The town triangle in Jeffersonville became an invasive-free area thanks to plant donations and volunteer staff from Smuggler's Notch Resort.

V. Working with Local Governments

Towns can have a significant impact — negative and positive — on the spread of invasive plants. However, chances are your town has not developed comprehensive ordinances, practices and policies regarding invasive plants. Engaging your town government will be an essential element of the long-term success of your program.

The most important actions you could encourage your town and regional governments to take include:

- Adopting invasives-related language, goals, and policies in the town and regional plans.
- Adopting zoning ordinances or bylaws which prohibit new plantings of invasives and encourage the planting of native plants.
- Adopting Road Crew Best Management Practices for invasive plants.
- Developing invasive plant management plans for town forests and other areas.
- Conducting prevention and management activities on town-owned lands.

Excerpt from the 2007 Village and Town Plan of Woodstock

Problem/Issue: Woodstock's natural areas, working forests, and agricultural fields are being threatened by the spread of exotic invasive plants.
Goal 4.1. Limit the spread of invasive plants.
Objective 4.1.1. *Control invasive plant species to minimize ecological and economic impacts to our native species and habitats, working forests and agricultural fields.*
***Implementation 4.1.1.1.** Conduct workshops and provide informational materials to help landowners identify and control invasive plants on their properties.
***Implementation 4.1.1.2.** Work with the Billings Park Commission and other civic groups to control invasive plants on public lands.
***Implementation 4.1.1.3.** Encourage town and state road maintenance workers and utility, construction and logging crews to clean mowers, backhoes and other equipment before moving on to new sites.

A growing number of Vermont municipalities have begun to address invasives through their town plans and ordinances. Additionally, a growing number of local land trusts, select board members and conservation commissions are taking the lead on public outreach and invasive plant management projects. Even if your town has very few invasive plant populations, it is still important to meet with your town leaders and start the discussion. The easiest and most inexpensive strategies for dealing with invasives are those that prevent them in the first place. Involving key town leaders from the outset lays the foundation for future activities.

Raising awareness of town and regional leaders

Reach out to people responsible for local land use policies and management. This includes town managers and select board members, the road commissioner, parks and recreation committee members, members of the business community, school administrators, conservation commissions and regional planning commission members.

Meet with leaders individually, or bring them together as a group. Show them pictures of local infestations or offer a workshop, including a brief PowerPoint presentation (templates are available through The Nature Conservancy). Most importantly, take them on a walking tour of infestations in a town-owned park or forest. Describe specific ways that invasives threaten the local economy, reduce the quality of recreation, and degrade wildlife habitat. Once you have made initial contact, keep town leaders informed of any progress or activities.

Hosting informational tables at town events like this one in Charlotte are a great way to get the word out about invasives and volunteer opportunities.

Assessing the invasive plant situation on town lands and roadways

Gather a more complete picture of the presence of invasive plants on town-owned properties. At this point, it is not necessary to do an extensive survey of each property. Instead, work with community leaders to gain a cursory understanding of which properties or roadways are most problematic, which resources are most important to protect, and what new Early Detection/Rapid Response (EDRR) species are approaching.

Giving towns a clear picture of what and where the threat is can spur them to take action. For example, Mike Rudell of Redstart Consulting noticed a growing population of giant hogweed (*Heracleum mantegazzianum)* along rivers and roadways in the town of Washington. He provided documentation of the problem to the town, and proposed a plan to control it. Presented with clear information about a dangerous plant, the town hired Redstart to manage the hogweed population.

Use iMapinvasives, a new web-based invasives mapping program, to conduct initial and then more detailed assessments and prepare maps for planning purposes. Consider the following areas in your initial assessment:

- Town roads
- Town parks
- Town forests and natural areas
- Hiking trails and bike paths
- Plantings in front of town-owned buildings and median strips
- Plantings in front of private businesses

Keep it realistic and do what works with available time and resources. School groups, Scout troops, and interns can often be enlisted to perform initial assessments.

