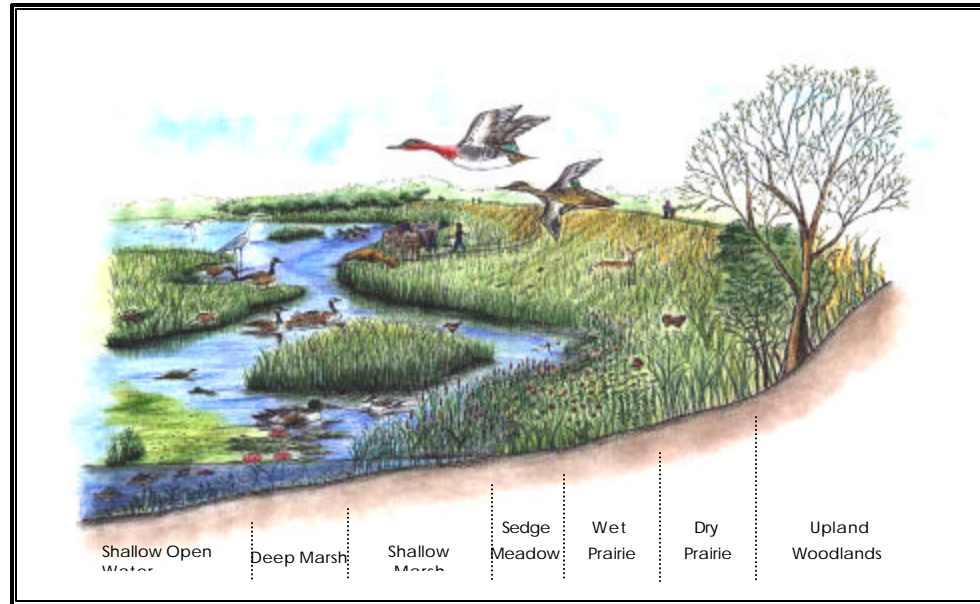


Wetland Ecosystems Interpretive Trail



Wetland Ecosystems

Wetlands exist wherever the water table is as high or higher than ground level, leading to "wet" "land." There are many types of wetland that can be seen in the Hennepin and Hopper Lakes Restoration Area. All have wet soils or are submerged under water at least part of the year. As you walk this trail notice the variation in elevation, amount of water, and the types of plants that can grow in each location.



Wetland Ecosystems Interpretive Trail

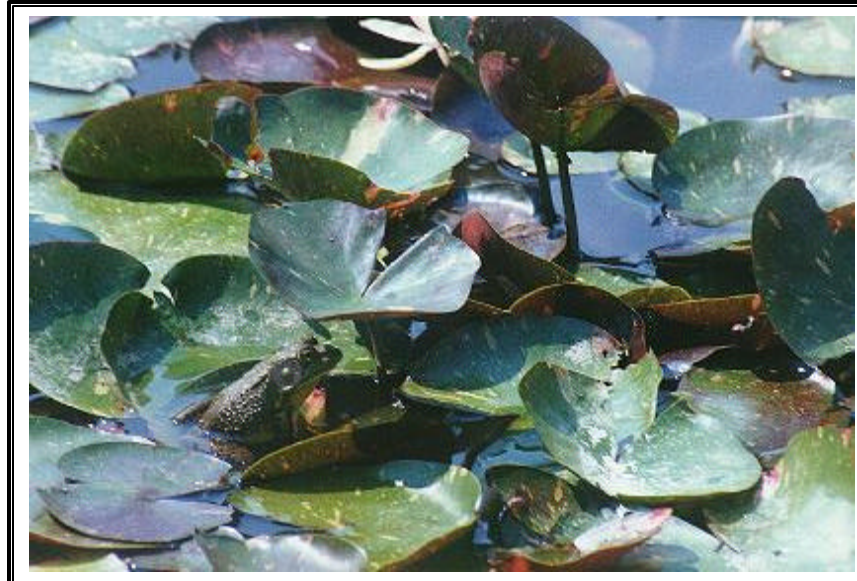


Shallow Open Water Communities

Looking out over Hennepin and Hopper Lakes, it may be difficult to believe that this area, now used by ducks, geese, and other waterfowl was once drained and used as farmland. Now restored to a more natural condition, the water is allowed to flow into the floodplain and to fill these lakes.



