



## Maple Ridge Noxious Weeds Program Japanese Knotweed

### Background:

The **BC Weed Control Act** imposes a duty of responsibility on the occupier of the land to control designated noxious plants. The City of Maple Ridge has a **Noxious Weed and Other Growth Control Bylaw No. 2384-1976** and an **Untidy and Unsightly Premises Bylaw No. 6533-2007** to control noxious weeds. In addition, Maple Ridge has a **Pesticide Use Control Bylaw No. 6413-2006** that limits the use of chemicals to control nuisance weeds. However, when a plant is added to the Noxious Weeds in BC list in the **BC Weed Control Regulations**, it opens up the use of chemical control methods and moves it outside any municipal bylaw.

In 2011, Japanese Knotweed was added to the list of Noxious Weeds in BC, and recently it was added to the **Untidy and Unsightly Premises Bylaw No. 6533-2007** which requires that residents dispose of this, and other noxious weeds, when their presence is noted on private property.

Manual removal of Japanese Knotweed (i.e. digging it up or chopping the stalks) is not a viable long term solution for Japanese Knotweed eradication, nor is the use of organic chemical controls, such as vinegars. The best effect is the use of specific chemicals, through foliar applications or injection of the chemicals into the plant stalks. The correct amount of chemicals and the application equipment is specialized, and needs to be done by people that are properly trained and have their "**Pesticide User Licence**".

### Japanese Knotweed Control:

*Please review the attached Identification Sheet and check if the property(ies) involved in this application may have Japanese Knotweed on or near the property(ies).*

Subject Property(ies) Address(es): \_\_\_\_\_

Application Number(s): \_\_\_\_\_

Is Japanese Knotweed Present on or near the Subject Property(ies)? Yes  No

If yes, have you implemented a plan to effectively treat and remove the Japanese Knotweed from the property(ies)? Yes  No

Summary of Plan: \_\_\_\_\_  
\_\_\_\_\_

Other Noxious Weeds that are listed in the **Untidy and Unsightly Premises Bylaw No. 6533-2007** include:

Canada Thistle (*Cirsium arense*)

Purple Loosestrife (*Lythrum salicaria*)

Bindweed or Morning Glory (*Convolvulus*)

Giant Hogweed (*Heracleum mantegazzianum*)

Couch Grass (*Agropyron repens*)

For more information on how to eradicate Noxious Weeds from your property, please visit:

City of Maple Ridge – Invasive Plant Species <http://mapleridge.ca/714/Invasive-Plant-Species>

The Invasive Species Council of Metro Vancouver (ISCMV) <http://www.iscmv.ca/>

The Invasive Species Council of BC (ISCBC) <http://bcinvasives.ca/>



Young knotweed



In flower



Full-growth

## Maple Ridge Noxious Weeds Program

### Knotweed species

Japanese, Giant, Bohemian (*Fallopia* sp.) and Himalayan (*Polygonum polystachyum*)

**Designation:** Provincially Noxious

#### History:

Japanese and Giant knotweed were introduced into North America from eastern Asia in the 1800's as garden ornamentals. Those two plants hybridized to create Bohemian knotweed, the predominant plant in the metro Vancouver area. Less is known about the introduction of Himalayan knotweed to North America except for the origin; the Himalayan mountain region of southern Asia.

#### How to Identify:

**Early growth:** Newly emerging knotweed is likened to red asparagus emerging from the ground.

**Mature growth:** Large, woody bamboo-like plants that can grow 1 – 3 m tall in dense thickets.

**Flowers:** Not all plants flower. Those that do have small, white/green flowers grow in showy, plume-like, branched clusters along the stem and leaf axils (joints).

**Leaves:** Variable. Japanese: spade-shaped; Giant: larger, heart-shaped; Bohemian: hybrid of Japanese and Giant; Himalayan: lance-shaped, pointy. Leaves appear in zigzag pattern along stems.

**Stem:** Stems, or canes, are hollow with varying thicknesses, upright, and bamboo like with red segments and thin, papery sheaths. Stems die in winter turning brown and woody.

