

BUR OAK  
NATURE TRAIL  
VIKING LAKE STATE PARK



*“Like winds and sunsets, wild things were taken for granted until progress began to do away with them. Now we face the question whether a still higher ‘standard of living’ is worth its cost in things natural, wild, and free.”*

Aldo Leopold  
*Sand County Almanac, 1949*

Bur Oak Interpretive Trail allows the park visitor an opportunity to see, feel and hear nature. As the visitor hikes the trails he will be able to enjoy a wide variety of plant and animal life. This trail allows the visitor to escape the daily hectic pace of work and home and to gain a better knowledge and appreciation for nature.

As you hike along Bur Oak Trail keep your eyes open for wildlife. Some of the more common mammals include squirrels, rabbits and white-tailed deer. Other mammals found include raccoon, opossum, skunk, as well as the ever elusive predators, the red fox and coyote. Reptiles abound as well. Turtles and a number of NON-poisonous snakes (which eat insects and undesirable rodents such as mice) make the forest their home. Some snakes to be found include the garter snake, the bull snake and the fox snake.

A wide variety of birds may also be spotted by the keen observer. Songbirds such as cardinals, juncos, blue jays, bluebirds, orioles and the American goldfinch (Iowa’s state bird) are spotted here. Other larger birds include the pheasant, the red-tailed hawk and maybe even a great horned owl. Included with this brochure is a wildlife check list that can be used to keep track of wildlife seen on the trail or in the park.

Plant life along the trail as well as throughout the park includes a wide variety of wild flowers such as the wild rose (Iowa’s state flower), Dutchmans breeches, wild carrot (Queen Anne’s lace), daisy, yellow violet and the black-eyed Susan. The flower’s begin to bloom in early spring and continue to bloom throughout late summer. Within this predominately oak-hickory forest there are found over 25 different species of trees in addition to various shrubs and bushes.

As you walk along this trail there are numbered posts next to points of interest. The numbers, which correspond with numbers in this pamphlet, will provide information concerning each individual point of interest. We hope that you will enjoy yourself and we ask that you please help us take care of YOUR park so that other people may also enjoy it. While on this trail we ask that you follow these rules.

1. Do not litter—pick up any litter that you may see and place it in the nearest receptacle.
2. Stay on the designated trail.
3. Do not remove or damage any vegetation—take only pictures and leave only footsteps.
4. Be extremely careful with matches and cigarettes.

## HOW OLD?

As you begin your hike you will notice to the right of the trail a podium with a stump inside it. In order to determine how old this tree is you must count each ring which represents a growing period. Each ring has two layers, the inside one being the spring wood (a period during which rapid growth occurs due to the amount of moisture usually available), the outside layer is the summer wood which grows a little slower due to the drier conditions.

Environmental elements have a big impact on the width of these rings. Such elements include rain, temperature, light and competition with other trees for these elements. The better the growing conditions the wider a ring will be.

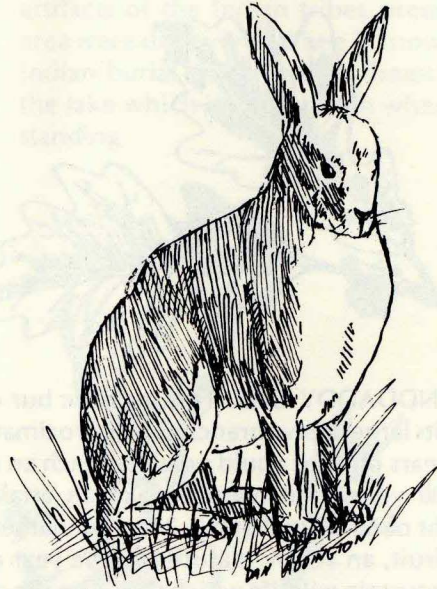
For your interest, we have selected a few historical events and marked their dates on the stump.

1. HAZLENUT. This small, understory shrub is quite common in the midwestern forests where the edible nuts are eaten by squirrels and other mammals, even man. The ovoid nut is surrounded by a leafy, toothed involucre. The leaves of this plant are extremely rough, resembling sandpaper. This shrub is valued for its wildlife food and ground cover.