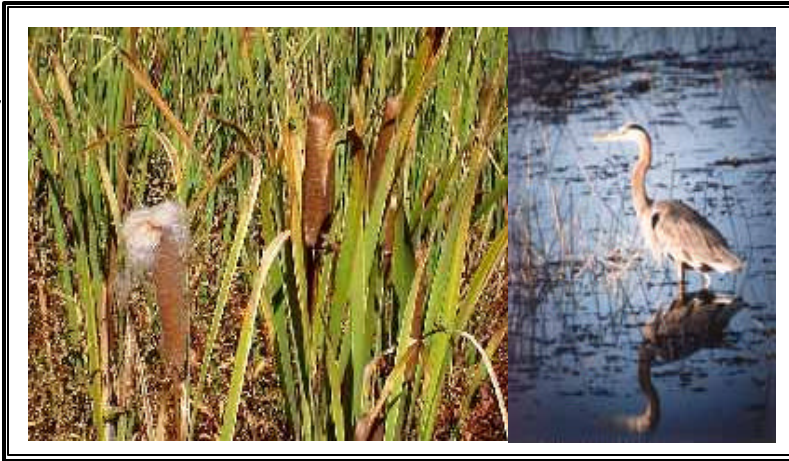
Wetland Ecosystems Interpretive Trail



Deep Marsh Communities

In the deep marsh there is water for most of the year. Plants like water lilies commonly grow in this area. In addition, all the water makes a great habitat for fish, who use marshes to breed and grow big and strong. In this part of the restoration project, carp mesh has been used to help reduce the numbers of carp, which are a non-native fish that often out-competes native fish for food and space. It is hoped that this carp mesh will help give populations of native fish a boost.





Shallow Marsh Communities

Depending on what time of year it is and how much rain has fallen recently, you may notice that you are now standing over water! The shallow marsh is one of the most productive types of ecosystem in the world and is important for filtering pollutants out of water. This area is also vital habitat for many wetland creatures such as frogs, salamanders, and turtles.



Wetland Ecosystems Interpretive Trail



Sedge Meadow Communities

Right now you are in a type of transition zone known as an *ecotone*.

An ecotone is a place where two or more types of ecosystems come together. Notice as you move toward the center of the floodplain how the land gradually grows wetter and wetter.

Wet

ail





Wet Prairie Communities

Similar to the sedge meadow, the wet prairie area is dominated by native grasses and forbs. Common species you can find here are cordgrass, big bluestem, gayfeather, New England aster, culver's root, prairie dock, and sawtooth sunflower. Do you find sandhill crane, ring-necked pheasant, common snipe, sedge wren, small mammals or white-tailed deer hidden behind the grasses?

Upland Communities

Here in the upland you may be more inclined to notice the prairie grasses than the things you normally associate with a wetland, but we are in the floodplain of the Illinois River just the same. Putnam County is located within the heart of the tall grass prairie bioregion. Before conversion to agriculture, Illinois was covered in tall grasses where animals like deer and bison lived.

If you glance around right now, you will notice that you have a great view of the Hennepin floodplain. This area serves as a barrier zone when the Illinois River is in flood stage.

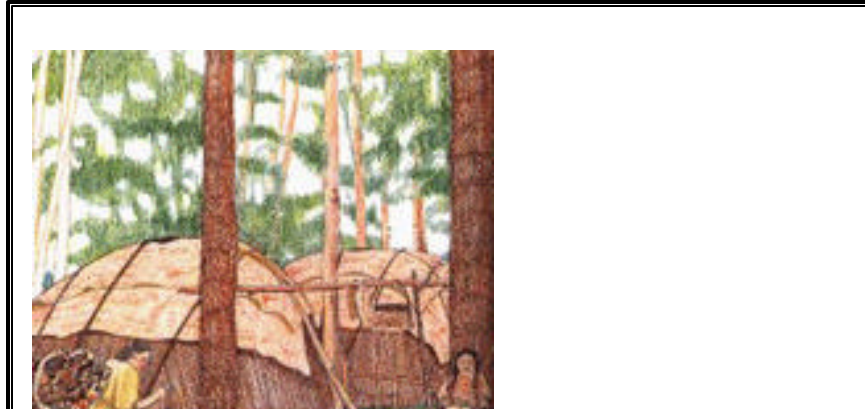
Wetland Ecosystems Interpretive Trail





167

Hennepin Levee District History Interpretive Trail



Wigwams like this one were used by the Woodland Indians who once lived in this area.

