Controlling invasive plants on your property

Saanich

PLANNING
Environmental Services

What are invasive plants?

Invasive plants are weedy, usually non-native plant species that have been introduced outside their natural range. They are also known as invasives, escapees, noxious weeds and introduced, alien, and exotic plants. They succeed in new areas because of factors such as a lack of natural controls, and adaptations that enable them to spread and establish quickly. Impacts of these plants can be detrimental to humans, animals and entire ecosystems.

Invasive plants in Saanich

Many invasive plants are familiar to us as escaped garden ornamentals. Unfortunately, they have become a serious threat to our native ecosystems. Periwinkle, for example, can form an impenetrable layer on the Douglas-fir forest floor, making it impossible for native plants to grow. Shrubs such as Scotch broom threaten rare Garry oak ecosystems, choking out the diversity of native plants. Invasive grasses such as orchard grass, are now common in many natural areas in Saanich.

Although a number of invasive plants are well-established in Saanich, it is possible to make a difference to native ecosystems by managing the spread of certain species. Individual land owners can assist by controlling invasives on their properties. This brochure provides information on how you can help to control five key species:

- Scotch broom
- English holly
- English ivy
- Himalayan blackberry
- Daphne

A sample of other invasive plants in our region:

- Purple loosestrife
- Periwinkle
- Japanese knotweed
- Gorse
- Invasive grasses (e.g. orchard grass)
- Poison hemlock

Purple loosestrife

Periwinkle

Japanese knotweed

Gorse

Invasive grasses

Poison hemlock

SCOTCH BROOM

(Cytisus scoparius)

Why is Scotch broom a problem?

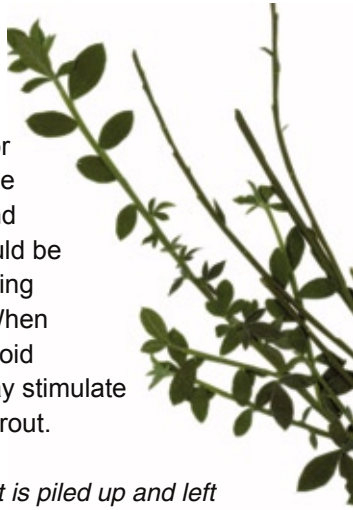
Scotch broom is an aggressive invader in our region, especially in open or disturbed ecosystems. Broom is successful because it fixes its own nitrogen, is drought and cold tolerant, and builds up a long-lived 'seed bank' in the soil. Scotch broom quickly fills in open areas, forming dense stands and choking out native species.

How do I recognise it?

- Form: grows as an upright deciduous shrub, up to 3 m in height;
- Leaves: alternate and small (reduced to spines and scales on older plants);
- Flowers: bright yellow, pea-like, sometimes tinted with orange;
- Seedpods: green, ripening to black, slightly hairy and flattened;
- Branches: green and spindly on young plants, tough woody stems on mature plants.

When and how should I remove it?

Scotch broom is best removed beginning in late summer, after native wildflowers have gone dormant but before its seedpods begin to open. Removal at this time will stop the addition of new seeds to the soil and may have the advantage of killing drought-stressed plants. Broom cut during wetter months can survive to re-sprout the following season. Removal can continue through to early winter, though care must be taken to stop work once native bulbs begin sprouting through the earth.



If the soil is moist, and the stems are a pencil's width or smaller, broom plants can be pulled easily from the ground by hand. Larger plants should be cut below the root crown using loppers or a pruning saw. When removing Scotch broom, avoid disturbing the soil which may stimulate dormant broom seeds to sprout.

Disposal

Broom that is piled up and left on-site will leach toxins into the soil and suppress native plant growth in the vicinity. To avoid spreading seeds, load the broom onto a tarp and use this to carefully remove plants from the work site. Home composting is not recommended because only 'hot' compost is able to kill all the seeds. Cut plants can be disposed of at the site listed near the back of this brochure.

ENGLISH HOLLY

(Ilex aquifolium)

Why is English holly a problem?

English holly is a popular ornamental tree that is now established in natural areas. Holly out-competes native vegetation for light, nutrients and water. It spreads through suckering from the roots, sprouting where branches touch the ground, or by birds that eat its berries.

How do I recognise it?

- Form: evergreen tree with spreading branches up to 15 m tall;
- Leaves: alternate, glossy, dark green, spiky and evergreen;
- Flowers: small and white;
- Berries: *poisonous,* red, on female trees in winter;
- Bark: green on young plants, smooth and grey on mature plants;
- Also known as Christmas holly because of its decorative use.

Young holly plants look similar to native Oregon grape, which has yellow flowers, blue berries, and somewhat duller leaves, sometimes with a reddish tinge. Unlike holly leaves, Oregon grape leaflets grow opposite to one another.

