Controlling Invasive Exotic Plant Species

It is important for you as a landowner to understand the importance of controlling exotic plant species on your property. You can help! Resource managers in federal and state agencies are working to control infestations on many public lands. However, they have no control on privately held property, even if it shares a boundary with public land. If an invasive species occurs on your property, there is a good chance it will spread uncontrollably, and infestations onto other private property or public lands are certain to occur.

The first step in control is to make a positive identification of these noxious invasive species. Use this brochure as a guide, as well as other listed resources. The second step is to determine the best control practices for your situation. With any of the following control methods, the impact to surrounding native vegetation should be limited as much as possible.

Depending on the species, controls include mechanical (hand-pulling or cutting/mowing), fire using a CONTROLLED professional burn, biological (introducing a natural predator or control), or chemical, which includes treatment with an approved herbicide. Often the most effective and effective control involves a combination of methods. Patience is important; control usually takes several years unless the invasion is light.

Please use information from the following websites to determine the best management practices for dealing with invasive species on your property, and when in doubt, contact your local IDNR natural heritage biologist:

(618) 462-1181

Resources and References:

The Nature Conservancy, Invasive Species Initiative: tntweeds.ucdavis.edu
National Invasive Species Council: www.invasivespecies.gov
Midwest Invasive Plant Network: www.mipn.org
The Center for Plant Conservation: www.centerforplantconservation.org/invasives
PCA Alien Plant Working Group: www.nps.gov/plants/alien/factmain.htm
USDA Forest Service, USDA APHIS, and other contributors: www.invasive.org
Protect Your Waters: www.protectyourwaters.net
Illinois Department of Natural Resources: dnr.state.il.us

Invasive Plants: What Are They?
During the past ten years, southwestern Illinois has seen a tremendous increase in the types and abundance of non-native/exotic plants invading our woodlands, natural areas, parks and neighborhoods. Invasive plants have been taken from their natural environment, either intentionally or unintentionally, and transported to regions that do not contain the same pests, diseases, and competition that would normally keep them in check. These species crowd out native plants, creating a domino effect that threatens the very existence of our woodlands, prairies, and wetlands.

The potential loss of these special habitats and the animals that depend on them will certainly have a negative impact on the recreational opportunities we value as a society. Whether you enjoy picking mushrooms, hunting, fishing, hiking, or bird watching, the negative impact caused by invasive exotic plant species should concern you. The damage caused to our natural surroundings will have an impact for many generations to come.

Reed Canary Grass
(Phalaris arundinacea)
This Eurasian grass, which can reach heights of 6 feet, infests wetlands and marshes. The species spreads by rhizomes and seeds. Dense clusters of flowers bloom from late spring through August. This species was widely planted to help control erosion of farmland. Special attention must be given for its control using licensed herbicide contractors because of the potential impact to public and private water sources. Mechanical removal of small infestations can also be accomplished.

Tree-of-Heaven
(Alnus glutinosa)
Tree-of-Heaven is a deciduous tree that has taken root in both poor and rich soil in fields and woodlands. It is especially common in urban and disturbed habitats. Its bark is gray and smooth. These trees can grow 6-10 feet in one season. It reproduces by seed (300,000 seeds per tree) and by root suckers. The leaves are compound with over a dozen pointed leaflets. Do not let the sap get on your skin; it is highly toxic. Control methods include mechanical (manual), chemical, and potentially biological.

Other Potential Invaders:
Mimosa Tree
(Albizia julibrissin)
Golden Raintree
(Koelreuteria paniculata)
Periwinkle
(Vinca major)
Autumn Olive
(Elaeagnus umbellata)
This Asiatic shrub was intentionally planted for wildlife cover and food, to control erosion and to create windbreaks. It can reach heights of 20 feet. It is identified by the silvery scales ripening to speckled red or yellow. Seeds are spread by birds and water. Methods of control include mechanical and chemical.

Burning Bush
(Euonymus alatus)
This shrub, also known as winged wahoo, is characterized by alternate, ovate simple leaves, and new growth is characterized by four coryl wings. The flowers are small and yellow-green, and the fruits are relatively small and nearly purple. Flowers are produced from June through July. The fruits are readily eaten by birds, which disperse the seeds. Burning Bush is capable of growing in full sunlight or shade, and some woodlands in Illinois have thousands of individuals per acre in the understory. Burning Bush grows in scattered locations throughout Illinois. Methods of control include mechanical, chemical, and repeated burning.

Japanese Honeysuckle
(Lonicera japonica)
A climbing vine that can cover shrubs and low growing plants. Japanese Honeysuckle produces dense shade that prohibits any growth beneath it. Its flowers are white to yellow tubular pairs at the leaf junctions, and it is spread by birds eating the seed, by roots and aerial runners. It tolerates shade but grows more rapid in sunny locations. This vine colonizes forested and open spaces, roadsides, and disturbed soils. Methods of control for this species include mechanical (manual), chemical, and repeated burning.

Cut-leaved Teasel
(Dipsacus laciniatus)
This invasive was brought to North America by early Europeans. The spiny seed heads were used in the textile industry to raise nap on cloth. It grows a basal rosette of leaves for one year before sending up a tall flowering stalk the following year before sending up a tall flowering stalk the following year. The seeds are dispersed by birds and water. Methods of control include mechanical and chemical.

Garlic Mustard
(Allaria petiolata)
Garlic Mustard is a shade tolerant European native that invades upland and bottomland forests destroying other species on the forest floor. It usually blooms in April with numerous white flowers at the top of the stem and also at some leaf junctions. The stems can reach a height of 24-28 inches. Up to 3,000 seeds per plant are produced. Successful control methods include mechanical, chemical, and repeated burning.

Bush Honeysuckle
(Lonicera maackii and L. morrowii)
These Asian deciduous shrubs can reach 6-20' high and nearly as wide. They are easily identified as the first shrubs to turn green in late winter and the last to die back in late fall. Flowers are white fading to yellow in early summer. Seeds are spread quickly by birds which eat the red fruits found at the leaf junctions in the fall. These species completely dominate the forest understory leaving an absence of native plants and animals. They are the most numerous invasives in southwestern Illinois. Control methods include mechanical, chemical, and chemical.

Chinese Lespedeza
(Lespedeza cuneata)
An Asiatic introduced to control erosion on steep slopes, along roads and pond levees, Chinese Lespedeza (also known as Sericea Lespedeza) forms dense stands and rapidly spreads to prairies, gravel bars and open spaces. The seeds are viable for 20 years or more in the soil. It has a native "look-a-like" which is valuable, but much less common. Methods for control include chemical and manual.

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Honeysuckle
(Japanese Honeysuckle)