



Prunus laurocerasus

BEST MANAGEMENT PRACTICES FOR
Cherry Laurel
in the Metro Vancouver Region



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SERVICES AND SOLUTIONS FOR A LIVABLE REGION



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Introduction

The impacts of invasive species on ecological, human, and economic health are of concern in the Metro Vancouver region. Successful control of invasive species requires concerted and targeted efforts by many players. This document - **“Best Management Practices for Cherry Laurel in the Metro Vancouver Region”** - is one of a series of species-specific guides developed for use by practitioners (e.g., local government staff, crews, project managers, contractors, consultants, developers, stewardship groups, and others who have a role in invasive species management) in the region. Together, these best practices provide a compendium of guidance that has been tested locally by many researchers and operational experts.

Cherry laurel¹ is a fast-growing woody evergreen tree or shrub that is commonly used as an ornamental hedge plant (Klinkenberg, 2020). It is native to southwestern Asia and southeastern Europe, in areas surrounding the Black Sea including Turkey, Serbia, Bulgaria, the Caucasus and Iran (Schulze, Contreras, & Scagel, 2017) (Chwil, Kostyco, & Matraszek-Gawron, 2019) and has been widely introduced in other parts of Europe, Australia and in North America west of the Cascade Mountains (State of Victoria - Agriculture Victoria, 2020).

Despite the toxicity of the leaves, stems and seeds, cherry laurel is a popular fruit, medicinal, and horticulture plant in many parts of the world and researchers and plant breeders have attempted to create cultivars with disease

resistance and increased fertility (Schulze & Contreras, 2017) (Contreras, 2017). It is available in over 45 different cultivars, developed to emphasize different growth forms and leaf colours (Contreras, Doane, & Friddle, 2010). Ironically, much of the research conducted on cherry laurel worldwide has focused on improving propagation success, as opposed to management in areas where it is considered invasive.

Cherry laurel has escaped cultivation in many areas, including southwestern BC. The plant grows quickly, is tolerant of a wide range of growing conditions, and can easily invade new habitats via abundant fruit production and dispersal by birds and small mammals (Rusterholz, Schneuwly, & Baur, 2018). It is readily sold in garden centres in southwestern BC and Vancouver Island. Although it is found in locations throughout the Metro Vancouver region, it is not yet widespread and management can influence the spread of this species in the region and beyond (Evergreen, 2010).

Academic institutions, government, and non-government organizations continue to study this species in British Columbia. As researchers and practitioners learn more about the biology and control of cherry laurel, it is anticipated that the recommended best management practices will change. This document will be updated to reflect these changes as the information becomes available. Please check metrovancover.org regularly to obtain the most recent version of these best management practices.

¹ *Prunus laurocerasus* is also known by the common names cherry-laurel, cherrylaurel, English laurel, and common laurel (Schulze, Contreras, & Scagel, 2017). It is referred to as ‘cherry laurel’ in this document. The name laurel is derived from its resemblance to the true laurel tree (King County, 2021).

REGULATORY STATUS

Although cherry laurel is not regulated anywhere in British Columbia, it is included on the Province's *Invasive Trees in British Columbia*, a list of invasive or potential tree species of concern confirmed by the BC Ministry of Forests' Invasive Plant Program and the BC Inter-Ministry Invasive Species Working Group. Provincial staff are currently undertaking a risk assessment for cherry laurel (BC Ministry of Forests, 2022). The Invasive Species Council of Metro Vancouver considers cherry laurel a priority invasive species in the Metro Vancouver region.

IMPACTS

Indigenous Peoples have an intrinsic relationship with the natural world, built on reciprocity and stewardship. Many native plants and animals have cultural and spiritual significance for Indigenous Peoples, in addition to being important food and medicine sources. Indigenous communities in British Columbia have collectively called for invasive species prevention, management, and control due to their impact on infrastructure, the economy, human health, ecosystems, and cultural practices. Further collaboration with Indigenous Peoples will deepen our understanding about the impacts of invasive species, such as cherry laurel, on Indigenous ways of life and our shared environment.

Cherry laurel is a strong plant competitor and can grow up to 30 centimetres per year in ideal conditions (Evergreen, 2010). In forests, cherry laurel competes with native plants, by forming a dense cover that shades tree seedlings and shrubs (Evergreen, 2010). Over time it shades out understorey vegetation and prevents forest regeneration (Kent Wildlife Trust, 2023). As a result, there is a lower number of native ground cover plants and shrubs in forests where cherry laurel grows (Ries, Pfeiffenschneider, & Krippel, 2024). The presence of cherry laurel also lowers the soil moisture content and changes the activity and composition of soil microbes (Rusterholz, Schneuwly, & Baur, 2018).



Large, overgrown cherry laurel hedge

CREDIT: ISCMV

In residential or private property settings, cherry laurel hedges can quickly become a challenge for landowners to control, as the plants may require significant maintenance or removal (Sea to Sky Invasive Species Council, 2022). When used as a hedge or ornamental shrub, fruit litter can be unsightly and further contribute to its spread in urban and natural areas (Contreras, Doane, & Friddle, 2010).