When and how should I remove it?

Ideally, holly should be removed while it is still young and not yet producing berries. Pull young plants from moist soil, or cut them if soil is dry. Remove mature trees and saplings by cutting them below the root crown. As with other invasive shrubs or trees, monitor the cut stumps for signs of re-sprouting.

Disposal *Holly spreads by seed dispersal so care should be taken to contain berries when disposing of fruiting trees. Load the cut holly onto large tarps and use these to carry plant material from the worksite. Dispose of waste materials at the site listed near the back of this brochure. Home composting is not recommended as it may not kill all seeds and tough leaves and dense woody stems take a long time to break down.*

ENGLISH IVY

(Hedera helix)

Why is English ivy a problem?

English ivy is a highly successful invader that thrives in our mild climate. Ivy often forms thick mats of vegetation that smother low-growing native plants. Ivy also climbs up tree trunks and forms such a dense cover that the tree is concealed from view. The weight of the vines and leaves make the tree more vulnerable to breaking or toppling over in windstorms. Rampant ivy growth can also weaken or kill a tree by reducing its exposure to light and thus limiting its ability to photosynthesize. English ivy grows quickly (up to 4 metres per year) and is spread by birds that eat its seeds.

How do I recognise it?

- Form: a vigorous evergreen vine found growing as ground cover, or climbing;
- Leaves: waxy, dark green with three to five lobes (young plants) or unlobed oval-shaped leaves with a pointed tip (mature plants);
- Flowers: small and greenish-white;
- Berries: *poisonous*, shiny and blue-black in colour.

When and how should I remove it?

Heavy infestations of English ivy are difficult to eliminate and realistic control plans must include persistence and repeated site visits. The first priority should be to remove ivy from standing live trees. Although ivy stems can grow to a large diameter, they can be cut with loppers, pruning saws, or hatchets. Cut all vines in a complete strip around the trunk from ground to chest height, then pull or cut ground-growing vines around the base of the trunk. Leave the upper vines to decay on the tree and remove them once the foliage has died back. Use a small pry bar to break away smaller stems from the trunk, taking care not to damage the tree's bark. Never remove ivy from dead trees as it can be hazardous to do so.

Ivy growing on the ground can be removed by pulling vines and digging roots from the soil. It is best to work from the outside edge of the patch inwards.

Disposal

Most ivy re-growth occurs from roots left in the soil but cut stems and leaves can also regenerate. Take precautions with ivy berries, which contain seeds that will readily sprout. Use heavy-duty garbage bags or tarps to remove all ivy from the worksite and dispose of it at the location listed near the back of this brochure. Home composting is not recommended.

HIMALAYAN BLACKBERRY

(Rubus discolor)

Why is Himalayan blackberry a problem?

Himalayan blackberry is a widespread and aggressive invasive plant that can quickly turn naturally open areas into dense thickets of impenetrable brambles. Blackberry thickets suppress growth of native vegetation through shading and build up of heavy loads of leaf litter and dead stems. Himalayan blackberry spreads by its roots and canes and is widely dispersed via berry-eating birds.

How do I recognise it?

- Form: a trailing shrub with thick, thorny stems or canes reaching 10 metres or more in length;
- Leaves: large (up to 20 cm in length), divided into five toothed leaflets, dark green above and pale greyish-green below;
- Flowers: white to pinkish and five-petalled;
- Berries: edible, deep black-purple when ripe.

When and how should I remove it?

Be sure you can tell the difference between the non-native and native blackberries before starting removal. Native blackberry is a trailing vine with slender stems and deciduous leaves formed of three dark green leaflets. The best approach is to remove Himalayan blackberry before it becomes established in an area. Wear thick clothing to protect yourself from sharp thorns. Pull or cut the canes from the ground before they produce berries. Canes that are cut as the plant is producing flowers are least likely to re-sprout. If possible dig out the roots, paying careful attention not to damage nearby vegetation.

Disposal *Remove plant material from the work site to avoid re-sprouting, seed germination and to rid the area of debris from leaves and stems. High-temperature industrial composting is required to kill seeds and root masses. Dispose of waste material at the site listed near the back of this brochure.*

DAPHNE

(Daphne laureola)

Why is daphne a problem?

Daphne, also called spurge laurel, is a highly invasive ornamental shrub. The plant and its berries are poisonous to people and most animals. Unfortunately, some birds can eat the berries and are effective at spreading its seeds.

How do I recognise it?

- Form: a small shrub (to 1.8 m in height) reminiscent of a rhododendron;
- Leaves: glossy, dark green, leathery, elongated and oval in shape;
- Flowers: greenish-white, grow in clusters among the leaves near the top of the stem;
- Berries: shiny black, slightly egg-shaped, and *poisonous.*

CAUTION

When and how should I remove it?

