Tool 6: Developing an invasive plant management plan

A well thought out plan to invasive plant prevention and management can help make the difference between effective treatment and wasted time. Consider taking the following steps and including the following information when developing a weed management plan or including invasive plant recommendations in an existing farm or forest management plan. A plan template and sample plans are available at www.vtinvasives.org. You can use all or parts of the template to help you organize information and decisions.

- Get to know the property. Create a property map depicting natural features and major vegetation cover types (e.g. mature hardwood forest, meadows, wetlands, significant habitats). Include recreation trails, buildings, and roads. Sketch it by hand, use a USGS topo map, use an orthophoto, and create a more sophisticated, computer-generated map with aerial photography. GoogleEarth and Vermont's Agency of Natural Resources online Environmental Locator mapping software http://maps.vermont.gov/imf/sites/ANR NATRESViewer/jsp/launch.jsp?popup_blocked=true can also be used.
- 2. **Outline land management goals.** Summarize the wildlife management, forestry or trail building activities, timber harvests and any other projects which are underway or projected for the future.
- 3. Identify and map invasive species on the property and the surrounding area. Find out what plants are likely to be on the property and look for them along logging roads and trails, at old home sites, and openings in the forest canopy (old patch cuts, shelterwoods, or tree blow-downs), as well as areas under greater forest canopy. Map the species that are found, and make note of the size and density of the populations. Include in the plan a brief description of methods used for scouting/surveying to identify current invasive species infestations or invasions and a map or list indicating species/degree of infestation found. Consider the assessment protocols suggested in Tool 1: Landowner Invasive Plant Assessment and Tool 2: UVA Invasive Plant Assessment Methods. Use iMapInvasives (found at www.vtinvasives.org under the Report it! Button) to create a simple map.
- 4. **Include an assessment of invasive species threats**. The threat assessment considers the impact of invasive species on land management objectives and options for responding to these threats.
- 5. Integrate Best Management Practices (BMPs) into all land management activities. All land management activities pose some risk of spreading invasive species. Predict what activities (such as logging, construction of trails or buildings) will cause future problems. Learn to apply the BMPs found in the field guide, Best Management Practices for the Prevention and Treatment of Terrestrial Invasive Plants in Vermont Woodlands. These are summarized at www.vtinvasives.org. If no land management plan exists, consult with a forester or ecologist.
- 6. **Practice Early Detection and Rapid Response (EDRR).** Walk the property bi-annually, in the spring and autumn, to look for invasive species. Stay on top of what species are coming into the area and remove new problem plants as soon as they arrive.

- 7. **Identify goals for managing invasive species present on the property**. Is this a weed-led or a siteled management approach? This will likely vary from one part of the property to the other, depending on species/density and resources that the landowner wants to protect.
- 8. Consider available resources. Be realistic about available time and money when setting goals.
- 9. Use an integrated pest management (IPM), also known as integrated vegetation management (IVM) approach. The choice of control method will depend on the availability of local resources (time, money, labor); other land management goals (e.g. organic farming or sugaring); the size and extent of the infestation; the relative height and density of the infestation; and terrain. Understand the biology of each plant and identify the best methods for controlling the species (e.g. manual, mechanical, chemical, cultural, or a combination of methods). Go to the Gallery of Invaders at www.vtinvasives.org to learn control options for each species. Tool 4: Invasive Plant Treatment Methods offers a more complete description of mechanical and chemical methods.
- 10. Develop a reasonable timeline. A timeline that outlines treatment methods by season and species should be developed. It needs to be based on size of infestation, species, the most effective time/season for treatment, and the existence of suitable control methods. Be prepared to monitor the site for three to five years and to do follow-up treatments where plant populations continue to grow.
- 11. **Be realistic.** Because of the tenacity of certain species, it may be impossible to completely remove them from a property. They can, however, be managed at a level that allows native plants to thrive, and reduces the seed output that could create new invasive plant sites.