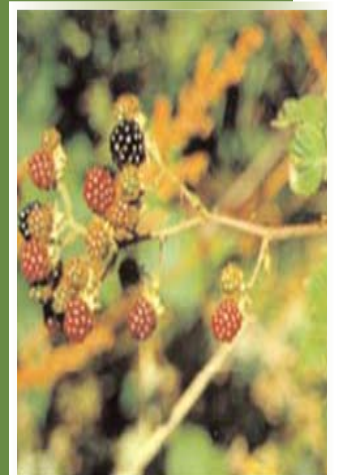


**Controlling  
INVASIVE  
PLANTS:  
Information  
and  
Process  
Package**



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## Identifying Invasive Plants

Invasive plants are non-native plants that cause economic or environmental harm to our ecosystems. These plants are primarily transported to their new locations by humans, either accidentally or intentionally.

Native plants are organisms that have lived and evolved within our local ecosystems for thousands of years. Their long history in the Nanaimo area has enabled these species to develop intricate relationships with one another. These relationships permit our ecosystems to thrive and survive throughout time.



Invasive English Ivy (*Hedera helix*) completely overtaking and killing a cedar.



Native Camas (*Camassia quamash*)



Native Skunk Cabbage (*Lysichiton americanum*)



Native Salal (*Gaultheria shallon*)



Native Red Alder (*Alnus rubra*)

## Why are Invasive Plants a Concern?

Invasive plants out-compete our native plants for space, nutrients and sunlight. They can lessen the diversity of our ecosystems and destabilize them, increasing further invasion of non-native plants.



Lamium covering forest floor in Trillium Park.

## Where do Invasive Plants Come From?

Invasive plants come from a variety of sources.

- In the past, immigration of people from different parts of the world have spread a variety of invasives plants throughout British Columbia.
- Seeds or plant residues from nursery plants are transported from gardens by wind, water and animals.
- Others are illegally dumped in parks.
- Invasive plants are transported in the wheel wells of vehicles and then distributed throughout our roadways.



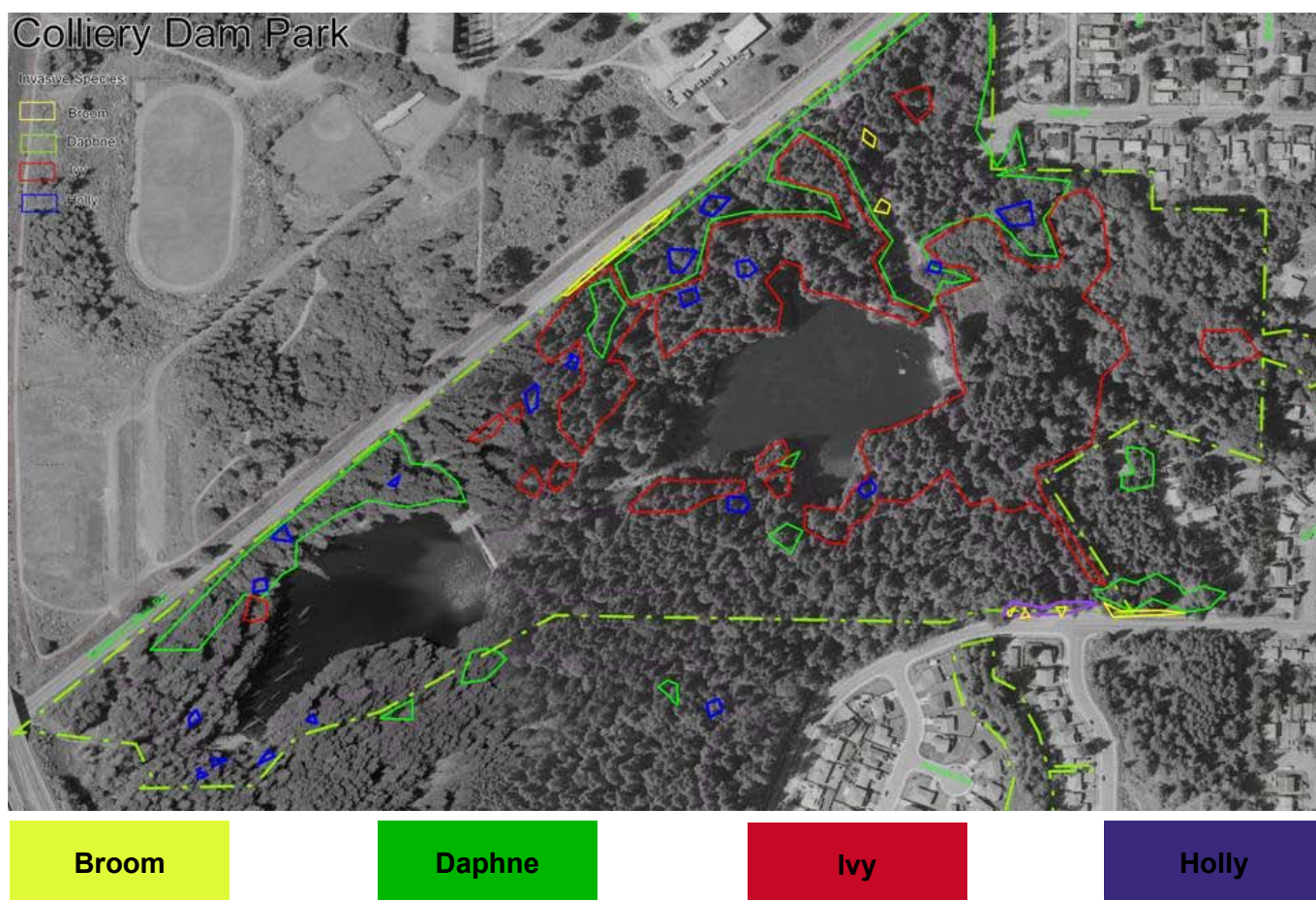
Invasive Scotch Broom (*Cystius scoparius*) spread along roadsides by vehicles.