Presettlement in Hennepin

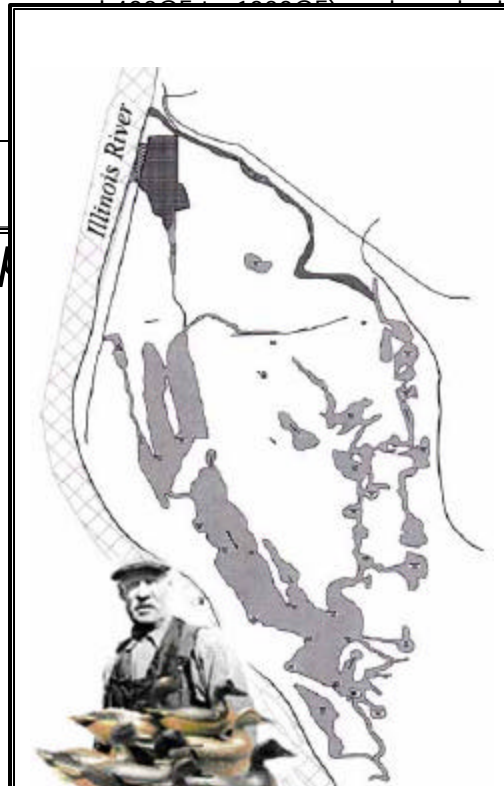
Before the arrival of European settlers, this area was inhabited by various groups of Native Americans dating back at least 10,000 years! This area was very important because of its rich food resources and several Middle and Late Woodland (200 BC to 400CE) archaeological deposits exist in the area.

The Potawatomi peoples lived in the area. The Native populations have been displaced by Europeans, and cultural change has taken place over time.



168

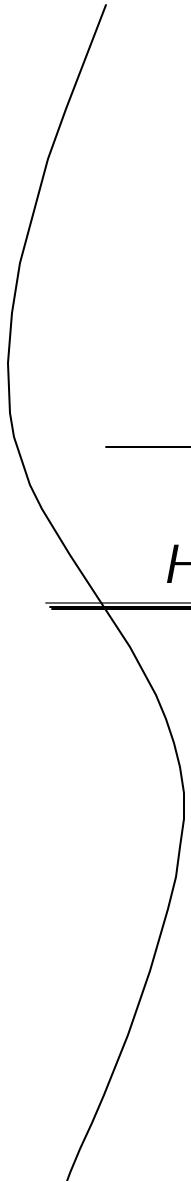
Hennepin



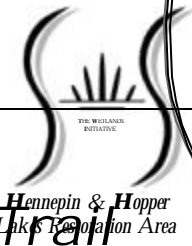
History Interpretive Trail

1800s

In the early 1800s many people of European descent moved from the east to settle in what was then a frontier. The Village of Hennepin was established in 1817 and Putnam County was founded in 1825. In the 1800s, floodplain wetlands with backwater lakes provided habitats for waterfowl thus became important for duck hunting and many duck clubs



Hennepin Levee District History Interpretive Trail



169





1900s

The Hennepin Levee and Drainage District was legally formed in 1920 for agricultural purposes. The land was primarily used for soybean and corn row crops.



Henne

tory Interpretive Trail

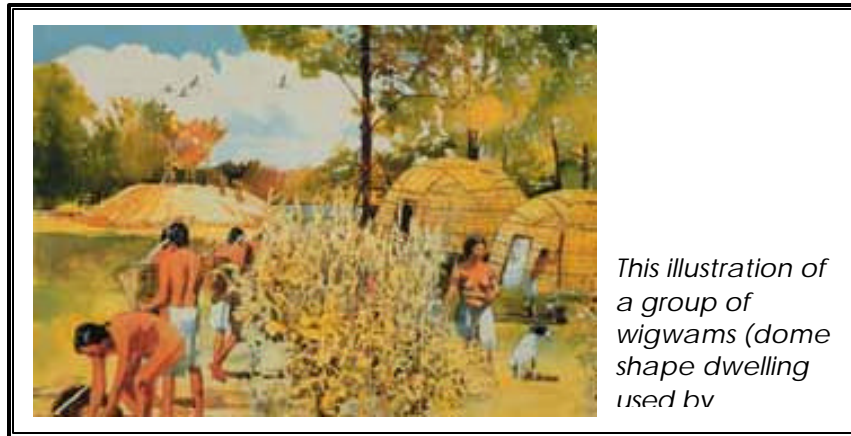


2000s

At the start of the new millennium, The Wetlands Initiative acquired the properties in the Hennepin Levee District and is undertaking a restoration plan in order to improve water quality, enhance wildlife habitat, and provide educational

*Hennepin & Hopper
Lakes Restoration Area*

Archaeology & Ethnobiology Interpretive Trail



The Middle and Late Woodland Periods

From 200 BCE until 1000 CE groups of Native American people known as Woodland peoples lived in this area. They likely came to the area seasonally for hunting, fishing, and gathering of wild food resources. Wetland and floodplain areas are a very rich source of food. Archaeological deposits are known to exist within and surrounding the restoration area.