Montpelier City Hall

Montpelier City Hall is a historic structure, housing city offices and a large hall used for theater productions and town gatherings. For twenty or more years, the front landscaping consisted of ten Japanese barberry plants. In Spring 2010, Montpelier Conservation Commission members convinced city planners to remove the invasive terrestrial plants. In early May Vermont Youth Conservation Corps students dug up the plants, Parks staff hauled the plants to the local stump dump, and on Green Up Day a crew of volunteers replanted the site with Wiegelia and a mix of perennials. It was a true team effort!

Implementing change

Amend the Town Plan

The town plan outlines the vision and goals for your town's future and leads the implementation process for regulations, ordinances and policies. Town plans are generally updated every five years and are required by Vermont statute to include goals regarding natual resources. Your town will be better positioned to effect change and apply for grant money for specific management projects if the town plan expresses specific goals and intentions regarding invasive species. Also, the planning commission could use recommendations in the town plan as a basis for drafting specific amendments to zoning bylaws. The implementation of road crew policies can also be based on recommendations from the town plan.

Excerpt from the Town of Dummerston 2010 Town Plan

Policy 1.6: Undertake efforts to remove invasive species.
Action Steps:
a. Provide landowner education on how to identify and remove invasive species. (Conservation Commission)
b. Work with the highway department and road crew to identify and remove invasives along the roadsides. (Conservation Commission)
c. Explore funding for consultation and hiring experts to remove invasive species that are the most difficult to control. (Conservation Commission, Highway Department, Selectboard)
d. Explore a regional approach to control and removal of invasives.

Each town plan is different. Some are relatively short and include only broad goals; some are lengthy, detailed documents which include specific policies. Get to know the sections that reference natural resources, road management, land protection and landscaping, and advocate for desired changes. Town plans can be found by contacting your town clerk or by going to the documents or zoning section of the town website. Links to Vermont town websites are available at http://crs.uvm.edu/town-websites/.

Adopt Zoning Ordinances and Bylaws

Many towns have guidelines about the appropriate use of trees and shrubs in the landscaping section of their zoning bylaws. In this section, add specifics about both recommended and prohibited plants. For example, the Town of Williston's zoning ordinance clearly states that barberry, burning bush, Norway maple and other invasive plants are prohibited in new commercial and residential plantings. If it is not possible to get specific lists of prohibited plants inserted into a bylaw, work with the development or design review board to develop a list of prohibited plants, against which they can check Site Plans that come to them for approval. Some municipalities in Florida and perhaps other states go further and require that all new plantings are actually 75% native cover. (See the "*Model Native Plant Landscaping Ordinance Handbook*", The Florida Native Plant Society (FNPS) http://www.fnps.org/committees/fnps/pdfs/fnpsfnps_landscape_ord_0224071.pdf)

Collaborate with town land managers to develop and implement invasive plant management plans

Work with the conservation commission, recreation commission and other partner organizations to determine which properties are highest priority for invasive plant management and prevention. Once a priority property is identified, use the Weed Management Plan template found in the Appendix to develop a plan. This template is useful for any sized property and can be adapted for smaller projects. Present the completed Weed Management Plan to town planners or the select board for approval. In Richmond, The Nature Conservancy, the Richmond Land Trust and a local volunteer developed a weed management plan that was approved by the town. This paved the way for soliciting and successfully receiving funding from the Lake Champlain Basin Program for both outreach and management activities.

From the Unified Development Bylaw for the Town Of Williston, Vermont (amended 2010). Landscaping Chapter. *This list applies development for which a discretionary permit is required.*

23.7.2 Are the plants that may be used limited? Yes. The species listed in Table 23.B must not be used. **Table 23.B – Prohibited Species**

