

# English Ivy Identification and Removal



Soon, English ivy will have completely covered all these trees. Its weight and wind resistance can cause trees to topple (photo by TMaywalt).



Bedded English ivy has outcompeted all native plants and is creeping toward trees in the background (photo by Chris Evans, University of Illinois, Bugwood.org).

## Background

English ivy (*Hedera helix*) was first introduced to the U.S. by European colonists as a reminder of home and

as an ornamental ground cover. Although it has long been identified as a serious threat to native ecosystems, it is still sold as an ornamental plant in the U.S. In the Piedmont, it is an aggressive invader – escaping landscapes to overrun urban and rural forests. Our ecosystem lacks the constraints such as natural predators and disease that keep it in check in its native range in Western Europe, North Africa and Western Asia.

## Threat

English ivy is an aggressive year-round invader at all levels in forest and open areas alike, creeping along the ground and climbing any object during its juvenile stage. In its mature stage it produces fruit having seeds that are spread by birds. It completely covers and smothers all growth on the ground killing future generations of trees and other plants. Its vines climb trees and spread out covering branches, twigs and leaves blocking sunlight and impeding photosynthesis. Ivy vines and leaves add weight to the tree increasing wind resistance which can cause trees to topple. It competes with trees for water and nutrients and serves as a reservoir for bacterial leaf scorch (*Xylella fastidiosa*) a serious pathogen affecting a wide range of trees such as elms, oaks and maples.



The leaf on the left is a juvenile specimen - dark green with three to five lobes. On the right, the mature leaf, has a single lobe and is usually lighter in color. The fruit, in small black clusters, is found in

---

If applying herbicides to treat English ivy, always read the entire pesticide label carefully, follow all mixing and application instructions and wear all recommended personal protective gear and clothing.

*late fall and early winter only on mature ivy vines (photo by TMaywalt).*

## Identification

English ivy will be found in two forms: juvenile and mature. The juvenile stage typically has dark green waxy leaves, whitish veins and three to five distinct lobes and does not flower or bear fruit. It can only spread by creeping. The juvenile plant is well-adapted to low light and is usually found in shady areas. The mature stage has single-lobed leaves that are usually lighter in color than juvenile leaves. They will most often be found higher up on trees where they have access to more sunlight. In the mature stage, English ivy is a major threat because it produces berries. Birds eat them and spread the seeds for up to two miles from the source tree. Note - killing the ivy on the tree does not address the stockpiled seeds in the ground around the tree that have been spread by birds. Therefore, after treatment or removal, continued maintenance will be needed until the seed bed is exhausted. Note also, that new plants grow easily from cuttings or stem fragments that contact the soil. Do not leave cut vines on the ground because they can re-root. Some English ivy vines are hairy and could be confused with poison ivy. But in winter, poison ivy has dropped its leaves, while English ivy is a perennial and keeps its leaves all year. In summer, poison ivy's compound leaves with three leaflets and clusters of creamy white fruits, differentiate it from English ivy.

## Prevention and Control – If Planted Intentionally

Although it remains commonly available, don't purchase and plant English ivy. If you already have it on the ground at your property it is best to remove it and replace it with native ground covers such as wild ginger or violets, Virginia knotweed, White wood aster, Heart-leaved aster, Lobelia species, Zigzag goldenrod, Wreath goldenrod, turtlehead or other ferns. If you choose to keep your ivy as ground cover and are committed to controlling it, monitor it carefully and keep it within the boundaries you have defined. Continually prune it to keep it from growing up trees or other objects where it can transform to its mature stage and start to fruit. But keep in mind that when you leave your property, the

next owner may not be as careful or knowledgeable as you.

## Prevention and Control – Removing English Ivy

Manual, mechanical, chemical and biological approaches alone or in combination can be used to treat English ivy.

**Safety Tips-** Always wear gloves and long sleeves to protect your skin from poison ivy and thorny vines that are often found growing along with English ivy. If applying herbicides to kill ivy roots, always read the entire pesticide label carefully, follow all mixing and application instructions and wear all recommended personal protective gear and clothing. Glyphosate is the active ingredient in many herbicides but is mentioned below only as an example of an effective agent against English ivy. Other herbicides with active ingredients such as triclopyr and metsulfuron can be equally effective in controlling English ivy when prepared and applied according to their label directions. Refer to the Virginia Department of Forestry Herbicide Recommendation Chart ([click HERE](#)), for options, concentrations and other details.

