

Subject: 2021 LDD Moth Program Summary Report

Recommendation:

BE IT RESOLVED THAT Council receive Report #2021-0115 – 2021 LDD Moth Program Summary Report, for information.

Background:

In 2020 Council approved the Gypsy Moth Management Policy S802-03 to address the periodic infestation of the *Lymantria dispar dispar* Moth (LDD Moth) experienced in the Town of Pelham.

This report serves to fulfill the requirements of the Policy S802-03 to inform Council on the effectiveness of the treatment program and present a post spray assessment and defoliation surveys of the treated areas.

The detailed assessment of the 2021 treatment program, prepared by Lallemand Inc./BioForest (BioForest), has been included as an attachment to this report as Appendix A.

Analysis:

In 2021 the Town of Pelham treated a total of 113.1 hectares in the areas of Fenwick and Fonthill with two applications of Foray 48B (*Bacillus thuringiensis* var. *kurstaki* [BtK]) and applied at a rate of 4.0L/ha. The first application took place on May 20, 2021 and the second on May 31, 2021. Zimmer Air Services Inc. was the aerial applicator.

Assessment of the 2021 aerial spray program indicates that the program was effective by significantly reducing the forecasted defoliation and maintaining a healthy tree canopy. No branches within the spray areas showed greater than 25% defoliation and the majority had less than 5%.

While the management program effectively met the objectives of Policy S802-03 within the spray areas, many properties outside of those areas have experienced severe defoliation of their trees. Staff continued to receive reports from citizens regarding LDD Moth infestations in all areas of the municipality outside of the spray areas, including large rural properties and woodlots, and urban residential areas of

both Fonthill, and Fenwick, as well as along the border between the Town of Pelham and City of Welland.

Staff recommend that the LDD Moth Management Program continue as per Policy S802-03. Continuation would mean that egg mass surveys will be completed in January of 2022 to determine the level of infestation expected.

Financial Considerations:

To date, the cost of the LDD Moth Management program in 2021 was \$146,900 (excluding applicable taxes). This included; \$105,800 for aerial spray services, \$35,780 for program consulting and execution, and \$5,400 for mail outs and print media communication. The approved budget 2021 budget was \$150,000. The remainder of the allotted budget will fund the Forestry Health Volunteer program.

Alternatives Reviewed:

Policy S802-03 was approved for the management of the LDD Moth in 2020. The policy was based on the principals of Integrated Pest Management and provides a process to address the periodic infestations of the LDD Moth, including communication to Council regarding the efficacy of the program.

As staff are following the policy, no further alternatives were considered in the preparation of this report.

Strategic Plan Relationship: Strong Organization

The tree canopy within the municipal boundary is vital to increasing the quality of life within the Town of Pelham.

Consultation:

Lallemand Inc. / BioForest provided; 2021 LDD Moth Aerial Spray Program Summary Report.

Other Pertinent Reports/Attachments:

Appendix A – 2021 LDD Moth Aerial Spray Program Summary Report
Public Works Report #2021-0054
Public Works Report #2021-0065
LDD Moth Management Policy S802-03

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