



INVASIVE PLANT PRIMER FOR THE **HOME LANDSCAPE**

IDENTIFY | CONTROL | REPLANT

Tennessee Invasive Plant Council's website features a wealth of information and online tools to assist in the identification of invasive plants on private property and determine the best methods for eradication and control. Homeowners can make great strides toward tackling any invasive plant problem large or small by following these simple steps.

www.tnipc.org



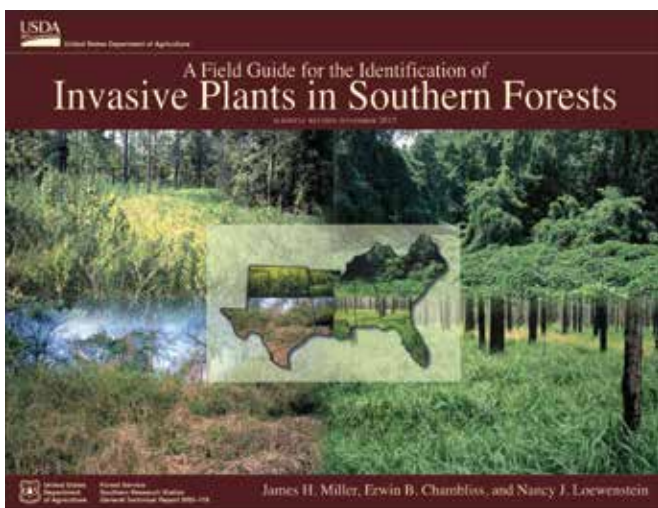
Department of
Agriculture

Forestry

1. IDENTIFICATION

The best first step is to identify the non-native species on your property and use our invasive plant list to determine which ones are most problematic. Approximately 400 non-native plants have naturalized in Tennessee. Very few of them rise to the level of invasion that threatens intact native habitats, though some spread aggressively in disturbed areas such as urban and suburban landscapes, agricultural fields, or along roadsides. While TN-IPC's current list doesn't include most of these routine weedy species, our website still features pertinent identification and control information on many of these undesirable plants.

TN-IPC's current list focuses on non-native plants that demonstrate the ability to invade undisturbed natural areas and displace native plant species growing in these habitats. Removing invasive plants from the landscape slows their spread and curbs their introduction into new areas. These worst offenders should be a control priority. The 'Invasive Plants' page on TN-IPC's website features this list with full descriptions and a photo of each plant. In addition, the 'Initiatives' page contains several online and electronic print resources to assist ID under "Helpful Links."



James Miller's Field Guide for the Identification of Invasive Plants in Southern Forests is an easy to use and excellent place to start. It may be downloaded directly from the U.S. Forest Service Southern Research Station at: www.srs.fs.usda.gov/pubs/35292. An app is also available at: apps.bugwood.org/apps/southern-forests. The Center for Invasive Species & Ecosystem Health website (Invasive.org) contains photos showing physical characteristics of these plants to assist with identification.

Additional identification options include posting images of unknown plants to the application iNaturalist or Facebook page of botanical groups like Flora of the Southeastern United States or Southern Appalachian Flora and Ecosystematics.

To avoid confusing an invasive plant with a similar native species, the "Mistaken Identity" link on our website will point out key differences, and our Web descriptions also list possible native look-a-likes and their distinctions.

2. CONTROL

Once the species for removal or control have been identified, download Miller's companion Management Guide, which clearly explains various chemical, mechanical, and biocontrol methods most effective for each species. Our website's 'Invasive Plants' page also contains suggested control methods. These sources will explain what to do, when to do it, and how to do it safely. This step is crucial. Different plant species can respond differently to certain treatments. An effective method for one plant may only compound the invasive problem when used with a different species. Learn which methods work best on the plants you want to control.

Chemicals such as glyphosate (RoundUp) are often recommended. Some homeowners are rightfully skeptical of using potentially toxic herbicides. However, depending on the plant species and their density on your property, careful and targeted application of chemicals (cut stump method or hack-and-squirt, for example) can be done safely and proves highly effectively to get a tough situation in hand quickly with minimal amounts of herbicide. Once this initial clearing phase is complete, regular monitoring with other methods such as hand pulling can keep the property clear.

For large stumps, paint the outer edge with herbicide. On smaller stems, paint the entire cut surface. Dyes clearly reveal the treated area.



Photo: James H. Miller, USDA Forest Service, bugwood.org

A FEW WORDS OF CAUTION WHEN EMPLOYING CHEMICAL CONTROLS:



Pay attention to the seasonal timing and temperature recommendations for herbicide application to ensure the chemical will reach the plants' roots to maximize effectiveness.



Be sure to follow label directions explicitly regarding the amount of herbicide to use. It is not necessary to exceed this amount, and doing so may compromise the effectiveness of the treatment.



