

Invasive Species Watch List for Vermont

VT Invasive Exotic Plant Committee

Introduction

This is a list of non-native plants that have some potential to become invasive in Vermont based on their behavior in northeastern states. Since not enough is known about the distribution or abundance of these species in Vermont, or their potential to become invasive in Vermont, we hope this list encourages people to observe, assess and report where these species occur and how rapidly they may be spreading.

About one-third of the plant species found in Vermont are not native to our state. Many of these introductions are beneficial and economically important (e.g. red clover, our state flower) and many others are neutral in their impact (e.g. mullein or Queen Anne's lace.) A small percentage of the non-native plants, about 8%, have the potential to create environmental and economic harm due to their ability to grow rapidly, profusely and widely. It is these non-native invasive plant species that the Vermont Invasive Exotic Plant Committee is monitoring.

Definition

An invasive species is defined by the National Invasive Species Council as a species that is

- 1) *non-native (or alien) to the ecosystem under consideration* **and**
- 2) *whose introduction causes or is likely to cause economic or environmental harm or harm to human health.* (Executive Order 13112; <http://www.invasivespecies.gov/>)

Invasive species can be plants, animals, and other organisms (e.g., microbes). Human actions are the **primary** means of invasive species introductions.

Watch List versus the Noxious Weed Quarantine

This Watch List is different from the Noxious Weed Quarantine Rule created in 2002 by the Vermont Agency of Agriculture, Food and Markets. The Watch List is intended for public information and as a way to enlist volunteers to monitor potentially harmful plants in Vermont. The Watch List has no regulatory force.

The Noxious Weed Quarantine Rule has the force of law. It was created to regulate the importation, movement, sale, possession, cultivation and/or distribution of 32 invasive plants. For more information about the Noxious Weed Quarantine Rule see <http://www.state.vt.us/agric/invasive.htm>. The rule plus additional information is also posted at <http://www.uvm.edu/mastergardener/>. Click the yellow circle at the bottom for Invasive Plant Info.

Purpose of the Watch List

The purpose of this Watch List is to alert and inform people about some plants that may become invasive in Vermont. We've included species known to be invasive elsewhere but their status in Vermont is uncertain. The listed plants are primarily those that may spread into Vermont's natural habitats; this list does not include plants that may be pests of agricultural lands or disturbed habitats such as roadsides. Some of these plants are not yet here as far as we know. Others are here but no one knows how extensively they occur or whether they are spreading. We hope that by making this list public, people will be motivated to help track the occurrence, distribution and rate of spread of the listed plants throughout Vermont.

Criteria

For inclusion on the Watch List, a plant must meet at least #1 and #2, and either #3 or #4.

1. The taxon¹ is nonindigenous² to northeastern North America.
2. The taxon may negatively affect native species or natural communities.
3. In Vermont, the taxon has the potential, based on its biology and its colonization history in the northeast or elsewhere, for rapid and widespread dispersal and establishment over spatial gaps away from the site of introduction.
4. The taxon is acknowledged to be invasive in northeastern North America but its Vermont status is unknown or unclear. This may result from lack of field experience with the taxon or from difficulty in taxonomic determination.

¹ A taxon can be a species, a subspecies or variety

² Indigenous means native to an area.

