

INVASIVE EXOCTIC PLANTS ISSUES AND MANAGEMENT

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LOCAL PROBLEM SPECIES:

Asiatic bittersweet - *Celastrus orbiculatus*
Japanese Barberis - *Berberis thunbergii*
Autumn Olive - *Elaeagnus umbellata*
Japanese Honeysuckle - *Lonicera japonica*
Burning Bush - *Euonymus alatus*
Multiflora Rose - *Rosa multiflora*
Tree of Heaven - *Ailanthus altissima*
Japanese Knotweed - *Polygonum cuspidatum*
Purple Loosestrife - *Lythrum salicaria*
Phragmites - *Phragmites australis*

CONTROL

Pull, cut plant Brush-B-Gone on stump
Pull or Roundup
Pull or Brush-Be Gone
Pull, 2-4D Foliar
Pull or Brush-B-Gone
Pull or Roundup or Brush-B-Gone
Cut and Brush-Be –Gone
Cut and Roundup
Pull or biological or Rodeo
Black Plastic or Cutting and Rodeo

TOOLS FOR VEGETATION MANAGEMENT

1. Mechanical:
 - Digging and Pulling – Weed Wrench.
 - Repeated cutting or mowing.
2. Chemical:
 - Burning
 - Herbicides- Goal is to root kill the target plant(s) with minimum damage to surrounding vegetation.
 - Use most selective application possible:
 - Cut stump-spray or paint on Roundup 1:1 or Brush-B-Gone undiluted.
 - Foliage and stems use low pressure foliage spray per label directions.
 - Triclopyr, active ingredient in Brush-Be-Gone (and Garlon products).
 - Glyphosate, active ingredient in Roundup and Rodeo.
3. Biological:
 - Grazing animals.
 - Bio-control-introduction of natural enemies.

Native Plants in the Landscape- Take Home Points

Definitions:

Native Plant - define geographically and temporally.

- Plants that remained after the last glaciation, 18,000-20,000 year ago.
- A better definition those plants here in the 1600's.
- 17,000 natives in U.S., 2000 in CT.

Exotic Plants - non-native (all others including alien, naturalized, non-native).

Naturalized Plant - non-native plant that reproduces in the "wild."

- 5000 plants naturalized in U.S.

Flora - listing of all plant species in a certain geographic area.

- Is estimated that in Southeastern Connecticut 25% of all flora is naturalized
- Remember that, "not all exotics are bad and conversely not all natives are good."

Everywhere - a small subset of naturalized plants are becoming aggressively invasive.

- Thus becoming a **local as well as a global problem.**
- Considered 2nd most important threat to natural habitats, 1st is habitat destruction, man's activities.

Problem - Ecosystems Altered

- Displace native plants and animals (one plant replaces hundreds of species).
- Species Diversity altered.
- Can alter hydrology i.e. Phragmites suck out water. Exotics from temperate eastern Asia, climates like ours, Korea and Japan come in as garden plants lacking disease and pest controls, gives these plants an advantage over our natives.
- Can limit recreational opportunities
- Increases maintenance problems and costs in all landscapes.
- Ballast in ship a problem, plants, animals, invertebrates

Costs are astronomical

- Purple loosestrife \$45 million /yr.
- All exotic invasives both plants and animals est. 138 billion/yr.
- Nearly 50% of federally listed endangered threatened species impacted by invasive exotic species.
- 4600 acres a day taken over by invasive plants

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