

PINE LAKE

WILDLIFE CLUB

NATURAL AREA

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You are entering a native oak-hickory woodland plant community. The existing 20-acre natural area has been disturbed very little by man.

The trees, shrubs, many flowering forbs and few grasses are a living example of the plants that once covered and protected the land near the Iowa River.

As you walk the one-half mile trail you will be able to observe and appreciate how nature cares for its own environment. The plants protect and develop the soil over a period of time. The soil provides nutrients and water to the plants. Then the squirrels, birds and other small animals live here because of the good food and cover available.

How do you fit into the environment you are going to see ?

This natural area is kept for your enjoyment by the Pine Lake Wildlife Club.

You begin your walk by taking the trail which is shown on the attached map. Identification tags are placed by or on the various plants along the quiet trail. Number 41 is the first labeled plant. Then read the plant description. The last number is 72.

41. Poison Ivy (*Rhus toxicodendron*)
This plant is poisonous to the touch, for most people. It causes itching watery little blisters which become worse if scratched. Some people seem to be immune to the poison, though this immunity can change. Birds aid in spreading the seeds. The plant is found in many forms -- vine, bush and small tree-like but always it is poisonous.

Ivy (*Parthenocissus quinquefolia*)
Other common names are Woodbine, Virginia Creeper, American or Five-leaf Ivy. This is a rambling, creeping vine of the grape family. It grows in almost all parts of America. It has long slender tendrils ending in tiny discs which stick to the surface of another plant. The creeper looks somewhat like poison ivy, but poison ivy's leaves are made up of 3 leaflets, while the creepers leaves are made up of 5 leaflets. In the autumn the creeper turns flaming red, and has bunches of dark blue berries. Berries are not good to eat.
Can you tell the difference between the two plants ?

42. Prickley Ash (*Zanthoxylum americanum*)
Another name Toothache Tree
A small shrub or tree which is the only member of the Citrus Family (Oranges and Lemons) commonly found native in Iowa. Fruit is very small, red to orange in color and has very pronounced lemon odor. The taste is so spicy and strong that it bites the tongue. In southern states, a close relative of this tree is called the "Toothache Tree" because people chew the little fruit to relieve the ache.

43. Greenbrier (*Smilax* sp.)
The greenbrier is a climbing vine of the lily family. It has a prickly stem. The roots of closely related species have been used as food by the Indians. Upon exposure to the air they have a tendency to turn redish color. The stem of this greenbrier stays green all winter and is noticeable above the snow in the winter woods. The fruits are relished by birds and animals who assist in distributing the seeds.
44. Bitternut Hickory (*Carya cordiformis*)
A common tree in this area. It is tall 50-75 feet high and 1-2 feet in diameter. The bark is thick, firm and gray, with some furrows and ridges. The winter buds are easy to tell by the long $1\frac{1}{3}$ - $3\frac{1}{4}$ inch, flat, pointed, sulfer-yellow characteristics. The wood is not as good as other hickories.
45. White Oak (*Quercus alba*)
A large oak of great economic value, (50-70, 150 ft. high) with a trunk diameter of 3-4 to 9 feet. It produces light brown acorns in pairs, whose meat is sweet and edible. The wood is strong, heavy, hard, and close-grained. The bark is used for tanning. Commercially it is one of the most important and valuable timber trees of the United States. The acorn germinates in the fall.
46. Den Tree
This standing dead tree provides a home and protection for squirrels and other small animals. Birds also like to build their nests in dead trees. Dead trees in a forest are also called snags.
47. Slippery Elm (*Ulmus fulva*)
Another name Red Elm. This tree is commonly found in woodlands over Iowa, and is considered more valuable for its wood, than the American or White Elm. It is subject to Dutch Elm Disease as you can see in this area. The inner bark is mucilaginous, and was the backwoods chewing gum of the country boy. Wood is heavy, hard, fairly good finish, interesting grain design. Seed spread by the wind.
48. Shagbark Hickory (*Carya ovata*)
A large and beautiful tree with wide-spreading boughs (60-90, 140 ft. high), trunk diameter of 4 ft. Bark is pale brown gray, shredded and shaggy, loosely attached, hanging in strips a foot long and several inches wide. It produces the hickory nut which is valued for its delicate flavor.
49. Hazelnut (*Corylus* sp.)
The hazelnuts are a shrub that grows from 3 to 8 feet high. The leaves are deciduous, alternate, simple, oval to ovate, and doubly serrated. The fruit is a brown nut enclosed within a leafy material. The nut is sweet and edible. They are ripe in August or September. Squirrels like them too.
50. Eastern Hophornbeam (*Ostrya virginiana*)
Other name Ironwood.
This is a small tree that grows well in the shady understory of the Oak-hickory community. The wood is very heavy, hard and when seasoned gets as hard as iron. That is how it got it's name Ironwood. The one-seeded nut fruit is enclosed in a pod that resembles hops.