Cherry laurel employs several defense mechanisms that allow it to evade predators and thereby contribute to its success in its introduced habitat in the Pacific Northwest (Kautz, Williams, & Ballhorn, 2017). For example, it produces extrafloral nectar (nectar secreted from plant parts other than flowers) that attracts predatory insects (such as ants), thereby deterring other insects that may consume the foliage (Kautz, Williams, & Ballhorn, 2017). Cherry laurel can also exhibit cyanogenesis, the release of toxic cyanide gases, which deters insect herbivores (Kautz, Williams, & Ballhorn, 2017).

Cherry laurel contains cyanide, which is toxic to mammals and some invertebrates. Ingesting leaves, stems and seeds may cause cyanide poisoning characterized by gasping, weakness, pupil dilation, muscle spasms, coma, or even respiratory failure (North Carolina Cooperative Extension, 2024). Wilted or damaged plant parts are even more toxic (North Carolina Cooperative Extension, 2024). Livestock and other animals including invertebrates find cherry laurel unpalatable (Kent Wildlife Trust, 2023).

In addition, cherry laurel is a potential vector for various *Phytophthora* plant pathogens, including *Phytophthora ramorum*, responsible for sudden oak death (Ries, Pfeiffenschneider, & Krippel, 2024). The fruit can be a host to the western cherry fruit fly (*Rhagoletis indifferens*), an invasive insect that impacts crops (Contreras, Potential to become invasive provokes need for sterile shrubs, 2011).

REPRODUCTION AND SPREAD

Many cherry laurel cultivars are readily available in nurseries in BC and other parts of the world (Ries, Pfeiffenschneider, & Krippel, 2024). Reproduction is primarily by birds and small mammals who ingest the fleshy fruits and disperse the seeds long distance (King County, 2021) (Rusterholz, Schneuwly, & Baur, 2018). Cherry laurel also spreads by layering when roots grow laterally from stems that touch the ground (King County, 2021). When cut, shoots will grow from the cut surface and suckers will form from the roots (King County, 2021). Cuttings can easily and quickly root and propagate new plants; this is a common form of propagation in the horticulture industry (Schulze, Contreras, & Scagel, 2017). There is risk of spread in natural areas if cherry laurel clippings are illegally dumped.

HABITAT AND DISTRIBUTION

Cherry laurel is tolerant of disturbance, pollution, and a wide range of soil and moisture conditions (King County, 2021) (North Carolina Cooperative Extension, 2024) (Contreras, Doane, & Friddle, 2010). It grows in full sun or dense shade with little direct light (State of Victoria - Agriculture Victoria, 2020). It easily invades undisturbed habitats, escaping into remote areas, but is most common in forests and parks adjacent to developed areas (King County, 2021). It is often found with a mix of native and non-native species (King County, 2021).

Outside its native range of southwestern Asia and eastern Europe, cherry laurel has escaped cultivation and is invasive in other parts of Europe, Australia and along the Pacific west coast in British Columbia and Washington, Oregon and California (King County, 2021). In BC, cherry laurel is primarily found in the southwestern portion of the province (Klinkenberg, 2020). Although it is found throughout the Metro Vancouver region, it is not yet prolific and management can influence the spread of this species in the region and beyond (Evergreen, 2010). There are no reports of cherry laurel in the Sea to Sky region and invasive species experts there are keen to keep it out (Sea to Sky Invasive Species Council, 2022).

CLIMATE CHANGE ADAPTATION

Climate models predict that the Metro Vancouver region will experience warmer temperatures; a decrease in snowpack; longer dry spells in summer months; more precipitation in autumn, winter, and spring; more intense extreme events; and an extended growing season. In the past, our region had an average of 252 days in the growing season. In lower elevations, 45 days will be added to the growing season by the 2050s, and 56 days by the 2080s, resulting in nearly a year-round growing season of 357 days on average. In higher elevation ecosystems the growing season length will increase by 50% to 325 days by the 2080s (Metro Vancouver, 2016). These changes will stress many sensitive ecosystems, increasing their vulnerability to competition from invasive species.

Cherry laurel's ability to survive in a variety of conditions and habitats, and its widespread distribution around the world will likely influence its ability to adapt to future climate changes. It is speculated that this plant may benefit from our future climate in several ways:

- **Carbon dioxide levels:** Elevated atmospheric carbon dioxide concentrations favour cherry laurel growth and may contribute to its spread in forests (Hättenschwiler & Körner, 2003).
- **Extreme temperature and drought tolerance:** Cherry laurel has been categorized as highly tolerant to heat, frost, and drought (Yener, Akdeniz, & Zencirkiran, 2020; State of Victoria - Agriculture Victoria, 2020; Percival & Sheriffs, 2002).
- **Fire disturbance:** Cherry laurel plants can resprout after wildfires (State of Victoria - Agriculture Victoria, 2020).

With these kinds of competitive advantages, this species is more adaptable than native species in a variety of ecosystems. Its ability to reproduce in multiple ways and ability to spread quickly suggest that it will be able to withstand, and possibly thrive, with changing climate conditions.

