
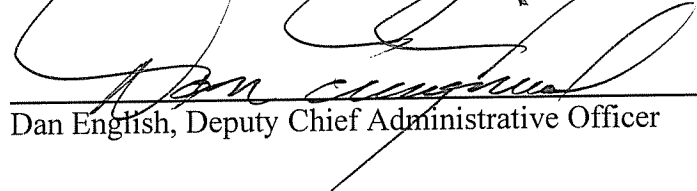


Halifax Regional Council
November 12, 2002

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:


George McLellan, Chief Administrative Officer


Dan English, Deputy Chief Administrative Officer

DATE: October 30, 2002

SUBJECT: Urban Forest Pest Management Protocol

ORIGIN

Staff wish to update Regional Council on the ongoing management of recent exotic pest infestations and present a proposed Protocol to manage these types of situations for the future.

RECOMMENDATION

It is recommended that :

Halifax Regional Council endorse the attached, "Urban Forest Pest Management Protocol" for staff to use as a guideline for managing serious pest threats to our urban forest and park areas.

BACKGROUND

Over the past two - three years Halifax Regional Municipality has experienced infestations of two serious exotic pests. These include the Brown Spruce Longhorn Beetle on park and forest trees and the Japanese Beetle on turf and horticultural plants. The attached information from the Canadian Food Inspection Agency (CFIA) provides a summary and overview of the management efforts to date with each of these pests. The CFIA is the lead federal agency on these types of matters.

Environmental, social and fiscal impacts from damage caused by these types of pests can be very significant. These non native infestations are new experiences for our municipality and the country as a whole and managing them is literally breaking new ground.

Therefore, it is very important to learn from these experiences in order to better prepare for the future.

Through the collaborative efforts of staff representing the cities of Vancouver, Victoria, Calgary, Regina, Winnipeg, Toronto, Fredericton and Halifax Regional Municipality and the federal agencies, Canadian Forest Service (CFS) and the Canadian Food Inspection Agency (CFIA), a generic management framework/ protocol was developed. A copy is attached

It is designed in such a manner that it can be tailored for a specific region and for specific issues.

It is principled on good communications, community and stakeholder involvement, interagency cooperation and preventative measures wherever possible.

DISCUSSION

Staff believe that this protocol provides a good template to follow for the prompt and effective management of these types of serious threats to our urban forest and parks, including when and who to engage in the process. Therefore, staff recommend that Regional Council endorse the attached "Urban Forest Pest Management Protocol" as a corporate guideline for managing serious insect pest threats.

These types of templates/ protocols provide fundamental components towards an overall Urban Forest Management Strategy or Plan for HRM. In essence some of the smaller pieces can be concurrently completed.

An Urban Forest Management Strategy and related environmental asset management plans would be integral to the Regional Planning process in the bigger picture of integrated and sustainable growth management for HRM.

BUDGET IMPLICATIONS

Not applicable at this time.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

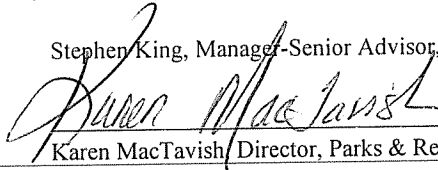
This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ATTACHMENTS

Urban Forest Pest Management Protocol
Exotic Pest Management Summaries from the Canadian Food Inspection Agency

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

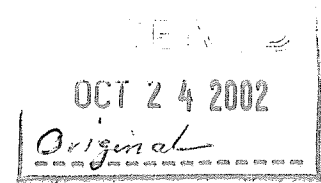
Report Prepared by: Stephen King, Manager-Senior Advisor, Parks & Natural Areas, 490-6188

Report Approved by: 
Karen MacTavish, Director, Parks & Recreation Services, 490-4734



Canadian Food Inspection Agency / Agence canadienne d'inspection des aliments

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PO Box 1060
Dartmouth, Nova Scotia, B2Y 3Z7
Phone: (902) 426-1393 // Fax: (902) 426-4844
E-mail: cunninghamg@inspection.gc.ca



Your file / Votre référence

Our file / Notre référence

October 18, 2002

Mr. Stephen King
Manager/Senior Advisor for Parks and Natural Areas
Halifax Regional Municipality
5711 Sackville St.
PO Box 1749, Halifax, NS B3J 3A5

Dear: Mr. King

I have prepared the attached "executive summary" which provides an overview of the brown spruce longhorn beetle (BSLB) eradication program status within the Halifax Regional Municipality. As you know, the magnitude of the program is difficult to convey on paper, however, when one reflects on what it takes to survey in excess of one hundred thousand residential properties, in addition to several hundred square kilometres of densely forested area, they can readily imagine the effort incurred to date.

