Public Release September 12, 2016



# Town of Aurora Additional Items to Heritage Advisory Committee Meeting

Monday, September 12, 2016 7 p.m. Holland Room

> Delegation (a) Tom Boddy, Resident

Re: Item 1 – HAC16-009 – Request to Remove a Property from the Aurora Register of Properties of Cultural Heritage Value or Interest, 68 Temperance Street

> Delegation (b) Susan Morton-Leonard, Resident

Re: Item 4 – Memorandum from Planner, Re:Additional Information Re: Conservation and Watering Practices for Established "Heritage" Trees



Legal and Legislative Services 905-727-3123 councilsecretariatstaff@aurora.ca

Town of Aurora 100 John West Way, Box 1000 Aurora, ON L4G 6J1

## **DELEGATION REQUEST**

This Delegation Request form and any written submissions or background information for consideration by either Council or Committees of Council must be submitted to the Clerk's office by the following deadline:

### 4:30 P.M. ON THE BUSINESS DAY PRIOR TO THE REQUESTED MEETING DATE

COUNCIL/COMMITTEE/ADVISORY COMMITTEE DATE:

MON NORT 1214 2016 SUBJECT: DUROND HISTORICAL SOCIET

NAME OF SPOKESPERSON: Tom BOBDY

NAME OF GROUP OR PERSON(S) BEING REPRESENTED (if applicable):

BRIEF SUMMARY OF ISSUE OR PURPOSE OF DELEGATION:

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PLEASE COMPLETE THE FOLLOWING:

Have you been in contact with a Town staff or Council member regarding your matter of interest?

YES 🔽 NO 🗌

IF YES, WITH WHOM? JEFE HEALEY

DATE: TWILL LAST THE 2 WELLIN AGO AT MY

I acknowledge that the Procedural By-law permits five (5) minutes for Delegations.



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# 4:30 P.M. ON THE BUSINESS DAY PRIOR TO THE REQUESTED MEETING DATE

COUNCIL/COMMITTEE/ADVISORY COMMITTEE DATE: 12/09/2016

**SUBJECT:** Heritage Trees

NAME OF SPOKESPERSON: Susan Morton-Leonard

NAME OF GROUP OR PERSON(S) BEING REPRESENTED (if applicable):

# BRIEF SUMMARY OF ISSUE OR PURPOSE OF DELEGATION:

Property tax relief or funding assistance for heritage property as per request of Councillor Gaertner

# PLEASE COMPLETE THE FOLLOWING:

Have you been in contact with a Town staff or Council member regarding your matter of interest?		YES 🗆	NO 🗆
IF YES, WITH WHOM?	Councillor Gaertner, Dan Elliot (June 2016), Paul Dillman (Oct. 2015)	DATE:	

☑ I acknowledge that the Procedural By-law permits five (5) minutes for Delegations.



MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS

#### **Diplodia Tip Dieback of Pines**

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- 3. Life Cycle
- 4. Conditions Favouring Disease
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- 6. Control
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#### Introduction

Diplodia tip blight of pines is caused when susceptible plants are infected with the fungus *Diplodia pinea*. This fungus is also known as *Saphaeropsis sapinea*. All two and three needle pines are hosts to this disease: This includes Austrian pine (*Pinus nigra*), Scot's pine (*P. sylrestris*), mugo pine (*P. mugo*), ponderosa pine (*P. ponderosa*), and red pine (*P. resinosa*).

Pines which are 25 years or older are more susceptible to the disease. Younger trees are more resistant to the disease. However, if younger trees are growing on poor sites or are located close to affected trees, they may become infected.

Pines are more susceptible to *D. pinea* if they are planted on poor sites (poorly drained, compacted soils or drought soils) and experience root loss either chemically or mechanically, or lack of nutrition. By carefully locating the trees in the landscape and avoiding mass planting of Austrian pines, are the first steps in controlling this disease.

#### Symptoms

Newly developing candles (shoots) are infected by the fungus and turn brown and stunted. Needles turn brown and fail to elongate. By the end of the summer, shoots are brown and dead. Black pycnidia, or fruiting bodies, can be seen at the base of the needles.

Secondary buds often form at the base of dead shoots. The shoots grow the following spring, producing a "bunchy" growth. This new growth can become infected, depending on the frequency of rains and other environmental factors favouring disease development.

Older shoots and tissues may be infected through wounds, branches can eventually be girdled. The disease usually begins in the lower branches.

#### Life Cycle of Diplodia

The fungus is present throughout the entire season surviving from year to year on dead needles, twigs, and cones (either on infected trees or on the ground).

