

ERADICATING THE ASIAN LONGHORNED BEETLE *ANOPIPHORA GLABRIPENNIS* FROM WOODBRIDGE, ONTARIO —AN UPDATE ON CFIA'S EFFORTS

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Abstract

Since the first interceptions of the Asian Longhorned Beetle (ALB) *Anoplophora glabripennis* in cargo at Burnaby, BC in 1992, the Canadian Food Inspection Agency (CFIA) has been actively involved in screening cargo and surveying high risk sites. Fortunately, the level of preparedness within CFIA and other government agencies, to such an exotic, is high due to a number of emergency simulations held during the last 5 years.

In September 2003, a resident of Woodbridge, Toronto submitted to the CFIA, an insect, later confirmed as *Anoplophora glabripennis*. A quick survey of the site, indicated a localized introduction of ALB in an industrial park. An emergency response was initiated by CFIA which include commencement of delimitation surveying, mobilization of staff and communications with media and partners. CFIA is the lead agency in partnership with the Cities of Vaughan and Toronto, York Region, Toronto Region Conservation Authority other local municipalities, Canadian Forest Service, and the Ontario Ministry of Natural Resources.

The Eradication Team is divided into three sections: Operations, Communications, and Science. The Operation group is responsible for survey direction and data collection, host removal and disposal, quarantine zone enforcement, mapping and GIS and costing. The communications group is responsible for press releases and media interviews, information line for public assistance, website management, public open houses and community involvement. The research group has been tasked with finding answers to and making recommendations as to host tree susceptibility, eradication protocols, disposal options and chemical treatments.

The original site of introduction was in an industrial area between warehouses on private property. Estimates

on the introduction date is 6 years ago which predates the regulations enacted to prevent the movement of untreated wood from Hong Kong and China. The infestation has expanded throughout the industrial area to an area of 3 km east/west by 2 km north/south with three satellite sites just beyond the main area. The area originally surveyed was 160 km² of delimitation survey of all public or street trees, equating to 50% of all trees (private and public) in the area. An intensive (approx 100 km²) visual survey and tagging of public and private trees in the infested core is ongoing and includes the primary, secondary and tertiary zones as well as a containment area with a radius of 1600 m from the infested trees.

After extensive consultation and debate, the recommendations for eradication are to remove all host material within a radius of 400 m (secondary) from an infested tree (primary). An additional, a further area of treatment of 400 m (tertiary) is to be treated with Imidacloprid, (Canadian registration pending) or host removal. The areas where trees are to be removed include the generally infested industrial park, a newer residential area, a cemetery, and an older well treed neighborhood. The time frame for eradication commenced with the first tree removal November 20 and a projected completion for host removal by May 15, 2004. Insecticide treatment by soil injection under host trees into the root ball will commence in the spring but is dependant upon the registration of the insecticide by the Canadian Pesticide Management Regulatory Agency. In areas where the insecticide cannot be used i.e. in riparian zones, host removal will be the option. A Ministerial Order will be issued to authorize the removal or treatment of all host trees in the primary, secondary and tertiary areas.

The projected number of trees to be removed within the 400 m host removal area is estimated to be 11,000+ trees. The host list that is being used includes *Acer*, *Aesculus*,

Salix, Ulmus, Betula, Platanus, Celtis, Populus, and *Sorbus* but leaves open the possibility of including some possible genera cited in literature as *Fraxinus, Malus* and *Prunus* should these hosts prove positive after extensive surveying. Host trees within the industrial park have been removed (600 trees as of early January) and 120 trees have been confirmed positive. Approximately 10% of the asymptomatic trees removed were found positive with ALB oviposition sites.

Continued surveys are expected for the next 3 to 5 years depending upon the results of this years eradication program. CFIA legislation enables the funding the survey and eradication costs but does not permit covering the costs of site restoration in the eradication areas. Other levels of government and agencies are assessing their levels of commitment in replacing ALB host trees with suitable nonhost species.