

CITY OF BURNABY

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ENVIRONMENT COMMITTEE

HIS WORSHIP, THE MAYOR
AND COUNCILLORS

**RE: THE "PLAYGROUND OF THE GODS" OUTDOOR SCULPTURE AT
BURNABY MOUNTAIN**

RECOMMENDATIONS:

1. **THAT** Council approve the request for an application of a Borate-based pesticide to control a highly active carpenter ant infestation in the pole grouping known as "The Direction", a component of the outdoor sculpture, "Playground of the Gods" in order to ensure public safety and safeguard the longevity of the artwork.
2. **THAT** a copy of this report be forwarded to the Parks, Recreation and Culture Commission for their information.

REPORT

The Environment Committee, at its Open meeting held on 2004 October 12, received and adopted the *attached* report requesting Council's approval for application of carpenter ant controlling pesticide to "The Direction", one of the pole groupings of the "Playground of the Gods" outdoor sculpture.

Respectfully submitted,

Councillor D. Johnston
Chair

Councillor P. Calendino
Vice Chair

Councillor C. Redman
Member

COPY - CITY MANAGER
- DIRECTOR PLANNING & BUILDING
- DIRECTOR PARKS, RECREATION & CULTURAL SERVICES
- DIRECTOR ENGINEERING

2004 OCTOBER 08

TO: CHAIR AND MEMBERS
ENVIRONMENT COMMITTEE

FROM: DIRECTOR PARKS, RECREATION AND CULTURAL SERVICES

**SUBJECT: THE "PLAYGROUND OF THE GODS" OUTDOOR SCULPTURE AT
BURNABY MOUNTAIN**

PURPOSE: To request Council's approval for application of carpenter ant controlling pesticide to "The Direction", one of the pole groupings of the "Playground of the Gods" outdoor sculpture.

RECOMMENDATIONS:

1. THAT the Committee recommend that Council approve the proposed request for an application of a Borate-based pesticide to control a highly active carpenter ant infestation in the pole grouping known as "The Direction", a component of the outdoor sculpture, "Playground of the Gods" in order to ensure public safety and safeguard the longevity of the artwork.
2. THAT a copy of this report be forwarded to the Parks, Recreation and Culture Commission for their information.

REPORT

1.0 BACKGROUND

In the summer of 2003, the conservator from the Burnaby Village Museum examined the outdoor sculpture "Playground of the Gods", located on Burnaby Mountain as the artwork had obvious signs of deterioration. A conservation consultant specializing in totem poles was therefore retained to provide a detailed evaluation of the poles' conditions and put forward treatment proposals for problems such as water damage, fungal decay and infestation by wood boring insects

During the detailed examination of the individual pole groupings at the site, the conservation consultant and conservator discovered a highly active carpenter ant infestation in the pole grouping known as "The Direction".

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Attachment 1 shows how the long angled pole is supported by a post and lintel frame - the framework houses the nest. The artwork also suffers from an underlying infestation of decay fungi. The conservation consultant submitted an interim report identifying the troubling nature of these infestations and the need to control them with pesticides as soon as possible, to halt the weakening of the framework, save the art work from the colony's rapid expansion and address potential public safety concerns.

An entomologist was then retained to report on the type and extent of the infestations. The report confirmed the previous findings and recommended that the active infestation must be controlled immediately by the initial use of pesticides (borate based) followed by other preventive measures.

The purpose of this report is to identify an urgent need to control the carpenter ant infestation which endangers the longevity of the artwork. Action is advised due to the clear risk to public safety as nest expansion will further compromise structural strength.

Staff have investigated different control approaches and have determined that a chemical approach is the only effective means for addressing this urgent situation. Staff have reviewed chemical approaches and selected borate as a treatment that will be effective while presenting the lowest possible environmental and health risks.

It is recommended that a "one off" application of pesticide be undertaken by a licenced pesticide applicator. The option to wait for the final report from the conservation consultant and then treat "The Direction" at the same time as the other pole groupings, is not recommended as work might begin in the Spring of 2005 at the earliest and the delay will allow the ants to gain ground.

