

12. **Serviceberry**—The serviceberry or shadbush is one of the first trees to bloom, producing white flowers in April. This tree can grow to a height of 25 feet. Notice its smooth, light gray bark. The berries, appearing in midsummer, are purplish-red and edible. Its common name of shadbush was given by early settlers, who associated its blooming with the runs of shad, a fish found in the creeks and rivers of the east.
13. **White Oak**—This is a member of the white oak family whose leaves are characterized by rounded lobes. The acorn has a sweet taste and is an important food source for many animals such as deer, squirrel, turkey and quail. Its light-colored, scaly bark makes it easy to identify in the woods. The wood is hard and used in boats and wooden kegs because it is impervious to water. Oak splits and burns easily and has a high heating ability.
14. **Soil layers**—Here you can observe the type of soil that is found in the park. The dark topsoil layer contains much organic matter from the decomposition of leaves and plants. Underneath is a well-drained, loamy, sand layer ranging in thickness from 24 to 40 inches. Sandstone will be found under this layer. This soil type is fragile and not good for growing crops.
15. **Sumac**—Sumac can grow to be 12 feet tall. Notice the newest growth which has a fuzzy texture to it. The leaves are “*compound*”, which means that one leaf is made up of several leaflets. Sumac has 10 to 15 leaflets per leaf, which turn a brilliant red in autumn. The wine colored fruit cluster is made up of reddish, hairy berries which are a concentrated source of vitamin C and can be used in making tea.
16. **Red Cedar**—This is a common evergreen found throughout Iowa. The cedar has two types of needles: the scale-like needles of the old growth, and the prickly, sharp ones of new growth. The fruit is a small, light blue berry which is eaten by some songbirds, especially the cedar waxwing. It is a host for apple cedar rust. Rust formation looks like prickly orange golf balls on the branches of the tree. Rust often develops in wet weather and results in a slimy surface on the branches.
17. **Fungi**—Notice the fungi growing on the dead trees. These fungi are called “*painter pallets*” because artists sometimes paint on their flat sides. Dead trees provide food and shelter for

thousands of insects, as well as several types of animals. Over the years, these trees will totally decompose, thereby releasing the needed nutrients for new trees to grow.

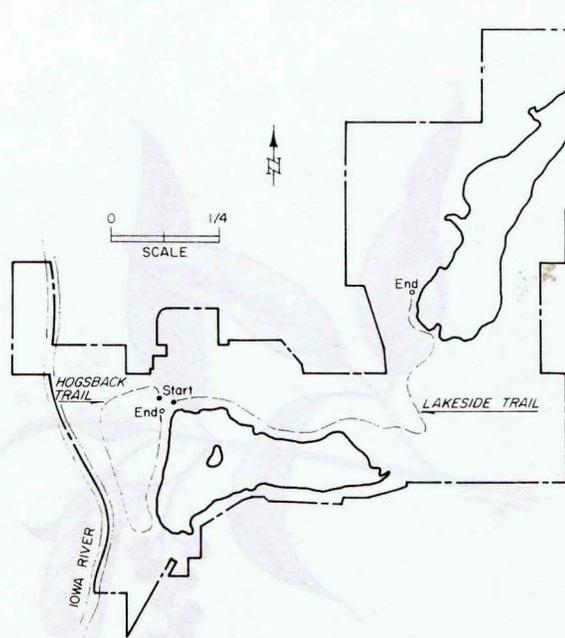
18. **Sycamore**—This tree is well-known for its peely bark which is the result of the new bark growing from the inside out. Look around on the ground to see if you can find the big pieces that flake off the top of the tree. Sycamore is also known for its button-ball fruit which appears in late summer. The fruits burst open, releasing thousands of soft fluffy seeds. Sycamore is a fast-growing tree, growing eight to ten feet a year and reaching 100 feet in height.
19. **Cottonwood**—This member of the poplar family grows quickly, up to six feet the first 40 years of its life, and reaches heights of 80 to 150 feet. The cottonwood is one tree that survives forest fires well, due to its thick bark. It is named for the fluffy white seeds you often see floating around in May. Cottonwood is usually one of the first trees to be struck by lightning. This is apparently due to the chemical balance in the tree which attracts lightning and turns the sap and wood red. Thus, it's a good idea never to stand under a tree in a storm, especially a cottonwood!
20. **Hackberry**—This member of the elm family is not affected by the Dutch elm disease. However, almost all hackberry trees develop a “*witches broom*” of tangled twigs caused by a mite. This does not really hurt the tree, just makes it unsightly at times. Feel the rough, bumpy bark characteristic of the hackberry.
21. **Honeysuckle**—This shrub has flowers produced in pairs and leaves attached opposite one another. The fragrant flowers create food for butterflies and hummingbirds. The berries provide excellent summer and fall food for songbirds. Small mammals and birds find excellent cover and nesting areas in the dense foliage. The shrub is often used for landscaping.
22. **Walnut**—The walnut is well-known for its nut which is used in baking and also collected by squirrels and other small mammals to store for the winter. The nutshell can be used for making a dye for cloth. The compound leaves have 15 to 23 leaflets and reach two feet in length. This is a slow-growing tree which takes 20 years to reach a nine inch diameter. Its attractive wood is highly prized for furniture and gunstocks.