Identification

Unless otherwise noted, the following identification information was collected from King County (2021) and Klinkenberg (2020).

Lifecycle: Erect, spreading, woody, perennial shrub or tree (State of Victoria - Agriculture Victoria, 2020); plants grow up to 10 metres tall and 8 metres across (Kautz, Williams, & Ballhorn, 2017).

Stem: Twigs are green and smooth and have a bitter almond odour when crushed (North Carolina Cooperative Extension, 2024); bark becomes woody and brown as the plant grows; buds at the ends of twigs are light green.

Leaves: Simple, alternate, evergreen, thick, dark green and shiny on top, pale green underneath, 5-20 centimetres long, oblong-shaped coming abruptly to a point at the tip; finely toothed edges and short leaf stalks; there are 2-8 conspicuous glands on the underside of leaves next to the midrib (North Carolina Cooperative Extension, 2024).

Flowers: Small, white, fragrant flowers in upright clusters (racemes) 6-10 millimetres wide and 5-10 centimetres long; individual flowers have 5 petals and many yellow stamens, resembling cherry tree flowers; flowers form in mid-spring.

Fruits: Small, purple-black drupes (cherries) form in clusters in mid-summer; each cherry is 10-15 millimetres long and contains one pit (seed) shaped like a water droplet; pits are poisonous to humans, although birds and other animals consume them.

The following photos show cherry laurel parts.



Bark
CREDIT: ISCMV



Top of leaf
CREDIT: ISCMV



Underside of leaf (the arrows indicate the glands)
CREDIT: ISCMV



Alternate leaf arrangement
CREDIT: ISCMV



Flowerheads grow upright from branches
CREDIT: ISCMV



Flowers
CREDIT: ISCMV



Drupes (fruits)
CREDIT: MANUEL M. V. VIA FLICKR



Dried pits from the inside of the fruits
CREDIT: ISCMV

SIMILAR SPECIES

The species most commonly mistaken for cherry laurel are listed below.

NATIVE SPECIES

- **Pacific rhododendron (*Rhododendron macrophyllum*)** shrubs are 1-8 metres tall with evergreen, leathery, oblong-elliptic, 8-20 centimetre-long leaves and many bright pink to purple bell-shaped flowers up to 5 centimetres wide in terminal clusters (Klinkenberg, 2020).



Pacific rhododendron

CREDIT: I. GASIOR

NON NATIVE SPECIES

- **Bay laurel/bay leaf tree (*Laurus nobilis*)** is an aromatic, evergreen tree or large shrub with a distinctive pyramidal growth form (Klinkenberg, 2020). It has leathery, glossy dark green oval leaves commonly used as a culinary herb with purple berries in early summer (Klinkenberg, 2020). True bay leaves used in cooking come from this plant.
- **Portuguese laurel (*Prunus lusitanica*)** is a small evergreen shrub from Portugal, Spain, and the Canary Islands (Contreras, Doane, & Friddle, 2010). It grows up to 5 metres with leaves up to 12 centimetres long and pointed, with finely jagged edges and pointed tips. Like cherry laurel the flowers are small, white, fragrant and grow in racemes. It shares many of the same sun, shade and soil adaptabilities as cherry laurel (Contreras, Doane, & Friddle, 2010) and is thought to have a similar invasive potential to cherry

laurel (Contreras, 2017). Although not regulated, it is also considered invasive in the Metro Vancouver region.

- **Spurge/Daphne laurel (*Daphne laureola*)** is a perennial evergreen shrub that was introduced to North America as an ornamental plant. It grows 0.4-1.5 metres tall, resembling small trees. Evergreen, thick, waxy, smooth leaves grow in dense whorls at the ends of stems. Small, sweetly scented, tubular shaped flowers are pale yellow-green and form in clusters of 5-20 found at the base of the leaves at the tops of stems. It contains toxins that can cause health impacts in human and animals, including death if ingested. This invasive species is common in southwestern coastal BC. More information on this species can be found in the [Best Management Practices for Spurge Laurel in the Metro Vancouver Region](#).



Bay laurel

CREDIT: F. & K. STAFF, FLICKR



Portuguese laurel

CREDIT: J. S JACKSON, FLICKR



Spurge/Daphne laurel

CREDIT: CITY OF SURREY

Tracking

The provincial government maintains [InvasivesBC](#), an invasive species database, map and mobile data collection application available for use by all land managers, contractors, government agencies and non-profit organizations completing surveys and/or management activities on invasive species in BC. Many agencies, including local governments, have their own internal invasive species inventory and mapping protocols that are used by staff, contractors, and, in some cases, the public. For example, the City of North Vancouver has its own system called AlienMap. Agencies in British Columbia that do not enter data into IAPP are encouraged to check it regularly because it contains public reports and data from other agencies and it is important to consider as much data as possible when making management decisions. The Map Display module of IAPP is publicly accessible.

When carrying out a cherry laurel inventory it is useful to record the following information as it will later inform treatment plans:

- Size and density of infestation;
- Location in relation to the 10 metre Pesticide Free Zone adjacent to water courses;
- Location in relation to other water sources, such as wells.

