



Clearing A Path Through Hardwood Bottoms Using the Basal Bark Treatment Method

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Alabama's hardwood bottoms are rich with diversity, filled with beauty, and provide a fantastic wildlife habitat. They also protect our streams and filter the runoff from the adjacent watershed.

To get a view of this natural splendor, all you have to do is take a hike through the nearest river bottom you can find. There is a slight problem, however . . . there is a good chance your hike will be slowed down by the mass of privet invading these areas. You don't have to be an invasive plant expert to find this pest; it is literally spreading throughout the state, and for that matter, the Southeast.

Chinese privet (*Ligustrum sinense*) – or what we often call “common privet” – was introduced into the US from

China around 1852. Like many introduced plants of that time, it was actually sent here from England after being transported there from China. Regardless of the history, it's here now.

Privet thrives in hardwood bottoms, yet most landowners are unaware of its invasion. It really becomes trouble after a timber harvest. Having already been established for years, privet literally explodes once the mature overstory trees are removed. If you wait until after your timber harvest to address the problem, it is too late. If you are dealing with a predominantly pine stand, prescribed burning on regular intervals will effectively control privet. However, prescribed burning is not an option in bottomland hardwoods.

The simplest and easiest way to address the problem in bottomland hardwoods is before a timber harvest, using herbicides. Privet is fairly easy to control with a number of herbicides and treatment options. The three common treatment methods are foliar spray, cut stump, and basal bark, each with its own advantages and disadvantages.

Having tried all three methods on my own property in Elmore County along the Tallapoosa River, the purpose of this article is to highlight my experience with the basal bark treatment. When I stated previously that privet literally explodes after a timber harvest, I was speaking from experience. And, my experience with these three treatment methods is what I would term, “lessons learned the hard way.”



Photo by Sarah Albritton

Since harvesting a small stand of hardwoods in 1996, I have been spending weekends battling the privet invasion. Having spent most of my time using the foliar spray and cut stump treatment methods, I decided to give the basal bark treatment method a try just for kicks.

The basal bark treatment is performed by applying the herbicide directly to the base of the tree. The herbicide should be sprayed around the entire circumference, completely covering the bark from ground level to a height of 12 to 15 inches. The herbicide penetrates the bark into the living tissue (cambium) where it is transported through the tree into the roots and leaves. This treatment provides for a fast and effective way of controlling selected trees and shrubs.

I used an herbicide from Dow AgroSciences called *Pathfinder II*. It is labeled for the control of woody plants in the forest, and privet is one of the 95 species listed on the label.

Some of the qualities I like about *Pathfinder II* are that it comes ready-to-use, no mixing required, and it can be used in the cut stump treatment method as well. The chemical can be applied any time, including winter. If you have ever tried working in a hardwood bottom during

the summertime in Alabama, you can really appreciate that aspect.

Another advantage to applying a basal bark treatment in the dormant-season is that privet is easily identified. Most of the native hardwoods in the bottomland are deciduous (naturally shedding their leaves), but privet is an evergreen. It stands out like a horse in dog race.

I found applying the herbicide to be fairly easy since I didn't have to spray all of the foliage as with the foliar spray method, or cut down the tree as with the

cut stump method. With the basal bark treatment method, the herbicide is sprayed down low at the base of the tree, which also reduces the amount of drift.

Before you grab your sprayer and head out into the woodlands, you may want to familiarize yourself with some other nonnative invasive species. While you are killing privet, you can treat them, too. Some species listed in Dr. James Miller's *Nonnative Invasive Plants of Southern Forests* are: silverthorn, tall-owl tree, Chinaberry tree, princess tree, and silktree. All of these trees are a problem in Alabama, and if I were a betting man, I would bet you a dollar to a doughnut you have one or more on your property.

Jim Miller is a Research Ecologist with the USDA Forest Service, Southern Research Station at Auburn University, Alabama. His book is on the web at www.invasive.org/eastern/srs/.

Along with other concerned resource professionals, Dr. Miller and I serve on the Alabama Invasive Plant Council (ALIPC). To learn more about this problem which is adversely impacting our beautiful state, I encourage you to check out the Council's website at: www.se-eppc.org/alabama/. If you are not a member of the ALIPC, please consider joining us in our efforts to identify and address the issue of invasive plant species in Alabama. You can find an application on the website by clicking on the State Chapter link for Alabama. 🍄



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