

**ENVIRONMENT COMMITTEE****D**

*HIS WORSHIP, THE MAYOR  
AND COUNCILLORS*

**SUBJECT: EUROPEAN CHAFER UPDATE 2007**

**RECOMMENDATIONS:**

1. THAT Council approve the European Chafer Management Plan as noted in Section 3.0 of this report.
2. THAT a copy of this report be forwarded to the Parks, Recreation & Culture Commission.

**REPORT**

The Environment Committee, at its Open meeting held on 2007 April 10, received and adopted the *attached* report providing an update on various activities undertaken in 2006 relating to European chafer infestation and proposed European Chafer management activities for 2007. The Committee noted that the 2007 plan will further advance knowledge of sustainable landscape maintenance and treatment methods for European Chafer suppression. The Committee concluded by noting that continued education will also provide greater awareness of the pest and available treatment methods.

Respectfully submitted,

Councillor Dan Johnston  
Chair

Councillor Pietro Calendino  
Vice Chair

Councillor Lee Rankin  
Member

COPY – CITY MANAGER  
DIRECTOR ENGINEERING  
DIR. PARKS, REC. & CULTURAL SERV.  
DIRECTOR FINANCE

**TO:** CHAIR AND MEMBERS  
ENVIRONMENT COMMITTEE **DATE:** 2007 April 02

**FROM:** DIRECTOR ENGINEERING **FILE:** 33000-05  
*Reference: European Chafer*

**SUBJECT: EUROPEAN CHAFER UPDATE 2007**

**PURPOSE:** To provide the Committee with an update on various activities undertaken in 2006 relating to the European Chafer infestation and propose European Chafer management activities for 2007

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## RECOMMENDATIONS

1. **THAT** the Committee recommend Council to:
  - a) approve the European Chafer Management Plan as noted in Section 3.0 of this report.
  - b) forward a copy of this report to the Parks, Recreation & Cultural Commission.

## REPORT

### 1.0 INTRODUCTION

Council at its meeting of 2006 April 24 approved a European Chafer Management Plan for 2006, to build on the work that was initially undertaken in 2005 to manage the European Chafer turf pest in Burnaby.

The following report provides the Committee with an update on various activities undertaken in 2006 relating to the European Chafer, and proposes a European Chafer management Plan for 2007.

### 2.0 UPDATE ON EUROPEAN CHAFER MANAGEMENT ACTIVITIES (2006)

The European Chafer (*Rhizotrogus majalis*) is a non-native beetle that spends the majority of its life as a white grub (larva) in the soil. The grub form of the Chafer causes damage to turf grass in fall and spring when the grub feeds on turf roots. Secondary damage to lawns, boulevards and medians is caused by birds, skunks and racoons digging through the turf to feed on grubs. Since the introduction of European Chafer in New

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Westminster in 2001 and Burnaby in 2003, this turf pest has also been confirmed to be present in Vancouver and Coquitlam.

In 2006, staff undertook a comprehensive public education and public land remediation program. The components of the European Chafer Management Plan that were completed in 2006 were as follows:

- Continuation of participation in a multi-stakeholder advisory group consisting of academia, turf grass industry and government representatives to continue research on the most effective methods of controlling this turf pest;
- Distribution of European Chafer brochure city-wide and continuation of presentation to community and business groups as requested;
- Sponsoring eight free workshops to Burnaby residents through the Burnaby School Board's Adult & Continuing Education Program on tips for managing this turf pest;
- Surveillance / mapping of infested public and private lands;
- Pilot remediation and treatment of fifteen specific sites on public lands using a natural biological product (entomopathogenic nematode *Heterorhabditis bacteriophora*) to control first and second instar chafer larvae and undertaking post evaluation;
- Research to assess European Chafer populations in shaded versus exposed sections of public lands prior to treatment (early spring).

In 2006, the Chafer flight was observed later in June than in previous years. Similarly, first instar chafer larvae, which are usually present in the soil in mid July, were not easily found in the soil until the first week of August. This highlights the need for nematode treatments to be based on pre-treatment sampling rather than calendar dates. It is important to note that in addition to the timely nematode treatment, maintenance of a healthy lawn is a key element in management of European Chafer.

### **3.0 EUROPEAN CHAFER MANAGEMENT PLAN (2007)**

Building on the work undertaken in previous years, the proposed European Chafer Management plan for 2007 includes the following components:

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PHASE	ACTIVITY	COMMENTS
Education	Staff	Continue to participate in multi-stakeholder advisory group; Continue to educate City staff to identify and report on Chafer impacted public lands.
	Public	Continue to provide information on European chafer through City website, distribution of brochures at public events, InfoBurnaby, newspaper articles and presentations.
Surveillance	Public Lands	Continue to identify and map high value public lands that have been impacted by European Chafer.
	Private Lands	Continue to identify and map reports of European Chafer damage on private lands.
Treatment and Research	Public Lands	Continue with the pilot nematode treatment of select European Chafer impacted medians and boulevards with modified maintenance and mowing practices. Look at the feasibility of undertaking trials with different grass species and rooting depths in tulip boxes with known number of Chafer grubs inserted in them.
	Private Lands	Look at the feasibility to offer one time, limited number of nematode packages to Burnaby residents at cost to promote the use of biological treatment over chemical treatment.

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#### 4.0 CONCLUSION

A number of activities were undertaken by the City in 2006 to respond to the continued evidence of the European Chafer turf pest and the growing demand for information from the public. Building on the work from previous years, the European Chafer Management Plan for 2007 will further advance our knowledge of sustainable landscape maintenance and treatment methods for European Chafer suppression. Continued education will also provide greater awareness of the pest and available treatment methods.



W.C Sinclair, P.Eng.  
DIRECTOR ENGINEERING

DD:cg  
Attachment

Copied to: City Manager  
Director Parks, Recreation and Cultural Services  
Director Finance