## How Affected is Nanaimo by Invasive Plants?

Many of our parks and natural areas in Nanaimo are impacted by invasive plants.

For example, a study at Colliery Dam Park maps the approximate extent to which the park is overtaken by invasive Daphne, English Ivy, Scotch Broom and English Holly.



## Preventing Invasive Plants from Overtaking Nanaimo

- Be careful about what plants we choose for our gardens.
- Refrain from dumping garden trimmings in our parks and open spaces.
- Observe our parks for unfamiliar or foreign plants. If invasives are found early enough before they become well established, they can be eradicated easier than when they mature.
- Minimize disturbance of the environment. When soil is disturbed and vegetation is removed, ideal conditions for invasive plants are created.

## Control and Management of Invasive Plants

If invasive plants are well established in an area, there are several measures to deal with them.

- Systematically remove them throughout the season each year. There are special management and eradication techniques used for each particular invasive plant.
- Restore invaded areas with plant species that will eventually alter the environment thereby making it unfavourable for the invasive plant to thrive. Consistent nurturing helps native plants re-establish.



An invasive English Ivy removal team at Piper's Lagoon Park.



A garden growing native plants such as Pacific Ninebark, Ocean Spray, Sword Ferns and Oregon Grape.

## Common Invasive Plants in Nanaimo

- English Ivy
- Scotch Broom
- Daphne
- Himalayan Blackberry
- Bamboo
- English Hawthorn
- Gorse
- Hogweed



Invasive Daphne (*Daphne laureola*) growing in Bowen Park.

- English Holly
- St. John's Wort
- Japanese Knotweed
- Lamium
- Privet
- Periwinkle
- Morning Glory



## Invasive Plants - Characteristics and Removal Techniques

### ENGLISH IVY

**Name:** English Ivy (*Hedera helix*)

**Origin:** Britain

**How to recognize it:** English Ivy is a vigorous evergreen vine found growing as ground cover or as a climbing vine. Its leaves are dark and waxy with three to five lobes (young plants) or as an unlobed oval-shaped leaves with a pointed tip (mature). Ivy's flowers are small, greenish white in colour, and their shiny and blue-black berries are poisonous to humans.

