



# SLELO PRISM's Guide for Terrestrial Plants

2018

**ST. LAWRENCE EASTERN LAKE ONTARIO PARTNERSHIP FOR  
REGIONAL INVASIVE SPECIES MANAGEMENT**

To learn more visit <http://www.sleloinvasives.org/>

Created by: Sarah Kirkpatrick, SLELO Early Detection Team. Edited by Megan Pistolese, SLELO E/O Coordinator.  
*With contributions from Sean A. Regalado-Adirondack Watershed Institute.*



## Safety First

1. Always travel in pairs, use the buddy system & inform someone of your travel plans
2. Always have a first aid kit nearby.
3. Wear your life jacket when on the water
4. Bring a means of communications with you, ie. Cell phone or two-way radios.
5. Place emergency contact numbers into your phones address book.
6. Drink plenty of water on hot days and bring snacks.

## Steps You Can Take to Stop the Spread Of Invasive Species

**CLEAN + DRAIN + DRY  
YOUR GEAR**



Choose Native Plants

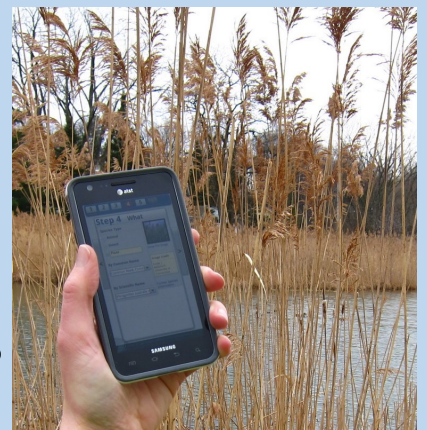


Use Boot Brush Stations



Collect a Specimen/ Take a photo

- Get a close-up photo
- Put a specimen in a container and label it with date/ location/contact info
- Email photo(s) to [rwilliams@tnc.org](mailto:rwilliams@tnc.org) or call 315-387-3600 x 7725 for drop off location(s) near you.





# INVASIVE Porcelain berry (*Ampelopsis brevipedunculata*)

- Deciduous, branched, tendril-bearing woody vine that climbs to heights of more than 20 ft. (6.1 m)
- White pith continuous across nodes
- **Fruit are** small berries that range in color from yellow to purple to blue and have a porcelain-like appearance
- Leaves are alternate along stem
- Leaf shape **highly variable**. simple heart shaped with coarse teeth along margins. Leaves vary from slightly to deeply lobed.
- **Flowers** greenish to white inconspicuous flowers develop in small clusters



Left photo Credit: Karan A Rawlins, University of Georgia, bugwood.org  
Right photo: variegated porcelain berry Tony Beane SUNY Canton



Photo credit: <http://home.btconnect.com/ros.flemming/climbers/slides/Ampelopsis%20brevipedunculata%20v.%20maximo%20viczii.jpg>



Photo credit: John Brandauer , NC State University.



Photo Credit: Leslie J. Mehrhoff, University of Connecticut, bugwood.org



Photo credit: [https://c2.staticflickr.com/6/5349/9452129826\\_f027ee8f78\\_b.jpg](https://c2.staticflickr.com/6/5349/9452129826_f027ee8f78_b.jpg)



Photo Credit: [https://www.nybg.org/files/scientists/rnaci/Mistaken\\_Identity\\_Final.pdf](https://www.nybg.org/files/scientists/rnaci/Mistaken_Identity_Final.pdf)



# INVASIVE Mile-a-Minute Vine (*Persicaria perfoliata*)

- Leaves grow alternately along stem
- Leaves are triangular and have long petioles with thin blades
- Stems are woody at the base and change from light green to red with age and are armed with recurved barbs
- Fruit is round and grows in cone shaped cluster from petioles on top of leaves
- Fruit range from light green to red when maturing and are blue and fleshy when mature.



