Exotic Invasive of the Quarter: English Ivy (*Hedera helix*).

By: Jennifer Gagnon, Virginia Tech

We can buy it at local nurseries. We can buy it on-line. Landscapers plant it in our yards. Heck, this plant is such a part of our culture, it has clip art. So, there’s no way English ivy can be an exotic invasive, right?

Normally in this column I feature species which no one would consider using as a landscaping plant (i.e., kudzu, *ailanthus*, multi flora rose), but this one’s a bit trickier. English ivy has been widely planted as an ornamental and developed into hundreds of varieties – prized for its easy growth, shade tolerance and year-round green foliage. But this species is truly a wolf in sheep’s clothing.

English ivy is thought to have been brought over by European settlers as an ornamental; since then it has been used not only for landscaping but also, erroneously, for erosion control. English ivy is a climbing vine which attaches to bark and bricks with small root-like structures which exude a sticky substance. Older vines can reach up to a foot in diameter and 90’ in length.

According to Invasive Plants of the Eastern U.S. (www.invasive.org), English ivy is one of the most “abundant and insidious invasive plants”. The ability to grow under a wide range of light and soil conditions allows it to thrive in forests, edges, fields, hedgerows, coastal areas, salt marsh edges, and backyards. Formation of dense mats on the ground precludes the growth of native grasses, forbs and legumes. English ivy also invades tree crowns, preventing sunlight from reaching the leaves, eventually resulting in tree mortality. The heavy vines weigh down trees, resulting in tip up or blow down.

Because it does not form extensive underground root systems, English ivy does not provide effective protection for soils on steep slopes. The leaves and berries contain glycoside hederin – which can cause toxicosis if ingested. Birds, however, are able to tolerate low levels of the toxin, and eat the fruits and disseminate the seeds (English ivy can reproduce both from seeds and sprouts). Furthermore, this species is a home to undesirables such as rats, slugs, mosquitoes and bacterial leaf scorch, a pathogen which harms native and ornamental trees. English ivy is not, however, a parasite. The small rootlike structures which adhere the vine to trees, do not penetrate into the bark.

How to identify English ivy:

- **Leaves:** Two distinct leaf forms – (a) juvenile (more commonly seen) and (b) mature. Both types are dark green with white veins; waxy to leathery, hairless, and alternately arranged. Juvenile leaves have 3-5 lobes while the mature leaves are generally un-lobed and rounded. Mature leaves are often found in the full sun.
- **Flowers:** This vine will bloom June through October when exposed to full sun. Flowers (c) are small, pale yellow-green, in terminal clusters.
- **Fruit:** Ripens in late winter to spring; (d) black-purple spherical drupes with a thin fleshy outer covering occur in clusters. Fruits contain 1-3 hard stone-like seeds which may persist through winter if not eaten.
- **Bark:** Woody, pale green (younger), sometimes reddish tinged, gray brown shiny bark (older).

How to control English ivy

**Mechanical Options:**

- **Cutting:** Cut vines as close to the ground as possible. The vines tangled in tree crowns will eventually die, but may continue to live for several growing seasons. The stumps will continue to sprout, so repeated cuttings will be necessary.

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• **Grubbing:** Dig or pull entire plants, including roots and runners. Effective on small or new infestations. Bag and dispose of ivy.
• **Mulching:** Cover English ivy with several inches of mulch. For additional control, cover mulch with cardboard. The mulch will need to stay in place for 2 growing seasons.

**Chemical Options***

• **Stem applications** (apply after cutting vines 2” above the ground):
  Apply products like Brush-B-Gone®, Brush Killer® and Roundup Pro® Concentrate undiluted to cut stems. Using a paint brush or a plastic spray bottle, apply herbicide to the cut surface especially the perimeter inside the bark which is the living portion of plant. Be sure to follow the instructions on the label. The label is the law.

*Disclaimer: Commercial products are named in this publication for informational purposes only. Virginia Cooperative Extension does not endorse these products and does not intend discrimination against other products which also may be suitable.

So once you have your English ivy under control, your yard may look rather bare. What are some good native replacement species? Some alternative vines include: Virginia creeper and crossvine (although these two can also get out of hand). Some alternative ground cover plants include: partridgeberry, foamflower, creeping flox, wild ginger, lady fern and evergreen woodfern.

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