**Location:** Found just about anywhere. Thrive on freshly disturbed soil in roadside ditches, low-lying areas, irrigation canals, and other water drainage systems. Also found in riparian areas, along stream banks, and in other areas with high soil moisture. Able to grow in partial shade or full sun.

**Mistaken Identity:** Elderberries (*Sambucus* spp.) have lance-shaped, pointed, and sharply toothed leaflets. Red elderberry (*Sambucus racemosa*) is found in moist areas but the stems have small nodules (bumps) along the stem.

#### Danger / Impact

Forms dense, impenetrable thickets which displace native vegetation. Allelopathic nature of knotweed discourages the growth of other native vegetation. Dominates stream banks, which increasing erosion potential when plants die and expose banks during winter. Exposed knotweed roots break off and float downstream to form new infestations. Degrades wildlife and fish habitat. Extensive root system can lead to knotweed growing through weaknesses in cement, house foundations and walls.

#### Distribution in DMR:

Several locations, some small and some extensive.

Requires coordinated control.

Early detection required to prevent new infestations.

#### Information and photos:

<http://www.bcinvasives.ca/invasive-species/invasive-plants/knotweeds>

<http://www.iscmv.ca/species-profiles/japanese-knotweed>

[http://westvancouver.ca/sites/default/files/dwv/assets/home-building-property/docs/pets-wildlife-environment/Invasive-Plants/APPENDIX\\_A\\_-JANUARY\\_28\\_\\_2014\\_DRAFT.pdf](http://westvancouver.ca/sites/default/files/dwv/assets/home-building-property/docs/pets-wildlife-environment/Invasive-Plants/APPENDIX_A_-JANUARY_28__2014_DRAFT.pdf)

#### Management:

Knotweed is extremely difficult to control once established. It spreads prolifically by root and stem segments, and in some cases seed. New research shows that seeds of plants in the region are highly viable and little is known about their long-term viability in the soil.

Do not treat manually. Manual treatment is ineffective and may cause further spread. Should be controlled by a professional using herbicide application. Live knotweed should not be cut as this method is ineffective and disposal results in a high likelihood of spread during transport.

**Timing:** Herbicide treatment should occur two to three times per growing season for maximum control. Spring treatment, mid-summer and fall treatments show best efficacy. Plant is dormant during the winter.

**Disposal:** Herbicide killed material can be left on site to decompose. Cut material can be disposed of at the Maple Ridge Transfer Station. Do not compost in home compost bin.

**Follow-up:** Monitor at least twice annually. Continue monitoring for several years even after no re-growth appears.

#### Restoration and Planting Alternatives:

Restoration should not occur for a couple of years after management as the allelopathic nature of knotweed can have inhibited newly planted native vegetation.

- Red-osier dogwood (*Cornus stolonifera*)
- Willow species (*Salix* spp.)

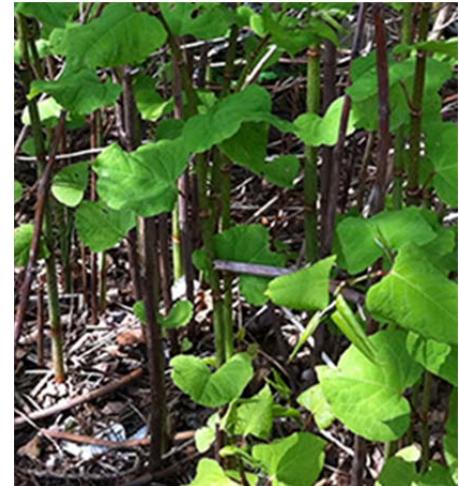
#### Native tree species:

- Red alder (*Alnus rubra*),
- Black cottonwood (*Populus balsamifera* ssp. *trichoparpa*),
- Douglas-fir (*Pseudotsuga menziesii*),
- Western redcedar (*Thuja plicata*),
- Sitka spruce (*Picea sitchensis*)



Photo: e-flora BC

Photo: J. Craig



#### Who Do you Call?

**1) REPORT PROHIBITED WEEDS** Report-A-Weed: [www.reportaweedbc.ca](http://www.reportaweedbc.ca)

1-888-WEEDSB

**2) DMR: 604-467-7363 AND SEE:** <http://www.mapleridge.ca/714/Invasive-Plant-Species>