Invasive Species Profile: English Ivy (Hedera helix) Part 1

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<u>Native Range:</u> Europe, western Asia, and northern Africa

<u>U.S. Introduction:</u> at least 1727 as an ornamental **Life Cycle:** perennial vine

<u>Means of Spreading:</u> runners and berries, eaten by birds which pass the seeds

Commercially Available: yes

<u>Control Method:</u> hand-pull seedlings and young plants. Cut ivy windows around trees. Sever long vines for easier management. Mature vines may require mechanical tools, such as a Weed Wrench.

<u>Good Alternative Species:</u> green and golds (*Chrysogonum virginianum*), foamflower (*Tiarella cordifolia*), trumpet or coral honeysuckle (*Lonicera sempervirens*)

<u>Comments:</u> English ivy is the weed that brought the Invasive Management Area (IMA) program to Royal Lake in 2007. Back then, IMA was in its second half of a two-year pilot program, sponsored by the Fairfax County Park Authority (FCPA). After identifying several English ivy plots along the Shanes Creek section, volunteers worked and removed those targets over the next few years. Since then, the <u>list of invasive species</u> found in the Royal Lake watershed expanded. With six trained and certified IMA site leaders, Royal Lake, Lakeside, and Crooked Creek Parks are some of FCPA's most active and successful areas.

Before it became a nuisance, English ivy came to America in 1727 as an ornamental vine. People liked its evergreen foliage and images evoking Old World charm. While initially adding English ivy seemed innocent enough, the saying about planting it is, "The first year it sleeps, the second year it creeps, and the third year it leaps." This vine is such a weed in the U.S. due to the "leaping" or rampant growth because it lacks parasites, predators, or diseases to keep it in check. Deer nibble on the leaves in the late autumn but that browsing is an inadequate biological control.

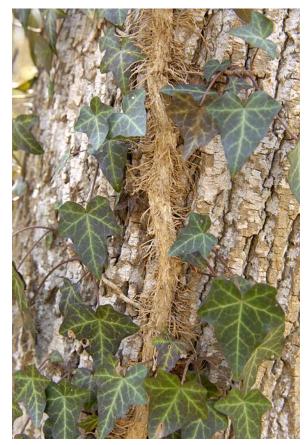


Figure 1. English ivy's evergreen leaves have five points and light veins. The dark green background might acquire reddish hues in the winter. Adventitious roots cover mature vines, especially climbing ones. These roots do not absorb water or nutrients when acting as holdfasts on trees but can become normal roots upon contacting soil if the tree falls. These hairy roots are thicker and lighter than those on poison ivy's maroon vines.

English ivy overtakes plots by extending long expeditionary vines where, if left uncut, they fill out and smother the native herbaceous plants. Another form of vegetative reproduction is when pieces of detached vine—even a single leaf—are left in contact with moist soil. These fragments sprout roots and grow into a mature plant. Invasive species introduction like this is one of the many reasons why dumping or leaf-blowing yard waste into parkland is illegal and an all-around bad idea.

English ivy must climb something like a tree or building to sexually reproduce. The height can be as short as a four-foot fence. The elevated vines bloom, which yield fruits that birds eat and later distribute the seeds via droppings. Vines, including English ivy, should never be allowed to grow on buildings as the plants can cause pricy damage to exteriors such as masonry and siding. Even in Europe, many landlords are wising up and removing the iconic ivy from their mansions before the inevitable repairs become too expensive! In its homeland, where natural biological controls exist, English ivy integrates with forest









Figure 2. English ivy's growth stages include (A) blossoms, which are light green and attract yellow jackets. The flowers immediately start forming fruits (B). These green specimens will swell and ripen into charcoal-colored berries. The leaves on fruiting branches are rounded compared to the more pointed forms elsewhere on the vine. The bird-dispersed seeds sprout into seedlings (C), which develop into dense, smothering groundcover (D).

ecosystems and sparse to moderate vines grow without matting down all other plants. In America, unchecked English ivy climbs up trees, tightly covering the trunk and branches. The ivy's excessive weight and surface area increases the risk of the tree's death or collapse, especially during wind, snow, or ice storms. As it does to ground-level plants, the vines can overrun and stifle smaller trees—causing death by blocking sunlight. Thick vine coverage may trap moisture, especially around the tree's base, causing bark to rot. Native vines, such as Virginia creeper (*Parthenocissus quinquefolia*), fox grape (*Vitis labrusca*), and even poison ivy (*Toxicodendron radicans*), lack drastic impacts on trees due to a looser density than English ivy. With leaves absent from these deciduous vines during colder months, winter storm damage is typically lower than when evergreen English ivy engulfs the tree.

Given that English ivy is on many people's radar and is one of the weeds that folks ask about the most, <u>Part 2</u> of this series details how to efficiently eradicate the vines.

For more information on English ivy:

https://www.invasiveplantatlas.org/subject.html?sub=3027 https://www.invasive.org/browse/subinfo.cfm?sub=3027 https://www.invasive.org/alien/pubs/midatlantic/hehe.htm https://www.fs.fed.us/data-

base/feis/plants/vine/hedhel/all.html

https://weedwise.conservationdistrict.org/management/english-ivy

Eco-Article: Invasive Plant Removal Program (August 2007)

Eco-Article: More Invasive Plant Q/As (May 2008)

Eco-Article: <u>Invasive Plant Q/A's: What to Plant</u> (March 2009) Eco-Article: <u>IMA Q/A's: Native Plants for Dry Shade</u> (April 2012)

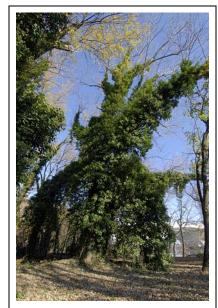


Figure 3. One way that English ivy kills mature trees is by weighing them down.