

Reed Canary Grass (*Phalaris arundinacea*) This species' thin stems form dense clusters which spread via rhizomes and deplete the seed bank of other species. It provides little to no habitat for wildlife.

Common Reed (*Phragmites australis*) This plant alters the species and function of diverse marsh ecosystems and increases wildfire potential.



Common Buckthorn (*Rhamnus cathartica*) Buckthorn forms dense clusters which shade and crowd out low, native species.

It is not uncommon to find these species in naturalized areas; in fact, Reed Canary Grass is a common indicator of wetlands. Nevertheless, these species can quickly dominate a sector of a naturalized area and can out compete desirable native vegetation. Land management practices are necessary to remove these species.

Do you think that you are ready to begin?

Don't forget these key steps:

1. Determine if the natural area is a wetland or stormwater management facility by reviewing County wetland maps or subdivision plat or contacting DuPage County or the local municipality.
2. Contact DuPage County and/or the municipality to see if a Stormwater Permit is necessary in order to ensure compliance with local and federal regulations.
3. Implement your Restoration Management Plan.
4. Enjoy and share the natural landscape, maintaining it as necessary.

Summary

A naturalized area near your home benefits humans, animals, plants, and fish. Naturalized areas protect the environment, by improving water quality, soil quality and stability, and absorbing carbon from the atmosphere. Use proper care to not impact the naturalized environment through the construction of fences, sheds, or refuse piles; refrain from regular mowing and planting of non-native vegetation. With the correct management techniques, your naturalized area is easy to maintain and even easier to enjoy.

Remember, early detection and control of non-native species is best. They are easiest to manage when they are first observed, as control is significantly more difficult after weeds have established.



To Learn More

On Naturalized Area Management
<http://ohioline.osu.edu/w-fact/0010.html>
<http://www.cwma.org/nxwdid.htm>

On Wetlands
<http://www.epa.gov/owow/wetlands>
<http://www.fws.gov/nwi>

On Native Plantings
<http://dnr.wi.gov/invasives/plants.htm>
<http://www.invasive.org/weeds.cfm>
<http://plants.usda.gov/java/factsheet>
<http://www.chicagowilderness.org/wildchi/landscape/index.cfm>

Local Resources on Plant Identification
 Morton Arboretum- www.mortonarb.org
 University of Illinois Extension Office-
<http://web.extension.uiuc.edu/state/natres.html>



Division of Environmental Concerns

Department of Economic Development and Planning
 421 N. County Farm Road
 Wheaton, IL 60187
 Phone: 630-407-6700
 Fax: 630-407-6702
 Website: <http://www.dupageco.org/edp>

Illustrations Credit: U.S. Fish and Wildlife Service
 U. S. FWS/line art by Bob Savannah, Tom Kelly, Paul Kerris

Invasive Plant Illustrations, U.S. Department of Agriculture
<http://plants.usda.gov/gallery.html>

Maintenance and Management of Naturalized Areas

A Homeowner's Guide



DuPage County Department of Economic Development and Planning



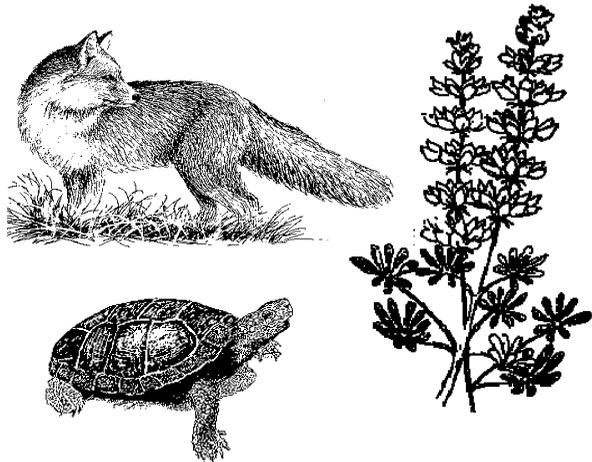
Division of Environmental Concerns

What types of naturalized areas occur in DuPage County?

Wetland, wetland buffer, stormwater management facilities, grasslands, and woodlands occur throughout DuPage County.

Why are natural areas important?

- Natural areas provide food and habitat for local birds, fish, insects, and other wildlife.
- Natural areas require less maintenance than grass or gardens and cost less to maintain than traditional turf grass. Natural vegetation is drought resistant and does not require watering or fertilizers.
- Native vegetation has deep root systems that stabilize soil, reduce erosion, increase infiltration, and filter pollutants from waterways.
- Native vegetation is aesthetically appealing year-round.
- Natural vegetation deters large goose populations. Geese fear that predators are hiding in the tall vegetation.
- Native vegetation attracts mosquito predators!
- Plants help to absorb carbon dioxide through cellular respiration, and trap carbon monoxide in anaerobic decomposition, thus reducing global warming.