Always wear gloves when handling daphne because it produces a noxious substance which can cause severe eye and skin irritation. Never transport daphne cuttings or plants inside an enclosed vehicle because the noxious compounds can also cause respiratory irritation. Pull small plants from moist soil. Cut larger plants as close to the ground as possible, ideally in summer. Daphne stems re-sprout after cutting and numerous seedlings may germinate so repeated site visits are necessary.

Disposal *Daphne spreads via seeds so cut plants should be wrapped in tarps for removal to avoid distributing berries to new sites. Due to daphne's toxicity, home composting is not recommended. Dispose of cut plants at the site listed near the back of this brochure.*

Attention!

Remember that while removing or controlling invasive plants is usually beneficial, it is important to plan an approach that will not cause further damage to native ecosystems. Use the techniques described in this brochure, and make sure that you have the time to visit the site more than once: your work may take several years to complete. Develop a long-term removal and monitoring plan for your activities, and seek permission before removing invasives from local parks or other public areas. Although herbicides are effective for controlling invasive plants, they should only be used sparingly (if at all) and by qualified applicators. Always seek expert advice before using herbicides near sensitive ecosystems.

Safety first

When removing invasive species, pay careful attention to your surroundings. This is important especially when working on steep slopes and around dead trees. Always wear appropriate safety equipment and have a first aid kit nearby, particularly if you are working with groups of volunteers.

Minimize damage

Pay close attention when removing invasive plants, not to damage the native ecosystem. Be cautious on steep or rocky sites where moss and soil are easily disturbed. If you are working on a sensitive site, consult with experts for assistance.

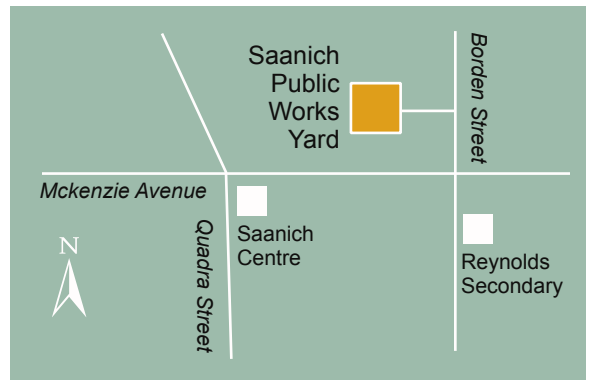
Disposal

Proper disposal and disposal sites

Invasive plants are proficient at spreading to new areas, so plan disposal as carefully as removal. Remove cuttings on tarps or in bags to avoid spreading seeds or leaving behind roots or stems that can take root in moist soil. Dispose of the plant material at an approved site such as the Saanich Public Works Yard. Garden waste dropped off here undergoes high intensity heat composting and is used locally for agricultural soils.

Saanich Garden Waste Disposal
at the Public Works Yard
1040 McKenzie Avenue
(enter off Borden)

For hours of operation: 475-5595
or
www.saanich.ca/resident/utilities/garden.html



Controlling invasive plants on your property

• Saanich Projects

The Municipality of Saanich is working on invasive species control and education throughout the community. To find out more contact:

Garry Oak Restoration Project
Environmental Services, **475-5475**
www.gorpsaanich.com
www.saanich.ca/resident/environment/invasive.html

Pulling Together
Invasive Plant Removal Support program
Saanich Parks, **475-5522**

• Other Resources

Garry Oak Ecosystems Recovery Team
www.goert.ca

King County Noxious Weed Control Program
http://dnr.metrokc.gov/wlr/lands/weeds

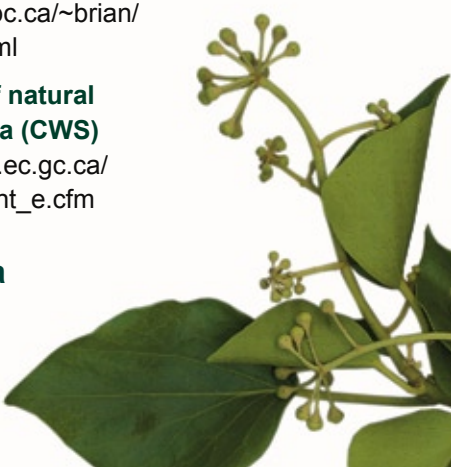
Invasive Plant Council of British Columbia
http://www.invasiveplantcouncilbc.ca/

Invasive plant alerts
http://www.agf.gov.bc.ca/cropprot/invasiveplant.htm

E-Flora
http://www.geog.ubc.ca/~brian/florae/invasives.html

Invasive plants of natural habitats in Canada (CWS)
http://www.cws-scf.ec.gc.ca/publications/inv/cont_e.cfm

www.saanich.ca



PHOTOGRAPHY
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