



BAINBRIDGE ISLAND
LAND TRUST
FOR EVERYONE. FOREVER.

MOST WANTED INVASIVE SPECIES

Overview: In addition to the Land Trust's monthly Work Parties, you can also remove invasive weeds on your own property with guidance from this packet. Armed with this knowledge, we look forward to hosting our annual Free Invasive Weed Disposal Days, at which point you will hopefully have plenty of invasive weed material to dispose of!

Invasive plant species are one of the leading causes of vegetation biodiversity loss. They spread quickly and can displace native plants, prevent new native plant growth, and create monocultures. Lack of diversity among native plants reduces the quality and quantity of fish and wildlife habitat. Remove your invasives now while the ground is soft and make room for native plants come fall and winter when the weather is best for planting!

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ENGLISH IVY

(*Hedera helix*)

Arguably our Island's most notorious nuisance.

Identification:

English ivy is an evergreen vine with dull green-lobed leaves sporting light veins (see photo for identification). The lobed-leaf shape and size may vary from deep to shallow, and from small and narrow to large, broadly shaped leaves. This means the leaves can look anywhere from a star to a duck's footprint in shape and size. Ivy grows along the ground until it eventually forms thick mats that smother forest floors or climbs up trees.



As ivy creates dense patches it crowds out native vegetation. It can smother smaller plants as the vines grow over them, preventing sunlight from reaching the soil's surface. Consequently, native plant seeds are no longer able to germinate.



Ivy removal at a Land Trust Work Party. © Paul Brians



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Ivy requires lots of sunlight to flower and bear fruit. As such, it tries to grow up vertical surfaces, such as tall trees. Once growing up a tree, ivy can negatively impact the tree's health by damaging the bark, reducing the tree's access to sunlight, and can increase the likelihood of the tree toppling over during heavy windstorms as the heavy weight of ivy's vines and leaves become too much for the tree to bear. Left untreated, this can happen to even the largest of our native Pacific Coastal tree species. Over time, English ivy poses a major threat to forest health and rejuvenation by killing mature trees and preventing new plant establishment.

Removal:

English Ivy can be easily controlled by hand pulling, though large old-growth patches of ivy may take time to treat.

English Ivy on Trees

- To treat ivy growing up in trees, first use a pair of hand pruners and circle the tree cutting of all the vines at shoulder-height. Then, cut the vines at your ankle height. A small hand saw, hand clippers, or pruners, are helpful tools.

- Next, pull all of the ivy away from the trunk between your cut marks. Carefully peel the vines off the bark, looking carefully for vines that have become imbedded in the tree bark. Once all the ivy is removed from the tree between your two cuts, it's now time to create a "survival ring." Pull the ivy away from around the base of the tree until you have a five-to-eight-foot "ring." This will prevent the ivy from growing back up the tree for a few years and will give you a good place to start pulling ground ivy. Use the technique described below for ground ivy for best results.

Caution:

- **Do not** pull the ivy above the cut mark as it will die on its own, and you may end up pulling down a branch (or even the entire tree) on top of you.
- **Do not** just cut the ivy at the base of the tree at ground. If you don't pull out the ivy roots, the ivy will quickly grow back up the tree and will become harder to pull out in the future. Simply cutting the ivy will also not work as the ivy can eventually reconnect. You have to pull the ivy back away from the trunk and the base of the tree.

English Ivy on the Ground

- English ivy on the ground is fairly easy to control. Simply pull back the vines and try to get all of the roots while doing so. Ivy is relatively shallowly rooted, and if the soil is moist, it is easy to pull out. As you remove the vines, you may be surprised about what native plants are hiding underneath, ready to grow once the ivy is removed!

Disposal:

- Pulled ivy vines can be dealt with several ways. They can be deposited into your compost containers, stored on top of an impervious surface such as a tarp or rocks for later disposal, or composted in place by ***cold composting***.
- ***Cold composting*** involves creating a small platform of branches and placing the ivy, or other invasive weed, material on top. As long as no part of the pulled material makes contact with the ground, it will eventually die and turn into compost, over time.

ENGLISH HOLLY

(*Ilex aquifolium*)

First introduced to the Puget Sound region as an ornamental and later cultivated on holly farms for the floral industry.

Identification:

English holly is now a prevalent invasive species, threatening native plant habitats region wide. It is a large, dense, slow-growing evergreen tree or shrub, 15-50 feet tall, and 15+ feet wide. It is able to grow as either a single-trunk tree or a multi-stemmed thicket. The leaves are thick, glossy, dark-green and wavy, 1-3 inches long, and usually with sharp, stout spines along edges - though they may be smooth on older branches.

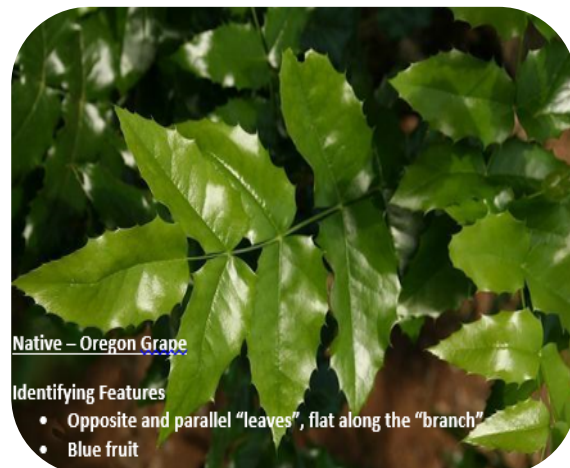
This species can easily be confused with Oregon grape, so make sure you have correctly identified the invasive! For distinction between the two species, see the photos below.



