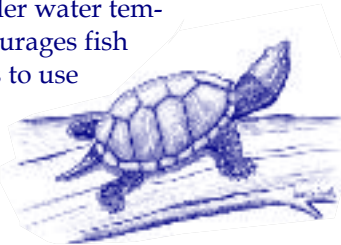


for vegetation and/or wildlife dependent on the proximity to water. Riparian areas in DuPage County are often dominated by tree and shrub species, such as Alder, Willows, Dogwoods, Ash and Cottonwood.

Why are these areas important?

Riparian areas supply several beneficial functions to the environment. Vegetated riparian areas are important since they help to slow stream water down and allow it to infiltrate into the ground. This helps to remove sediment and pollutants that would otherwise make their way into the river system. This also offers flood control benefits by absorbing oncoming flood water into the groundwater system. Also, many native plants have deep roots that help to prevent streambank erosion by holding the soils in place.

These floodplain areas also provide essential access to fresh water, food and safe travel for wildlife. These corridors are especially important in an urban environment. Forested riparian areas provide cover that helps maintain cooler water temperatures and encourages fish and aquatic species to use these areas for spawning.



Stinkpot Turtle
Karen J. Couch/USFWS

I am worried about mosquito breeding sites and West Nile virus. What can be done to prevent the spread of this disease?

The West Nile virus is transmitted by mosquitoes and was first found in Illinois in 2001. The primary mosquito carrying the West Nile virus, *Culex pipiens*, prefers to

breed in stagnant water, often in containers that hold rain water, such as birdbaths, buckets and gutters. Since few mosquito predators reside in a backyard environment, many mosquitoes that live in these areas tend to stay. However, the mosquito most commonly found in wetlands, *Aedes vexans*, is not a primary disease carrier. Wetlands have many mosquito predators, such as frogs, dragonflies, and fish that help to keep the mosquito population in balance with other species.

To prevent mosquito breeding sites in your yard, empty or remove containers that have accumulated water after a rainfall. If you live near a wetland area, provide a habitat for wildlife, such as birds, bats, and fish, to help control the mosquito population. Always wear insect repellent when working outdoors in the early morning and evening hours and wear light colored clothing while outside.

Mayfly
Karen J. Couch/USFWS

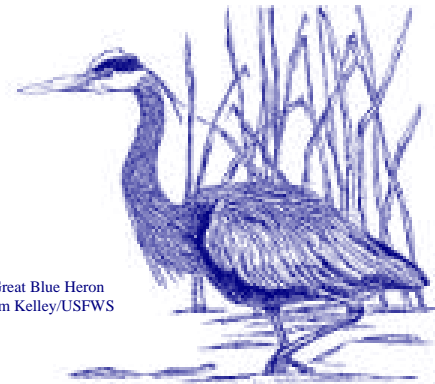


For more information regarding West Nile virus, please consult the following websites:
CDC West Nile Virus Homepage
www.cdc.gov/ncidod/dvbid/westnile/index.htm
Fox River Ecosystem West Nile Virus Homepage
http://www.foxriverecosystem.org/west_nile.htm
Illinois Department of Public Health
www.idph.state.il.us/envhealth/wnv.htm

For further information on wetlands, please contact the following websites:
EPA wetland site
<http://www.epa.gov/owow/wetlands/>
Society of Wetland Scientists
<http://www.sws.org/>

How can I help to maintain or improve a natural area near my home?

Everyone can help to maintain a wetland or riparian system by using proper care. If your property has a wetland or waterway on site, make sure that you do not negatively impact the area in any way. This would include building unpermitted structures, including fences or sheds, creating brush/landscape waste or refuse piles, mowing in the natural area, or planting non-native vegetation in or around the wetland or buffer area.

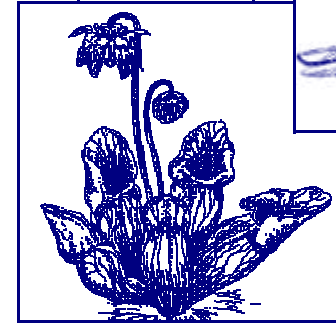


Great Blue Heron
Tom Kelley/USFWS

For more information, please contact:
DuPage County
Department of Economic Development and Planning
Stormwater Management Division
421 N. County Farm Rd.
Wheaton, IL 60187
Phone: 630-407-6700
Fax: 630-407-6702
Website: <http://www.dupageco.org/edp/>

Front illustrations: Swainson's Hawk – Paul Kerris/USFWS
Black-capped Chickadee – Tom Kelley/USFWS
Northern Pitcher Plant – Robert Savannah/USFWS

DuPage County Wetlands and Streams



DuPage County
Department of Economic Development and Planning
Stormwater Management Division

Frequently Asked Questions About Wetlands

What is a wetland?