Reporting

Since cherry laurel is widespread throughout the Metro Vancouver region and commonly found on private property, there is generally little value in reporting individual occurrences.

Prevention and Control Strategies

Effective invasive plant management may include a variety of control techniques ranging from prevention, chemical, manual, mechanical, biological, and/or cultural methods. Each method is described below in order of effectiveness.

Since the impacts to native plants are more pronounced with time after the establishment of cherry laurel, and large plants are more difficult to manage, removing young plants first is an effective management strategy (Rusterholz, Schneuwly, & Baur, 2018).

HANDLING CHERRY LAUREL SAFELY

Although the seeds, leaves and bark of cherry laurel are all poisonous (Evergreen, 2010), the greatest health risk is ingestion of the seeds (or ingesting entire cherries with seeds). Use caution at sites with children and pets present to prevent the ingestion of the cherries. When handling cherry laurel, wear gloves and protective clothing. Wash hands thoroughly after management activities and before eating.

STRATEGY COLOUR LEGEND

GREEN: RECOMMENDED

ORANGE: CAUTION

RED: NOT RECOMMENDED OR NOT AVAILABLE

PREVENTION: IMPERATIVE

Prevention is the most economical and effective way to reduce the spread of cherry laurel over the long term.

When working in or adjacent to cherry laurel, it is best to inspect and remove plants, plant parts, and seeds from personal gear, clothing, pets, vehicles, and equipment and ensure soil, gravel, and other fill materials are not contaminated with cherry laurel before leaving an infested area. Plants, plant parts, and seeds should be tarped or bagged before transport to an appropriate disposal site (see Disposal section).

When selecting plants for a site, do not purchase, trade, or transplant cherry laurel. The Invasive Species Council of BC's 'Grow Me Instead' Program or [Metro Vancouver's Grow Green](#) website provide recommendations for non-invasive, drought-tolerant plants, and garden design ideas. Cherry laurel is often sought as a border or hedge plant and alternatives are available that can provide a similar continuous hedge or screen.

All materials (e.g., topsoil, gravel, mulch, compost, wood chips, plant stock) should be weed-free. Cherry laurel can be introduced via these materials and sites where they are used should be monitored carefully for any growth (Crosby, 2018). Healthy green spaces are more resistant to invasion by invasive plants, so it is also important to maintain or establish healthy plant communities.

MANUAL/MECHANICAL: RECOMMENDED

- **Pulling** by hand when the soil is moist is effective for seedlings or small plants (King County, 2021). It is best to remove as much of the plant, including roots, as possible.
- **Cutting plus stump management** can be used to manage larger plants. Stems and trunks can be cut using a hand tool or chainsaw as close to the ground as possible (King County, 2021). Severed branches and stems exposed to moist soil may produce roots and

continue growing and should be removed offsite (King County, 2021). Cherry laurel can withstand heavy pruning (State of Victoria -Agriculture Victoria, 2020) and it takes several years of persistent cutting of all the above-ground branches before the plant completely exhausts and dies (Plavčak, Mikac, & Merela, 2021) so cutting alone is not recommended. Cut stumps should be managed in one of several ways:

- **Cutting plus removing new stems** that re-grow from the cut surface. Shoots that grow from the cut surface should be broken or cut off. It is best to monitor the surface regularly throughout the growing season for several years until the plant stops producing new shoots (King County, 2021). Younger plants will produce more shoots than older plants (King County, 2021).
- **Cutting plus digging out the stumps** to remove as much root material as possible (King County, 2021). A machine, such as an excavator, may be required to dig out large stumps. To avoid re-growth, dispose of the stumps offsite or turn them upside down and remove the soil from the roots. Removal of the stump may leave a hole in the ground, which should be filled with soil or replacement trees or shrubs to stabilize the area, prevent erosion, and avoid a safety hazard (King County, 2021). Stump removal is time-consuming and causes soil disturbance (King County, 2021). This method is not recommended for large infestations or steep slopes (King County, 2021).
- **Cutting plus herbicide application to cut stump (cut stump application)** can be effective to reduce regrowth. See Chemical Control section for more information about herbicide application.

If any remaining stump material is left in the ground, the site should be monitored for regrowth.

- **Girdling** is effective in suppressing cherry laurel and can eventually cause plant death (Plavčak, Mikac, & Merela, 2021). Girdling is often applied around the entire circumference of a trunk, but Plavčak, Mikac, & Merela (2021) found that cherry laurel survivability was significantly reduced if girdled up to $\frac{3}{4}$ of the circumference of the trunk (called incomplete girdling). Complete girdling was less effective because sprouts grew more readily below the wound when tissue above the injured (girdled) area died quickly. Incomplete girdling avoids this by causing a slower plant death with lower risk of sprouts forming (Plavčak, Mikac, & Merela, 2021).

It is best to use a sharp knife, hatchet, or similar tool to slice through the outer bark of the plant. The same tool or a flat shovel can be used to pry the bark off in a ring $\frac{3}{4}$ of the circumference around the trunk.