Common Name(s)	Scientific Name
TREES	
Norway Maple	*Acer platanoides*
Amur Maple	*Acer ginnala*
Tree of Heaven	*Ailanthus altissima*
Black Locust	*Robinia pseudoacacia*
SHRUBS	
Japanese barberry	*Berberis thunbergii*
Common Barberry	*Berberis vulgaris*
Bush Honeysuckles (many varieties)	*Lonicera, spp.*
Russian Olive	*Elaeagnus angustifolia*
Autumn Olive	*Elaeagnus umbellata*
Multiflora Rose	*Rosa multiflora*
Common Buckthorn	*Rhamnus cathartica*
Glossy Buckthorn	*Rhamnus frangula*
Burning Bush	*Euonymous alata*
HERBACEOUS	
Celandine	*Chelidonium majus*
Oriental Bittersweet	*Celastrus orbiculatus*
Flowering Rush	*Butomus umbellatus*
Common Reed	*Phragmites australis*
Goutweed	*Aegopodium podagraria*
Garlic Mustard	*Allaria petiolata*
Purple Loosestrife	*Lythrum salicaria*
Pale Swallow-wort	*Vincetoxicum hirundinaria*
Japanese knotweed	*Polygonum cuspidatum*
Wild Chervil	*Anthriscus sylvestris*
Yellow-flag iris	*Iris pseudacorus*

Work with the conservation commission to create an Early Detection Rapid Response (EDRR) protocol

An EDRR protocol describes procedures and action steps for limiting and controlling small-scale outbreaks of invasives before they proliferate into larger, more difficult problems. This can be one of the most important actions a community can take. See part VI, Prevention and Management, for information on developing a strike team to deal with small-scale outbreaks.

Any town wide effort to reduce the spread of invasives should include collaboration with the local road crew. Road maintenance is a primary vector for the movement of the seeds and roots of invasive plants.

Meet with the local road commissioner to discuss how road crews can help prevent the spread of invasives

Some of the most common places that invasive plants are found are along roadways, and one of the most common ways they are spread is through the well-intentioned activities of town road crews.

- Work with your road commissioner to adopt Best Management Practices for Road Crews. (Table 5.1.) These are concrete actions they can adopt that will help to prevent the spread of invasives.
- Help identify and map invasive plant populations along roadways. Find someone strong in plant identification skills to train road crew personnel on plant identification. Go out with the road crew and map infestations of roadside invasive plants. This will give them real information when they are asked to use 'clean fill' for culverts.
- Collaborate with the regional planning commission's transportation planners and/or VT Local Roads, a statewide technical assistance program for road crews (http://www.vermontlocalroads.org/), to host a local road crew workshop.

Table 5.1. Best Management Practices for Roadside Invasive Plants

SOIL DISTURBANCE & STABILIZATION	MOVEMENT & MAINTENANCE OF EQUIPMENT
1. **Minimize soil disturbance.** Monitor recent work sites for the emergence of invasive plants for a minimum of 2 years after project completion. 2. **Stabilize disturbed soil as soon as possible.** • Use clean mulch, hay, rip-rap, or gravel • Seed with native species where possible 3. **Avoid using fill from invaded sites.** When in doubt about the quality of fill, monitor work sites for the emergence of invasive plants for a minimum of 2 years.	1. **When equipment needs to be moved, plan work flow so that equipment is moved from unaffected sites to affected sites.** This is especially important during ditch cleaning and shoulder scraping. 2. **Staging areas should be free of invasive plants** 3. **All equipment and tools should be cleaned of visible dirt and plant material before leaving affected project sites.** Cleaning methods can include portable wash stations, high pressure air, brush, broom, or other hand tools. 4. **If equipment will be used in infested areas, remove above-ground invasive plant materials** such as purple loosestrife, phragmites, and Japanese knotweed prior to the start of work.
MOWING	**HANDLING EXCAVATED MATERIAL & INVASIVE PLANT MATERIAL**
1. **Avoid mowing areas infested with purple loosestrife, phragmites, and Japanese knotweed,** as these can sprout from stem and root fragments. Stake roadside populations with "Do Not Mow". 2. **If mowing is necessary, mow these areas BEFORE seed maturation** (approximately August 1st). 3. **Clean mowing equipment daily, and prior to transport.** This is particularly important if mowing is after seed maturation (August 1st)	1. **Destroy removed plant material.** Methods include: • Drying/Liquefying: *place on impervious surface and cover* • Brush piles: *not for plants with fruit or seed* • Burying: *minimum of 3 feet below grade* • Burning: *have a designated burn pile for invasive plants* • Herbicide: requires a *licensed applicator (VT Department of Agriculture)* 2. **Cover invasive plant material when transporting.** 3. **Excavated materials taken from infested areas should only be used onsite, unless all plant material has been destroyed.** Only use within exact limits of infestation. 4. **Stockpile unused excavated materials on impervious surface, or bury a minimum of 3 feet below grade** (5 feet for Japanese knotweed). 5. **Excavation should be avoided in areas containing purple loosestrife, phragmites, and Japanese knotweed.** 6. **Cover soil from infested areas when transporting.**