2.0 **CITY OF BURNABY INTEGRATED VEGETATION AND PEST MANAGEMENT POLICY**

The Integrated Vegetation and Pest Management Policy governs intervention in infestations on City lands. Its principles and philosophy require that the City manage vegetation and pests in a conservative manner.

The policy also states that action must be taken when a level of development of the pest population may increase to the injury level, where the infestation will cause an unacceptable impact on public safety, recreation and aesthetic values (among others). For carpenter ants, the action level is reached when more than ten ants are seen at one time. We are beyond this point for "The Direction".

3.0 PROPOSED APPROACH

Staff propose that a plan with the following series of measures is indicated:

1. To apply a pesticide now to “The Direction” and stop the weakening of the wood.
2. To ensure public notification of the work in progress through signage that identifies the purpose of pesticide application, procedures and compliance with the City of Burnaby’s IPM policy.
3. To continue with the conservation consultant’s review of the condition of “Playground of the Gods” as a whole and to present his report for consideration. This program will follow an IPM approach that will consider pest life cycle, physical controls and environmental and health factors.

This approach has been reviewed by staff from Parks, Engineering and Planning Departments.

3.1 Application of Pesticide

Staff concur with the entomologist that a borate-based pesticide be used to treat the infestations. This work will be done by a licenced pesticide applicator so that all safety concerns are met.

Borate is advised for many reasons:

- it is specific to the target species of carpenter ants and other wood boring pests;
- it effectively controls decay fungi;
- it has low toxicity to humans and low impact on non-target organisms (such as pets, eagles, seed eating birds and fish) ;
- it has a long residual effect inside wood;
- it presents a low environmental risk during handling and disposal;
- it is endorsed by the United States National Parks Service and B.C. Hydro as a successful component of their IPM strategies for the preservation of totem and telephone poles on public lands.

Borate would be most effective if applied in rod form (inserted into a hole drilled into the wood) and as a bandage wrapped around the base of the pole at the ground/air interface. These bring the pesticide to all areas of the nest most effectively. Large colonies are controlled in two to three weeks.

3.2 Public Notification

Accompanying the application of pesticides to “The Direction”, signage will be installed to provide public notification of the type of work underway and the reasons for it. Staff also suggest a larger, permanent “No Climbing” sign, with a universal pictograph, be installed as a deterrent.

3.3 Overall Conservation and IPM Strategy for “Playground of the Gods”

The application of pesticides is only one way in which the ants and fungi can be controlled and deterioration slowed for the “Playground of the Gods” as a whole. The conservation consultant continues to research and put together a long term program for the entire artwork.

For the best long-term control, an IPM strategy will also include steps that:

- reduce the moisture content of the wooden poles;
- improve drainage around pole bases;
- eliminate plant growth at pole bases and tops;
- use preferred pesticides to mitigate infestations and fungal decay in the other pole groupings;
- ensure continued public awareness through signage describing the work undertaken to protect safety of visitors and the artwork.

These steps will be presented in the conservation consultant’s final report to be submitted in mid November that will be used to develop a long term strategy for “Playground of the Gods”.

4.0 CONCLUSION

A highly active carpenter ant infestation and underlying fungal decay is further weakening the structural components of “The Direction”. It is recommended that this process of deterioration be halted through the application of borate-based pesticides by a licenced pesticide applicator in accordance with the City of Burnaby’s Integrated Vegetation and Pest Management Policy, as soon as possible. This action will protect the public and will ensure due diligence for the protection of the artwork which is a gift from Burnaby’s sister city and a prized tourist attraction in spectacular location.

Funds are available for this interim measure in the 2004 Annual Budget for the Burnaby Village Museum. A long term strategy to conserve the "Playground of the Gods" as a whole will be presented for consideration when the conservation consultant has completed the full and final report.



KATE FRIARS

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Attach.

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cc: City Manager
Director Planning and Building
Director Engineering



