

INVASIVE PLANT SPECIES ON LONG ISLAND.

Control and Alternatives

Why are invasives bad?

Invasive species are often brought to a new area over distances of many miles. This is usually by people, but birds and tides and wind can do it in a more gradual fashion.

Invasives outgrow the native plants and create monocultures. Monocultures are vast areas where only the one plant grows. It's like being in a desert for native animals and insects. They can't eat, nest or shelter in the invading plant. The invader is useless to them.

Nearly 25% of 20,000 native North American plants are in danger of extinction due to habitat loss.

Invasives can outgrow the native species of an area by different means.

- 1) Invasives might emerge in the springtime earlier than the native plant and keep the native plant from growing.
- 2) Invasives could have more vigorous root systems.
- 3) Invasives have few or no animal and insect species that consume them to keep their growth in check.
- 4) Invasives might emit chemicals that discourage other plants from growing near them.

Examples of invasives at UUCSR

- 1) The Legacy Gardens that surround the buildings were being overrun by English Ivy, Porcelain Berry, and Mile-a Minute Vines. This situation is much improved over the last 4 years, but we must remain ever vigilant.
- 2) Two acres of bamboo in the woods that are encroaching on a very important pond habitat.
- 3) At least a ½ acre of pachysandra (Japanese Spurge) in the woods.
- 4) Thousands and thousands of Winged Euonymus lining the trail and encroaching into the woods.
- 5) Porcelain berry vines cover desired shrubs and trees and kill them.
- 6) English Ivy covers everything, killing anything beneath it. English Ivy climbs up trees and kills them, too. It's a slow-motion death scene from a monster movie.

Control

Choosing a method of control for invasives depends on many factors. Methods include digging, smothering with cardboard or plastic, and chemicals. The goal must be determined first as this will influence the choice of method.

- A) How large an area is affected? This often determines whether you can eradicate an invasive or try to get it under control. This includes having a short-term and long-

term plan. The short-term plan is to save precious habitats, such as the vernal ponds and the Legacy Gardens. The long-term plan is to make sure that the 75 acres of woods remain a healthy, viable habitat for the hundreds of animals that live there.

B) Eradication or measured control?

1) Measured Control

- a. Where the bamboo is encroaching on the pond, we will try to cut it by hand on that side, for now, until we can deal with the entire 2 acres.
- b. The Winged Euonymus was pulled out 100 feet from the lawn's edge by machinery and will be replaced with native plants this coming fall.

2) Eradication

- a. We are trying to rid the property of Boston Ivy.

C) When does its growth cycle start?

- a. Fig Buttercup blooms very early in the spring and the plants must be dealt with at that time.

D) Is the plant woody or fleshy? Fleshy plants can be hand dug and pulled. Woody plants require more complex tools and/or machinery.

E) How deleterious an affect are the invasives having on the native population?

Invasives and Native Alternatives

For pachysandra and English Ivy: Canada Wild Ginger (*Asarum canadense*), Green-and-Gold (*Chrysogonum virginianum*), Allegheny spurge (*Pachysandra procumbens*), and Barren Strawberry (*Waldsteinia fragaroides*, *Genum fragaroides*)

For bamboo: Eastern red cedar (*Juniperus virginiana*) which is a juniper, as shown by the scientific name and not a cedar, grows to 40' to 50' and 8' to 20' wide. Wherever you have room enough for bamboo and want something tall, plant this juniper instead.

For Porcelain berry: Heartleaf peppervine, (*Ampelopsis cordata*), Trumpet Honeysuckle, (*Lonicera sempervirens*), American Bittersweet, (*Celastrus scandens*), and Fox Grape, (*Vitis labrusca*).

For Winged Euonymus: Highbush blueberry (*Vaccinium corymbosum*) is not as tall but turns red in the fall and provides food for animals, birds, and people; Red chokeberry (*Aronia arbutifolia*), American Cranberrybush (*Viburnum opulus var. Americanum*) and Winterberry (*Ilex verticillate*) also provide fall and winter color to the landscape.

For Fig Buttercup: Wood poppy (*Stylophorum canadense*), and Marsh Marigold (*Caltha palustris*).

Invasive



English Ivy, *Hedera helix*



Pachysandra, *Pachysandra terminalis*



Bamboo, *Bambusoideae*



Porcelain Berry, *Ampelopsis brevipedunculata*

Native Alternative



Green and Gold, *Chrysogonum virginia*



Appalachian Barren Strawberry, *Genum fragaroides*



Eastern red cedar, *Juniperus virginiana*



Heartleaf peppervine, *Ampelopsis cordata*

Invasive



Winged Euonymus, *Euonymus alatus*



Fig Buttercup, *Ficaria verna* (*Ranunculus ficaria*)

Native Alternative



Highbush Blueberry, *Vaccinium corymbosum*



Wood poppy, (*Stylophorum canadense*)