

Three Invasive Species - Janice Hardy

**Scientific Name:** *Lythrum salicaria* L.

**Common Name:** Purple Loosestrife



**Family:** LYTHRACEAE (LOOSESTRIFE)

**Type of Plant:** Herbaceous Perennial

**Usage:** Ornamental

**Identifying Characteristics:**

**Stems & roots:** Stout plant, erect (24-48in); 4 angled stem can be smooth to fuzzy; long, well-established tap root

**Leaves:** Smooth, opposite (2 per node) or whorled (3 per node); narrow to narrowly oblong and heart shaped at base; 1.25-4 in long, attach directly to stems; upper leaves & those in the inflorescence alternate (1/node) & smaller than lower leaves

**Flowers:** Magenta - pink, tightly clustered, dense, terminal spikes from 4-20in; sepals united into a column with 8-12 prominent green veins & ending in several, long, thin, pointed lobes; 5-7 petals approx. 1/4in long; several stamens & 1 pistil; small seed-pod. Bloom late June - mid Sept. Many garden species previously thought to be sterile can produce seeds by cross pollination with wild & other species, increasing the opportunities for spreading

**Habitat:** In the wild - wetlands, sedge meadows, open bogs. Can also occur along streams, riverbanks, lake shores. Opportunistic in areas with recent soil disturbance. Grows best in highly organic soils in full sun

**Invasive Potential:** Introduced from Europe. 2.7 million seeds per plant annually, highly invasive in wetland areas through wind, birds, animals & humans. Readily establishes itself, crowding out native species. Decrease in biodiversity has far reaching ecological implications including displacing plants & animals, eliminating food & shelter for wildlife, degrading native wetlands, reducing habitat for waterfowl. Native to Eurasia

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**Control:** No effective method except in small, localized growth area where it can be intensively managed. Isolated areas, uproot plant by hand ensuring the removal of all parts of plant including all roots

Other methods of control: cutting, burning where permitted, herbicide application although herbicides can destroy other nearby plants

Biological control using root weevil (*Hylobius transversovittatus*), 2 species leaf eating beetles (*Galerucella pusilla* & *Galerucella californiensis*) have been approved by Canadian government. Research indicate there is little chance of permanent host transfer as these insects only feast on purple loosestrife

**Recommendations:** Recommended to dig all cultivars of Purple Loosestrife from the landscape and, according to the Manitoba Purple Loosestrife Project, can best be replaced with Spiked Gayfeather (*Liatrus*); a native plant with pink, purple or white flowers that is an environmentally safe perennial. It requires full sun to part shade, height up to 1.5-2.5m, hardy to CDA zone 3; blooms midsummer to Sept

**Resources:**

Ontario Food & Agriculture: [www.omafra.gov.on.ca](http://www.omafra.gov.on.ca)

Ministry of Agriculture, Food & Rural Affairs:

[www.omafra.gov.on.ca/english/crops/facts/ontweeds/purple\\_loosestrife.htm](http://www.omafra.gov.on.ca/english/crops/facts/ontweeds/purple_loosestrife.htm)

Ontario Federation of Anglers & Hunters: [www.ofah.org](http://www.ofah.org)

Invading Species: [www.invadingspecies.com](http://www.invadingspecies.com)

Manitoba Purple Loosestrife Project: [www.purpleloosestrife.org](http://www.purpleloosestrife.org)

Plant Conservation Alliance's Alien Plant Working Group:

[www.nps.gov/plants/ALIEN/fact/lysa1.htm](http://www.nps.gov/plants/ALIEN/fact/lysa1.htm)

Environment of Canada: [www.ec.gc.ca/](http://www.ec.gc.ca/)

St. Lawrence Info: [www.qc.ec.gc.ca/csl/inf/inf034\\_e.html](http://www.qc.ec.gc.ca/csl/inf/inf034_e.html)

[www.cws-scf.ec.gc.ca/publications/inv/p4\\_e.cfm](http://www.cws-scf.ec.gc.ca/publications/inv/p4_e.cfm)

Royal Botanical Gardens: [www.rbg.ca/cbcn/en/projects/invasives](http://www.rbg.ca/cbcn/en/projects/invasives)

Ducks Unlimited: [www.ducks.ca/aboutduc/news/archives/2000/000526.html](http://www.ducks.ca/aboutduc/news/archives/2000/000526.html)

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**Scientific Name:** *Lonicera tatarica*

**Common Name:** Tartarian Honeysuckle



**Family:** CAPRIFOLACEAE (Honeysuckle)

**Type of Plant:** Flowering Deciduous Shrub

**Usage:** Ornamental

**Identifying Characteristics:**

**Stems & roots:** Woody, multi-stemmed, upright 2-5m; Branches thin, smooth, becoming hollow; Dicotyledon; bark turns pale grey & shreds with age