After girdling, the wounded portion of the tree weakens over time, causing the stem to crack and break (Plavčak, Mikac, & Merela, 2021). This process may take several years and there is a risk of branches or trees falling once dead. For large cherry laurel trees, this method should be conducted or overseen by an arborist or equivalent professional to monitor the integrity of the tree and advise on safe removal of branches and the trunk.



Example of a girdled tree. Note that this is not a cherry laurel tree.

CREDIT: G. CZIKO, FLICKR

- **Flower removal** can prevent seed production, but this method is time-consuming and not viable for large infestations or trees taller than 6 metres with many branches (Evergreen, 2010). The flowering branches should be cut before the fruits form.

REMOVAL TIMING

Cherry laurel can be removed throughout the year. However, as cherries can persist for many months, undertaking manual control methods prior to fruit maturation is ideal. Often cherry laurel is managed by crews during the winter months, as other high priority plants are targeted during the spring and summer and cherry laurel management is possible in the winter (Hendel, 2024). One advantage of conducting management in the winter is that cherry laurel is easy to spot and access in forests since deciduous plants will have lost their leaves. Caution must be taken to avoid disturbing wildlife throughout the year, especially birds that may feed on or use cherry laurel for perching and cover.

APPLYING MANUAL/MECHANICAL CONTROL METHODS IN RIPARIAN AREAS

Cherry laurel often grows in large contiguous patches right up to the edge of water courses. Consider the impact of control techniques and the resulting bare soil on the adjacent aquatic environment. Schedule removal works during a period of least risk to fish species, outside of the [fish window](#). Adhere to Provincial and Federal riparian regulations. It is recommended to consult with a qualified environmental professional when working around water bodies.

CHEMICAL: CAUTION

When alternative methods to prevent or control invasive plants are unsuccessful, professionals often turn to herbicides.

This method should be used with caution for the following reasons (Crosby, 2018):

1. Weather conditions greatly influence treatment efficacy;
2. Cherry laurel often grows in riparian areas where pesticide use is restricted; and
3. Since cherry laurel growth is closely associated with other plants, chemical control can easily damage non-target species (Province of BC, 2002).

With the exception of substances listed on Schedule 2 of the *BC Integrated Pest Management Regulation*, the use of herbicides is highly regulated in British Columbia. Site characteristics must be considered with herbicide prescribed, based on site goals and objectives and in accordance with legal requirements. [This summary of BC's Integrated Pest Management Act](#) provides an overview of the provincial legislation.

PESTICIDE LICENCE AND CERTIFICATION

A valid pesticide licence is required to:

- offer a service to apply most pesticides;
- apply most pesticides on public land including local government lands²; and
- apply pesticides to landscaped areas on private land, including outside office buildings and other facilities.

Pesticides (e.g., herbicides, insecticides, fungicides) are regulated by the Federal and Provincial governments, and municipal governments often have pesticide bylaws.

- Health Canada evaluates and approves chemical pest control products as per the *Pest Control Products Act*.
- The *BC Integrated Pest Management Act* sets out the requirements for the use and sale of pesticides in British Columbia. This Act is administered by the Ministry of Environment and Climate Change Strategy.
- Several municipalities have adopted bylaws that prohibit the use of certain pesticides.

Everyone who uses pesticides must be familiar with all relevant laws.

² on up to 50 hectares/year by a single organization. Organizations looking to treat over 50 hectares of land per year are also required to submit a Pest Management Plan and obtain a Pesticide Use Notice confirmation.

ONLY companies or practitioners with a valid Pesticide Licence and staff who are certified applicators (or working under a certified applicator) may apply herbicide on invasive plants located on public lands in British Columbia. Applicators must be either the land manager/owner or have permission from the land manager/owner prior to herbicide application.

On private property the owner may obtain a Residential Applicators Certificate (for Domestic class products only) or use a qualified company. Residents do not require a Residential Applicator Certificate for certain uses of domestic class glyphosate including treatment of plants that are poisonous for people to touch, invasive plants and noxious weeds listed in legislation, and weeds growing through cracks in hard surfaces such as asphalt or concrete. Refer to the 'Pesticides & Pest Management' and 'Home Pesticide Use' webpages listed in the Additional Resources Section for more information.

Questions? Contact the BC Integrated Pest Management Program: Telephone: (250) 387-9537

Email: bc.ipm@gov.bc.ca

Pesticide applicator certificates can be obtained under the category 'Industrial Vegetation Management' to manage weeds on industrial land, roads, power lines, railways, and pipeline rights-of-way for control of noxious weeds on private or public land. However, since cherry laurel is not a regulated noxious weed in the Metro Vancouver region, the 'Landscape' certification category is needed for herbicide use on public and private lands. Assistant applicator training is also available and the [online course and exam](#) are free.

It is best practice for personnel supervising or monitoring pesticide contracts to also maintain a pesticide applicator licence so they are familiar with certification requirements.