**Impact on humans and the environment:** English Ivy is a highly successful invader that thrives in our climate. Ivy often forms thick mats of vegetation that smother low-growing native plants. Ivy also climbs up tree trunks and forms a dense cover that can conceal trees from view. The weight of the vines and leaves make the tree more vulnerable to breaking and toppling during windstorms. Rampant English Ivy growth can also weaken or kill a tree by reducing its exposure to light and limit its ability to photosynthesize. English Ivy grows quickly (up to 4 metres a year) and can be spread by birds that eat its seeds.

**Management techniques:** Infested trees generally require a combination of ivy removal from tree trunks (to eliminate the seed source) and the immediate area around the tree. It is also important to pull seedlings before they become established. Vines growing as groundcover can be hand-pulled, bagged and disposed of off-site. Hand trowels can be used to remove as much of the root system as possible while minimizing soil disturbance. Vines growing up trees should be cut at about 1 metre above ground level to kill the upper portions. The upper vines can be left to decay on the tree or removed when brittle.



A close-up of leaves and stalks.



Tree infestation in Bowen Park.



Volunteers removing English Ivy from trees.

## Invasive Plants - Characteristics and Removal Techniques

### SCOTCH BROOM

**Name:** Scotch Broom (*Cytisus scoparius*)

**Origin:** Europe

**How to recognize it:** Scotch Broom grows as an upright deciduous shrub up to 3 metres in height. Its leaves are alternate and small (reduced to spines and scales on older plants), and its flowers are bright yellow, pea-like, sometimes tinted with orange. Scotch Broom seed pods are green, ripening to black, slightly hairy and flattened. Branches are green and spindly on young plants and then become tough woody stems on mature plants.

**Impact on humans and the environment:** Scotch Broom is an aggressive invader in our region, especially in open or disturbed ecosystems. Broom is successful because it fixes its own nitrogen from the air, 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.

**Management techniques:** The best control is to remove young plants before they can flower in order to prevent the development of a soil seed bank. Small plants, up to 1 cm diameter, can be pulled out of the ground when the soil is moist (November to January is optimal to avoid trampling any wild flowers). If pulling disturbs the soil, cut the stem at soil level. Larger plants should be cut off at ground level. Re-sprouting can be reduced by damaging the cut stem with a brush blade or axe. Return in following years to remove young seedlings and any sprouts from old stalks. Care should be taken when moving branches so that seeds are not dropped.



Close-ups of invasive  
Scotch Broom.



## Invasive Plants - Characteristics and Removal Techniques

### DAPHNE

**Name:** Daphne (*Daphne laureola*)

**Common Names:** Spurge Laurel

**Origin:** Eurasia

**How to recognize it:** Daphne is a small shrub (to 1.8 metres in height) similar to a Rhododendron with leaves that are glossy, dark green, leathery, elongated and oval in shape. The flowers are greenish-white, growing in clusters among the leaves near the top of the stem. Daphne's berries are shiny black, slightly egg-shaped and poisonous to humans.

**Impact on humans and the environment:** This highly toxic plant displaces and excludes the growth of other plants, including endangered species. Daphne may grow up to 1 metre in height as individuals mature and become dominant shrub patches. The ripe black seeds are widely dispersed by birds. Little is known about the environmental impacts of Daphne, but its ability to alter soil chemistry may prevent normal forest succession.

**Management techniques:** Early removal of individual Daphne plants before they can seed or become an infestation is most effective. Gloves should be worn when working with it, as the bark, sap and fruit all contain toxins that can cause skin irritation. Always wear gloves when handling it 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 cause respiratory irritation. Pull plants from moist soil. Cut larger plants as close to the ground as possible ideally in the summer. Daphne stems re-sprout after cutting, and numerous seedlings may germinate. Repeated site visits are necessary.



## Invasive Plants - Characteristics and Removal Techniques

### HIMALAYAN BLACKBERRY

**Name:** Himalayan Blackberry (*Rubus discolor*)

**Origin:** Western Europe

**Growth Characteristics:** Himalayan Blackberry is a coarse shrub with shoots 2 to 10 metres long often forming thick, impenetrable thickets. The stout stems are armed with hooked prickles. Flowers are pinkish-white with five petals. The fruit is red, turning a deep purple-black as it ripens. Its root crown is up to 20 centimetres in diameter with many lateral roots at various angles.