What is Ethnobiology?

Ethnobiology is the study of the relationships between human populations and the plants and animals that sustained them. It includes ways in which people used plants and animals as well as their beliefs about them.

Archaeology & Ethnobiology Interpretive Trail

Native Uses of Plants

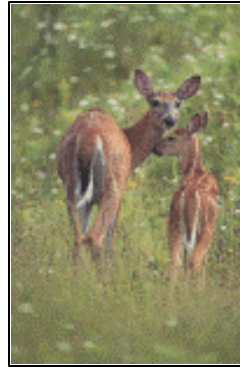
Hundreds of wetland plants were used by the Woodland peoples for purposes ranging from medicine, food, shelter, fibers for insulation, and colorful dyes.

Native Uses of Animals

Many types of animals live in the Hennepin floodplain. Birds, fish, and mammals served many purposes for Woodland Peoples. Hides could be used for shelter and clothing, sinew could be used for sewing, and bone was used for many domestic utensils. Animals that were likely hunted in this area included white-tailed deer, bison, black bear, geese, ducks, beaver, and muskrat and many more.

White-tailed deer





Archaeology & Ethnobiology Interpretive Trail

	<p><i>Arrowhead (Sagittaria latifolia)</i> commonly grows up to three feet tall in shallow water. The roots look like, and are used as small potatoes. This summer food was eaten raw, boiled, or roasted and could be stored for later use.</p>

Cattail (Typha latifolia)
is one of the most broadly useful of all wetland plants. Not only is it a very common species, but its uses are manifold. The fuzz on the ripe fruit makes good tinder for fires and can serve as an excellent insulation material. The pollen can be ground and used as flour. The roots of the cattail can be roasted and peeled and dry well for winter storage. This part of the plant is often made into a mush or meal. Inner stalks can also be eaten when boiled. The root of the cattail plant can be used as a poultice

Archaeology & Ethnobiology Interpretive Trail



Groundnut (Apios tuberosa)

is common in wetlands. It has uses and properties similar to the potato.

This common food source would have grown well on the floodplain site and in other areas with moist soil. The tubers are eaten raw, cooked, or dried and floured. Seeds may also

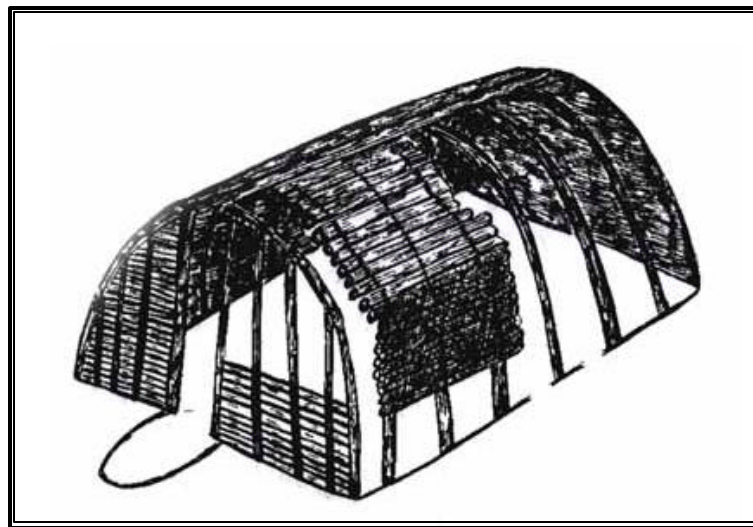


Jerusalem artichoke

(*Helianthus tuberosus*)

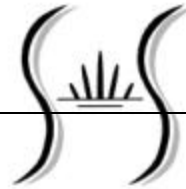
grows commonly in wet areas. The roots are used raw or cooked and were once a very important food source. This plant may have been encouraged by habitat manipulation in some places, but was never actually cultivated. The Jerusalem

