

# Maine is beautiful the way it is.



But invasive plants are threatening the plants, animals and activities we love most. Fortunately, you can help! By preventing and managing invasive plants, we can keep our state beautiful.

**What is an invasive plant?** Any plant that is non-native to the ecosystem and whose introduction causes or is likely to cause harm to the environment, economy, or human health.

**So what can you do?** Keep an eye out for the **Toxic Six** invasive species and manage them on your own property. The Rachel Carson National Wildlife Refuge is hosting a new campaign, **Weed Warriors**, to make invasive plant removal even more rewarding. The rules are simple:

- 1.) Locate invasive species on your property.
- 2.) Grab some tools and remove those plants!
- 3.) Take a picture of the activity. 
- 4.) Tweet the picture with the hashtag #WeedWarriors or post it to our Facebook at [www.facebook.com/RachelCarsonNWR](http://www.facebook.com/RachelCarsonNWR)
- 5.) We will pick one "Weed Warrior" each month to reward with Weed Warriors gear!

Read on to learn how to identify the "Toxic Six" in Southern Maine.

Look for these icons to learn what each plant threatens!



## You can stop invasive plants.

Here is a summary of how to get started with invasive plant management:



Oriental bittersweet choking out a tree

- **Stop invasions early.**
- **Check where your trash goes.** If your town uses an incinerator, then it is OK to throw out fruiting invasives with the trash. Do not throw away bags of invasives with seeds if your waste is sent to a landfill.
- When removing, **do not spread the plants/fruit to new areas** or dispose of plants where they might reestablish, e.g. a compost pile, the landfill.
- **Don't buy invasive plants.** See below for invasive ornamentals and their native alternatives.

| Invasive             | Alternatives   |
|----------------------|--|
| Japanese Barberry    | New Jersey Tea, Witch Alder                          |
| Winged Burning Bush  | Black Chokeberry, Highbush Blueberry, Fragrant Sumac |
| Oriental Bittersweet | American Bittersweet                                 |

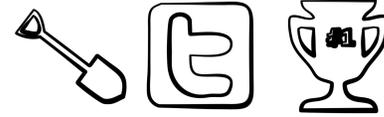


Japanese barberry threatens the New England cottontail's habitat

Love how Maine looks now? Pull a pest and join the

# Weed Warriors

Weed, Tweet, & Win!



Supported by the Rachel Carson National Wildlife Refuge



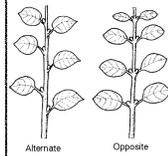
## Bush Honeysuckle



Oblong, gray-green, oppositely arranged leaves with a finely hairy undersurface. White flowers bloom in the spring and fade to yellow. Bright red fruits appear in the summer. Hollow piths ("stem center") distinguish this plant from its native counterpart. **Threat:** Limits forest regrowth. Fruits are non-nutritious for birds and diminish energy levels necessary for migration. **Management:** Ideally, pull outside of the fruiting season.

Place the plants so that they are not touching the ground e.g. on a tarp or hanging in a tree. When fruiting, bag and incinerate.

Here's a tip for what to look for:



## Oriental Bittersweet



A climbing vine with distinct yellow fruit that split open and reveal bright red-orange seeds in the fall. The light brown branches have tan lenticels ("pores"). The rounded leaves have wavy, slightly toothed edges and are alternately arranged. Root color ranges from amber to yellow. **Threat:** It is extremely shade tolerant and grows rapidly up trees, blocking necessary sunlight for plants below. The berries offer little nutrition for birds which readily eat and spread the seeds.

**Management:** Pull small plants from soil. If it has grown high up into trees, cut at 4-5 ft. and again at the root to prevent resprouting. Weekly mowing will also discourage regrowth.



## Glossy Buckthorn



Grows as a shrub or small tree. The smooth-edged, oval-shaped leaves have glossy upper surfaces, hairy lower surfaces, and deep veins that turn upwards towards the edge of the leaf. Fruits turn from red to black. Stems have distinctly lighter colored lenticels ("pores"). **Threat:** Forms dense thickets and crowds out native plants, diminishing habitat for native animals such as the endangered New England Cottontail. **Management:** Pull/dig and let dry on a tarp or in a shed, then dispose of. When fruiting, bag and incinerate.



## Garlic Mustard



Crushed new leaves have pungent garlicky odor. First-year leaves are heart shaped with scalloped edges. Second-year plants have 1-3 ft. tall flowering stalks with small, white clusters of 4 flowers. The leaves are more toothed and triangular in the second year. Skinny, 1-2.5 in. long seed pods turn tan by midsummer and have small black seeds. **Threat:** Crowds out native plants by colonizing the understory and blocking light. It inhibits the growth of fungi necessary for certain native plants' growth. Butterflies use garlic mustard for nesting however the larvae are unable to survive on the plant. Garlic mustard also wipes out wild flowers such as trout lilies, showy wood lily, trillium, and lady slippers. **Management:** Ideally, pull and bag when flowering, then send to an incinerator.



## Japanese Barberry



A short shrub (seldom over 3 ft.) which grows densely in forest understory. Dry, bright red, oblong berries in the fall. Small, oval-shaped leaves cluster along the branches with single thorns coming out where the leaf and branch meet. Leaf color ranges from green to dark red and sometimes purple. **Threat:** Branches root upon contact with the ground, forming impenetrable thickets. This poses a problem for hikers. Dense populations change soil chemistry and lower plant diversity. **Management: Do not buy** this plant for your own garden. For alternatives, see the back of this brochure. To remove, dig the roots out and set to dry in a bag or on a tarp. Contain the seeds and incinerate.



## Black Swallowwort



A perennial vine that reaches up to 6 ft. in height. Oppositely arranged leaves are broad at the bottom and taper off at the tip. Loose clusters of small, purple-black star-shaped flowers with pale yellow center bloom in late spring. The long, thin, green fruit pods are 1-3 inches long and 0.5 in. wide. Feathered seeds appear when the pods dry and split in late summer. **Threat:** Spreads via seeds and rhizomes (i.e. root systems that shoot up new stalks), invading grasslands. It threatens grassland bird populations and tree growth. Monarch butterflies, which usually nest on the common milkweed, will lay their larvae on black swallowwort, which cannot support the larva. **Management:** Dig up the underground crowns from which the plants sprout. For larger populations, pull or mow to prevent seed dispersal. Prevention is essential since black swallowwort is near impossible to eliminate once it is established.

