

INVASIVES MGMT & ID GUIDE for TRAIL MAINTAINERS

This is a supplemental guide to invasive plants in our region that trail maintainers commonly encounter on our trail systems.

*Refer to the [Invasive Species Management video](https://youtu.be/c6qL90WfczU) for full guide to management techniques: <https://youtu.be/c6qL90WfczU>



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For questions/more info...

Contact invasives@nynjtc.org
Visit lhprism.org

INVASIVE TREES

Tree of heaven (*Ailanthus altissima*)

- Large compound leaves composed of many paired leaflets oppositely arranged on leaf stalk
- Leaflets have a notch at base with gland
- Smooth bark – looks like cantaloupe rind!
- Crushed leaf smells like rancid peanut butter
- Fruits are winged seeds (unlike sumac)

Recommended Management Practice:

- Aggressive resprouting species- **cutting not recommended**
- Trim branches overhanging trail only; trim prior to fruiting in July



**Aggressive
resprouter**



**Trim before
July**



Invasive Angelica Tree (*Aralia elata*)

- Tree, large doubly-compound leaves with many leaflets
- Vertical thorn at each leaflet node
- Very thorny stem

Recommended Management Practice:

- Aggressive resprouting species- **cutting not recommended**
- Trim branches overhanging trail only; trim prior to fruiting in August



**Aggressive
resprouter**



**Trim before
August**



INVASIVE SHRUBS

Autumn Olive (*Elaeagnus umbellata*)

- Small tree or shrub (multi-stemmed), alternate branching
- Silvery leaves with silver dots on leaf & twig
- Leaves have wavy appearance
- Red fruits with silver scales in fall

Recommended Management Practice:

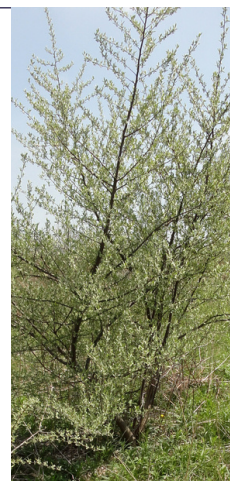
- Aggressive resprouting species- **cutting not recommended**
- Trim branches overhanging trail only; trim prior to fruiting in September



**Aggressive
resprouter**



**Trim before
September**



INVASIVE SHRUBS (cont'd)

Invasive Barberry (*Berberis thunbergii*)

- Shrub, alternate branching, arching branches
- Small, straight needle-like thorns
- Small, spoon-shaped leaves
- Red, oval-shaped, overwintering berries



Dig up to remove



Cut before September

Recommended Management Practice:

- Removal of entire shrub is recommended by digging and pulling, if possible*
- Otherwise, **cut back to base** and/or lop (trim-only as last option) prior to fruiting in September*



Multiflora rose (*Rosa multiflora*)

- Shrub with arching branches
- Compound leaves with toothed edges
- Green stems
- Hooked thorns like dorsal fin on shark
- **Fringed stipule** at base of leaves- looks like little centipede with antenna at base of leaf (see photo)



Dig up to remove



Cut before September

Recommended Management Practice:

- Removal of entire shrub is recommended by digging and pulling, if possible*
- Otherwise, **cut back to base** and/or lop (trim-only as last option) prior to fruiting in September*



Wineberry (*Rubus phoenicolasius*)

- Shrub with arching branches
- Dense prickles all along stem- fine reddish hairs all along branch
- Compound leaves with 3 leaflets, fuzzy, white underneath



Dig up to remove



Cut before June

Recommended Management Practice:

- Removal of entire shrub is recommended by digging and pulling, if possible*
- Otherwise, **cut back to base** and/or lop (trim-only as last option) prior to fruiting in June*



Burning bush (*Euonymus alatus*)

- Shrub, opposite branching
- Sometimes looks like small tree
- Stems, green with brown ridges aka “wings”- look like cardboard coming off it!
- Leaves oppositely attached



Dig up to remove



Cut before September

Recommended Management Practice:

- Removal of entire shrub is recommended by digging and pulling, if possible*
- Otherwise, **cut back to base** and/or lop (trim-only as last option) prior to fruiting in September*



INVASIVE SHRUBS (cont'd)

Common buckthorn (*Rhamnus cathartica*)

- Leaves – opposite or almost opposite with 3 pairs of secondary veins curving to tip. Glossy surface. Finely toothed at edges of leaf.
- Spur/pointed end on twig tip.
- Berries – clusters in leaf axils. Black when ripe



**Aggressive
resprouter**



**Trim before
June**



Recommended Management Practice:

- Aggressive resprouting species – **cutting not recommended**
- Trim overhanging branches only- trim prior to fruiting in June

Bush honeysuckle (*Lonicera spp.*)

- Shrub, opposite branching
- Oval leaves with smooth edges, oppositely attached on branch
- Flowers, fragrant, tubular, in pairs
- Fruit, juicy red berry, in pairs



**Aggressive
resprouter**



**Trim before
June**



Recommended Management Practice:

- Aggressive resprouting species – **cutting not recommended**
- Trim overhanging branches only – trim prior to fruiting in June

Linden viburnum (*Viburnum dilatatum*)

- Shrub, opposite branching
- Leaves – oval, rounded. Covered with soft hairs.
- Edges of leaf are like scallop shell
- Flowers and fruit are flat-topped clusters. Berries are red when ripe



**Aggressive
resprouter**



**Trim before
August**



Recommended Management Practice:

- Aggressive resprouting species – **cutting not recommended**
- Trim overhanging branches only- trim prior to fruiting in August

Invasive privet (*Ligustrum spp.*)

- Large densely leaved shrubs
- Leaves arranged opposite of each other along branch and densely packed
- Many small, white, and fragrant flowers appear in April to June; flowers at tips of branches



**Dig up to
remove**



**Cut before
September**



Recommended Management Practice:

- Removal of entire shrub recommended by digging and pulling, if possible *
- Otherwise, **cut back to base** and/or lop (trim-only as last option) prior to fruiting in September (though this can vary)*

INVASIVE VINES

Mile-a-minute (*Persicaria perfoliata*)

- Triangular leaves
- Curved prickles along the stem & leaf stalks
- Mint green color
- Fruit: blue berry ripening in July
- Stems have round leaf-like stipule- looks like saucer for a teacup



Hand pull roots before July



Recommended Management Practice:

- Annual species- pull vines (using gloves) and dispose of properly prior to fruiting in July*

Invasive bittersweet (*Celastrus orbiculatus*)

- Vine, twines around other plants like a corkscrew
- Leaves alternate, rounded and toothed
- Leaves feel smooth, waxy
- Fruit is hard berries - orange to red when ripe
- Additional check: has orange root



Hand pull roots



Recommended Management Practice:

- For large vines, cut at base and again at eye height prior to fruiting in September*
- **Do not pull off entire large vines from tree;** leave large vines after cutting*
- For smaller vines, hand pull or dig roots and dispose of properly*



Cut before September

Invasive honeysuckle vine (*Lonicera japonica*)

- Vine, trails along ground or twines around other plants
- Thin stems with pairs of leaves arranged opposite of each other along branch (looks like string with bow ties or airplane propellers)
- Leaves oval, rounded, smooth edges
- Has fruit in pairs, juicy red berry



Hand pull roots before September



Recommended Management Practice:

- Pull vines and roots and dispose of properly prior to fruiting in September*

Invasive Wisteria (*Wisteria spp.*)

- Twining vine
- Leaves - compound with many long narrow leaflets (7-19) arranged opposite along the leaf stem; Leaves are wavy and pointed at tip
- Cascades of blue to purple flowers
- Seeds - large bean-pod capsules. Hairy. Begin forming in early summer



Hand pull roots



Recommended Management Practice:

- For large vines, cut at base and again at eye height prior to fruiting in September*
- **Do not pull off entire large vines from tree;** leave large vines after cutting*
- For smaller vines, hand pull or dig roots and dispose of properly*



Cut before September

INVASIVE VINES (cont'd)

Porcelainberry (*Ampelopsis glandulosa*)

- Twining vine with tendrils
- Bark does not shred off in strips like grapes
- Leaves – green beneath. Often deeply lobed.
- Fruit – borne erect and clustered, not dangling like grapes
- Small berries are multicolored pastels



**Hand pull
roots**

Recommended Management Practice:

- For large vines, cut at base and again at eye height prior to fruiting in September*
- **Do not pull off entire large vines from tree**; leave large vines after cutting*
- For smaller vines, hand pull or dig roots and dispose of properly*



**Cut before
September**



Black swallowwort (*Vincetoxicum nigrum*)

- Leaves – opposite. Long, pointed, dark green, smooth edges.
- Flowers – clusters, tiny dark purple, star-shaped at leaf bases
- Seeds – milkweed-like pods in the fall



**Hand pull
roots
before
September**

Recommended Management Practice:

- Pull vines and dig roots and dispose of properly prior to fruiting in in late August/September*



INVASIVE HERBACEOUS PLANTS

Garlic mustard (*Alliaria petiolata*)

- Biennial plant- Year 1, shorter rosettes that are kidney shaped; 2nd year bolts upright with more triangular leaves
- Dead skeletons- stalk-like left behind once leaves fall off mid-summer
- White flowers, long narrow seed pods on stalk
- Crushed leaf has garlic smell



**Hand pull
roots
before April**

Recommended Management Practice:

- Pull out the second-year growth by roots just prior to fruiting in April*
- **Pull out first-year growth any time of year**



GENERAL NOTE ON MANAGEMENT TIMING:

As noted throughout this guide, it is important to begin management before fruits set – especially before fruit ripens, if at all possible. In some cases, immature fruit may ripen on cut vegetation. Management, after fruits appear, may spread the species. Also, note that some species will not fruit at expected times. In this guide, we have listed the most common fruiting periods for our region but it will vary slightly from year to year.