51. American Elm (*Ulmus americana*)
Another name White Elm
A tall graceful tree (50-70, 120 ft. high), trunk diameter of 3-10 ft. Bark is brown gray, formed like flat-topped ridges. It is a good shade tree, but has suffered from Dutch Elm disease.
52. Gooseberry (*Ribes* sp.)
A native shrub over most of Iowa in or near woodlands. The fruit is edible, somewhat tart when green. The berries make good preserves and pie. The gooseberry is the alternative host for White Pine Blister Rust which is found on the Eastern White Pine. Fortunately the rust is not in Hardin County.
53. Quaking Aspen (*Populus tremuloides*)
A small tree, 50-60 feet high and 1-2 feet in diameter. It is usually found in stands or groups because new sprouts can grow from the roots of the older trees. The wood is soft, weak and undurable in icy or windy weather. The wood is excellent for paper pulp.
54. Vine Honeysuckle (*Lonicera* sp.)
Other names Honeysuckle, Brush Honeysuckle.
This is an upright shrub. Birds like the fruit and also spread the seeds.
55. Pagoda Dogwood (*Cornus*)
Other names Blue Dogwood, Green Osier.
The slender branches grow horizontally. The large shrub or small tree has a white blossom in May and a small berry. The berries are eaten by many species of wild birds.
56. Hackberry (*Celtis occidentalis*)
This may become a very large timber tree in Iowa. Grows over most of the state in a great variety of soil conditions. It is a good shade tree to replace the elms around our homes. Frequently has witches brooms in the crown which may be either interesting or ugly depending on how you look at it. Does not usually harm the tree to any extent. Wood somewhat like elm but easier to work, smoother and easier to use. Bark very warty looking. Berries sweet and edible when ripe though each has a large seed. Seed is spread by birds and animals.
57. Tag and Plant missing.
58. Boxelder (*Acer negundo*)
This small tree is a member of the maple family. It is the only maple with a compound leaf. The wood is light, soft, and close grained. It is used for some furniture. The sap is occasionally used for maple sugar.
59. Northern Red Oak (*Quercus rubra*)
The tallest of the northern oaks 60-80 feet high and 2-4 feet in diameter (max. 150 by 6 feet). The acorn is bitter to eat. The leaves on leaf lobes are bristle-tipped (the red oak). The wood is important but less strong and durable than white oak. The acorn germinates in the spring.

60. Bur Oak (*Quercus macrocarpa*)
This tree can become quite large in favorable locations. The acorn is enclosed for 1/3 to all of its length in a fringe-margined cup. The leaf lobes are rounded so it is in the white oak group. The wood has similar characteristics to white oak.
61. Black Cherry (*Prunus serotina*)
The largest of the native Cherry trees, (40-100 ft. length), with a trunk diameter of 1-2 feet. The bark is blackish brown, exceedingly rough and scaly with re-flexed edges. It produces a lustrous black cherry when ripe (September) which has a bitter almond flavor. The wood is hard, strong, closegrained; it takes a fine polish, and is greatly valued for cabinet work and furniture. The bark of the root and branches is rich in hydrocyanic acid of tonic property, and is used medicinally, and as a flavoring extract.
62. Common Chokecherry (*Prunus virginiana*)
The chokecherry is a common shrub or small tree 10-20 feet high. It closely resembles black cherry, but can be distinguished from it by smaller size and red fruit. Birds like the fruit.
63. Fern (*Polypodiaceae*)
The fern is a flowerless plant (spores on under side of leaf) which belongs to the third division of the plant kingdom, the Pteridophytes. There are 200 different varieties which grow in the U.S. In most ferns, the leaves are the part of the plant which is usually noticed. The stems and roots are usually underground. The leaves, called fronds, are large compared to the stems and roots, and have different forms.

POND TRAIL - Optional

The pond at the end of this trail was constructed in 1960 for several purposes. The 5500 cubic yard earth structure stores nearly 2 surface acres of water. The pond was designed to prevent and store silt that would normally flow into Upper Pine Lake. The water has recreational, wildlife and aesthetic values too.

64. Blackberry (*Rubus* sp.)
The blackberry is a plant of the rose family which bears small black fruit. It grows wild in most parts of the U.S. Most blackberries have thorns on a branch-like stem which is very brittle. They grow best where the ground is deep, mellow, and damp. Its fruit are in the shape of a thimble.
65. Elderberry (*Sambucus canadensis*)
The stem of the elderberry is pithy. The fruit is a blue berry found in clusters. Preserves and jams can be produced from the berries.
66. Raspberry (*Rubus* sp.)
The raspberry is a thorny bush. It bears small red berries which are much like blackberries. The raspberry belongs to the rose family, along with the blackberry. They grow best in fine, deep and sandy loam in regions where summers are cool.

67. Wild Grape (*Vitis* sp.)

A native vine that has small clusters of very small blue-black grapes. These are edible, and are used to make jellies, preserves, juices and wines. When a wild grape vine grows over a brush pile or plum thicket, it makes excellent wildlife cover. However, because the vine has a tendency to twine tightly around trees and other plants, it can also kill or injure trees and shrubs, and is especially harmful to young newly planted trees. It is a valuable wildlife food. Seed is spread by both birds and wild animals.

68. Arrow-wood (*Viburnum dentatum*)

This shrub is sometimes 15 feet tall. The smooth new twigs or shoots are straight and arrow-like. The Indians used the stems for the shaft of their arrows.

69. Common Chokecherry (*Prunus virginiana*)

You saw this plant before at number 62.

70. Gray Dogwood (*Cornus racemosa*)

A shrub of woodlands, can grow in shade. It has clusters of gray to white berries which are a valuable wildlife food for birds and animals. In some woodlands, it makes a heavy understory. The wood is rather hard.

71. Decaying log

The woodland community has a trash disposal system. Materials no longer useful in the community are recycled to provide minerals and nutrients for new plant generations. This log is in the decaying process. It will be decomposed with help from many insects, fungi, mosses and lichens. The complete decay process requires from 10 to 20 years.

72. Hawthorn (*Crataegus* sp.)

Other name Redhaw

There are over a thousand species of this tree, hybridization is common. It is a beautiful small tree, usually spiny. The thorns are about $\frac{1}{2}$ to $1\frac{1}{2}$ inches long. It produces a small red berry that is eaten by birds, and the birds spread the seed. Reproduction is fast but tree growth is slow.

THANK YOU FOR NOT LITTERING SO OTHERS CAN ENJOY THE NATURAL AREA !

ASSISTED BY -

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Hardin County Soil Conservation District

Soil Conservation Service

1971

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Scale
1" = 165'