The release of spores and infection of susceptible plant tissues may occur at any time between March and October when conditions are favourable. During wet periods in the spring, pycnidia release spores. Pycnidia are the fruiting bodies of the fungus. The spores are scattered by wind, insects, and animals. For a period of two weeks, as the buds begin to open and the candles develop, they are most susceptible to infection.

Once the spores have landed on the newly developing tissue, they germinate quickly, penetrating the needles throughout the stomata. Susceptibility of the developing shoots decreases by the middle of June. Pycnidia erupt through the surface by late summer. Dieback of tips may be seen as early as three weeks after infection.

Since spores can be released from early spring to late autumn by splashing rains, the fungus may develop extensively on second year cones as well as older tissue if wounds are present.

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#### **Conditions Favouring Disease**

Spores of *D. pinea* require a high relative humidity to germinate and infect needles and shoots. A wet period of 12 hours at 12 °<sup>C to 36</sup> °<sup>C</sup> is enough for spore germination and infection. In warm, moist weather, symptoms appear in about three to four days. The fungus grows rapidly at about 28 °C. During relatively dry periods, while shoots are elongating, infection levels will be lower.

#### **Insects and Diseases Causing Injury to Pine Shoots**

#### Insects:

White pine weevil *Pissodes strobi*: Legless grub-like larva found early to mid summer in shoots; top whorl of shoots withers resembling a shepherd's crook, turns red; pith is not mined; adult feeding is indicated by small glistening drops of resin on leaders in spring or on laterals in the fall

**European pine shoot moth** *Rhyacionia buoliana*: Brown caterpillars can be found working in the tips of shoots in late May to early June; large quantities of resin are produced around buds; shoots fail to elongate; pith is mined

**Eastern pine shoot borer** *Eucosma gloriola*: Whitish caterpillar burrows down the centre of lateral shoots from May to July; injured shoots wilt, die back and break easily at the point of feeding

**Pine shoot borer** *Rhyacionia adana:* Attacks trees less than 1 m high, red brown caterpillar; feeds within the shoot in early spring to mid June or late July; shoots fail to elongate, turn brown

**Zimmerman pine moth** *Dioryctria zimmermani*: Larva white to reddish-yellow; branch tips turn brown as larva girdle twigs; entire top of tree may break off; resin can be found on the trunks and branches; shoots not mined

#### **Diseases:**

**Diplodia tip blight** *Diplodia piniea:* Shoots fail to elongate; flagging and death of young shoots; look for small conical beaks or fruiting bodies emerging from the needles; shoots remain firm, pith is intact

**Needle blight or cast** *Lophoderium, Dothistroma:* Affecting needles only; may appear as dead spots or tip dieback; look for dark bands or spots on needles.

Eastern gall rust: Needles and branches affected; look for round galls on stems.

Fusiforme blister rust: Needles and branches affected; spindle shaped swellings on young branches.

#### Other:

**Branch tip dieback** at any time of the season: Root problems such as bark beetles, girdling roots, soil sterilant, pesticide spray, root severing due to construction or digging, lawnmower/string trimmer girdling, root rot, transplant, drought, excessive water.

Ends of needles brown: Air pollution.

#### Scattered ends of branches: Scorch.

If you are unsure of the cause of the dieback in your pine, you may send a sample to the Pest Diagnostic and Advisory Clinic at the University of Guelph. There is a fee for diagnosis.

#### Control

Stressed and weakened trees are more susceptible to Diplodia. Maintain tree vigour through adequate watering and fertilization. Improve soil environment by removing competing turf and mulching around trees. Improve soil conditions by aerating the soil. Austrian pines seem to be more afflicted with the disease, but that may be due to their larger numbers in the landscape.

A tree exhibiting a few symptoms may be pruned to help reduce the spread of the disease. However, in most cases, pruning will only improve the appearance of the plant rather than control the disease. Fungus will develop on second year cones as well as on stressed mature tissue. Pruning during dry weather, raking blighted needles, twigs, and cones, and discarding them may help to reduce disease pressure. Disinfect tools between pruning cuts. Improving air circulation around the trees will help in a faster drying of needles and reducing the chance of infection

For chemical controls please order OMAFRA Publication 840, Crop Protection Guide for Nursery and Landscape Plants.

#### **Related Links**

- <u>Pest Diagnostic and Advisory Clinic <http://www.guelphlabservices.com/></u>
- Guide to Nursery and Landscape Plant Production Publication 841
- Crop Protection Guide for Nursery and Landscape Plants Publication 840

For more information: Toll Free: 1-877-424-1300 E-mail: <u>aq.info.omafra@ontario.ca</u>