Invasive Plant Hit List: Privet

by Joyce Bender

When I was a girl, my father would spend considerable time trimming a long privet hedge that defined one side of our property. He fussed to get the sides straight and the top even. I went along behind him and collected the cuttings as he snipped with his hedge clippers. Little did I know then that I would grow up to have my own reasons to fuss about privet. Privet in Kentucky refers to two species Ligustrum sinense, the Chinese privet, and L. vulgar, the European privet. Introduced from China and Europe in the mid-1800s, both of these species were widely planted as ornamentals and for hedgerows and have now been reported as aggressive invaders of our woodlands.

Privet is a very serious pest plant south of Kentucky, with Georgia as its stronghold. Driving north of Atlanta in January, I was stunned to see the heavy concentrations of this evergreen shrub in every woodlot I passed. Privet needs to be contained now in Kentucky so that it does not expand its range to the crippling levels observed to our south. Current distribution information for Kentucky is incomplete. We do know that Chinese privet is more widespread across Kentucky and has been documented from 41 counties, with concentrations in southeastern Kentucky, central Kentucky, and far western Kentucky. European privet has been documented from 22 counties and is scattered from far western Kentucky to several southeastern localities.

When not in bloom, both species look similar. These shrubs can grow to a height of around 30 feet. The trunks have pale gray bark and tend to be multiple stemmed with many leafy branches. The half-inch to inch and a half-long leaves are opposite and almost perpendicular to the stem. They are thick, with an elliptical shape and somewhat rounded tips. When in flower, the numerous fragrant white clusters are found at the ends of branches. The tiny flower is tube-shaped with four lobes at the tip. On the Chinese privet, the stamens extend from the tube, while the stamens on European privet remain within the tube. The fruits look like tiny purplish-black beads hanging in dense clusters from the branches. Thousands of seeds can be produced by one shrub.

Privet exhibits many of the “red flag” characteristics typical of aggressive invaders. It is found in a variety of habitats, in both upland and lowland situations. The wide range of habitat preference enables privet to impact more natural communities and disrupt more ecosystem functions. It is commonly found in floodplains and along stream banks as well as in forests and even along the margins of rocky limestone glades where it is crowding out our native upland privet. Chinese privet is more shade tolerant than European, but both do well in low light levels. The prolific number of fruits guarantees successful reproduction. Fruits are eaten by birds and mammals, enabling the plant to be transported great distances. Vegetative reproduction can also occur through root sprouting. Privet will quickly form dense thickets that shade out other vegetation, making it impossible for native trees, shrubs, and forbs to become established or for their seeds to even germinate. The lack of native plants for food and cover will force wildlife to go elsewhere to find life’s essentials.

Controlling privet can be overwhelming if the thicket is extensive. It is always best to remove the plant...
from an area as soon as it is found or when an infestation is light. Small plants and seedlings can be pulled by hand, but care must be taken not to leave any root material behind that could re-sprout. Foliar applications can be effective in situations where the privet has formed a monocultural stand and no native species are at risk from drift or drip. Cut stump treatments allow discrete application of herbicide to the target plant. Immediately after horizontally cutting through the stem (close to ground level), apply herbicide to the cut stump’s surface. You can use a spray bottle and small sponge brush to facilitate treatment. Using the table below, consider what will be the best fit for your situation. It is important to monitor the site after treatment in case any plants were missed or if some re-sprouting occurs. There are other herbicides that are listed for control of privet, and more information can be found at the following Web site:  
http://se-eppc.org/publications.cfm

Table 1. Control methods for privet (Ligustrum spp.).

<table>
<thead>
<tr>
<th>Method</th>
<th>Timing</th>
<th>Details and Cautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand pulling</td>
<td>Any time soils are moist.</td>
<td>Use for seedlings or small plants large enough to grasp that are not in fruit.</td>
</tr>
<tr>
<td>Herbicide¹ (foliar)</td>
<td>Late fall or early spring when other species are dormant is ideal, but temperatures should be above 65°F for best absorption.</td>
<td>For plants head height or less. Foliar applications of 2% glyphosate. Accord is labeled for use in woodlands. Can also use triclopyr at 2% (Garlon 3A).</td>
</tr>
<tr>
<td>Herbicide¹ (cut stump)</td>
<td>June–January</td>
<td>For plants greater than 1 inch in diameter. Thoroughly wet stump with herbicide immediately after cutting. Use 25% glyphosate or 25% triclopyr.</td>
</tr>
<tr>
<td>Herbicide¹ (basal bark)</td>
<td>Fall, winter, early spring</td>
<td>For plants greater than head height. This method is effective throughout the year as long as the ground is not frozen. Apply a mixture of 25% triclopyr and 75% horticultural oil to the basal parts of the shrub to a height of 30–38 cm (12-15 in) from the ground. Thorough wetting is necessary for good control; spray until runoff is noticeable at the ground line.</td>
</tr>
</tbody>
</table>

¹Other herbicide brands can be used for control. The herbicides that are listed are those commonly used regionally and are labeled for use in forests (woodlands). Mention or display of a trademark, proprietary product or firm in text or figures does not constitute an endorsement and does not imply approval to the exclusion of other suitable products or firms.

Photo courtesy: James H. Miller, USDA Forest Service, www.forestryimages.org

Graphic courtesy: USDA PLANTS Database, USDA NRCS PLANTS Database, www.forestryimages.org

About the Author:
Joyce Bender is the Branch Manager for Nature Preserves and Natural Areas at the Kentucky State Nature Preserves Commission, she is responsible for managing the state nature preserve system. She and her staff oversee the protection and management of 59 areas encompassing 25,000 acres across the commonwealth. She is active in invasive plant issues, serving as the president of the Kentucky Exotic Pest Plant Council (EPPC) and the vice president of the Southeast EPPC.

Kentucky State Nature Preserves Commission, 801 Schenkel Lane, Frankfort, KY 40601, E-mail: joyce.bender@ky.gov, Phone: 502.573.2886.