For more information on how to obtain a licence and the requirements when working under the provincial *Integrated Pest Management Act and Regulation*, please review the Noxious Weed & Vegetation Management section on this webpage: gov.bc.ca/PestManagement.

HERBICIDE LABELS

Individual herbicide labels must always be reviewed thoroughly prior to use to ensure precautions, application rates, and all use directions, specific site and application directions are strictly followed. Under the federal *Pest Control Products Act* and the BC Integrated Pest Management Regulation, **persons are legally required to use pesticides (including herbicides) only for the use described on the label and in accordance with the instructions on that label.** Failure to follow label directions could cause damage to the environment, create poor control results, or pose a danger to health. Contravention of laws and regulations may lead to cancellation or suspension of a licence or certification, requirement to obtain a qualified monitor to assess work, additional reporting requirements, a stop work order, or prohibition from acquiring authorization in the future. A conviction of an offence under legislation may also carry a fine or imprisonment.

Herbicide labels include information on both the front and back. The front typically includes trade or product name, formulation, class, purpose, registration number, and precautionary symbols. Instructions on how to use the pesticide and what to do in order to protect the health and safety of both the applicator and public are provided on the back (BC Ministry of Environment, 2011).

Labels are also available from the Pest Management Regulatory Agency's [online pesticide label search](#) or [mobile application](#) as a separate document. These label documents may include booklets or material safety data sheets (MSDS) that provide additional information about a pesticide product. Restrictions on site conditions, soil types, and proximity to water may be listed. If the herbicide label is more restrictive than Provincial legislation, the label must be followed.

HERBICIDE OPTIONS

Although not specifically listed on the labels for the following herbicides, cherry laurel may be treated under the general application provision for woody plants. Information is from King County (2021) and Hood Canal Cooperative Weed Management Area (2024).

ACTIVE INGREDIENT (EXAMPLE BRAND NAMES)+	APPLICATION	PERSISTENCE	GROWTH STAGE++	TYPE+++
Glyphosate § (many products)	cut stump, stem injection, foliar application	non-residual*	actively growing	non-selective
Triclopyr (example: Garlon™)	cut stump, frilling, foliar application	residual	actively growing (just before cut)	selective, no effect on grasses
Imazapyr (example: Arsenal™)	cut stump, frilling, foliar application	residual	actively growing (just before cut)	non-selective

+ The mention of a specific product or brand name of pesticide in this document is not, and should not be construed as, an endorsement or recommendation for the use of that product.

++ Active growing periods vary from year to year depending on weather and other factors. There may be more than one active growing period for a plant in a year.

+++ Herbicides that control all vegetation are non-selective, while those that control certain types of vegetation (e.g., only grasses or only broadleaf plants) are termed selective.

§ Glyphosate can impact other trees with roots within or adjacent to the treatment area.

* Non-residual herbicides are active only on growing plant tissue and have little or no persistence in the soil whereas residual herbicides persist in the soil, remaining effective over an extended period.

APPLYING PESTICIDE IN RIPARIAN AREAS

Provincial legislation prohibits the use of herbicides within 10 metres of natural water courses and 30 metres of domestic or agricultural water sources on public lands. On private lands herbicide labels need to be followed (which means for glyphosate products treatment can happen up to the water's edge) and other restrictions may apply (e.g. industrial sites, forestry sites, golf courses, etc.). On public lands, glyphosate is the only active ingredient that can be applied within the 10 metre Pesticide-Free Zone (PFZ)³ in British Columbia in accordance with the *Integrated Pest Management Act* and Regulation and all public land Pesticide Management Plans (PMPs). A plant must be either a listed Noxious Weed (under the *Weed Control Act*) or appear in the *Forest and Range Practices Act Invasive Plants Regulation* to be treated within the 10 metre PFZ. **Cherry laurel is not listed and therefore glyphosate and other herbicides can only be applied on cherry laurel up to 10 metres away from the high water mark (HWM)⁴.** The 30 metre no-treatment zone around a water supply intake or well used for domestic or agricultural purposes may be reduced if the licensee or PMP holder is "reasonably satisfied" that a smaller no-treatment zone is sufficient to ensure that pesticide from the use will not enter the intake or well.

When managing cherry laurel with herbicide in riparian areas:

- Observe and mark all PFZs while on site.
- The HWM should be determined by careful evaluation by the applicator.
- Distances in PFZs should be measured as horizontal distance.
- Herbicides restricted in a PFZ must not enter these zones by leaching (lateral mobility) through soil or by drift of spray mist or droplets.
- Treatments should be conducted when water levels are low (e.g. summer months) to reduce risk.
- Note that efficacy may be dependent on site conditions, including moisture in the soil.

³ The Pesticide-Free Zone (PFZ) is an area of land that must not be treated with pesticide and must be protected from pesticide moving into it, under the *Integrated Pest Management Act* and Regulation.

⁴ The High Water Mark (HWM) is defined as the visible high water mark of any lake, stream, wetland or other body of water where the presence and action of the water are so common and usual and so long continued in all ordinary years as to mark upon the soil of the bed of the lake, river stream, or other body of water a character distinct from that of the banks, both in vegetation and in the nature of the soil itself. Typical features may include, a natural line or "mark" impressed on the bank or shore, indicated by erosion, shelving, changes in soil characteristics, destruction of terrestrial vegetation, or other distinctive physical characteristics. The area below the high water mark includes the active floodplain (BC Ministry of Environment, 2011).