**Impact to humans and local ecosystem:** Blackberry thickets crowd out native species and alter soil chemistry which inhibits other plants from growing. If allowed to dominate, Himalayan Blackberry can eliminate most herbaceous species.

**Management techniques:** Gloves are a necessity because of the prickles. Be careful to correctly distinguish non-native blackberries from the native trailing blackberry which have more slender vines that crawl along the ground (*Rubus ursinus*). Hand pulling and weed wrenches can be used to remove seedlings and young plants up to 1 metre tall. This should be done before the blackberry seeds set, and it is easier when the ground is moist. Remove as much of the root system as possible to minimize re-sprouting. Older, established plants can be cut using machetes and brush cutters and then removing the roots by hand digging. Remove any sprouting roots in following years. If cut before seeds are produced, the debris may be piled and left as brush cover for birds and small mammals. Take care to prevent rooting of the cut material. Large, established patches can be controlled by cutting new growth from late July to early October. (If cut too early in the year, new tips will grow.)



Close-up of invasive Himalayan Blackberry berries.



Close-up of leaves and flowers from an invasive Himalayan Blackberry.



Native *Rubus ursinus*.



## Invasive Plants - Characteristics and Removal Techniques

### HOGWEED

**Name:** Hogweed (*Heracleum mantegazzianum*)

**Origin:** Caucasus region of Asia

**How to recognize it:** Aside from its immense size, Hogweed is distinguished by its stout, dark reddish stem that can grow 5 to 10 centimetres in diameter. Leaf stalks are spotted and produce a compound leaf that can expand to 1.5 metres across. Each leaflet is deeply grooved or divided. Both stems and stalks are hollow and produce coarse hairs around a blister like pustule. Each year tuberous root-stalks form long-lived buds. In summer, small, white flowers form together to make up an inflorescence or umbrella-shaped head that can become a diameter of almost 1 metre. Hogweed will grow in a variety of habitats but is most frequently found adjacent to streams, creeks, roads, in vacant lots or in rights-of-ways. It is frequently found in areas that are considered moist to wet.

**Impact on humans and the environment:** The greatest concern from Hogweed is human health. The blister-like pustules on stems and stalks exude a clear watery sap that sensitizes skin to ultraviolet radiation. Affected areas are subject to severe burns that usually result in blistering and painful dermatitis. Blisters often result in purplish to blackened scars. Hogweed's tenacious and invasive nature allows it to readily occupy and crowd out native vegetation. In riparian areas, it forms a dense canopy, out-competing native species and causing stream bank erosion.

**Management techniques:** If Hogweed is growing in a park or on a public right-of-way, please call the City of Nanaimo at 755-7515. If Hogweed is growing on private property, please adhere to the following precautions:

- Use protective clothing, gloves and face visor or similar to undertake any cutting or removal of this species.
- Clear above ground leaf and stem material by hand; remove ground material of roots and seeds.
- Bio-control: Cattle and pigs are cited as possible bio-control agents. Both eat Hogweed without apparent harm.



Invasive Hogweed stalk and flowers.



Close-up of an Invasive Hogweed flower.

## Invasive Plants - Characteristics and Removal Techniques

### GORSE

**Name:** Gorse (*Ulex europaeus*)

**Common Names:** Furze, Irish Furze, Prickly Broom, Thorn Broom, Whin

**Origin:** Central and Western Europe

**How to recognize it:** Dense, spiny and a dull greyish-green, Gorse is a perennial shrub that grows up to 2.5 metres high and 3 metres in diameter. The stems and branches are green to brown, woody when mature and armed with sharp spines up to 5 centimetres long. Its vivid yellow, pea-like flowers are hard to miss in March and April and again in late fall.

**Impact on humans and the environment:** Gorse will grow on most soil types and will invade. Gorse invades infertile or disturbed sites, sand dunes, gravel bars, fence rows, overgrazed pastures, logged areas and burned-over lands.

