





Other Invasives in Indiana

Although many are still commonly available in nurseries, the following additional invasive plants are currently threatening natural areas in Indiana. Avoid planting these and learn to recognize and eliminate them before they spread.

Indiana Distribution: A=All, N=North, C=Central, S=South
Habitat Invaded: O=Openland, F=Forest, W=Wetland

FLOWERS		Indiana Distribution	Habitat Invaded
Canada thistle	<i>Cirsium arvense</i>		
Dame's rocket	<i>Hesperis matronalis</i>	A	F,O
Sericea lespedeza	<i>Lespedeza cuneata</i>	A	O
Sweet clover	<i>Melilotus alba, M. officinalis</i>	A	O
Star of Bethlehem	<i>Ornithogalum umbellatum</i>	S,C	F
Japanese knotweed	<i>Polygonum cuspidatum</i>	S	F
GRASSES			
Smooth brome	<i>Bromus inermis</i>	A	F,O
Tall fescue	<i>Festuca elatior</i>	A	O
Japanese stilt grass	<i>Microstegium vimineum</i>	S,C	F
Maiden grass	<i>Miscanthus sinensis</i>	S	O
VINES AND GROUNDCOVERS			
Purple winter creeper	<i>Euonymus fortunei</i>	A	F
Creeping Charlie	<i>Glechoma bederacea</i>	A	F,O
Japanese hops	<i>Humulus japonicus</i>	S	F
Creeping Jenny	<i>Lysimachia nummularia</i>	A	F,W
Kudzu	<i>Pueraria lobata</i>	S	F,O
Periwinkle	<i>Vinca minor</i>	A	F
SHRUBS			
Black alder	<i>Alnus glutinosa</i>	A	F
Winged burning bush	<i>Euonymus alatus</i>	A	F
Bicolor lespedeza	<i>Lespedeza bicolor</i>	A	F,O
Common privet	<i>Ligustrum vulgare</i>	A	F
Multiflora rose	<i>Rosa multiflora</i>	A	O
Highbush cranberry	<i>Viburnum opulus v. opulus</i>	N	F,W
TREES			
Norway maple	<i>Acer platanoides</i>	N,C	F
Tree-of-heaven	<i>Ailanthus altissima</i>	S	F
White mulberry	<i>Morus alba</i>	N	O
Black locust	<i>Robinia pseudoacacia</i>	N,C	O
Siberian elm	<i>Ulmus pumila</i>	A	F

What Can We Do?

-  Avoid using non-native invasive plants in your garden; ask your nursery for native, non-invasive alternatives. More information is available in the INPAWS brochure "Landscaping with Plants Native to Indiana" and in the book *Go Native* by Carolyn Harstad (Indiana University Press, 1999).
-  Scout your property for invasive species, and remove invasives before they become a problem. For more information on how to control them see The Nature Conservancy's web site listed below.
-  Alert people in your neighborhood and place of work about the problem with invasives and what species to watch for.
-  Volunteer to help at local parks and natural areas to remove invasives.