APPLICATION METHODS

Herbicide may be applied to cherry laurel using the following methods:

- **Cut stump application** can be used for large plants in combination with cutting (see Manual/Mechanical Control section for additional information on cutting). The plant should be cut as close to the ground as possible (Hood Canal Cooperative Weed Management Area, 2024). Immediately after cutting the trunk, the cut surface of the stump should be painted or sprayed with herbicide (King County, 2021). If there is a delay in applying herbicide after cutting the stump and new shoots form, they can also be sprayed (a surfactant is recommended) (King County, 2021).
- **Frilling** (also called hack and squirt) involves chipping notches around the trunk and applying herbicide to the fresh cuts (King County, 2021). This method can be used on large plants that have not been cut down (King County, 2021). Notches can be made using a chainsaw, hand saw or hatchet (Hood Canal Cooperative Weed Management Area, 2024). Cuts should be made around the trunk, below the last living branch (Hood Canal Cooperative Weed Management Area, 2024). Herbicide should be sprayed or applied to the exposed area of the trunk according to the herbicide label.
- **Stem injection** can be used on large plants that have not been cut down (King County, 2021). This method involves the insertion of herbicide-filled capsules or shells evenly around the base of the trunk with an injection lance (such as EZ-Ject®). The number of capsules injected into the trunk depends on the herbicide product and the DBH (diameter at breast height) (EZ-Ject®, 2024). The capsules must penetrate through the outer layer of bark into the next tissue layer to be effective (EZ-Ject®, 2024). All branches should be removed below the application point. This method can be used year-round and in all weather conditions except when the bark is frozen (EZ-Ject®, 2024). This method may require several weeks or months to show signs of plant death and death of surrounding sprouts.
- **Foliar application** can be used for seedlings but is not recommended for larger plants due to the thick, waxy leaves that reduce herbicide absorption (King County, 2021). The addition of a surfactant may improve absorption (King County, 2021).

CULTURAL: NOT AVAILABLE

There are no documented cultural control methods for cherry laurel. Due to the toxicity of cherry laurel, targeted grazing is not a suitable management option for this species. Cherry laurel is also reported to be unpalatable to livestock (State of Victoria - Agriculture Victoria, 2020).

BIOLOGICAL: NOT AVAILABLE

There are currently no biocontrol options available in British Columbia for cherry laurel. Although the plant is susceptible to bacterial and fungal pathogens (Schulze & Contreras, 2017), this characteristic has not been investigated for biological control.

CONTROL SUMMARY COLOUR LEGEND

GREEN: RECOMMENDED

ORANGE: CAUTION

RED: NOT RECOMMENDED OR NOT AVAILABLE

CONTROL SUMMARY

The following table provides a summary and comparison of control methods for cherry laurel.

CONTROL STRATEGY	TECHNIQUES	APPLICABLE SITE TYPE	PROS	CONS
Manual	Pulling	Seedlings or small plants	Selective, non-chemical, can be managed by volunteers, inexpensive	Labour intensive, may create soil disturbance, must remove entire plant, must deal with biomass
	Cutting plus removing new stems from stump	Mature plants, trees	Selective, non-chemical	Labour intensive, regrowth may occur for several years
Manual/ Mechanical	Cutting plus digging out stumps	Mature plants, trees; areas accessible by machine	Non-chemical	Labour intensive, causes soil disturbance, regrowth will occur if stump is not removed entirely, may require trained staff or specialty equipment
Chemical	Cut stump application	Mature plants, trees	Selective with appropriate herbicide and application, may prevent regrowth of cut stems, less disturbance of surrounding environment	Unintended environmental/health impacts, high public concern, weather dependent, requires trained staff
Manual	Girdling	Mature plants, trees	Selective, non-chemical	Plant death is slow and may take several years, requires trained staff
	Flower removal	All plants with flowering branches within reach	Selective, non-chemical, prevents seed production	Will not kill the plants
Chemical	Filling	Mature plants that have not been cut down	Selective with appropriate herbicide and application, less disturbance of surrounding environment	Unintended environmental/health impacts, high public concern, weather dependent, requires trained staff, requires specialized equipment and herbicide
	Stem injection	All plants except seedlings that have not been cut down	Selective with appropriate herbicide and application, can be used all year and in all weather conditions except freezing, less disturbance of surrounding environment	Unintended environmental/health impacts, high public concern, requires trained staff, requires specialized equipment and herbicide
	Foliar application	Seedlings	Selective with appropriate herbicide and application, less disturbance of surrounding environment, less labour intensive	Unintended environmental/health impacts, high public concern, weather dependent, requires trained staff, can only be used on seedlings
Cultural	Grazing	None		Not a suitable management option for this species, potential toxicity
Biological	No biological control agents are currently available for distribution in British Columbia			

Disposal

ON SITE DISPOSAL

Pulled or cut stems exposed to moist soil may produce roots and continue growing and should be removed offsite (King County, 2021). Cut stumps can be left onsite if they are turned upside down and all soil removed from the roots (King County, 2021).