2. **AMERICAN BASSWOOD.** A rapidly growing tree given good moist conditions, the basswood can achieve a height of 100 feet and a diameter of 36 inches. However, trees larger than 20 inches in diameter are rare. Basswood has no serious insect or pathogen problems. This wood is used for veneer, concealed parts of furniture, shade and map rollers.
3. **A PAIR OF OLD SNAGS.** This old tree has served as a den for several types of wildlife and will probably continue to be used by them. There is also another stump, to the right of this one that was also used as a den. Some mammals such as squirrels and raccoons, may have lived in this stump. These stumps may have also served as nesting sites for birds. Although these trees are often unsightly, they serve an important role in nature and should be left alone and not used for firewood.
4. **OAK CLUMPS.** This forest is comprised of primarily bur oak. Many of these trees in this forest are found in clumps. These clumps were formed from stumps which were left after old oak trees had been cleared out of the area for pasture land. Through neglect these oak stumps sprouted to grow into the oak trees which are present today. This phenomena is called natural regeneration and is the most common and successful method of reforestation used in Iowa's forests. As you walk this trail look and you will see many clumps of oak trees which appear to have grown around a stump.
5. **DECAY.** This decaying log is being broken down into organic matter by carpenter ants, fungi (such as white rot) and other insects and bacteria. If you look carefully on the ground you can see sawdust (frass) which is from the boring of ants, this frass will quickly break down to form organic matter. The fungi (which form the conks or mushrooms on the log or forest floor) also help speed up this process. The organic matter forms a layer just above the top soil. The minerals in the organic matter are eventually leached out and drain

down into the soil layers where the minerals are then absorbed and recycled by the plants and trees in the forest.

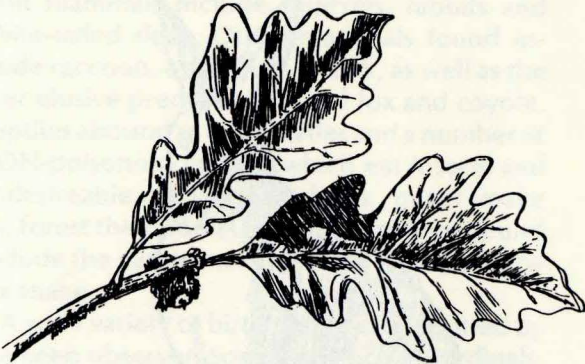
6. **EASTERN COTTONWOOD.** The cottonwood (the extremely tall tree off to your right) can grow to attain a height of 60-100 feet and a diameter of 3-5 feet. The broad, open crown and its large spreading branches are quite characteristic of this species. The tree loses its seeds in the early summer. The seeds are attached to a cottony appearing fiber, giving the tree its name. The wood, which is light and is not very durable, is used for veneer, pulpwood and lumber. The large trunk upon dying and rotting out, often serve well as a den or habitat cover for wildlife.



7. **POISON IVY.** This plant comes in the form of a small bush, vine or as short shoot. The plant's poison, which causes a blistering and itching of the skin, is carried through a volatile oil. The best medicine is to avoid it. However should you come in contact with it, a strong laundry soap with cold water should be used to wash it off as soon as possible (In severe cases consult your physician). A good way to avoid contact with this plant is to

remember “leaflets three—let it be.” Patches such as this one often add yellow-orange or scarlet colors to the Iowa forest in the fall, however the plants still contain their poison, so beware!

8. **WEEDS?** No. Weeds are misplaced plants, and these plants and grasses are right where they belong. Many of the plants you see in this area are native. Iowa was once carpeted under prairie grasses such as these. Some of these grasses and forbs which are found in this patch include little bluestem, big bluestem, goldenrod and the common milkweed. Some wild flowers may also be found in here, such as Queen Anne’s lace which blooms May through October and the partridge pea which is in bloom July through September.