Photo Credit: Leslie J. Mehrhoff, University of CT, bugwood.org



Photo Credit: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org



Photo Credit: Todd Mervosh, Connecticut Agricultural Experiment Station, inspection.gc.ca

## Native Look-a-Likes

### Hedge bindweed (*Calystegia sepium*)

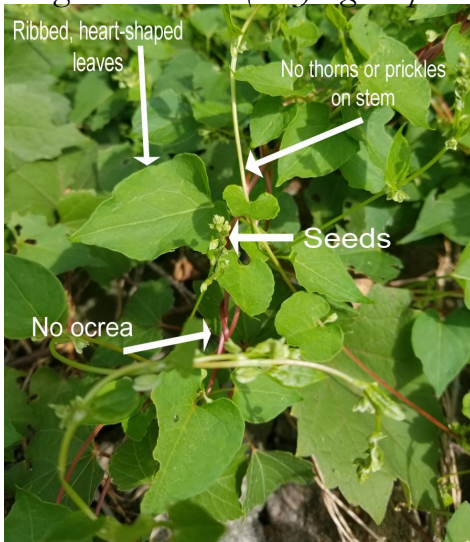


Photo Credit: Alyssa Coleman, LH PRISM

### Halberdleaf teathumb (*Polygonum arifolium*)



Photo Credit: Sarah Rall, <https://www.inaturalist.org/>



## INVASIVE Kudzu (*Pueraria lobata*)

- Leaves are 3 lobed, have hairy margins, and are arranged alternately along stem
- Stems are hairy and grow as a vine easily
- Flowers are showy and grow in ½ inch hanging clusters on plant vines.
- Flowers are typically red, purple or magenta and occasionally pink or white. Flowers have a strong grape- like aroma.



Photo Credit: James H. Miller, USDA Forest Service, bugwood.org



Photo Credit: Leslie J. Mehrhoff, University of CT, bugwood.org



Photo Credit: Forest and Kim Starr, Starr Environmental, bugwood.org; James H. Miller, USDA

## Native Look-a-Likes

Poison ivy (*Toxicodendron radicans*)



Photo Credit: Bruce Marlin, <http://www.cirrusimage.com/>

Hog peanut (*Amphicarpaea bracteata*)



Photo Credit: [https://www.illinoiswildflowers.info/savanna/plants/hog\\_peanut.html](https://www.illinoiswildflowers.info/savanna/plants/hog_peanut.html)



# INVASIVE Pale & Black Swallow-wort (*Cynanchum spp.*)

- Leaves are arranged opposite on the stem and oval shaped with a pointed tip
- Flowers are small, star shaped, and are purple (black swallow wort) to pink (pale swallow wort)
- Fruit are smooth, slender, pointed pods that resemble miniature milkweed pods or chili peppers
- White fluffy seeds dehisce from the pods and are wind dispersed



Photo Credit: John M. Randall, The Nature Conservancy, Bugwood.org



Photo Credit: Rob Boutledge, Sault College, bugwood.org.



Photo Credit: Rob Boutledge, Sault College, bugwood.org

## Native Look-a-Likes

Honey-vine Climbing Milkweed  
(*Cynanchum laeve*)



Photo Credit: [http://www.missouriplants.com/Whiteopp/Cynanchum\\_laeve\\_page.html](http://www.missouriplants.com/Whiteopp/Cynanchum_laeve_page.html); <https://www.inaturalist.org/photos/14534946>

Common Milkweed  
(*Asclepias syriaca*)

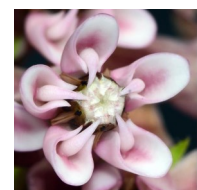


Photo Credit: Right photo James Revel <https://www.wildflower.org>;  
Left photo <http://www.bio.brandeis.edu>



# INVASIVE Giant Hogweed (*Heracleum mantegazzianum*)

Giant hogweed sap cases severe burns.  
**DO NOT touch this plant!**

- Leaves palmately compound (leaflets radiate from a single point) with three deeply incised leaflets
- Size is enormous; can grow up to 5 ft. in length (only basal leaves are produced the first year)
- Flowers are 50-150 small white blooms that form a loose umbel at the top of the stem.



Photo Credit: Donna R. Ellis, University of Connecticut, Bugwood.org



Photo Credit: Leslie J Mehrhoff, University of CT, Bugwood.org



Photo Credit: Terry English, USDA APHIS PPQ, Bugwood.org

## Native Look-a-Likes

Great Angelica  
(*Angelica atropurpurea*)



Photo Credit: Walter Muma, <http://ontariowildflowers.com/main/species.php?id=474>

Cow Parsnip  
(*Heracleum maximum*)



Queen Ann's Lace  
(*Daucus carota*)



Photo Credit: <https://www.maine.gov/dacf/php/horticulture/hogweedlookalikes.shtml>