Stephen, please let me know if this summary is suitable for your needs.

Sincerely,

Gregg Cunningham
Program Network Specialist, Forestry
Atlantic

cc Paul Farrell, CFIA
Jarvis Mawhinney, CFIA

encl.



Executive Summary:

Your file *Votre référence*

Our file *Notre référence*

**Brown Spruce Longhorn Beetle
Eradication Program, Halifax Regional Municipality, Nova Scotia**

The Brown Spruce Longhorn Beetle (BSLB) has been identified by Canadian Forest Service (CFS) scientists to be the causal agent of red spruce mortality in the Halifax Regional Municipality (HRM). Point Pleasant Park, where the beetle was first discovered, is approximately 75 hectares in size, and is located in the south end of Halifax, adjacent to major international ocean terminals. It is believed that this insect arrived in Canada in solid-wood packing material, used to stow ships' cargo, discharged at the Port of Halifax. HRM is the only location in North America known to be infested with BSLB. A science-based pest risk assessment conducted by the CFIA has identified the BSLB as an exotic pest of quarantine significance, and a direct threat to trade in Canadian forest commodities and to the forests of North America.

The CFIA has established a task force, a science-based advisory group, including representatives from Natural Resources Canada - Canadian Forest Service (CFS), Nova Scotia Department of Natural Resources (NSDNR) and the HRM. The task force provides recommendations to the CFIA in respect to the control and eradication of the BSLB. Ongoing research, existing scientific data and survey findings have provided task force scientists, and those with whom they collaborate, with the necessary information from which they base their recommendations to the CFIA.

The CFIA and NSDNR are conducting surveys within the HRM to identify trees harbouring the BSLB, and to determine the outer distribution of the beetle's population. As of October 03, 2002, more than 600 square kilometres of urban and non-urban forest have been surveyed, or re-surveyed, in HRM. In addition, over 150 square kilometres of woodlands have been surveyed at various seaports and sawmills throughout Nova Scotia and major Canadian seaports. Infested trees are continuing to be removed and disposed of in a concerted effort to eliminate the beetle from HRM.

In July of this year, Point Pleasant Park was intensively surveyed and 17 positive trees were confirmed for removal, as compared to 108 in the previous fiscal year and 2537 during the first year of the eradication program for BSLB. Also, as in the previous two years of the program, approximately 300 windfallen spruce trees have been left in the park throughout the egg laying season of the beetle, then removed, as a means of further suppressing the BSLB population.

Outside of Point Pleasant Park, approximately 2400 trees have been removed, and incinerated, in the first three years of the program. To date, the beetle has not been found outside of a 15-km radius from Point Pleasant Park, with the exception of one property in Lower Sackville, approximately 19 km from



Executive Summary:

Your file *Votre référence*

Our file *Notre référence*

**Brown Spruce Longhorn Beetle
Eradication Program, Halifax Regional Municipality, Nova Scotia**

the park.

CFIA and NSDNR surveyors have also inspected over 100000 residential properties within HRM. Area residents and landholders have been very cooperative in facilitating each aspect of the program, from access to their lands for the survey to the removal of infested trees. The CFIA has provided information to the public through the media, open houses, a toll-free number, information pamphlets, as well as through staff performing various aspects of the program.

The BSLB Infested Places Order, established during the fall of 2000, also known as the “Ministerial Order,” as signed by the Hon. Minister of Agriculture and Agri-food Canada, Lyle Vanclief, prohibits the unapproved movement of softwood logs and by-products, such as bark, green lumber and wood chips, out of the known infested area for the BSLB, as a means of controlling the spread of the insect. Ministerial Order Inspectors from the CFIA promote compliance with the Order through education and direct communication with both the public and private sectors, as well as through ongoing monitoring of logging, land development and other activities within the BSLB regulated area.