**Leaves:** Opposite, ovate, 3-6cm long, short-stalked & blue-green; Smooth, hairless, bluish-green leaves

**Flowers:** Usually in 2 pairs developing in axils of leaves at end of branches; 2 leaflets beneath each bud pair, 2 sepals above leaflets; Petals pink to crimson, tubular, 2-lipped, 7-20mm long, fragrant. Blooms May-June. Fruit - abundant berries 3mm diameter, joined at base, ripening orange to red that are available in winter for the birds & other wildlife

**Habitat:** Adaptable to wide range of habitat; open woods, ravines, woodland edges; prefer moist, sunny areas

**Invasive Potential:** Moderately invasive in Ontario. Replaces native understory species & ground flora thereby changing vegetation structure; impedes forest seedling & natural tree regeneration; spread by birds & mammals dispersing seed. Native Eastern Asia

**Control:**

**Mechanical:** less dense infiltrations - pull ensuring all roots removed

**Chemical:** systemic herbicides such as Roundup are most effective. Another method is to cut off near ground level & apply herbicide

**Biological:** There are no current biological control methods available

**Recommendations:** As with most invasive plants it is best to remove and replace. To contain remove seedlings annually as they appear. Widespread dispersion by birds limits effectiveness. Replacement with North American natives such as Spice bush (*Lindera benzoin*) - hardy to CDA zone 5 or *Viburnum* - hardy to CDA zone 3

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**RESOURCES:**

Plant Conservation Alliance's Alien Plant Working Group:

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Environment of Canada: [www.ec.gc.ca/](http://www.ec.gc.ca/)

Royal Botanical Gardens: [www.rbh.ca/cbcn/en/projects/invasives](http://www.rbh.ca/cbcn/en/projects/invasives)

Wisconsin Department of Natural Resources:

[www.dnr.state.wi.us/invasives/fact/honeysuckle\\_tart.htm](http://www.dnr.state.wi.us/invasives/fact/honeysuckle_tart.htm)

Talk About Wildlife; Alberta: [www.talkaboutwildlife.ca/profile/](http://www.talkaboutwildlife.ca/profile/)

[www.rivers.org/wsp/CLASS\\_8/TartarianHoneysuckle.htm](http://www.rivers.org/wsp/CLASS_8/TartarianHoneysuckle.htm)

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**Scientific Name:** *Rhamnus frangula* L.

**Common Name:** Glossy Buckthorn



**Family:** RHAMNACEAE (Buckthorn)

**Type of Plant:** RBC site consider this plant a deciduous tree but many sites consider it a flowering deciduous shrub

**Usage:** Ornamental

**Identifying Characteristics:**

**Stems & roots:** Most often grow in large shrub habit with a few to several stems shooting up from base; shrubs spreading, loosely branched crowns; Bark grey - brown with prominent, lighter-coloured lenticels (pores in the stem of a woody plant allowing exchange of gases between the plant and the exterior)\*. Unusual winter appearance with naked, hairy terminal buds & appealing curved twigs with closely-spaced, prominent leaf scars giving the twigs a bumpy outline against a white snowy backdrop. Tree habit reaches 6-9m high and 26cm diameter

**Leaves:** Thin, glossy, ovate or elliptic leaves, 3.8-7.6cm long; upper leaf surface shiny; lower surface hairy or smooth with margins that are not toothed - a distinguishing feature from the similar common buckthorn

**Flowers:** Yellow-green, 4 petals develop in clusters of 2-6 near base of petioles. Plant are dioecious (male & female sex organs on separate plants). Fruits small, black berries 0.6cm in diameter appear singly or in small groups in leaf axils. Fruit is poisonous except to European Starling - primary agent responsible for the spread

**Habitat:** Prefers range of wetland areas such as marshes and bogs but can grow in upland habitats such as forest, wood edges & old fields. In Ontario, primarily near larger populations

**Invasive Potential:** Invasive locally in Southern & Eastern Ontario. Rapid spread & ability to invade native wetland areas suggest this will become a serious threat in the future. Detrimental effects include: outcompeting native plants for nutrients, light & moisture; degrading wildlife habitat, serving as host to pests such as crown rust fungus

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**Control:**

**Mechanical:** Remove isolated plants early before seed production, prescribed burns if permitted by law (may need to do this for several years);

**Chemical Control:** Best during fall season to lessen risk of affecting non-target plants;

**Biological Control:** No current biological control methods

**Recommendations:** As with most invasive plants it is best to remove and replace. As with the Glossy Buckthorn, replacement with same North American natives such as Spice bush (*Lindera benzoin*) - hardy to CDA zone 5 or *Viburnum* - hardy to CDA zone 3 is recommended

**Resources:**

\* Life Sciences & Allied Applications / Botany definition

Invasive Plants of the US: [www.invasive.org/weedcd/species/](http://www.invasive.org/weedcd/species/)

Plant Conservation Alliance's Alien Plant Working Group:  
[www.nps.gov/plants/ALIEN/fact/lysa1.htm](http://www.nps.gov/plants/ALIEN/fact/lysa1.htm)

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