Land areas that are inundated or saturated with water for prolonged durations of time and support vegetation typically found in saturated soil conditions are considered wetlands. Wetlands generally include swamps, bogs, marshes, ponds, streams, wet meadows and similar areas.

Three factors are used to determine the presence of wetlands:

- 1. Hydric Soils** - Soils which present certain characteristics when saturated.
- 2. Hydrophytic vegetation** – Plants which grow in water or saturated soils.
- 3. Hydrology** - Saturation of soils with water.

Why are wetlands important?

Wetlands provide numerous benefits to the surrounding ecosystem. Wetlands filter nutrients into the soil and help to filter pollutants out of the water. Wetlands also control flooding by absorbing water runoff from storms. One acre of wetlands has the potential to store 1 to 1 ½ million gallons of floodwater!

Wetlands also contribute to our dwindling groundwater supply by filtering stormwater runoff through the system to remove pollutants and returning it to the

underground aquifers.

Many species of animals and plants depend on wetlands for habitat and nourishment. Birds use wetlands for nesting and migratory purposes. Nearly half of all endangered species depend on wetlands for survival!

Wetlands also provide habitat to diverse plant life. Wetlands make up approximately 5% of land in the continental U.S., but almost 1/3 of our plant species can be found in wetlands.



Blue-winged Teal
Tom Kelley/USFWS

What kinds of wetlands are common to DuPage County?

There are three common types of wetlands found in DuPage County.

- Emergent wetlands, or marshes, are characterized by open water areas that remain wet most of the year. These areas support water tolerant plant species, such as cattails and blue flag iris, and wildlife, such as mayflies, great blue heron, and blue-winged teal.
- Wet meadow areas are seasonally flooded, although soils are typically saturated throughout the year, even without the presence of standing water. Vegetation normally consists of prairie grasses, sedges, and wildflowers, which are more tolerant to wet conditions. Wet meadows also provide habitat to frogs and birds.
- Forested wetlands are typically found near streams and become saturated with water when the stream spills over its banks during flood events. These areas support diverse plant species including trees, shrubs, and un-

derstory vegetation, such as jack-in-the-pulpit. Trees often show buttressing at the roots in response to wet conditions. Wood ducks and salamanders are typically found in forested wetlands.

How do I know if I have a wetland on my property?

Wetland indicator maps are available at DuPage County for public use, although not all wetlands have been mapped. DuPage County staff may be available to perform wetland determinations for private property owners for a small fee.

A wetlands specialist is needed to delineate the location and exact boundaries of any wetland on the property. For proposed development projects, the DuPage County-wide Stormwater and Floodplain Ordinance states that an on-site wetland delineation must be completed with a stormwater permit application and submitted and approved before a building permit will be granted for new development.



Alder
Karen J. Couch/USFWS

What are the regulations regarding wetlands?

Wetlands are protected by both federal and local regulations, governed by the U.S. Army Corps of Engineers and DuPage County. Any activity that will impact a wetland or a wetland buffer area must be avoided. If avoidance is impracticable (see the DuPage Countywide Stormwater and Floodplain Ordinance), the loss of the wetland and buffer must be mitigated, or replaced.

What is a buffer and why is it important?

Buffers are areas surrounding wetlands that help to protect and support the functions of the wetland. Buffers provide habitat for wildlife that depend on the wetlands for survival. The buffer vegetation also helps to slow down stormwater drainage, helping to cleanse the water runoff by filtering out pollutants, such as fertilizer, pesticides, and road salt. The buffers around wetlands also allow the wetland to expand during flood events without entering into developed areas.

The buffer area measurements used for protection purposes are 50 feet wide surrounding regulatory wetlands and 100 feet around wetlands of critical importance.

What activities are allowed in a wetland buffer?

All developmental uses around wetland areas will eventually have a negative impact on the quality and value of the ecosystem. Therefore, buffer areas should remain intact and undisturbed. However, some low impact development uses are allowed under local and federal regulations as long as the buffer's functions are replaced, usually by planting native vegetation. These impacts must be minimized and approved by DuPage County. If you have any questions regarding these regulations, please contact DuPage County Department of Economic Development and Planning.

What is a riparian area?

A riparian environment, as regulated by DuPage County, is the vegetated area within regulatory floodplains that provides habitat