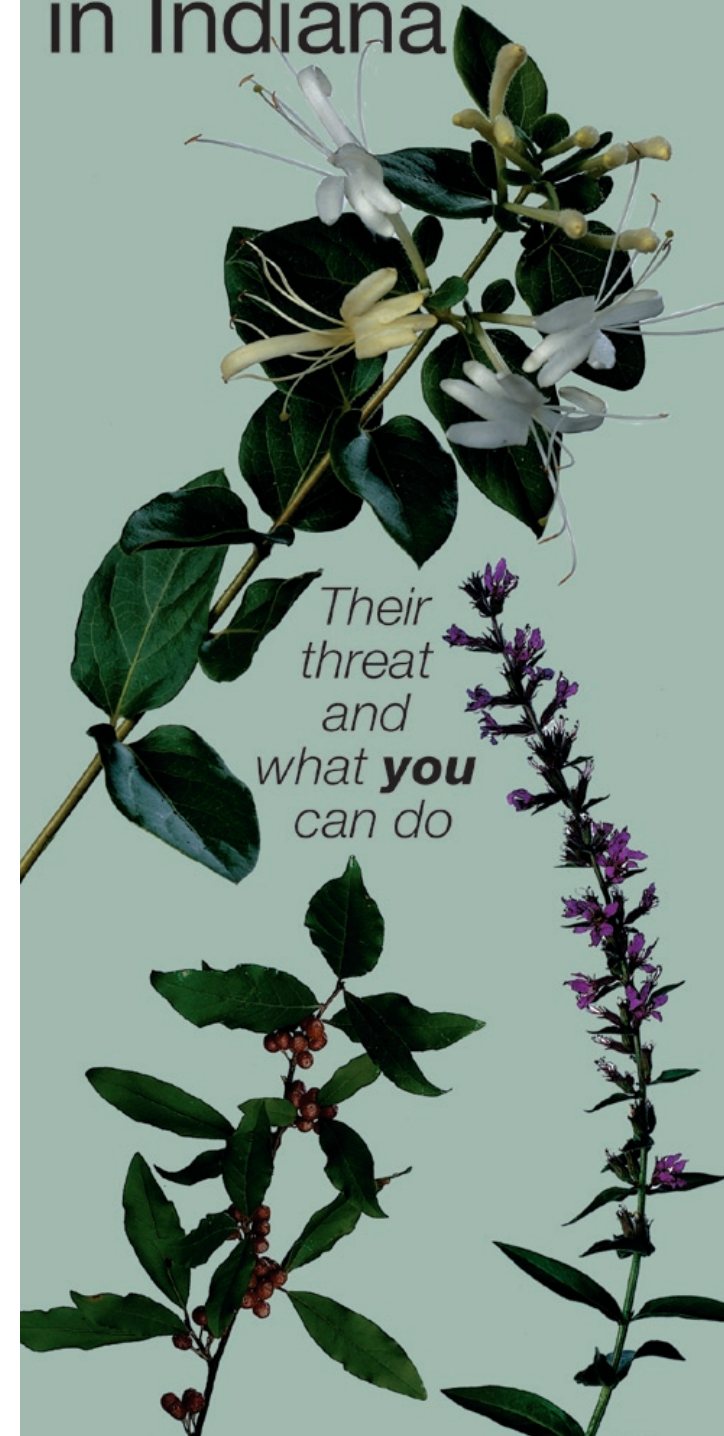
For more information on native & invasive plants, please contact:

- **Indiana Native Plant and Wildflower Society**
www.inpaws.org
- **The Nature Conservancy**
1505 N. Delaware St, Ste 200
Indianapolis, IN 46202
317-951-8818
tncweeds.ucdavis.edu/
- **IDNR Division of Nature Preserves**
402 W. Washington St. Rm W267
Indianapolis, IN 46204
317-232-4052
www.in.gov/dnr/naturepr/index.html
- **Plant Conservation Alliance**
www.nps.gov/plants/
- **Natural Resource Conservation Service**
plant-materials.nrcs.usda.gov



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Invasive Plants in Indiana



Their threat and what you can do





What are Invasive Plants?

“Invasive plant” is another name for a plant which grows quickly and aggressively, displacing other plants as it spreads.

Usually, invasive plants are not native to North America. Of the roughly 2,300 plant species growing outside of cultivation in Indiana, 25% are non-native. Most non-native plants cause little trouble. However, a few aggressive species are responsible for degrading and destroying thousands of acres of our natural plant communities in Indiana and are costing us hundreds of thousands of dollars each year in control measures.

Some of these invasive plants are still being sold by nurseries and planted by well-meaning Hoosiers, not realizing the problems they can cause. The good news is that there are many non-invasive alternatives that can be planted instead. Read on and find out more about the problems and the solutions.

Why Do We Care?

-  Invasive plants hurt wildlife by eliminating the plants our native animals need for food and cover.
-  Invasive plants destroy habitat for rare wildflowers and animals; they threaten two-thirds of all endangered species.
-  Invasive plants cost money. Agencies around Indiana spend hundreds of thousands of dollars each year to eradicate these species and protect our natural areas. Each year the cost grows.
-  Agricultural losses and control costs due to invasive plants are estimated at \$15 billion per year in the U.S.

The following are ten of the most damaging of the many invasive plants in Indiana.