**Management techniques:**

- Shading:** planting acid-tolerant, fast-growing trees in Gorse thickets may eventually shade out Gorse without further management efforts.
- Physical Control:** cut mature plants close to the ground preferably when the plant is just starting to flower or before the seeds set. Roots can then be dug out. Cut material should be disposed off site. Care should be taken to prevent vegetative reproduction from cuttings. Seedlings are best pulled after a rain when the soil is loose. This facilitates removal of the rooting system that may re-sprout if left in the ground. Plants should be pulled as soon as they are large enough to grasp, but before they produce seeds. Gorse, which has a large tap root, may not be completely removed by hoeing and may re-sprout afterwards. For plants up to 4 metres tall, a claw mattock is effective.
- Hand Digging:** the removal of rootstocks by hand digging is a slow but sure way of destroying weeds that re-sprout from their roots. The work must be thorough to be effective, as every piece of root that breaks off and remains in the soil may produce a new plant. Such a technique is only suitable for small infestations or around trees and shrubs where other methods are not practical.



Close-ups of invasive Gorse spines and flowers.



## Invasive Plants - Characteristics and Removal Techniques

### ENGLISH HOLLY

**Name:** English Holly (*Ilex aquifolium*)

**Common Name:** Christmas Holly

**Origin:** Britain

**How to recognize it:** English Holly is an evergreen tree with spreading branches up to 15 metres tall. Its leaves are alternate, glossy, dark green, spiky and evergreen. Flowers are small and white growing into poisonous, red berries on female trees in winter. English Holly is usually found in forests and well-shaded areas.

**Impact on humans and the environment:** Holly displaces native species. The berries act as a food source for birds who disperse the seeds with their droppings.

**Management techniques:** Small seedlings can be pulled out of the ground minimizing soil disturbance. Larger plants that are difficult to pull should be cut off at ground level. The stump could be damaged with an axe to reduce re-sprouting. It is best to do large tree removal before the berries have formed to avoid scattering them throughout the area. If the tree is full of berries, remove it anyway being aware that dispersed seeds may sprout in subsequent years. Take care not to disperse berries along the removal route. Debris can be removed using a tarp or garbage bags. Young seedlings can be confused with Oregon Grape (*Mahonia sp.*).



Close-ups of invasive English Holly leaves and berries.

## Invasive Plants - Characteristics and Removal Techniques

### ST. JOHN'S WORT

**Name:** St. John's Wort (*Hypericum perforatum*)

**Origin:** Eurasia

**How to recognize it:** St. John's Wort is an erect, semi-woody, perennial, rhizomatous herb. The stems are often winged. The leaves are simple, sessile, opposite and net-veined. The blade has pinnate major veins and numerous punctate dots that can be viewed when the blade is held up to the light. The base of the blade is obtuse and clasps the stem. The flowers are perfect and produced in clusters at the tips of the branches. The petals are bright yellow and often black dotted. The fruit is a capsule with many small, brown to black cylindrical seeds. St. John's Wort grows in pastures, open fields and disturbed areas.

**Impact on humans and the environment:** St. John's Wort is invasive, as well as toxic to livestock. It is a vigorous competitor in pastures, rangelands and natural areas.

**Management techniques:** Repeated cultivation destroys the weed. It is not found in any cultivated crop. Mowing several times to prevent maturation also helps control the plant.



Close-ups of invasive St. John's Wort flowers.



## Invasive Plants - Characteristics and Removal Techniques

### JAPANESE KNOTWEED

**Common Name:** Japanese Knotweed or Mexican Bamboo (*Polygonum cuspidatum*)

**Origin:** Asia

**How to recognize it:** Japanese Knotweed is a perennial species with numerous reddish-brown, freely branched stems. The plant can reach 4 to 8 feet in height and is often shrubby. The whitish flowers are borne in open, drooping panicles. Japanese Knotweed is found in disturbed areas, neglected gardens, roadsides and along stream banks.