# INVASIVE Glossy Buckthorn (*Frangula alnus*)

- Leaves are ovate, toothless, dark green, glossy, alternate and sometimes sub opposite
- Flowers are inconspicuous, pale greenish-yellow to yellow in color with 5 petals that occur in clusters in the leaf axis.
- Fruit is fleshy and ripens from red to a dark purple or black color
- Bark is dusky to dark gray, splotted to various degrees by lenticels (pores), the cambium (layer of tissue just under the bark) is a greenish yellow, the center heartwood reddish orange



Photo Credit: James H. Miller, USDA Forest Service, bugwood.org



Photo Credit: Leslie Mehrhoff



Photo Credit: Rob Routledge, Sault College, Bugwood.org



Photo Credit: Rob Routledge, Sault College, Bugwood.org

## Native Look-a-Likes

### Common Buckthorn (*Rhamnus cathartica*)

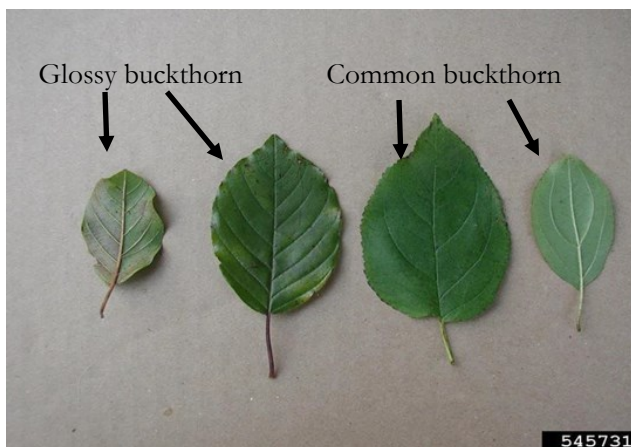


Photo Credit: Leslie J Mehrhoff, University of CT, bugwood.org



Photo Credit www.minnesotawildflowers.info



# INVASIVE Japanese Knotweed (*Fallopia japonica*)

- Leaves alternating around stem
- Leaves broadly oval to somewhat triangular or heart-shaped, pointed at tip with distinctive veins
- Stems zig-zag where the petiole meets the stem, are reddish– brown in color, smooth, look like bamboo, can reach up to 10-15 ft. in height
- Small, greenish-white flowers in branched sprays in late summer, followed by small winged fruits in



Photo Credit: <https://ohiostate.pressbooks.pub>



Photo Credit: WWP/MRBurne, [cisma-suasco.org](http://cisma-suasco.org)



Photo Credit: Jan Samanek, State Phytosanitary Administration, [bugwood.org](http://bugwood.org)



Photo Credit: <https://ohiostate.pressbooks.pub>



Photo Credit: <https://ohiostate.pressbooks.pub>



# INVASIVE Common Reed (*Phragmites australis* spp.)

- Leaves are dark green or blue-green, narrow, long, alternate along plant stem, and arise from thick, vertical stalks that can grow to heights of 15 ft. or more
- Stem persists into future seasons., are slightly ridged with a rougher texture than native common reed; invasive common reed has few to no fungal spots
- Flower plumes are large, bushy, and purple to golden to brown in color



Photo Credit: gobotany.newenglandwild.org



Photo Credit: Bernd Blossey, Cornell University, bugwood.org



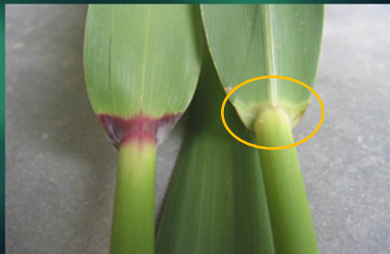
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Photo Credit: James Miller, USDA Forest Service, Bugwood.org

## Distinguishing from Native Look-a-Likes

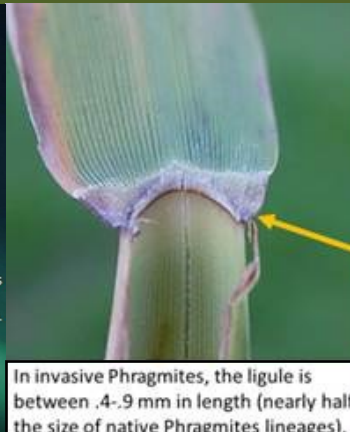
### Phragmites (*Phragmites australis*)

Native vs non-native



Leaf Collar is red on native spp.

Leaf Collar is white on invasive spp.