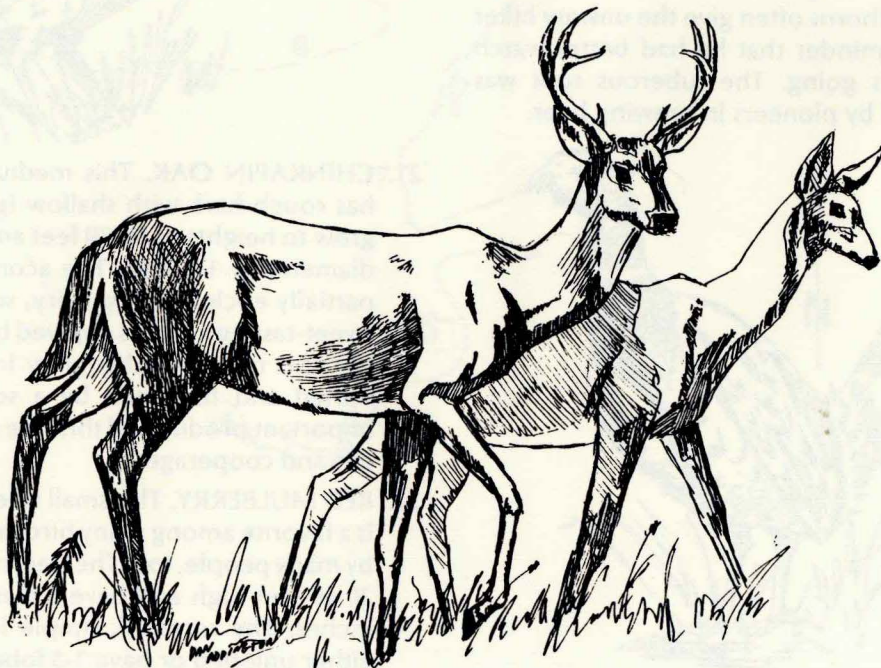
9. **GRANDDADDY OAK.** This majestic bur oak with its large, heavy branches is approximately 150 years old and could possibly reach an age of 600 years, the mature oak can attain a height of 60-80 feet and 2-3 feet in diameter. The fruit, an acorn, matures in one year and helps sustain wildlife which thrive on the nut. The wood from bur oak is very similar to white oak and is often used in the construction of furniture and railroad ties.
10. **BLACK CHERRY.** Black cherry is a high-value wood, used in the construction of fine furniture. The black cherry tree can grow to heights of 40-60 feet with a diameter of 1-3 feet. This type of tree grows well in rich, moist sites and is found in mixed stands. The fruit is very important to wildlife.

11. **HACKBERRY.** This tree species has some truly unique characteristics which allow it to be easily identified. The hackberry bark forms high ridges with smooth areas between. This member of the elm family is not susceptible to the Dutch Elm disease. However, several other pathogens and insects often have a noticeable impact on the tree. If you look carefully at the leaves you may see small, hackberry nipple galls which are caused by a tiny insect. Also appearing on some of the smaller branches are small clumps of thin twigs which have no foliage. This particular pathogen is called the hackberry witches broom. This tree is often used as a shade tree, it can attain a height of 100-120 feet and a diameter of 1-2 feet.
12. **WILD BLACK RASPBERRIES** form this patch of brambles which you see on both sides of this trail. This fruit is very popular with the birds as well as the park visitor, both whom enjoy the juicy, sweet fruit produced by this member of the Rose family. The fruit begins to form in early summer beginning as a red-colored berry, turning black as it ripens. The raspberry will often grow in large patches, forming a tangled mess of brambles making it difficult to walk through. There are 205 different species of raspberries making it difficult to identify, even by the specialist.
13. **STAGHORN SUMAC.** This tree can commonly be found in large clumps such as this one, bordering forests of southwest Iowa. This small tree grows rapidly, is short lived and is intolerant of shady areas. It is often the first species to begin growing in an open area, and is soon overtaken by more shade tolerant trees such as the eastern redcedar and finally the oak. This tree’s unique characteristics which allow for easy identification include the cone shaped clusters of red, hairy fruits (drupes). In the fall the leaves turn a bright orange to red color. It can also be identified by the velvety-hairy twigs which resemble stag horns. This tree is a member of the poison ivy family, but is not poisonous.

14. **OSAGE ORANGE.** This tree, also called a hedgeball tree, originated from Texas, but was brought north and planted extensively by the early settlers. These trees were planted close together to form a boundary or "fence" which would keep cattle within the pasture. The sharp thorns and the extremely hard wood made the tree a fairly effective hedge-row. The fruit which you may see either on the tree or on the ground is green, large and round — resembling an orange. This fruit serves as a food for many birds and for deer. The hard wood which is bright orange in color is used for making bows. These trees can reach heights of 20-30 feet and a diameter of 1-2 feet.
15. **BLACK WILLOW** is the largest willow species of all the American willows. This fast growing tree is intolerant to shade and requires much moisture. This tree can grow to a maximum height of 120 feet and a diameter of 4 feet. The wood is used for lumber, veneer, pulp, charcoal and artificial limbs.

**VIKING LAKE OVERLOOK.** From this vantage point you can see Viking Lake ; construction on this man made lake began in 1953, and it was dedicated in 1957. The lake covers 150 acres, with 4.5 miles of shore line. Viking Lake is formed via an earthen dam, which you can see to the right of the body of water. The entire park is 1000 acres in size. Other recreational activities of the park besides this interpretive trail include several miles of hiking trails, a fine sandy beach for swimming, as well as campsites and picnic areas for family enjoyment. While you stop here be sure to listen and look for signs of wildlife. Within the park and the surrounding area is a large deer population.

During the construction of this lake, many artifacts of the Indian tribes present in this area were discovered. There is known to be an Indian burial site in the northeast corner of the lake which is visible from where you are standing.