Archaeology & Ethnobiology Interpretive Trail



A Late Woodland Dwelling

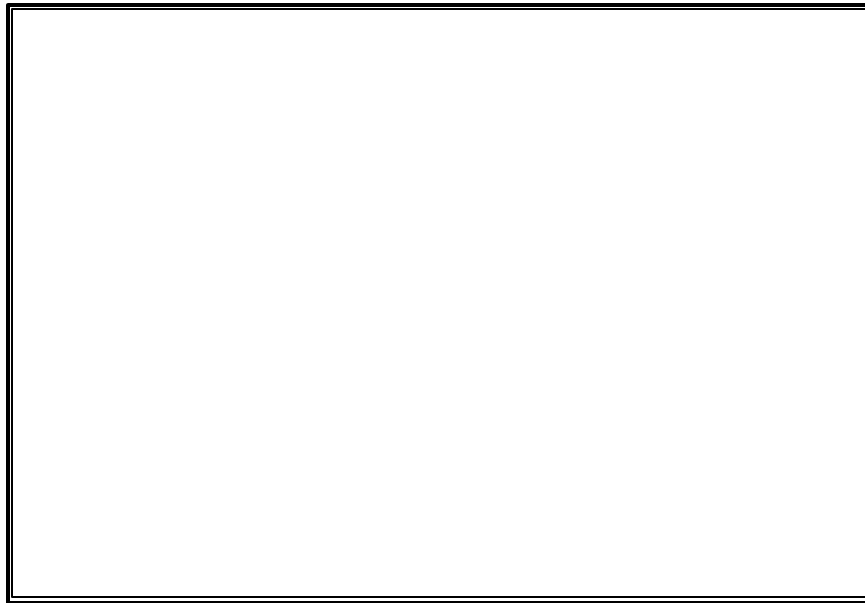
People of the Woodland Period lived in several types of dwellings. The one reconstructed here is typical of a Late Woodland home in central Illinois. What would it have been like to live here?



THE WISLAND
INITIATIVE

Yellow Monkey Flower Preservation Area

**Hennepin & Hopper
Lakes Restoration Area**



The Senachwine Seep

The Senachwine Seep, where groundwater fans out widely, feeds a 36-acre marsh and surrounding bottomland forest. It provides an unique habitat for a state-endangered species, the Yellow Monkey Flower (*Mimulus glabratus*), and two rare plants, the Bog Twayblade Orchid (*Liparis loeselii*) and the Crested Shield Fern (*Dryopteris cristata*), on the restoration area.

THE WISLAND
INITIATIVE



Yellow Monkey Flower Preservation Area

The Yellow Monkey Flower

The Yellow Monkey Flower (*Mimulus glabratus*) is an endangered plant in the state of Illinois. It currently exists at only a few known sites in the state. The Yellow Monkey Flower prefers cool, wet soil and has bright yellow flowers. Although endangered in Illinois, this plant is more common in the western parts of North America and in South America.



Yellow Monkey Flower Preservation Area



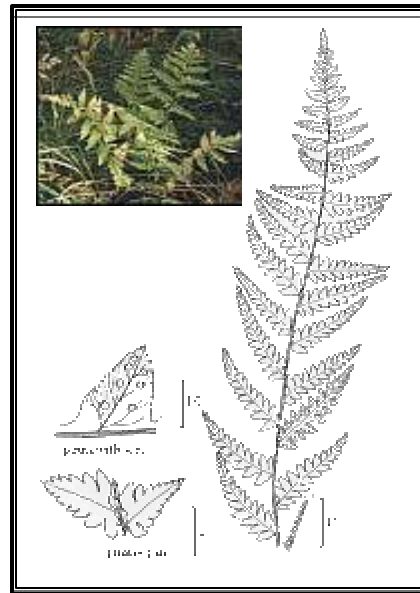
The Bog Twayblade Orchid

The Bog Twayblade Orchid (*Liparis loeselii*) grows in low and wet woodlands, moist meadows and bogs. This plant can prosper only in the absence of invasive competing vegetation. This plant is rare in the state and is found only in seven counties in the northern half of Illinois. The Bog Twayblade Orchid flowers in June and July and can reach a height of 25 centimeters. The flower is yellow-green in color and the leaves are lanceolate and up to 15 centimeters long.



Hennepin & Hopper
Lakes Restoration Area

Yellow Monkey Flower Preservation Area



The Crested Shield Fern

The Crested Shield Fern (*Dryopteris cristata*) can be found in low, moist woodlands, marshes, swamps, and sphagnum bogs in Northern Illinois. This rare plant has green fronds that may grow up to 75 centimeters long, with toothed leaflets. The fern has a wide range, but is rare in Illinois.



Hennepin & Hopper