Invasive Species of the Month

English ivy (*Hedera helix)*

Figure 1. . English ivy dominating the forest understory and climbing trees. Dead growth can be seen on the trees where control was attempted but without applying a herbicide after cutting, new growth will sprout. Repeated cuttings and vigilance is needed for control. Photo Credit: Michele Bakacs

Figure 2. English ivy leaves are alternate, dark green with whitish veins, waxy, somewhat leathery and variable in form, from unlobed to 3-5 lobes.
Photo credit: Michele Bakacs

Figure 3. English ivy fruit are bluish black and start to appear in the fall
Photo Credit: Trish Maguire

English ivy (Hedera helix)

By Michele Bakacs

Invasive vines such as English ivy can kill healthy, mature trees. Simple actions like controlling invasive vines can help save trees which are vital for capturing greenhouse gases and reducing the impact of climate change.

Ecological threat: English ivy (*Hedera helix)* is an ornamental vine commonly planted in landscapes as a groundcover that invades all types of natural areas including forests. Be on the lookout for English ivy as it is evergreen and climbs trees or forms a carpet on the forest floor which is most obvious when other plants are going dormant in the fall. English ivy climbs tree trunks smothering the tree canopy and preventing photosynthesis so that the tree eventually dies. The added weight of English ivy vine will often cause limbs or the whole tree to collapse. Deer assist in the spread as they rarely eat this invasive vine and prefer native plants that wildlife need for food and habitat.

Method of spread: English ivy spreads by runners and in recent years has become more vigorous and common in natural areas throughout New Jersey. The evergreen habit of English ivy allows it to photosynthesize throughout the year giving it a competitive advantage over dormant natives. It climbs trees or buildings with help from small roots structures along its stem that exudes a glue-like substance. It can grow to heights of 90 feet or more. In New Jersey, the fruit were historically frost killed in October before producing viable seed. Anecdotal evidence suggests that our warming climate is now allowing fruit production. As fruiting individuals become more common, they are creating new populations in natural areas.

Preferred habitat: Habitats invaded include forest interiors, openings and edges, fields, cliffs, steep slopes, and disturbed areas. English ivy grows in the shade and full sun and thrives in a variety of soil types. It only produces fruit when allowed to climb up trees.

Invasive Species of the Month
English ivy (*Hedera helix)*

Removal methods: For manual control, when infestations are small, English ivy can be hand pulled making sure to remove the root and checking back for re-growth. For larger populations on the ground, plants can be mowed and then smothered using a thick blanket of mulch and even cardboard, if practical. When controlling vines on trees, cut the vines low to the ground and allow the above-ground growth to die. Do not pull the vines off the trees as that may damage the tree. Roots will re-sprout if left in the ground and repeated cutting is needed throughout the growing season as new growth appears. DO NOT compost the seeds or cuttings.

For chemical control, basal bark treatment using triclopyr ester (for example, Pathfinder II) is effective. Cut-stump (cutting the vine low to the ground and treating the remaining stump) can be utilized throughout the year. Foliar applications are also effective making sure to use a surfactant to get through the waxy leaf cuticle such as Clean Cut. Winter foliar applications can minimize damage to dormant species and can be done if temperatures are above 50 degrees F. Always follow the herbicide label instructions. A more thorough discussion of control methods is available at https://www.invasive.org/alien/fact/hehe1.htm and North Carolina Cooperative Extension

Figure 4. Golden ragwort (Packera aurea) is a spring flowering native ground cover.
Photo credit: Michele Bakacs

Native alternatives:
Native ground covers are great way to incorporate sustainable landscaping practices on a property that provide habitat and reduce the need for annual mulch application. Remember to choose native plants that are appropriate for your site conditions.
Golden ragwort (Packera aurea) grows well in the shade and full sun and prefers moist soil that does not get too dry. It is semi-evergreen with yellow blooms forming a carpet in the spring and is deer resistant.

- Wild strawberry (Fragaria virginiana) grows well in the sun, is low growing and spreads vigorously.
- There are many native sedges such as Creeping Sedge (Carex laxiculmis) that are clump forming and some are deer resistant.
- Christmas fern (Polystichum acrostichoides) is a low growing, evergreen fern that is deer resistant and does well in part shade to shade.
- Coralbells (Heuchera americana) does well in part sun to shade and flowers in the spring.

Additional resources:

U of Maryland Invasives in Your Woodland: English ivy - extension.umd.edu/resource/invasives-your-woodland-english-ivy/

Plant Conservation Alliance's Alien Plant Working Group. English Ivy - invasive.org/alien/fact/hehe1.htm

New Jersey Invasive Species Strike Team Fact Sheets - fohvos.info/invasive-species-strike-team

Invasive Plants and Native Alternatives for Landscapes - njaes.rutgers.edu/fs1353/

The goal of Rutgers Cooperative Extension's "Invasive Species of the Month" is to highlight those organisms that are non-native to New Jersey and cause economic or environmental harm, or harm to human health. We can all help prevent the spread of invasives by learning which species are a threat to our ecosystems.