**Impact on humans and the environment:** The species forms dense stands that crowd out all other vegetation, degrading native plant and animal habitat. In addition, Japanese Knotweed can create a fire hazard in the dormant season. This perennial plant is difficult to control because it has extremely vigorous rhizome roots that form a deep, dense mat. In addition, the plant can re-sprout from fragments. Along streams, plant parts may fall into the water to create new infestations downstream.

**Management techniques:** Thoroughly digging out roots and stems takes years to completely eradicate. It takes a minimum of three years to get rid of it by covering the ground with black plastic and heating the soil to the point where the rhizome dies. The shoots can be eaten by grazing animals, but this doesn't eradicate the plant; it only controls it.



Close-ups of invasive Japanese Knotweed.

## Invasive Plants - Characteristics and Removal Techniques

### LAMIUM

**Name:** Lamium (*Aegopodium podagraria*)

**Common Name:** Goat's Ear, Ground Elder, Goutweed

**Origin:** Britain

**How to recognize it:** Lamium is a herbaceous perennial plant. The leaves are divided into three groups of three leaflets. The leaflets are toothed and sometimes irregularly lobed. It has small, white, five-petaled flowers produced in mid-summer. The rhizomes of Lamium are long, white and branching. Patches of Lamium typically form a dense canopy. It grows along the ground under Hedgerow, in woodland, dappled shade, shady edges and deeply shaded areas.

**Impact on humans and the environment:** Covers forest floor thereby out-competing all other ground cover and shrubbery.

**Management techniques:** Remove Lamium vines and roots with a pitchfork.



Close-up of invasive Lamium leaves.

Close-up of invasive Lamium forming a dense canopy.





## Invasive Plants - Characteristics and Removal Techniques

### PORTUGUESE LAUREL

**Name:** Portuguese Laurel (*Prunus lusitanica*)

**Common Names:** Privet

**Origin:** Spain/Portugal

**How to recognize it:** Portuguese Laurel is an evergreen shrub/tree with dense branching. Its young branches are red coloured. Leaves are glossy dark green and toothed, and its flowers are white and fragrant. Fruit is dark purple-black in colour. It is mainly found in shaded areas and under dense canopies.

**Impact on humans and the environment:** This plant is able to reproduce in the forest understory in low light conditions. It competes with and displaces native species when established and is spread by birds who eat the berries.

**Management techniques:** There is no specific removal technique other than cutting the shrub/tree at its base.



Close-up of invasive Portuguese Laurel flowers and leaves.

## Invasive Plants - Characteristics and Removal Techniques

### PERIWINKLE

**Name:** Periwinkle (*Vinca minor*)

**Origin:** Europe

**How to recognize it:** Periwinkle is a trailing groundcover with glossy, evergreen leaves that taper at both ends and grow opposite to each other on the stem. Their flowers are bluish lilac and appear trailing groundcover with glossy, tapering evergreen leaves. Scattered in open to dense canopied forests, it forms mats and extensive infestations even under forest canopies by vines rooting at nodes.

**Impact on humans and the environment:** Periwinkle persists in shady areas of second-growth forests usually near the site of the original planting. A single clone can spread vegetatively and form large matted areas that cover woodland understory crowding out all of the native herbaceous vegetation.

**Management techniques:** Periwinkle can be removed mechanically by digging or by lifting up the runners with a rake and mowing the plants. Take care to remove all of the plant, as the stems root easily wherever nodes touch the ground. Periwinkle also is controlled by cutting the plants during active growth in early to late spring.



Close-ups of invasive Periwinkle plants.



## Invasive Plants - Characteristics and Removal Techniques

### MORNING GLORY

**Name:** Morning Glory (*Convolvulus arvensis*)

**Common Names:** Bindweed

**Origin:** Eurasia

**How to recognize it:** Morning Glory is a trailing and climbing perennial vine with branching underground stems. Stems unbranched above ground up to 3 metres or more. Its leaves have lobed bases and pointed tips and are smooth. Flowers are white usually solitary, but they sometimes grow in pairs. Morning Glory spreads by rhizome and seed. Their roots grow deep into the soil. Morning Glory grows in open sunny spaces. It is less persistent in understory shaded areas.