OFF SITE DISPOSAL

In the Metro Vancouver region, several facilities accept cherry laurel plants and/or infested soil. Please consult [this disposal facility list](#) for current details.

PLEASE CONTACT ALL FACILITIES BEFOREHAND TO CONFIRM THEY CAN PROPERLY HANDLE THE MATERIAL.

CLEANING AND DISINFECTION⁵

Before leaving a site, all visible plant parts and soil from vehicles, equipment, and gear should be removed and rinsed if possible. When back at a works yard or wash station, vehicles should be cleaned and disinfected using the following steps:

- Wash with 180 °F water at 6 gpm, 2000 psi*, with a contact time of ≥ 10 seconds on all surfaces to remove dirt and organic matter such as vegetation parts or seeds. Pay special attention to undercarriages, chassis, wheel-wells, radiators, grills, tracks, buckets, chip-boxes, blades, and flail-mowing chains.
- Use compressed air to remove vegetation from grills and radiators.

- Sweep/vacuum interior of vehicles paying special attention to floor mats, pedals, and seats.
- Steam clean poor access areas (e.g., inside trailer tubes) – 200 psi @ 300 °F (149°C).
- Fully rinse detergent residue from equipment prior to leaving the facility.

* Appropriate self-serve and mobile hot power-wash companies in the Metro Vancouver area include: Omega Power Washing, Eco Klean Truck Wash, RG Truck Wash, Ravens Mobile Pressure Washing, Hydrotech Powerwashing, Platinum Pressure Washing Inc, and Alblaster Pressure Washing. Wash stations should be monitored regularly for cherry laurel growth.

Follow-up Monitoring

Whatever control method is used, follow-up monitoring and maintenance treatments are components of an integrated management plan or approach. Depending on the management technique used, multiple treatments may be required over a period of months or years. For methods involving cutting, one of the stump management methods should be used and the cut stump should be monitored for regrowth (King County, 2021). Chemical treatments can be repeated as directed on the herbicide label to control any subsequent growth.

⁵ Adapted from Metro Vancouver 2017 Water Services Equipment Cleaning Procedures and Inspection Protocols.

Restoration

Restoration is recommended to create competition, control cherry laurel re-growth, and replace lost habitat. Applying mulch to the treatment area can reduce seedling growth (King County, 2021). Removal of the stumps may leave holes in the ground, which should be filled with soil or replacement trees or shrubs to stabilize the area and prevent erosion (King County, 2021). Planting should not take place until management activities are completed, especially if the management techniques are expected to cause soil disturbance, for example digging the stumps.

Examples of common competitive native species prescribed in Metro Vancouver sites are summarized in the table below based on site moisture.

WET SITES	MOIST SITES	DRY SITES
SHRUBS		
Salmonberry	Salmonberry	Thimbleberry
Hardhack	Willow	Nootka rose
Willow	Red osier dogwood	Red flowering currant
Red osier dogwood	Red elderberry	Snowberry
Pacific ninebark	Vine maple	Tall Oregon grape
	Indian plum	Oceanspray
TREES		
Western red cedar	Western red cedar	Douglas-fir
Red alder	Red alder	Red alder

Replacement species should be chosen based on the ecology of the site by a qualified environmental professional. Local biologists, environmental professionals, agronomists, agrologists, native and domestic forage specialists, seed companies, and plant nurseries are all good sources for localized recommendations for regional native species and regionally adapted domestic species, based on site usage. Native grass seed mixes are also available. There are several science-based resources available to guide restoration efforts, such as the South Coast Conservation Program’s [Diversity by Design](#) restoration planning toolkit.

Revegetation of the site to a domestic or cultured non-native plant species composition may be considered in some circumstances. Often domestic species establish faster and grow more prolifically, which aids in resisting cherry laurel re-invasion.

Cherry laurel sites are often found in areas with existing, or potential, wildlife populations (e.g., deer, beaver, muskrat, vole, etc.) that can damage restoration plantings. Therefore, any revegetation plan must consider impacts from wildlife and utilize appropriate mitigation measures to protect the restoration and existing native plantings (e.g., tree wrapping, exclusion caging/fencing, vole guards, etc.).

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Additional Resources

For more information please refer to the following resources.

- BC Ministry of Forests, Lands, and Natural Resource Operations, Invasive Alien Plant Program (IAPP). www.gov.bc.ca/invasive-species
- Grow Green Guide. www.growgreenguide.ca
- Grow Me Instead. <http://bcinvasives.ca/resources/programs/plant-wise/>
- King County Cherry laurel identification and control. <https://kingcounty.gov/en/legacy/services/environment/animals-and-plants/noxious-weeds/weed-identification/english-laurel>
- Pesticides and Pest Management. Province of British Columbia <https://www2.gov.bc.ca/gov/content/environment/pesticides-pest-management>

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