Adapted from New Hampshire Department of Transportation's
Best Management Practices for Roadside Invasive Plants
http://www.nh.gov/dot/org/projectdevelopment/environment/units/technicalservices/documents/BMPsforRoadsideInvasivePlants.pdf

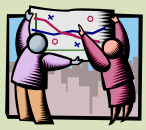
Engage the town's tree warden

A town's tree warden oversees the planting, maintenance and protection of all trees on town lands and within the town right-of-way. The tree warden can be an important advocate for town trees, whose health and regeneration may be threatened by infestations of invasive plants.

Seek municipal funding

Make a request to the town to dedicate funds for invasive plant management on priority parcels. A dollar commitment, even a small one, is another way to show prospective grantors that the project is valued. Federal agencies and private foundations like to see projects that are supported by town and regional leadership.

However, if you are not able to procure regular funding through the budget process, municipalities may still be able to fund specific projects through current grants and other sources if they understand the need. The Town of Woodstock was able to direct already existing funds from their conservation budget to a hogweed control project when they learned about small populations of giant hogweed spreading in the area. The project ended up becoming a successful and inspiring collaboration between the town, a professional contractor and student volunteer groups.



Excerpts from "Appropriate Management Recommendations" from the Windham Regional Commission's 2006 Regional Plan

6. Encourage public, industrial, and private landowners to maintain and enhance forest resources on their lands and to follow sustainable forest management practices that provide habitat for diverse natural species, avoid high grading of timberlands, and follow Acceptable Management Practices.
7. Support the eradication of exotic invasive plants that impede natural forest regeneration in the region, especially glossy buckthorn, Norway maple, Japanese barberry, tartarian honeysuckle, morrow (fly) honeysuckle and oriental bittersweet.

Approach the Regional Planning Commission

Each Vermont town is part of a region with its own regional planning commission (RPC). An RPC is a state- and member-funded organization whose primary purpose is to collect and analyze regional data, assist municipalities in developing plans and ordinances, and facilitate co-operative action among municipalities. Each RPC also develops a regional plan, regularly renewed, which addresses region-wide issues such as environmental quality, transportation, and economic development. An RPC will set priorities for the funding of special projects and other assistance, for example sponsoring regional trainings for road crews, based on compatibility with their regional plans. Including language regarding invasive plants in regional plans could lay the groundwork for the implementation of regional workshops, invasive species assessments, and management plans. You can find a link to your RPC at www.vapda.org.

The strategies you use to engage your town on the invasive plant issue will depend upon leadership strengths, the character of your community, interests, funding and other resources.
The Vermont Planning and Information Center (www.vpic.info) is a great resource and might be a good place to begin when deciding what approaches are most appropriate for your community.

Conserving Vermont's Natural Heritage: A guide to community-based planning for the conservation of Vermont's fish, wildlife and biological diversity, a 2004 publication of the Vermont Fish and Wildlife Department, is also an excellent resource. It is available for download at http://www.vtfishandwildlife.com/library/maps/Community_Wildlife_Program/complete.pdf.

Due to frequent flooding and movement of plant propagules, a floodplain forest is particularly susceptible to infestations of knotweed and garlic mustard.

We are fortunate in Vermont that a single concerned individual can still make a substantial difference, especially on the town level. Many successfully adopted ordinances or language in town plans began with one person speaking up at a select board or planning commission meeting.

Go Native!

Winterberry (*Ilex verticillata*) has abundant bright red winter fruit. Bees favor the honey smelling flowers.