



STEWARDS OF THE LAND

A publication for owners of land conserved with the Vermont Land Trust

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Vermont Land Trust | 8 Bailey Avenue | Montpelier, Vermont 05602 | (802) 223-5234

Vermont Invaders

Non-native plants that are harming our forests, fields, and farms

BY SHEILA MCGRORY-KLYZA

The VLT stewardship staff is frequently asked by landowners about the best ways to identify and control invasive species. Difficult to control and at times tricky to identify, invasives pose a severe threat to native plants and animals in forest communities by outcompeting and aggressively monopolizing light, nutrients, soil, moisture, and space.

According to information compiled by the Vermont Invasive Exotic Plant Committee, approximately one-third of plant species in Vermont are not native. Many of these plants are beneficial and economically important, such as our state flower, red clover. Others, like Queen Anne's lace, have a neutral impact. But around eight percent of these non-native plants can potentially wreak great environmental and economic harm because of their ability to grow rapidly, profusely, and widely; these plants are invasive species.

Unfortunately there is nothing preventing garden shops from selling certain invasives locally, and they are not labeled as such. Once established, these plants threaten biodiversity and have the potential to disturb our ecosystem.

"Some money is available from NRCS to landowners interested in controlling invasives but, because it is a competitive grant program, a landowner's chances are greatly improved if the application goes beyond just controlling invasives to, for example, improving wildlife habitat," advises Pieter van Loon, VLT Stewardship Forester. "County foresters and extension agents can be helpful resources for landowners also. For best results, identify the invasive plant early and go after it aggressively. You have to be vigilant and remove it repeatedly."

Below are five invasive plants that the VLT stewardship staff has identified as the most common and potentially harmful threats.

Common and Glossy Buckthorn

(Rhamnus cathartica and R. fragula)

These are woody shrubs/small trees that reach 20 feet in height with oval leaves early in spring, green-white or green-yellow flowers from May to June, and abundant purple-black or black fruit from August to September.



Common Buckthorn

USDA-NRCS Plants Database

Buckthorn invades wetlands and upland sites, such as roadsides, woodland edges, open fields, and woods. It tolerates full sun and

heavy shade, and its seeds are widely dispersed by birds. Buckthorn grows rapidly to form extensive root systems and dense thickets that shade out native plants. Repeated hand pulling and mowing are effective with small infestations. Fire may be used in appropriate settings, but must be conducted for several years.

Garlic Mustard

(Alliaria petiolata)

This cool-season, biennial herb grows to between 2 and 3.5 feet and has stalked, triangular, toothed leaves. It emits a garlic odor when crushed. Garlic Mustard has small, white flowers and slender, black seed pods that turn pale brown in summer. It invades the edges of woods, trails, and roads, and moist,

shady floodplains and forests, and does not tolerate high acidity. This invasive reproduces through seeds that can remain viable in soil for five years.

It harms native trees by slowing their growth rate through interference with mycorrhizae. Light infestations can be managed with hand removal; for heavy infestations, cut flowering stems at ground level before seeds mature and remove from site. Fire may also be used in appropriate settings, but must be conducted for three to five consecutive years.



Garlic Mustard

USDA-NRCS Plants Database



Vermont Land Trust

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Japanese Barberry

(*Berberis thunbergii*)

A dense, deciduous, spiny shrub that grows 2 to 8 feet in height. Japanese Barberry has pale yellow flowers in spring and bright red berries late summer into winter. It forms dense stands in varied natural habitats such as forests, open woodlands, wetlands, pastures, and meadows. Highly shade tolerant, this invasive spreads rapidly by seed and vegetative expansion and alters soil pH, nitrogen levels, and biological activity. Prevention of seed production and thorough removal of root portions should be a management priority. Manual control is effective but mechanical removal may be necessary to remove larger or older shrubs.



Japanese Barberry

Honeysuckles

(*Lonicera tatarica*, *L. morrowii*, and *L. xbella*)

Exotic bush honeysuckles are shrubs 6 to 15 feet tall. In early spring, they form oval, opposite leaves and pale yellow or pink, tubular flowers. In early autumn, these honeysuckles have small, red or orange berries. They invade the edges of fields and partially shaded to open upland areas, rapidly colonizing disturbed areas. These invasives tolerate various soil conditions, block sunlight, and smother other plants. Remove them by hand pulling vines and digging roots with a hoe.

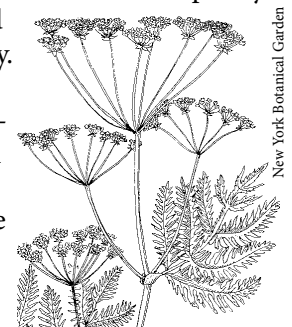


Lonicera Tatarica Honeysuckle

Wild Chervil

(*Anthriscus sylvestris*)

Dark green, ferny rosettes grow into branching, flowering stalks with finely cut, triangular leaves. Lacy, white, domed flowers appear from mid-May to mid-June. Wild Chervil resembles Queen Anne's Lace, but it blooms earlier and is taller, averaging three feet. This shade-tolerant invasive grows on roadsides, rapidly spreading to fields, pastures, and edges of woodlands. Early identification is crucial. It reproduces by seed and vegetatively. Wild Chervil shades out other plants, creating a monoculture. Its strong roots revive after being cut, so it must be completely weeded by hand or cut repeatedly. Wear gloves, however, as contact with skin in sunlight causes a poison ivy-like reaction. Mowing machines spread seeds, so they must be completely cleaned before use on other areas. Do not mow after seeds have set. For large stands, cover with two layers black plastic, weigh down, leave two years, then replant. *Warning: If you encounter a Wild Chervil-like plant over five feet tall with a red/purple stem do not touch it as it may be poisonous hogweed.*



Wild Chervil

VLT has posted links to photos and fact sheets on most of Vermont's Class A and B noxious weeds on this web page: www.vlt.org/invasives

Illustrations of Japanese Barberry and Wild Chervil reprinted by permission from: *Illustrated Companion to Gleason and Cronquist's Manual of the Vascular Plants of Northeastern United States and Adjacent Canada*. Pages 62 and 374. Noel H. Holmgren, ed. 1998. New York Botanical Garden, Bronx, New York. Illustrations of Garlic Mustard, Common Buckthorn, Tartian Honeysuckle from USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. Illustrated flora of the northern states and Canada. <http://plants.usda.gov/java/noxiousDriver#federal>