Note weather conditions such as wind speed that would affect spray drift or expected rainfall that could dilute the application before targeted plants have fully absorbed the chemical.



Always wear protective gear and clothing when applying herbicide—long sleeves and pants, gloves, safety goggles, dust mask.



Vines such as English Ivy and Wintercreeper may be particularly problematic growing on native trees. If the vines have grown up the trunk and onto branches out of reach, it is nearly impossible to pull them off a tree. This is where the cut stump method is so effective. Cut out a plug from the vine stem close to the ground and “paint” the chemical on the lower vine stump, taking care to protect the tree's bark from chemical residue. Use a small foam or bristle paint brush designed for door and window trim to apply the chemical only where needed, avoiding harm to non-target species.

Chemicals must be applied immediately after cutting, as the cut surface quickly begins to ‘seal’ when exposed to the air which hampers absorption of the herbicide. The upper portion of the vine will die (it may take a while — weeks with ivy), and the herbicide will severely impair the vine's roots. Regular follow-up will be needed on resprouts by cutting them religiously to exhaust the roots and completely kill the plant.

For larger shrubs, such as bush honeysuckle or Chinese privet, and small trees, an uprooting weed pulling tool may come in handy. It grabs small to medium shrubs and saplings near the soil line and magnifies applied force to more easily pull them out of the ground.



*Uprooting weed pulling tools use leverage to uproot small-diameter woody plants.
Photo: Kitty McCracken, ORNL*

MANY NATIVE SPECIES MAY RETURN ON THEIR OWN ONCE THE INVASIVE PLANTS ARE REMOVED.



The Uprooter (<https://www.theuprooter.com/>) is a well-constructed tool for this use. Make sure you are using it on appropriate plant species. Some invasive plants, like Tree-of-Heaven, are notorious for sending up sprouts from any bit of root left in the soil. These species are best treated chemically with the hack-and-squirt method explained in Miller's management guide.

Goats or sheep could be considered for extensive woody infestations. They eat everything (including native species) and will need to go through an area a few times once regrowth has occurred in order to exhaust the invasive plants' energy and effect control.

Finally, some situations may require professional expertise and equipment; for instance, stream corridors or the presence of other water sources, large infestations, difficult terrain, etc. In these instances, it is advisable to consult specialized businesses or licensed individuals trained in invasive plant control and land management. Search online or call your county agricultural extension agent, public parks department, or state forestry office for recommendations.

3. VIGILANCE

Many of these plants are spread by birds eating their fruit or winged seeds sailing in the wind. No matter how an invasive plant problem is tackled initially, it will be a lifelong effort to keep certain invasive species from re-establishing on your property. Regular monitoring will catch new seedlings early for easy removal to retain an invasive-free yard.

These additional tips will help. Thoroughly clean any lawn equipment, tools, boots, clothing, recreational equipment like bikes, boats, or ATVs, and even pets' fur and feet or horses' hooves that may have been in infested areas to remove hitchhiking seeds and stem or root segments. These important intervention measures will also prevent the spread of troublesome invasive plants along our waterways, park trails, and other pristine natural areas.

4. REPLANT

Nature abhors a vacuum. Invasive species will take full advantage of disturbed empty space unless other plantings are added to fill that space and provide sufficient competition. We recommend that removal of non-native species be followed with the introduction of suitable native plant species chosen for their compatibility with the soil pH, fertility, and moisture as well as the amount of sunlight.

Native plants provide several distinct advantages gained through their evolutionary development in association with the land, climate, fellow native plants, and native wildlife. There are many excellent books and online resources to discover which native species are best for your area. The "Landscaping" tab on our website features some great materials and links to assist you, including local nurseries selling native plants.

Many native species may return on their own once the invasive plants are removed. Without the overwhelming competition from invasives, native plants will have the space, nutrients, water, and sunlight they need to germinate seeds in the soil and grow unimpeded.

5. OTHER RESOURCES

TN-IPC's mission includes educating homeowners. If we can be of further assistance, don't hesitate to contact us through our website, www.tnipc.org. Our board members have a lot of experience with invasive plants.

In addition to TN-IPC, approach state and local organizations like native plant groups, wildlife or watershed associations, and urban forestry councils as well as state and municipal departments, such as public parks and water services or state forestry and agricultural offices. They may be able to provide additional educational materials or helpful contacts in your community.

6. THANKS

Finally, TN-IPC would like to thank you for recognizing the importance of controlling invasive plant species. Thoughtful private land stewardship goes well beyond protecting the value and integrity of individual property. It transcends ownership to positively influence the natural ecology of the larger Tennessee landscape. Your efforts benefit our native plants and wildlife and improve the outdoor experience for all Tennesseans.