In summary, the CFIA will continue to identify and remove BSLB infested trees with the objective of systematically removing the beetle’s population from HRM, while obtaining further evidence respecting the full extent of its spread. Despite the suppression of the BSLB population in such areas as Point Pleasant Park, it is expected that eradication will take a number of years. However, the resultant control of the spread of BSLB from HRM “buys time” for possible discoveries to be made via ongoing research, which may provide a key to eradication or increased control.



Rec'd Nov. 01, 2002
Originals
MK

Japanese Beetle Eradication in Halifax, Nova Scotia Executive Summary October 15, 2002

Your file Votre référence

Our file Notre référence

In August, 2001, adult Japanese beetles were identified feeding in Cornwallis Park, located in Halifax, Nova Scotia. In response, the Canadian Food Inspection Agency (CFIA) began trapping adult Japanese beetles in the park and in the area within 1.6 kilometers of it. In excess of 800 adults were trapped, of which over 600 were trapped within the park itself. All but five adults were trapped either in Cornwallis Park or within 200 meters of it. Soil surveys were conducted in the fall of 2001 around all positive adult traps, and immature stages of the beetle were identified within the limits of the park. (Trace back efforts have not identified the source of infestation.)

During the fall of 2001 and the winter of 2002, the CFIA met with stakeholders and undertook consultations to develop an eradication protocol. Stakeholders included the city of Halifax, the provincial Department of Agriculture and Fisheries, national and provincial landscape associations, residents' associations and potentially affected businesses in the vicinity of the park.

The CFIA deems eradication of the Japanese beetle in Halifax to be feasible because of the limited distribution of the pest, since it is confined to the area in and around Cornwallis Park. Recognizing that no single treatment is likely to succeed in eradicating the beetle, an integrated approach will be employed. Eradication activities include restrictions on the movement of potentially infested materials, an intensive adult trap-out program, removal of preferred larval host materials, enhancement of oviposition sites, and application of a systemic pesticide.

Movement restrictions are in place on all properties within a 200-meter radius of Cornwallis Park in order to prevent the spread of the beetle through the movement of material that is or could be infested with the different life stages of the beetle. The movement of soil and related matter from these properties is prohibited, unless it is authorized by the CFIA.

Mechanical disruption of the larval stages and removal of the larval host material in Cornwallis Park were carried out in the spring of 2002. All sod, plants and roots were removed from the park to control the larvae through the removal of their primary food source, which should disrupt the feeding larvae before they pupate.

Adult Japanese beetles have been trapped in Cornwallis Park utilizing a trap density of 25 traps per hectare. Because traps set just outside the park could draw adult beetles out of the park, no traps were set within 100 meters of the park perimeter. Traps have been set, at decreasing densities, outside of this 100-meter zone, to a distance of 4.8

kilometers from the park. Of the 248 adult beetles caught during this trapping season, 236 were collected in and around Cornwallis Park.

This fall soil samples will be taken at all positive trap locations to search for the presence of immature stages of the beetle.

Preferred adult host materials such as roses have been maintained in Cornwallis Park. Property owners within the vicinity of the park have been encouraged to limit their use of adult host material. Sod has been replaced within the park prior to the onset of oviposition. At the time of sod laying, a pesticide with the active ingredient Imidicloprid was applied. Imidicloprid is systemic and highly efficient in controlling early instar larvae.

The effectiveness of the eradication program will be evaluated on an ongoing basis and revisions will be made as required. A major review of the program, including an analysis of trap collection data, will be conducted in the fall of 2002 and in the winter of 2003 to determine the strategic plan for the future.

Public education and assistance is fundamental to the success of this eradication program. Information has been made available through various media outlets serving the affected area. The CFIA has also developed an information packet that is being distributed to all properties within, and in the vicinity of, the area under control.

Sources:

Ronald Neville, Regional Plant Protection Officer, CFIA
Dawn Miller-Cormier, Network Specialist, Horticulture, CFIA