**Impact on humans and the environment:** Morning Glory vines climb up and strangle stems of other plants, and their leaves shade out their hosts.

**Management techniques:** Morning Glory can be controlled through tillage and competitive species plantings. It must be managed for several years to bring it under control. Hoeing or hand-pulling in conjunction may be helpful but may also encourage the germination of dormant seeds or further promote vegetative growth by breaking up and spreading the plant. Light reduction (by smother crops or mulching) decreases Morning Glory vigor.



Close-ups of invasive Morning Glory plants and flowers.





## Invasive Plants - Characteristics and Removal Techniques

### BURWEED

**Name:** Burweed (*Soliva sessilis*)

**Origin:** South America

**How to recognize it:** Burweed is a low growing winter annual. The plant will grow to about 2 inches tall with a spread of 6 inches in diameter. Each plant has one to ten light to dark coloured stems. These stems grow from the base of the plant, and they can be hairy to sparsely hairy often with purple-spots. The flat, hard seeds are small, light-weight and tipped with serrated spines essentially forming a bur that makes dispersal by human activities common. Burweed is found in managed perennial grass areas usually associated with heavy foot traffic, public swim areas and boat launches of public lakes. This plant is also found in watered lawns. Human activities are the probable cause of seed dispersal and establishment in areas of maintained recreational use world-wide.

**Impact on humans and the environment:** This low growing and sprawling weed can successfully compete with planted and mowed grasses. As a winter annual, Burweed dies in the summer leaving large dead spots during times of the heaviest use. It also produces the sharp seeds or burs during the summer which penetrate skin and tires. These seeds are then dispersed by attaching themselves to anyone using these high traffic areas.

**Management techniques:** Establishing thicker lawns should help prevent the establishment of Burweed.



Close-ups of invasive Burweed plants.



## Invasive Plants - Characteristics and Removal Techniques

### ENGLISH HAWTHORN

**Name:** English Hawthorn (*Crataegus monogyna*)

**Common Names:** Common Hawthorn, One-Seed Hawthorn, May-Tree

**Origin:** Europe and Britain

**How to recognize it:** English Hawthorn is a deciduous tree or shrub 2 to 10 metres tall with a short trunk, many branches, dense leaves and short, stout thorns. It has dark grey-brown bark with smooth greyish to reddish-brown twigs. New shoots and leaves are a reddish colour and deeply lobed. Their flowers are creamy-white that produce clumps of scarlet fruits that stay on the tree over winter. English Hawthorn is found in lowland areas on many soil types but prefers moist to damp disturbed places such as thickets, wetlands, lake margins and open forests. It appears to thrive best in deeper soils.

**Impact on humans and the environment:** English Hawthorn can replace open grassland habitat with a dense shrub and small tree layer dramatically changing the composition of the plant community. By shutting out much of the light to the ground, it eliminates native plants and also impacts native birds, insects and other animals that rely on native plants for food and habitat. It may also harbour non-native mammals such as rabbits.

**Management techniques:** Seedlings can be hand pulled when the soil is moist. Young plants can be cut using a brush saw. Older trees can be cut close to the base using chain or handsaws. Cutting is most effective when about 20 percent of the flowers have gone to seed but should be avoided at this time if native plants are still flowering or setting seed. Avoid cutting when the trees are full of berries, as they will be scattered when the tree is dragged away. Roots should also be removed to prevent regeneration. Stumps can be cut with an axe to reduce re-sprouting. Since Hawthorn can regenerate from cuttings, cut material should be taken off site.



Close-ups of invasive English Hawthorn plants and flowers.



## Tips for Planning Your Invasive Plant Removal Project

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 booklet and make sure that you have the time to visit the site more than once. Work may take several years to complete. Develop a long-term removal and monitoring plan for your activities and seek permission from City of Nanaimo Parks Operations staff before removing invasive plants from local parks or other public spaces.



### Safety First

When removing invasive plants, pay careful attention to your surroundings. This is important especially when working on steep slopes and around wildlife or dead trees. Always wear appropriate safety equipment and have a first aid kit nearby, particularly if you are organizing a group volunteer pull.