16. **WHITE ASH.** The white ash is a medium-sized tree which attains a height of 50-80 feet and 2-3 feet in diameter. The ash, a very strong, hard and heavy wood, is used for purposes in which strength is required. Such uses include baseball bats, tennis rackets, boat oars, and implement handles. The ash will grow rapidly and is one of the most abundant and commonly planted species. As you're looking around you may notice that there are several ash trees in this little grove, as well as wild grapevines and gooseberries bushes.
17. **EASTERN REDCEDAR.** This is the most widely distributed conifer in the eastern U.S. The eastern redcedar can attain heights averaging 40-50 feet and a diameter of 24 inches. This species prefers moist soils but it will grow in poor, dry sites. This tree often serves as a source of food for deer. The deer browse can often lead to the stunting of the trees causing them to appear as small bushes. Songbirds also enjoy the eastern redcedar's blueberries.
18. **COMMON GREENBRIAR.** This woodland vine's fruit (a blue-colored berry) is a delicacy enjoyed by many birds in the winter months. The sharp thorns often give the unwary hiker a sharp reminder that he had better watch where he's going. The tuberous root was often used by pioneers in brewing beer.



19. **NORTHERN RED OAK.** This tree is fairly common throughout the state of Iowa and grows rapidly. This particular species of oak can attain heights of 60-80 feet and may have a diameter of 2-4 feet. This species of oak is moderately intolerant to shade and must grow in open areas. Wood uses are similar to many other oaks, however, it is not quite as strong.
20. **SHAGBARK HICKORY.** This tree is typically mixed with oaks forming an oak-hickory association. Hickories are commonly found on upland slopes in the northern part of their range. These plates of bark give the tree its shaggy appearance. This tree can grow to a height of 60-80 feet and a diameter of 1-2 feet.



21. **CHINKAPIN OAK.** This medium-sized tree has rough bark with shallow furrows. It will grow to heights of 50-70 feet and can reach a diameter of 1-3 feet. The acorn (or fruit) is partially enclosed in a hairy, scaly cup. This sweet-tasting acorn is enjoyed by squirrels, in fact this tree probably grew from an acorn buried and forgotten by a squirrel. Some important products of this tree are furniture, ties and cooperage.
22. **RED MULBERRY.** This small tree's edible fruit is a favorite among many birds and is enjoyed by many people, too. The tree may grow to be 20-40 feet high and have a diameter of 8-15 inches. The serrated, simple leaves can be either unlobed or have 1-3 lobes.

