD and the burning of egg masses with propane torches in area woodlots.

The LDD is an invasive species that was first introduced to North America in the mid-19th century and has since taken root across the Great Lakes Basin and well beyond. They feed on the leaves of oak trees, primarily, but also chomp their way through the greenery of aspen, birch, maple, poplar and willow trees and sometimes even spruce and pine.

Population booms happen every eight to 12 years, with 2020 bringing an all-time high.

Aurora experienced a high incidence of LDD in 2020 in a few areas in Town and in 2021 the population exploded, causing extensive defoliation of trees on residential and public lands, said Parks Manager Sarah Tienkamp in a report to Council. While tree canopies can be severely or completely defoliated, trees are relatively resilient and adapted to defoliating insects and diseases. Trees in good health will replace leaves later in season to perpetuate annual growth and development with little adverse impact, however, trees can see branch or crown dieback if energy stores are depleted for successive years and in some cases mortality can occur, usually when other stressors are present such as drought.

The spring of 2021 was extremely dry in York Region, with late May and June experiencing drought conditions. This was during the peak of the LDD outbreak and there was concern about how the trees may recover if conditions perpetuated into July and August. As a result, staff educated the public about the importance of providing adequate hydration to their trees to assist in the recovery and regrowth of leaves.

One of the tools in the municipal arsenal this year is the naturally occurring NPV virus, which has been detected in York Region. The virus, the report states, is one of the most important factors in population collapse of LDD. Although the virus was not found in Aurora, it was found in abundance in Newmarket and samples were collected by the Town and dispersed in hot spot locations last June.

It was discovered there is a disease let's call it COVID for LDD that was discovered in different municipalities and we collected some of the caterpillars from Newmarket and dispersed them in our woodlots so the disease would spread to the woodlots where our highest infestations were, said Al Downey, Aurora's Director of Operations. We hope that will reduce the number of caterpillars in 2022. In 2022 we are going to do everything we did in 2021 but in addition to that, we want an increased communication campaign because people need to know more about the effects of LDD. We want to expand our burlap program. It was extremely successful and people really appreciated the fact that we were doing something to address the caterpillars and the Region is stepping up and getting involved in that.

We have started to do some egg removal, which we didn't do in 2021, but we want to do in 2022. For lack of a better way of describing it, we take a propane torch and burn the egg masses off the tree trunks. We have identified where they are and the staff go with the propane torch and we burn as many masses as we can to help reduce the number of eggs that will be hatching in the spring.

Whatever you can do in order to disturb those egg masses is a good thing. We are somewhat living and learning in terms of what are the most effective ways, but burning with the propane torch seems most effective. I am not suggesting residents get their propane torch out because I don't want you injuring the tree; you can still scrape them off or power spray them off. Removing that

egg mass has a very positive impact on the number of caterpillars you will see in the spring.?

The return of old measures and the beginning of new ones received a positive reception at Council, particularly the education component.

?We just didn't have as much preparation and resources to really do the education in advance,? said Councillor Rachel Gilliland. ?I did notice the burlap was? a hot commodity, although there were still a lot of people who were using it incorrectly. They thought because they wrapped it around the tree?the caterpillars would not travel up it, but you have to learn how to harvest them and make it work. I noticed a lot of people had tape on their tree [but] they had it on the wrong way and they had it on past the time [it would be effective] and would actually cause more insects and rotting underneath.

?More education is needed.?

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