Invasive Holly. © Sue Larkin.



INVASIVE



NATIVE

Hollies are *dioecious* meaning there are male and female plants. Female plants have poisonous red, yellow, or orange berries, while male plants usually have none*. Holly is able to grow in both sunny and shady sites. It readily re-sprouts if cut, creating dense thickets. Once established, holly suppresses the establishment and growth of native vegetation under and around it. Left untreated, English holly can radically change natural forest communities by either crowding out or out competing native vegetation.

**Because biology is messy, occasionally some male plants will produce berries, though there will be far fewer berries than a true female plant.*

Control:

- Small plants can be dug or pulled by hand, shovel, or a weed-wrench (a great tool for removing hollies, laurels, and other woody invasive species, which is available to borrow from the Land Trust and from Bainbridge Island Metro Park and Recreation District). The roots need to be fully removed from the area to prevent the removed holly from re-sprouting and forming a thicket. Large holly trees or multi-stem thickets, unfortunately, require chemicals to kill. Hire an herbicide-licensed professional to do this for you as it is safer for you and the environment. The licensed professional will carefully cut down the holly tree and treat the stump with an herbicide. Herbicide applications are strictly regulated and restricted by city, county, state, and federal laws. Do not try using any “home remedy” herbicides as many are more toxic to the environment than herbicides applied by a licensed professional.

Caution:

- Do not cut down a holly tree or shrub without some form of follow-up treatment (either digging up the roots or chemically treating the remainder) as it will readily sprout and create a massive thicket that is even more difficult to control. If possible, try to at least cut off the fruit bearing branches to prevent birds from spreading the seeds elsewhere.

Disposal:

- Pulled holly can be stored on top of tarp or other impervious surface for storage until the Free Invasive Weed Disposal days. Alternatively, it can be cold composted by building a pile/platform of non-holly branches and then laying the holly on top of it to die.

- Holly can also spread in a vegetative manner as it rapidly re-sprouts with multiple stems if cut. If a branch gets knock over or pinned to the ground by a fallen branch, the holly branch can take root and start a new plant. In addition, occasionally the holly roots themselves will naturally form new shoots and start daughter plants around an already established plant.
- As long as no part of the holly makes contact with soil, it will die and eventually breakdown and compost in place.



Volunteers remove a large holly during a Work Party. © Paul Brians.

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HIMALAYAN & CUTLEAF BLACKBERRY

(*Rubus armeniacus* & *Rubus laciniatus*)

Himalayan blackberry, pictured here, is distinguished by leaves occurring in groups of five, similar to Cutleaf blackberry.

Identification:

These shrubs are comprised of stout arching canes covered with large stiff thorns. The thickets are up to 15 feet tall with individual canes up to 40 feet in length. The canes originate from the blackberry root wad. Both species have palmate compound leaves usually in groups of five on main stems and canes are ridged. The easiest identifying characteristic between the two species are the leaves. Himalayan blackberry leaves are large, rounded to oblong with toothed leaflets. Despite its name, Himalayan blackberry does not originate from the Himalayas – it's actually from the Caucasus region in Eurasia!



Himalayan blackberry © Forest and Kim Starr.

Cutleaf blackberry leaves are similar but with deeply incised leaflets (hence the “Cutleaf” name). Also, Himalayan blackberry tends to grow on the edges of forests and in sunny areas while Cutleaf blackberry grows in shady areas.

While both species are prolific fruit producers, which are easily spread by animals, they primarily spread through vegetative reproduction. Blackberry canes can root at their tips creating daughter plants. As blackberry infestations develop, they can out-compete native understory vegetation and create dense thickets negatively impacting wildlife habitat and human recreation.

Himalayan Blackberry also poses a wildfire risk. Blackberry fruit only grows on canes that are two or more years old, and after the canes bear fruit they die. The blackberry plant then sends out a new cane. This means a blackberry thicket is full of dry fuel, ready to burn in the event of a spark.

Did you know not all blackberries in Washington are invasive? The native blackberry is called trailing blackberry (*Rubus ursinus*). You can easily distinguish it along with the other native *Rubus* species on Bainbridge Island (Salmonberry – *Rubus spectabilis*) apart from the invasive *Rubus* by looking for two key features. Both trailing blackberry and Salmonberry only have leaves of three and smooth stems while both invasive blackberries, the Himalayan blackberry, and the Cutleaf blackberry leaves come in groups of five and have ridged stems. For visual reference, please see the photos below.



INVASIVE



NATIVE

Removal:

Both blackberry species are easily controlled by hand. Remember to wear long sleeves, long pants, and sturdy gloves. The thorns are very sharp and can cause injury.

- For small patches or individual plants, use a pair of loppers to cut the canes back so only 3-4 inches stick out from the ground. Next, use a shovel to dig out the root wad. In younger plants, the root wad may only be an inch or two in size but if the blackberry has been mowed repeatedly, the root wad can get quite large - with thick roots that can also sprout new canes.
- For larger blackberry patches, use a brush cutter or mower to cut the canes. Make sure you cut the canes high so you can see where they sprout from and know where the root wads are. Once the canes are cut, use your shovel to dig out the root wads.

Disposal:

- As long as the cut canes and root wads are not in contact with soil they will die. Store them on a tarp or another impervious surface until our Invasive Free Disposal Days or dispose of them in your compost once they die.

Want to learn more about invasive plants?

An excellent source is the Washington Noxious Weed Control Board:

<https://www.nwcb.wa.gov/classes-of-noxious-weeds>