LENGTH 1 MILE  
TIME TO WALK APPROX. 1 HOUR



SHOWER & TOILET



NATURE TRAIL



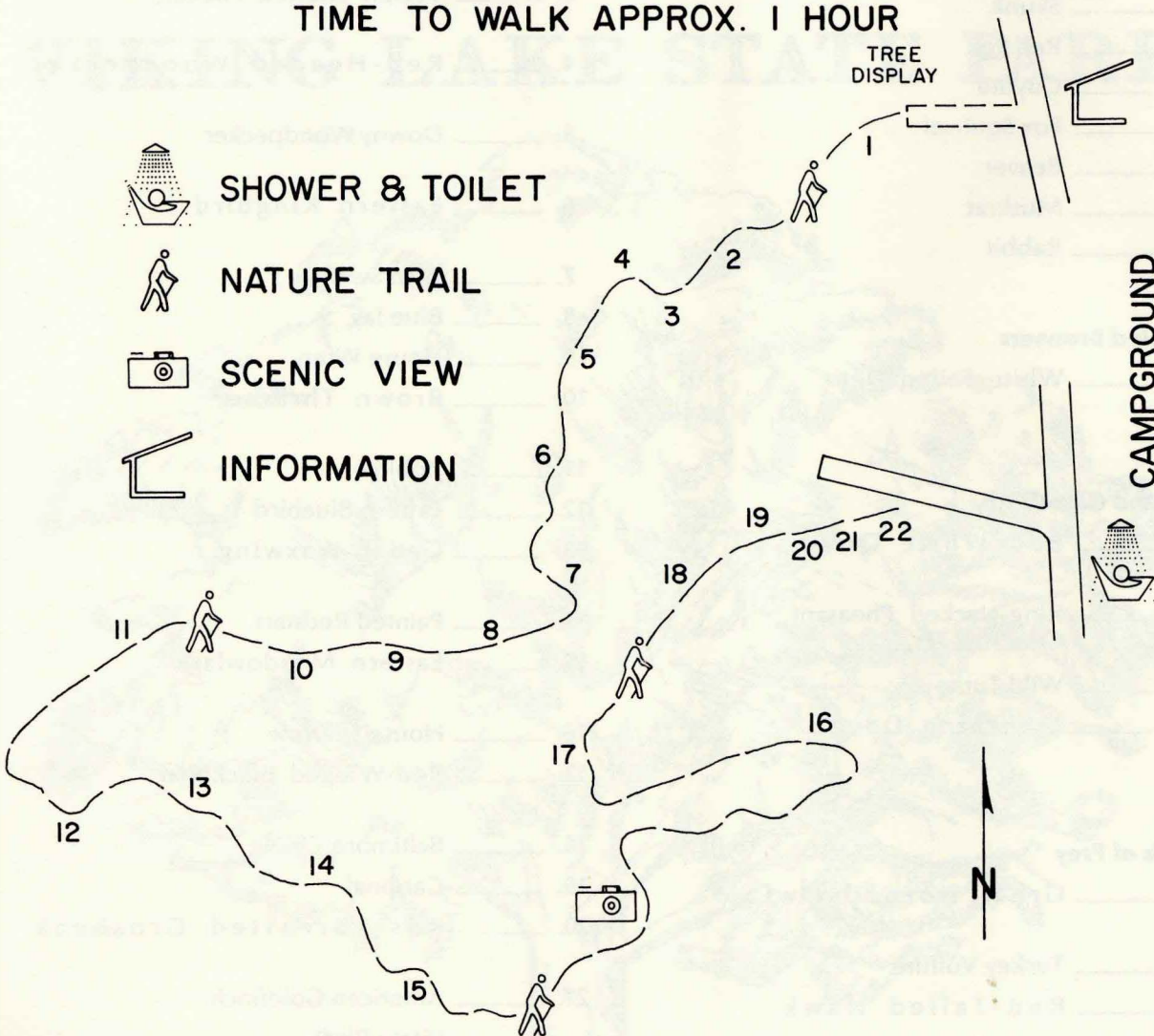
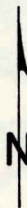
SCENIC VIEW



INFORMATION

TREE  
DISPLAY

CAMPGROUND



# WILDLIFE CHECK LIST

## Fur and Game Mammals

1. \_\_\_\_\_ Opossum
2. \_\_\_\_\_ Raccoon
3. \_\_\_\_\_ Skunk
4. \_\_\_\_\_ Red Fox
5. \_\_\_\_\_ Coyote
6. \_\_\_\_\_ Fox Squirrel
7. \_\_\_\_\_ Beaver
8. \_\_\_\_\_ Muskrat
9. \_\_\_\_\_ Rabbit

## Hoofed Browsers

1. \_\_\_\_\_ White-Tailed Deer

## Upland Gamebirds

1. \_\_\_\_\_ Bob White Quail
2. \_\_\_\_\_ Ring-Necked Pheasant
3. \_\_\_\_\_ Wild Turkey
4. \_\_\_\_\_ Mourning Dove

## Birds of Prey

1. \_\_\_\_\_ Great Horned Owl
2. \_\_\_\_\_ Turkey Vulture
3. \_\_\_\_\_ Red-Tailed Hawk
4. \_\_\_\_\_ Screech Owl

## Songbirds

1. \_\_\_\_\_ Whip-Poor-will
2. \_\_\_\_\_ Ruby-Throated Hummingbird
3. \_\_\_\_\_ Yellow-Shafted Flicker
4. \_\_\_\_\_ Red-Headed Woodpecker
5. \_\_\_\_\_ Downy Woodpecker
6. \_\_\_\_\_ Eastern Kingbird
7. \_\_\_\_\_ Barn Swallow
8. \_\_\_\_\_ Blue Jay
9. \_\_\_\_\_ House Wren
10. \_\_\_\_\_ Brown Thrasher
11. \_\_\_\_\_ Robin
12. \_\_\_\_\_ Eastern Bluebird
13. \_\_\_\_\_ Cedar Waxwing
14. \_\_\_\_\_ Painted Redstart
15. \_\_\_\_\_ Eastern Meadowlark
16. \_\_\_\_\_ House Sparrow
17. \_\_\_\_\_ Red-Winged Blackbird
18. \_\_\_\_\_ Baltimore Oriole
19. \_\_\_\_\_ Cardinal
20. \_\_\_\_\_ Rose-Breasted Grosbeak
21. \_\_\_\_\_ American Goldfinch  
(State Bird)
22. \_\_\_\_\_ Great Blue Heron

ART BY DAN ADDINGTON

IOWA CONSERVATION COMMISSION  
WALLACE STATE OFFICE BLDG.  
DES MOINES, IOWA 50319

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