**Manual (Hand Pulling Ivy on the Ground)** – if vines are small, soil is moist and there isn't much ivy, hand-pulling may be an appropriate technique. To determine whether soil conditions are good for hand pulling ivy from the ground, grasp an ivy vine and gently pull it side-to-side and back and forth. If it comes out of the ground easily without breaking roots, conditions are good for hand pulling. (See "disposal" details below.) For extensive beds of ivy on the ground, spraying with herbicide (addressed below) is much more efficient than hand pulling.

**Chemical Means Alone** – where hand pulling or mowing are not possible due to terrain or the presence of native plants mixed in with ivy, foliar application (spraying the leaves) can be the most effective treatment. Use a 2-4% concentration of glyphosate. If spraying extensive areas of ivy where you will need to refill your applicator before continuing, adding a dye to the spray is recommended so that you can see where you left off when you stop spraying.

---

If applying herbicides to treat English ivy, always read the entire pesticide label carefully, follow all mixing and application instructions and wear all recommended personal protective gear and clothing.

**Mechanical and Chemical Means Combined** – using only mechanical means – cutting vines with hand pruners, loppers, pruning saws, hatchet, axe or chainsaw – and not treating the cut ends with an herbicide, will result in growback since the roots of the ivy are not killed by cutting alone. Therefore, the combination of mechanical cutting and application of an herbicide is significantly more effective than mechanical means alone. This combined technique is called “cut stump.” Using the appropriate cutting tool for the size of the ivy vine, cut through the vines just above where they come out of the ground. Make a second cut 2-4 inches above the first cut to make sure the cut vine does not reseal.



*Make two cuts in the vine leaving a substantial gap to prevent the vine resealing, then immediately apply herbicide to the cut stump at ground level (photo by TMaywalt).*

Leave a cut end that is flat like a table top so that when herbicide is applied it will not drip off.



*Cut the vine flat like a table top so that when the herbicide is applied, it won't drip off (photo by TMaywalt).*

For cut stump to be effective, a more concentrated solution of herbicide is needed than is used for foliar spraying. Apply the herbicide with a spray bottle, drip bottle or dauber directly to the end of the cut stump where it comes out of the ground immediately after making the cut, so the cut end doesn't seal itself off hindering the penetration of herbicide. Application of an herbicide after cutting the vine is essential to prevent growback.



*Apply herbicide with a spray bottle, drip bottle or dauber (illustration by TMaywalt)*

Larger vines should be left on the tree after cutting and treating. Attempting to pull them off will often strip the bark, damaging the tree. The vines will eventually die, dry out and fall off the tree. Don't be disappointed with the immediate results of cutting the vines or spraying the leaves – it can take a couple months before there is any sign that the ivy has died.

**Cut Now, Spray Later** - An additional mechanical means combined with herbicide application is referred to as “cut now, spray later.” In this technique, which is appropriate where there are extensive beds of ivy on the ground, the ivy is mowed with a lawn mower or bush hog. After a few months, any growback is sprayed with 2-4% herbicide such as glyphosate. The site should be revisited periodically and growback sprayed until there is no further sign of growback or sprouting from the seed bed.

---

If applying herbicides to treat English ivy, always read the entire pesticide label carefully, follow all mixing and application instructions and wear all recommended personal protective gear and clothing.



*Spraying herbicide can be an effective treatment approach where there are extensive areas of bedded ivy (photo by USDA Forest Service Region 8 Southern USDA Bugwood.org).*

**Biological Means** – goats can be used to eat English ivy, either in areas where terrain makes use of traditional approaches difficult or where you don't wish to use herbicides. Goats are effective at removing leaves, but since they leave the root system undisturbed, growback will occur creating the need for repeated grazing or alternate treatment approaches.

**Disposal of Cuttings** – never leave cut vines on the ground – they can re-root. Either put them in plastic trash bags and dispose of them in a landfill or pile the cut material and allow it to dry out onsite. Cover the pile with heavy branches to keep wind from spreading the vines. Dried piles of pulled material should be monitored periodically for new growth or hauled away.