List of Watch Species

Scientific Name	Common Name	
<i>Acer ginnala</i> Maxim.	Amur maple	
<i>Acer platanoides</i> L.	Norway maple	
<i>Alnus glutinosa</i> (L.) Gaertner	European black alder	
<i>Amorpha fruticosa</i> L.	False indigo	
<i>Ampelopsis brevipedunculata</i> (Maxim.) Trautv.	Porcelainberry	
<i>Anthriscus sylvestris</i> (L.) Hoffm.	Wild chervil	
<i>Berberis thunbergii</i> DC.	Japanese barberry	
<i>Berberis vulgaris</i> L.	Common barberry	
<i>Callitriche stagnalis</i> Scop.	Pond water-starwort	aquatic
<i>Cardamine impatiens</i> L.	Narrowleaf bittercress	
<i>Centaurea maculosa</i> L. Syn.: <i>Centaurea biebersteinii</i> DC	Spotted knapweed	
<i>Elaeagnus angustifolia</i> L.	Russian olive	
<i>Elaeagnus umbellata</i> Thunb.	Autumn olive	
<i>Euonymus alata</i> (Thunb.) Sieb.	Winged euonymus	
<i>Euphorbia cyparissias</i> L.	Cypress spurge	
<i>Glyceria maxima</i> (Hartman) Holmberg	Reed mannagrass	
<i>Hesperis matronalis</i> L.	Dame's rocket	
<i>Iris pseudacorus</i> L.	Yellow iris	
<i>Ligustrum obtusifolium</i> Sieb. & Zucc.	Border privet	
<i>Lonicera xylosteum</i> L.	Dwarf honeysuckle	
<i>Lysimachia vulgaris</i> L.	Garden Loosestrife	
<i>Marsilea quadrifolia</i> L.	European watercress	aquatic
<i>Microstegium vimineum</i> (Trin.) A. Camus	Japanese stilt grass	
<i>Najas minor</i> Allioni	Brittle waternymph	aquatic
<i>Paulownia tomentosa</i> (Thunb.) Sieb & Zucc. Ex Steud.	Princess tree	
<i>Phalaris arundinacea</i> L.	Reed canary grass	
<i>Polygonum perfoliatum</i> L.	Mile-a-minute vine	
<i>Polygonum sachalinense</i> F. Schmidt ex Maxim. Syn: <i>Fallopia sachalinensis</i> (F. Schmidt ex Maxim.) Dcne.	Giant knotweed	
<i>Populus alba</i> L.	White poplar	
<i>Robinia pseudoacacia</i> L.	Black locust	
<i>Rorripa nasturtium-aquaticum</i> (L.) Hayek Syn: <i>Nasturtium officinale</i> Ait. f.	Watercress	aquatic
<i>Rosa multiflora</i> Thunb. ex Murr.	Multiflora rose	

Invasive Species Impacts

Invasive non-native species are the second greatest worldwide threat to native species and ecosystems after direct habitat destruction³. In the United States invasive non-native plants spread on public lands at the rate of 4,600 acres per day, or one-tenth the size of an average Vermont town.⁴ Invasive non-native plants can displace native species, disrupt ecosystem relationships, degrade wildlife habitat, impede recreation and cause economic damage to forests, agricultural crops and other managed lands. Invasive species cost the American public an estimated \$138 billion each year⁵ and negatively impact about 42% of the plant and animal species listed by the Federal government as threatened or endangered⁶.

What You Can Do

We encourage you to identify, observe, map or measure, and report on the status of any of these plants you find in your vicinity. By making this Watch List public, we hope that people will pay more attention to the plants around them, help in the effort to collect data and watch these species for signs of invasiveness. A more comprehensive list of plant species that can become invasive throughout New England is on the website of the Invasive Plant Atlas of New England (IPANE) at <http://invasives.eeb.uconn.edu/ipane/>.

Please send us, the Vermont Invasive Exotic Plant Committee, information on these plants and consider becoming a volunteer for IPANE (see box on the following page.)

To report invasive non-native terrestrial plants:

Kathy Decker, Vermont Department of Forests, Parks and Recreation
802-751-0117
kathy.decker@anr.state.vt.us

To report invasive non-native aquatic plants:

Ann Bove, Vermont Department of Environmental Conservation
802-241-3782
ann.bove@anr.state.vt.us

For identification help, see these websites:

<http://invasives.eeb.uconn.edu/ipane/>

<http://tncweeds.ucdavis.edu/>

³ Randall, J. 1996. Weed Control for the Preservation of Biological Diversity. *Weed Technology* 10: 370-383.

⁴ Westbrooks, R. 1998. Pulling Together: National Strategy for Invasive Plant Management. Federal Interagency Committee for Management of Noxious and Exotic Weeds.

⁵ Pimental, D., L. Lach, R. Zuniga, D. Morrison. 2000. Environmental and Economic Costs Associated with Non-Indigenous Species in the United States. *BioScience* 50:53-65.

⁶ Wilcove, D.S., D. Rothstein, J. Bubow, A. Phillips, E. Losos. 1998. Quantifying Threats to Imperiled Species in the United States. *BioScience* 48(8):607-615.

About VTIEPC

The Vermont Invasive Exotic Plant Committee is comprised of representatives from state and federal government, non-profit organizations, private industry, and concerned individuals. The Committee meets semi-annually to assemble and disseminate information about invasive exotic plants. The goal of the Committee is to “provide coordination and guidance on invasive exotic plant issues so as to protect natural communities, native species, agricultural and forestry interests, and human use and enjoyment of Vermont’s natural resources.”

About IPANE

The Invasive Plant Atlas of New England’s (IPANE) mission is to create a comprehensive web-accessible database of invasive and potentially invasive plants in New England that will be continually updated by a network of professionals and trained volunteers. The database will facilitate education and research that will lead to a greater understanding of invasive plant ecology and support informed conservation management. An important focus of the project is the early detection of, and rapid response to, new invasions. To learn how to volunteer go to <http://invasives.eeb.uconn.edu/ipane/>.

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