Invasive Plant Management in Heavily Invaded Areas – How to Get Started

By the Tennessee Exotic Pest Plant Council, the University of Tennessee, and the Southern Appalachian Man and Biosphere Foundation

This guide is to help those who encounter areas of about 1/8th acre to several acres that are so inundated with invasive plants as to pose an overwhelming challenge. This is not an unusual situation. Solutions vary with each site and species combinations but some guidelines to approaching the overall challenge may help make the task more manageable.

Get started right away.

The worst thing you can do is to do nothing because the challenge seems so formidable. It is equally unwise to just start controlling large areas of invasive plants without thinking how to best approach the challenge. In these cases, inventorying, mapping, or simply scoping the situation are important first steps. Try different ways to look at the problem and break it up into manageable parts. Below are suggestions on how to do this.

Examine the challenge and decide what the important features are and start by working around these features.

Where invasive plants have seemingly inundated all living space, look around for native trees or bushes, rock outcrops, wetland seeps, or most conspicuous viewing areas. Any of these areas offers a place to start control efforts. Work may have to start by hand on a small scale to save these areas but they are relevant places to start. Start by saving the best. Controlling invasive plants around these areas will make it easier later to apply broad-spectrum herbicides while keeping the best areas protected from herbicide damage.

Work to stop invasive plant seed production early.

One of the most important first steps is to stop seed production as soon as possible. This may mean cutting down or girdling those invasive tree species old enough to produce seeds. This also works for some shrubs and vines. For herbaceous invasive plants that produce seed annually, determine what season the seeds mature and work to prevent the next crop from reaching maturity.

Start from the edges and work inward.

The edges of the invaded area are where much of the horizontal spread of invasions occur. Consider this the "front line" for preventing further spread of invasions. Consider scouting the front lines for "advanced individual invaders" or for small plots of exotic plants jumping the line. These are easily controlled and will help keep the invasion problem from getting worse.

Take some early actions to get the invasive plant canopy down to ground level.

One of the biggest problems in controlling invasive plants is when they are nearly the same height or taller than the native ones in need of protection. The invasive plants can't be controlled without damaging the native plants. The answer is to mow, whack, cut,

girdle, bush hog, knock down, or trim the invasive plants to nearly ground level. They will sprout back but now they can be sprayed or controlled much more easily without endangering the plants you want to keep. In the process, invasive plant seed production is often delayed.

Identify smaller areas where control efforts are easiest and can be accomplished in a day.

There may be pockets of native plant groupings, small sections along one side of a trail, or a particular section of slope that have less invasive species present. Work on invasive plant control in these areas. Seeing progress, even in small areas, really helps inspire action and opens up areas and strategies for more control efforts.

Consider commercial control efforts and/or advice from experienced specialists.

Don't be afraid to seek advice. Some people have been fighting invasive plant problems for years and have solutions and strategies that can save immense amounts of labor, money, and frustration. There are commercial companies, land management agencies, university staff, and non-government organizations that have expertise and will offer advice.

Determine the methods of control and their timing that provide the most effective control

Most plants have a particular season of the year and type(s) of control(s) that offer much better control results. Some plants are better controlled in the spring while others are better controlled in the fall. Some can be controlled by pulling and others cannot. Seek this information and set up a timetable of treatments to control the invasive species you have.

Consider some long-term preventive options in addition to the near-term controls.

It is discouraging to go through all sorts of control efforts only to find them wiped out by another invasion of exotic plants. There are two issues to address to avoid this. The first is to anticipate further invasions, to monitor the sites for several years, and to conduct "spot" control efforts frequently to prevent establishment or resprouting of unwanted plants. The second is to either prevent the conditions for further successful invasions or to eliminate the seed source that may be nearby. To prevent conditions for further successful invasions it is helpful to plant non-invasive plants that will help crowd out or shade out potential invaders. Lists of these plants are available at many land management agencies, nature centers, extension units, conservation groups, and through the Tennessee Exotic Pest Plant Council. Whatever the situation, be assured that exotic invasive plants will try to invade again and be prepared to detect them and hit them early before they become a major problem.

Let people know what you are doing.

When people find out what you are doing and what problems you are facing, they often become more aware and want to avoid the problems themselves. At a minimum they will be better able to recognize the problem if and when it arises and are likely to let you know of it. This is a great help.