In invasive *Phragmites*, the ligule is between .4-.9 mm in length (nearly half the size of native *Phragmites* lineages).



Rough texture, green in color, and unlike native common reed, invasive *Phragmites* has few to no fungal spots on its' stalk.

Leaf blade alternately arranged

Hairy Ligule

leaf sheath is located at the lower part of the stem and typically is wrapped tightly around the (stem) and persist well into other growing seasons.

Leaf sheath

Where sheath collar and leaf blade intersect around stalk



INTRODUCED

NATIVE

Invasive



Native





# INVASIVE Japanese Stiltgrass (*Microstegium vimineum*)

- Leaves alternate along a branched stalk
- Leaves are thin, pale green, lance shaped leaves, with a stripe of silver down the mid vein
- Leafy segmented stems with small white hairs; grows upward reaching heights of up to 3 feet; easy to pull up
- Flowers are delicate and develop in the axils of the leaves or at top of stems.



Photo Credit: Rebekah D. Wallace, University of Georgia, Bugwood.org



Photo Credit: James H. Miller & Ted Bodner, Southern Weed Science Society, bugwood.org



Photo Credit: Bobby Hattaway, discoverlife.org



Photo Credit: Les Mehrhoff, discoverlife.org

## Native Look-a-Likes

Whitegrass  
(*Leersia virginica*)



Photo Credit: <http://www.illinoiswildflowers.info>

Nimblewill  
(*Muhlenbergia schreberi*)



Photo Credit: <http://www.illinoiswildflowers.info>

Deer tongue / panic grass  
(*Dichanthelium spp.*)



Photo Credit: <http://www.illinoiswildflowers.info>



# INVASIVE Leafy Spurge (*Euphorbia esula*)

- Leaves grow alternately often in a spiral around stem
- Leaves narrow and waxy with a smooth edge and are bluish-green until late summer when leaves turn a reddish-orange color
- Flowers lack both petals and sepals and are yellow-green in color
- Fruit are three lobed capsules that explode when mature, propelling brown mottled ovoid seeds up to 15 ft. from parent plant.
- Stem exudes a milky latex when broken



Photo Credit: extension.umass.org & William M. Ciesla, Forest Health



Photo Credit: Chris Evans, Illinois Wildlife Action Plan, bugwood.org



Photo Credit: L.L. Berry, bugwood.org



Photo credit: Steve Schoenig, CAL Photos



Photo Credit: Julia Scher, USDA APHIS PPQ, bugwood.org



Photo Credit: extension.umass.edu



# INVASIVE Wild Chervil (*Anthriscus silvestris*)

- Leaves shiny and dark green in color, finely divided (Fern like) with sharply pointed segments that are somewhat hairy
- Flowers are small and white growing in 3 inch wide umbels (flower heads originating from one point)
- Stem is ribbed, entirely green, and hairy
- Seeds are shiny, black, elongated oval shaped, developed in pairs with small antenna like structures on top



Photo Credit: Leslie J Mehrhoff, University of CT, bugwood.org



Photo Credit: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org



Photo Credit: Leslie J Mehrhoff, University of CT, bugwood.org



Photo Credit: Sarah Kirkpatrick, Early

## Native Look-a-Likes

Bur Chervil  
(*Anthriscus caucalis*)



Photo credit: Joseph M. DiTomaso, University of California - Davis, Bugwood.org

Poison hemlock  
(*Conium maculatum*)



Photo credit: <https://extension.oregonstate.edu/>; Chris Evans, University of Illinois, Bugwood.org

Queen Ann's Lace  
(*Daucus carota*)



Photo Credit: <https://www.maine.gov/dacf/php/horticulture/hogweedlookalikes.shtml>



# INVASIVE Purple Loosestrife (*Lythrum salicaria*)

- Leaves opposite but sometimes alternate or bunched in whorls
- Leaves smooth and slender; lanced without petioles
- Flowers showy, individual flowers have 5-6 pink to purple wrinkled petals that are .5 -.75 inches across
- 1-50 stems per plant that grow upright, stiff and four sided. Often branching giving the plant a bushy appearance



Photo Credit: Norman E. Rees, USDA Agricultural Research Service,



Photo Credit: John D. Bryd, Mississippi State University, Bugwood.org



Photo Credit: Rob Boutledge, Sault college, Bugwood.org



Photo Credit: Sarah Kirkpatrick, Early Detection Team



Photo Credit: Britt Slattery, US Fish & Wildlife Service, Bugwood.org