### Minimize Danger

Pay close attention when removing invasive plants to not damage the native ecosystems. 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. Do not remove invasive plants that have grown over trees which appear to be dead or dying. Have a professional assess the risks before any work is done.



## Proper Disposal of Invasive Plants

When removing invasive plants from your property, remember how easily they can spread to new areas through their cuttings and seeds. Plan their disposal carefully. Remove cuttings on tarps or place in garbage bags to avoid spreading seeds. If in a park, make arrangements with parks staff to have them remove the material. If you are removing invasive plants from your property, you can drop it off at the following locations:

- Regional Landfill** - 1105 Cedar Road, Nanaimo (250) 722-2044
- Transfer Station** - 860 Church Road, Parksville (250) 248-5254
- International Composting Corp. (ICC)** - 981 Maughan Road, Nanaimo (250) 722-4614



## Scheduled and On-Call Collection Services

Businesses offering scheduled or on-call collection include:

- EnviroCore Recycling** (250) 758-2545
- International Paper Industries (IPI)** (250) 716-3340
- Grasshopper Yard Waste Collection** (250) 716-8181
- Wolvergreen Yard Care** (250) 753-1541
- Granby Bobcat Service Ltd.** (250) 245-0408 or (250) 714-5426

## “Pulling Together” with the Volunteers in Parks (VIP) Program

The Volunteers in Parks Program (VIP) is a public participation program designed to bring the ideas and efforts of volunteers together with the City of Nanaimo, Department of Parks, Recreation and Culture in order to create, develop and improve our parks and open spaces. This program utilizes the talents, skills and energy of volunteers to develop, maintain, and beautify Nanaimo’s many new and old open spaces, parks and trails.

Several volunteer groups have removed invasive plants in our neighbourhood parks, including Roxanne, Brookwood and Glen Oaks. In addition, youth teams have had invasive plant removal weekends in Colliery Dam Park and Saxer Park, and the Nanaimo Field Naturalists regularly remove invasive plants at Piper’s Lagoon Park; however, there is still much more to do.

The City Parks Department will provide education and some tools for volunteers interested in removing invasive plants while walking through the parks and/or organizing more substantial work parties. In some cases, restoration planting will follow the removal of invasive plants to minimize soil erosion and promote the re-establishment of native plant habitat.

Individuals or groups interested in invasive plant removal can contact the City of Nanaimo, Parks Operations Department at 755-7515.



## Typical Process for Invasive Plant Removal Project Under VIP

- A group of volunteers or interested resident contacts the Department of Parks, Recreation and Culture to suggest a site or find out which parks are in greatest need of invasive plant removal. Sometimes, invasive plant removal is also required as the first step in a beautification project.
- The volunteer group or resident organizes one or more volunteer “work bees” at the site.
- City of Nanaimo staff will provide training for the volunteers prior to the work bee or at the beginning of the scheduled work bee. Training generally takes an hour.
- Parks, Recreation and Culture staff may provide some loppers, hard hats, tarpaulins and information sandwich boards; however, resources are limited.
- Volunteers are asked to bring their own work gloves, sturdy shoes, loppers, pruners and other supplies.
- Volunteers bring all the waste that’s been removed to a central area, and the City of Nanaimo disposes of the waste following the work bee.
- Some sites benefit from restoration planting following invasive plant removal. Replanting helps to stabilize the now exposed soil and establish native plants. The City can work with the volunteer group to determine what native plants are appropriate for restoration planting at each site. For small sites, plants can be ordered and planted on the same day as the invasive plant removal work bee, but in most cases, planting occurs at a subsequent work bee. Plant ordering and delivery to the site will be arranged by the City.
- Fundraising is recommended for invasive plant removal projects. Volunteers can canvas local businesses for refreshment donations for the work bee. Financial donations can be put toward the required equipment and/or native plant purchases.
- Invasive plant removal is a long-term process. While the Department of Parks, Recreation and Culture is very interested in one-time work bees, volunteer groups that adopt a site for long-term invasive plant management is also desirable.



*Scotch Broom is a common invasive plant found in the area.*

***For more information about the VIP Program, refer to the Volunteers in Parks Program Overview Package.***