

# English Ivy *Hedera helix*

## About English Ivy

English ivy is a widely planted ornamental that arrived in North America during colonial times. It is indisputable that English ivy inhibits the growth and regeneration of native wildflowers, shrubs and trees through shading smothering and associated harmful pathogens.

## Legal Status

*Community Charter, Spheres of Concurrent Jurisdiction – Environment and Wildlife Regulation.*

## Distribution

English ivy is currently found in southwestern BC, along the coast, island, and Haida Gwaii. There have been isolated reports of English ivy in the southern interior and Kootenays.

## Identification

**Flowers:** Flowers are an umbel-shaped cluster of small, greenish-yellow flowers with five thick and pointed petals each 3 mm long. Petals radiate from green, five-sided floral disks.

**Stems:** An evergreen, climbing shrub that can form dense ground cover or climb to 30 m by aerial roots. Stems can grow to 25 cm in diameter when climbing. Vines covered in gray-brown shiny bark, with raised leaf scars.

**Leaves:** English ivy has thick, waxy, dark-green leaves with three to five pointed lobes when juvenile. Mature plants have erect branches with unlobed leaves with terminal flower clusters. Leaves are alternate, broadly egg-shaped, ranging from 5-10 cm long and 6-12 cm wide.

**Fruits:** Are dark blue to purplish, growing in clusters of spherical drupes each 6-9 mm diameter.

**Similar Native Species:** Salal (*Gaultheria shallon*) is a native creeping to erect shrub found in southwestern BC. While salal does not climb, it can also be differentiated by leaf width and the presence of toothed leaf margins, unlobed leaves, as well as nodding flowers and fruits.



## Ecological Characteristics:

**Habitat:** English ivy does best in moist, open forests, but is adaptable to a range of soil and moisture conditions. Young plants are shade tolerant enabling growth under existing dense stands of plants and trees.

**Reproduction:** English ivy flowers from late summer to early fall. Vegetative reproduction can occur from cuttings or from juvenile stems in contact with the ground.

**Dispersal:** The plant remains vegetative when growth is horizontal, but turns reproductive when allowed to climb. Fruit and seeds can be eaten and spread by birds.

## Impact

**Ecological:** English ivy can form dense monocultures that spread on the ground and on other plants and trees. It can suppress and exclude native vegetation by smothering them and competing for light. The excessive weight of English ivy growing on native plants can leave them more vulnerable to blowdown and disease. English ivy can also create unsuitable wildlife habitat and forage availability. It can serve as a vector of Bacterial Leaf Scorch (*Xylella fastidiosa*), a plant pathogen that is harmful to maples, oaks, elms, and other native plants.

**Economic:** Has the ability to damage infrastructure it grows on.

**Health impacts:** Has been found toxic to humans when eaten and may cause dermatitis in sensitive individuals.

## Integrated Pest Management

*IPM is a decision-making process that includes identification and inventory of invasive plant populations, assessment of the risks that they pose, development of well-informed control options that may include a number of methods, site treatment, and monitoring.*

### A. Prevention

- » **Monitor** for English ivy in community gardens, along built-up walls and trees, and in understory vegetation.
- » **Destroy** single plants or new infestations early, before seeds are produced.
- » **Maintain** a strong, competitive perennial plant cover.

- » **Plant** native and non-invasive species in gardens and community horticulture areas.
- » **Bag or tarp** plants, plant parts, and seeds before transporting to a designated disposal site. Do not compost plants.

## B. Mechanical control

- » Hand pulling and cutting of vines can be effective in late summer or fall, when plants are easier to remove. Aboveground vines should be cut and pulled so no rooted portions re-grow. Mechanical control is labour intensive and may require several years to eradicate, depending on size of area. If pulling, wear gloves and a long-sleeved shirt, as English ivy has been reported to cause skin rashes when handled.
- » Climbing vines growing on a host plant can be cut at a comfortable height to kill upper portions. Rooted vines should be pulled as they remain alive after cutting; a combination of cutting and herbicide can be used for more effective treatment.
- » Mechanically removed plants should be bagged and disposed of properly in a landfill, where plants cannot set new roots.

## C. Biocontrol

- » There are currently no biocontrol agents available for English ivy.

## D. Chemical control

Herbicide recommendations and use must first consider site characteristics and be prescribed based on site goals and objectives. Herbicide labels and other sources of information must be reviewed before selecting and applying herbicides.

- » U.S. research shows triclopyr or glyphosate applied for successive years can provide control. Using a combination of mechanical trimming to reduce layers and injure leaves with herbicide application on cut surfaces has been shown to aid herbicide penetration and increase uptake. Repeated treatments may be necessary, and there may be a possibility of host trees absorbing herbicides.
- » Applications of herbicides can be made throughout the year. As English ivy can continue to grow into the winter, killing host plants can be avoided as long as temperatures are above 12 degrees Celsius. Winter application in Oregon has shown good control at this time of year.
- » The addition of surfactants in herbicide applications can increase efficacy.

Application of pesticides on Crown land must be carried out following a confirmed Pest Management Plan (*Integrated Pest*

*Management Act*) and under the supervision of a certified pesticide applicator. [www.env.gov.bc.ca/epd/epdpa/ipmp/index.html](http://www.env.gov.bc.ca/epd/epdpa/ipmp/index.html)

## Disposal

**Note:** *Disposal of invasive plants varies by region. Contact your local government for specific information on how to dispose your invasive plants.*

- » Chemically treated plants can be left on site to compost.
- » Tarp and bag removed plants, plant parts and seeds before transporting to a designated disposal site (e.g. landfill or transfer station).
- » It is recommended that transfer stations provide disposal bins intended solely for invasive plants. This will ensure the plant matter within the container is transported in a sealed unit and properly disposed of at the landfill.
- » Burning and composting at home is not recommended as extreme temperatures are required.

## References/Links

BC Laws. <http://www.bclaws.ca>

Controlling English Ivy (*Hedera helix*) in the Pacific Northwest, Written by Jonathan Soll The Nature Conservancy Last edited 01/14/05

E-Flora BC and Electronic Atlas of the Flora of British Columbia. <http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Hedera%20helix>; <http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Gaultheria%20shallon>

EFSA Journal Update of database of host plants of *Xylella fastidiosa* November 20, 2015, published February 9, 2016. <http://onlinelibrary.wiley.com/doi/10.2903/j.efsa.2016.4378/epdf>, page 24; <https://www.invasive.org/gist/moredocs/hedhel02.pdf>

Invasive Plants of the Eastern United States. <http://www.invasive.org/eastern/srs/EI.html>

Invasive Plants of Southwestern BC website. [http://www.shim.bc.ca/invasivespecies/\\_private/englishivy.htm](http://www.shim.bc.ca/invasivespecies/_private/englishivy.htm)

Oregon State University Extension Service. <http://extension.oregonstate.edu/gardening/node/948>

Plant Conservation Alliance. <https://www.nps.gov/pLants/alien/fact/hehe1.htm>



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