

Hainesville's Ecosystems

The Chicago Wildness area includes Chicago and the six collar counties. This area was formed thousands of years ago by the advancing and receding of glaciers. In fact, our Cranberry Lake is a glacier-created spring-fed lake.

Geology, topography, and climate combine with living things to create ecosystems. The term community or natural community refers to the living things in the ecosystem. Since plants respond to moisture and light, communities are described by the vegetation.

Healthy communities have a variety of life, or biodiversity. Biodiversity helps natural communities survive catastrophes, such as floods, fires, and storms. In fact, for some species, these are opportunities rather than catastrophes. For example, we have prescribed burns to replicate what would have naturally occurred.

It is known that the loss of a single species in a community can lead to the loss of more species. For example, a flower disappears because the insect that pollinated it is gone. Insects vanish because their food plants have died out.

Hainesville is fortunate to have three basic communities— wetlands, woodlands, and prairie meadows.

WETLANDS

The U.S. Army Corps of Engineers, which oversees this section of the Clean Water Act, defines wetlands as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. ‘Normal circumstances’ means areas were wetlands even if they are temporarily dry”

Cranberry Lake wetlands and surrounding woodlands are regulated by the U.S. Army Corps of Engineers. The water from Cranberry Lake flows into Highland Lake, onto Long Lake, Fox Lake, Fox River onto the Mississippi River and finally into the Gulf of Mexico. The village areas surrounding the various ponds are also defined as wetlands.

WOODLANDS

Woodlands are defined as dense forests or open forests depending on the frequency and intensity of fire. Dense forests rarely had fewer and less intense fires. Our woodlands are open forest where intense fires came through frequently in pre-settlement time. Now we use prescribed burns to continue restoration of our open forests.

White oak, bur oaks, red oaks and shagbark hickories comprise our open forest. We have very few small trees, called understory trees. Buckthorn, an invasive non-native plant from Europe, had taken over the area where smaller trees would be found. About ten years ago, the village began a restoration project of our Cranberry Lake woodlands. The buckthorn was removed, and annual maintenance prevents it from taking over again.

Woodland Plants, Birds and Animals

Pictures of some of the plants, birds and animals found in Hainesville and surrounding areas are shown on the following pages.

PRAIRIE MEADOWS

Many early settlers thought prairies were of little use to farmers. They thought that if the soil was too poor to grow trees, then the soil would be too poor to grow crops.

Others realized the advantage of not needing to clear the land of trees. The prairie would be instant pasture for cattle and horses.

Prairies are grasslands. They develop on flat lands in areas where long periods without rainfall are common. However, the climate is not as dry as it is in deserts. Periods of drought may be regular seasonal occurrences, like the dry season in the tropics. They may happen only in some years, like the summer droughts in the Midwest.

Plants have adapted long root systems to survive the droughts. When old roots die, they add humus to the soil. See the illustration of the root system of various plants.

INFORMATION SOURCES

If you are interested in learning about a specific plant or animal you see, download the app called Seek. Take a closeup picture and it will be identified for you.

The website: inaturalist.org, has pictures of plants, birds and animal by location. You can find many examples found in Hainesville and surrounding areas.

The book, [An Atlas of Biodiversity](#), published by Chicago Wilderness has additional information, including pre-historic land development.

Wetland Plants and Animals

WETLAND FLOWERS



Cardinal Flowers



Great Blue Lobelia



Bulrushes



Brown Fox Hedge



Blue Flag Iris



Marsh Marigold

Wetland Animals



American Bullfrog



Green Frog



American Toad



Common Snapping Turtle



Garter Snake



Painted Turtle



Muskrat

Wetlands Birds



Bald Eagle



Common Gallinule



Red-winged Blackbird



Double-crested Cormorant