Bush Honeysuckles

Lonicera maackii, *L. tatarica*, *L. morrowii*
Amur, Tartarian, Morrow honeysuckle

Description: These upright shrubs with arching branches are 6-15 feet tall. Each of these species has dark green egg-shaped leaves. They stand out in the understory of forests as the first shrubs to leaf out in the spring and the last to lose leaves in the fall. The paired, tubular flowers are white on Amur and Morrow honeysuckle and pink on Tartarian honeysuckle. Berries range from red to orange and are dispersed by birds.

Problem: Bush honeysuckles grow so densely they shade out everything on the forest floor, often leaving nothing but bare dirt. This means a great reduction in the food and cover available for birds and other animals. Some species release chemicals into the soil to inhibit other plant growth, effectively poisoning the soil. Bush honeysuckles are found throughout the state, but are particularly invasive in central and northern Indiana.

Alternatives: Dogwoods (*Cornus racemosa*, *C. amomum*, and *C. sericea*), chokeberry (*Aronia melanocarpa*), winterberry (*Ilex verticillata*), and northern arrowwood (*Viburnum dentatum*).

Purple Loosestrife

Lythrum salicaria



Mike Norris



Mike Norris

Description: This plant grows 3-7 feet tall and puts up several spikes of purple flowers in June-July. The leaves are opposite and the stems are square. Purple loosestrife spreads aggressively by seed and by rhizome. Even “sterile” cultivars can still produce viable seed. **Note - it is illegal to buy, sell, or plant purple loosestrife in Indiana.**

Problem: Purple loosestrife invades wetlands in northern Indiana, forming pure stands that choke out native vegetation. This eliminates food and cover for many wildlife species, which are dependent on a diverse mixture of native species to survive.

Alternatives: Dense blazing-star (*Liatris spicata*), wild bergamot (*Monarda fistulosa*), cardinal flower (*Lobelia cardinalis*), and sweet joe-pye-weed (*Eupatorium purpureum*).



Tom Ransburg



Tom Ransburg

Japanese honeysuckle

Lonicera japonica

Description: Japanese honeysuckle is a woody semi-evergreen vine with opposite, oval leaves. The white, fragrant flowers grow in pairs and turn yellow with age. The fruits are black berries, also in pairs.

Problem: This vine climbs over vegetation in southern Indiana, forming dense patches that can overtop young forests.

Alternatives: Virginia creeper (*Parthenocissus quinquefolia*), virgin's bower (*Clematis virginiana*), American bittersweet (*Celastrus scandens*).



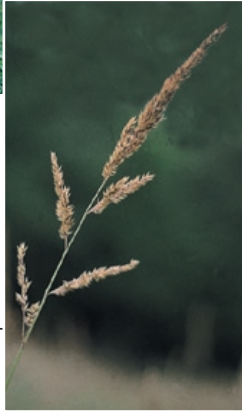
Tom Ransburg



Ellen Jacquart



Ellen Jacquart



Ellen Jacquart

Reed Canary Grass

Phalaris arundinacea

Description: This grass grows to 2-5 feet tall. The hairless stems have rough leaf blades 3-10 inches long. The flowers occur in dense clusters and are green to purple, changing to beige and becoming more open as they mature. The plant spreads ag-

gressively through a thick system of underground stems.

Problem: Widely planted for forage and erosion control, this grass has taken over large areas of both open and forested wetlands throughout Indiana. It forms monocultures by out-competing all the native wetland plant species. There may be native strains in the state; however, there is no reliable way to tell the native from the non-native strains.

Alternatives: Switch grass (*Panicum virgatum*), Canada bluejoint (*Calamagrostis canadensis*), prairie cord grass (*Spartina pectinata*), Indian grass (*Sorghastrum nutans*), and big bluestem (*Andropogon gerardii*).

Autumn Olive

Elaeagnus umbellata

Description: Autumn olive is a fast-growing shrub or small tree reaching up to 20 feet tall. Its leaves are small and oval, dark green on the upper surface and silvery below. This shrub has light yellow, aromatic flowers and produces large quantities of small, round red fruits that are readily eaten and spread by birds.

Problem: Often planted for wildlife food and cover in the past, autumn olive can quickly take over open areas, eliminating all other species. Such monocultures actually reduce the variety and amount of wildlife food available. It is now found throughout Indiana.

Alternatives: Black haw (*Viburnum prunifolium*), dogwoods (*Cornus racemosa*, *C. amomum*, and *C. sericea*), and serviceberry (*Amelanchier arborea*).