Why manage a natural area?

Just as weeds overrun yards and gardens, they may find their way into naturalized areas as well. Animals, humans, wind, and water are common ways in which non-native and invasive seeds get dispersed into natural areas.

Invasive species can take over a natural area and out compete native desirable species. Most invasive species multiply rapidly. Without management the natural area may become weedy and unsightly. Local animals that rely on natural areas for food and habitat may have to find other locations for survival.



How do I manage a naturalized area?

There are many ways to complete good land management practices within naturalized areas. The first step is to design a management plan based on site conditions and the target species.

Certain tasks such as hand removal of Buckthorn, Honeysuckle and Garlic Mustard can easily be completed by homeowners. Proper identification of the target species is the most important factor when controlling non-native species by hand removal. Field guides and the internet are good sources to assist in plant identification. Once the target species can be positively identified subdivision work days can be planned through the Homeowners Association, local boy/girl scout troops, or church groups. Residents can get to know one another while beautifying the neighborhood.

Several native landscape companies service DuPage County. They can help you develop a management plan or provide management services. However, it is recommended that the company have trained biologists that are experienced in evaluation of native plant communities. Please contact DuPage County for a list of these companies.

Remember, it is best to control invasive species when they are first observed not when they become out of control. Early detection is the key to keep unwanted species from colonizing.



Weed management practices

High Mowing is often used as a management technique during the establishment period of native plant communities or as a substitute when prescribed burning is not possible. Vegetation is mowed to 6-8 inches in height during late spring or late fall. During late spring, invasive species tend to grow taller and mature earlier than native species. Spring high mowing prevents invasive species from producing flowers and seeds but still allows the native species to grow and thrive. Fall high mowing is completed to remove dead plant material and to open up ground space for native plant growth the following spring.

Herbicide application is used to target specific non-native or invasive plants and is usually applied to unwanted species by a licensed applicator. When using herbicide near a water source it must be highly soluble and labeled as safe for aquatic organisms. The best time to apply herbicide usually depends on what the target species is. Spring and summer applications are usually completed before the species flowers and produces seed. Fall treatments are usually applied before the species enters winter dormancy. In preparation for the winter, plants absorb all nutrients into the root system. When herbicide is applied during this time period, it too is absorbed into the roots preventing the plant from re-growing the following year.

Prescribed burning is conducted to reduce encroachment of invasive species, promote seeding and flowering of native plants, and to retard unwanted shrub and tree growth in prairie areas. Native species have deep roots which allow the plant to survive below ground and continue to grow after the burn. In fact, some types of native plants rely on fire to provoke seed germination. Most invasive species do not have deep roots and cannot survive following the burn. Prescribed burns should only be conducted by professionals trained in wildfire management. Required permits must be secured and a burn plan that includes wind speed and direction and humidity allowances should be designed prior to execution of the burn. Prescribed burning is completed in late fall or early spring. Spring

burning tends to favor growth of grasses and fall burning favor growth of flowering species. Seasonal weather conditions is a major factor to consider when deciding to burn a natural area.

Manual Control/Hand pulling removing the target species by hand can be a successful method of invasive species control. Species that respond well to manual control include Sweet Clover and Garlic Mustard. Manual control should be done before or during the flowering of the plant but before seeds appear. Plant material should be removed from the site.

Common weeds

Some non-native and invasive species to watch out for and control in DuPage County are:

Garlic Mustard (*Alliaria petiolata*) will quickly invade species-rich shady sites. It secretes phytotoxic chemicals that interfere with native growth.



Canada Thistle (*Cirsium arvense*) forms dense stems which shade out native vegetation. It's leaves have prickles that can hurt exposed skin. It is hard to remove the plant once established.



Purple Loosestrife (*Lythrum salicaria*) dominates seedbanks therefore colonizing and stealing breeding grounds from turtles and birds. It's leaf decomposition jeopardizes wetland function as it occurs in the fall, whereas native plants' leaves decompose in the spring.



Amur Honeysuckle (*Lonicera maackii*) is an ornamental plant that deprives soil of moisture and nutrients. Birds which feed on its fruit may not be able to sustain migration as these fruits are carbohydrate-rich, not fat-rich like those of native species.

Yellow/White Sweet Clover (*Melilotus officinalis/alba*) is a ground cover crop which shades out sun-loving natives and easily takes over open areas.