LAKESIDE NATURE TRAIL Pine Lake State Park



The Lakeside Nature Trail will help you become better acquainted with some of Pine Lake's natural communities. The one-mile trail ends near the campground. Enjoy your walk and always remember that anything you carry in with you, please be sure to carry out.

LAKESIDE NATURE TRAIL



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related projects during the Great Depression. The CCC accomplished a great deal in Pine Lake and many other Iowa state parks. Here, all of the stone work was done by them: the bridges, picnic shelter, lodge, latrines and probably the toughest job, the construction of the upper lake. Please stay off the spillway, since it is very dangerous.

3. **Beaver tree**—An eager beaver has been at work here. Beavers can gnaw six-inch diameter trees in just 15 minutes. They use the trees to build their dams and lodges. The bark is eaten for food.
4. **Paper birch**—Usually a tree of the north woods, the paper birch thrives in very moist soils such as this location. The white, paper-thin bark peels off in long strips and was utilized by the Indians in making their legendary birch-bark canoes. This fast growing tree has a high heating ability and burns and splits easily.
5. **Spring**—The spring is a natural source of water. Water from rain and melting snow seeps into the ground and filters through pores and cracks into the layers of rock. The water eventually reaches a layer through which it cannot pass. Then, natural forces cause the ground water to rise until it finds a way out to the surface, forming a spring such as you see here.
6. **Black Cherry**—A variety of wildlife including songbirds and raccoons are attracted to its small purplish-red to black fruits. Its clusters of white flowers appear in April and May. The long shiny leaves are poisonous to both man and animals

1. **Shagbark Hickory**—Look at the tree with “shaggy” bark, to the left of the post. This is a typical shagbark hickory. Shagbarks can reach 100 feet in height and usually grow in bottomlands. Their sweet-tasting nuts are enjoyed by people and by animals, especially squirrels. Hickory wood is excellent for heating and is used in making tool handles, tennis racquets and skis. It was also the principle wood used for wagon wheels by pioneers. The leaves turn yellow in the fall.
2. **Spillway and Dam**—You have just walked across the earthen dam built in 1933 by the Civilian Conservation Corps (CCC). The CCC was a national employment program for young men who worked on a variety of conservation-

since they contain a toxic acid. The young bark is aromatic and has a bitter taste. The bark and the roots are used for cough medicine and flavoring. The wood is attractive for furniture use and provides fair quality firewood.

7. **Gooseberries and Raspberries**—The gooseberry grows well in shady woods as an understory plant. Several species of birds will quickly eat its early ripening berries. These are edible by humans and are commonly used for jams, jellies and pies. They were once a principal ingredient of pemmican, a concentrated dried food of the Indians.

Raspberries—This is a fast-growing, thorny shrub. Over 50 species of birds are attracted to the berries produced by this plant, which also make good pies, jams, jellies and wines. Small forms of wildlife also find the “*bramble patch*” to be good protective cover.
8. **Box Elder**—A member of the maple family, box elder is also known as the ashleaf maple. It grows well in a moist environment such as this. The crushed leaves have a very distinctive odor. The sap can be used for making syrup, since it has a high sugar content. You are probably familiar with the red and black-striped box-elder bug which is always associated with this short-lived maple.
9. **Red Oak**—The oak is our state tree. This species is in the red oak group, characterized by pointed lobes. Red oak can grow to be 80 feet tall, with a wide spreading, oval crown. The acorns take two years to mature and are very bitter tasting. The red oak lives up to its name, turning a beautiful scarlet and orange color in the fall.
10. **Red Twig Dogwood**—Notice the brick red color of its twigs. This is a small shrub, six to eight feet tall. Its branches arch out, touch the ground, and root again. The fruit is a cluster of white berries which appear in June and are eaten by many species of songbirds. All dogwood leaves are oval with veins curving upward along smooth, wavy edges.
11. **Trembling Aspen**—Here is a group of tall and straight-growing aspens. Notice the bark which is yellowish to white at the top. The stems of the rounded leaves are flat, causing them to rustle in the slight breeze. In the fall, the leaves turn a brilliant yellow, providing quite a spectacular display.