Ellen Jacquart



Tom Ransburg



Lee Casabere

Crown Vetch

Coronilla varia

Description: This perennial legume has creeping stems which form dense mounds of vegetation. Each of the compound leaves bears fifteen to twenty-five leaflets. Pea-like pink and white flowers are produced in early summer and develop into narrow, leathery seed pods.

Problem: Introduced to the United States for use in erosion control, crown vetch is very widely planted along roadsides in Indiana. Since it has a tap root rather than fibrous roots, it actually provides little erosion control. It spreads rapidly through seed and by underground stems, invading many of our open natural areas like prairies and savannas.

Alternatives: Roundheaded bushclover (*Lespedeza capitata*), purple vetch (*Vicia americana*), goat's-rue (*Tephrosia virginiana*). For erosion control, use a mix of native grasses with these species.

Common Reed or Phragmites

Phragmites australis

Description: Common reed is a grass that reaches up to 15 feet in height. The leaves are smooth, stiff and wide with coarse hollow stems. The big, plume-like flower head is grayish-purple when in fruit. Common reed spreads mostly vegetatively forming huge colonies by sprouting new shoots through underground stems.

Problem:

Common reed grows in open wetland habitats and ditches primarily in northern Indiana. It can create pure, impenetrable stands, excluding all other wetland plants. Some populations are not invasive and may be native; however, there is no reliable method to tell the two apart.

Alternatives: Switch grass (*Panicum virgatum*), Canada bluejoint (*Calamagrostis canadensis*), prairie cord grass (*Spartina pectinata*), Indian grass (*Sorghastrum nutans*), and big bluestem (*Andropogon gerardii*).



Tom Ransburg



John Randall

Oriental Bittersweet

Celastrus orbiculatus

Description: Oriental bittersweet is a rapidly spreading deciduous, twining vine with alternate round, glossy leaves. Small greenish flowers occur in clusters in the leaf axils. The leathery capsule surrounding the seed turns a bright orange in the fall.

Problem: This vine occurs throughout Indiana and can overrun natural vegetation, forming nearly pure stands in forests. It can strangle shrubs and small trees, and weaken mature trees by girdling the trunk and weighting the crown. There is some evidence that it can hybridize with American bittersweet, thus threatening the genetic integrity of the native species.

Alternatives: American bittersweet (*Celastrus scandens*), virgin's bower (*Clematis virginiana*), and Virginia creeper (*Parthenocissus quinquefolia*).

Garlic mustard

Alliaria petiolata

Description: Garlic mustard is a biennial herb. It begins as a rosette of kidney-shaped garlic-smelling leaves in the first year. The second-year plants grow a stem up to 4 feet tall with triangular sharp-toothed leaves and small white four-petaled flowers in clusters at the top of the stem. The plants die after setting seed. Garlic mustard can produce several thousand seeds from one plant, and the seeds can remain viable for seven years or more.

Problem: Garlic mustard can grow in dense stands covering many acres of forest understory. Now found throughout Indiana, it is a particular threat to spring wildflowers, overtopping and shading them out. Compared to the diversity of plants it eliminates, it provides little food for wildlife.

Alternatives: Celandine poppy (*Stylophorum diphyllum*), blue phlox (*Phlox divaricata*), and Jacob's ladder (*Polemonium reptans*).



Lee Casebere



Mike Norris

Buckthorns

Rhamnus cathartica, R. frangula

Description: Buckthorns are tall shrubs or small trees that grow up to 20 feet tall. Glossy buckthorn has shiny leaves with smooth edges. It has solitary red to purple berry-like fruits. Common buckthorn has black fruits and dull green smooth leaves. Glossy buckthorn tends to occur more often in wetlands and common buckthorn in uplands.

Problem: Both buckthorns occur in a wide variety of habitats in northern Indiana and spread quickly through natural areas by seed. They take over the understory and eliminate the diversity of native plants important to wildlife.

Alternatives: Lance-leaved buckthorn (*Rhamnus lanceolata*), Carolina buckthorn (*Rhamnus caroliniana*), serviceberry (*Amelanchier arborea*), and dogwoods (*Cornus racemosa, C. amomum, and C. sericea*).