

# SUTCLIFFE WOODLAND

## A Self-guided Interpretive Nature Trail

*Guide to the trees, shrubs,  
and woodland management practices  
at Sutcliffe Woodland*

### **Welcome!**

The Guthrie County Conservation Board welcomes you to Sutcliffe Woodland. In 1990, Dr. John Sutcliffe and his wife, Marjorie, of Audubon, Iowa, donated 55 acres known as Sutcliff Woodland to the Guthrie County Conservation Board. The Sutcliffes wanted the area to be used for environmental education and as a wildlife refuge. Dr. Sutcliffe purchased the area in 1954 and built the pond shortly thereafter. He planted numerous trees and shrubs, including the pines, in the years to come. He worked continually on the timber until the area was donated to the Guthrie County Conservation Board. Dr. Sutcliffe is truly a woodland steward of the land and has a deep love for nature. The Guthrie County Conservation Board is grateful for his donation.

The Guthrie County Conservation Board has three main goals in managing Sutcliffe Woodland:

1. Provide quality wildlife habitat on the entire 55 acres
2. Provide environmental education opportunities for school groups and the general public
3. Provide land management examples to private woodland landowners so they can manage their woodland for wildlife, recreation, and possible economic gain

The Sutcliff Woodland Nature Trail was designed to allow area visitors an opportunity to learn about trees, shrubs, wildflowers, and other interesting features of Sutcliffe Woodland. Numbered markers along the trail point out specific species or features. The numbers match numbered paragraphs in this pamphlet which give information about that species or feature. You should be able to identify unmarked trees and shrubs in the woodland once you have become familiar with the leaf shape and structure of the tree. Wildflowers are abundant throughout the forest floor and can be identified by reading the descriptions at the end of the pamphlet. When you walk down the trail, try to pay close attention to what is going on around you. Life is everywhere; it may be a wood duck, wild turkey, white-tailed deer, cardinal, a tiny wildflower, or a host of different things

## INTERPRETIVE STATIONS

### 1. **BLACK WALNUT (*Juglans nigra*)**

The Black Walnut has 15 to 23 leaflets that are smooth on top and hairy on the bottom. The fruit of the tree is 2 inches in diameter and has a yellowish-green fleshy husk. The walnuts that are produced provide food for wildlife, especially fox squirrels. The lumber from the tree has high economic value and is used to produce furniture along with many other things.

### 2. **WALNUT (Stark quick crop)**

This tree was planted by Dr. Sutcliffe in 1960. Dr. Sutcliffe planted many trees over the area throughout his years of ownership. This unique Walnut has oblong-shaped fruit compared to the round fruit of the Black Walnut.

### 3. **HACKBERRY (*Celtis occidentalis*)**

This tree can be easily identified by the bark which looks like a mass of warts that run in loose ridges. In the summer, the leaves are almost always perforated by plant lice damage. Berries of the Hackberry are eaten by birds.

### 4. **WALNUT HARVEST**

In 1991, the Guthrie County Conservation Board harvested 41 Black Walnuts and 7 Red

Elms from the area. Timber harvests can be part of timber management plans that should be done in conjunction with the District Forester (515) 993-4133. As sunlight hits the forest floor, natural regeneration will occur or trees may be planted. Either way, it creates plant diversity which is good for wildlife. The young trees are competing for sunlight with existing vegetation and other tree species. As the young trees mature, dominant species such as black walnut will prevail, especially if management practices such as TSI (Timber Stand Improvement) or CTR (Crop Tree Release) are applied.

### 5. **SUCCESSION**

Notice the small, straight trees (pole timber) that are growing. This spot has changed from grassland, to small woody vegetation, to immature timber over a gradual period of time. Succession is the process of community change and is going on all around you. As time goes by, the dominant trees will mature creating a canopy. This will cause less sunlight to reach the forest floor and, without sunlight, there will be less vegetation underneath the canopy. When the timber reaches this state, it is called a climax community.

**6. BASSWOOD (*Tilia americana*)**

American Linden is another common name. This tree usually grows in clusters of four to five trees coming from a single base. It reaches a height of 60 feet and has very soft wood. The American Linden is identified by unevenly based heart-shaped leaves and in the winter by having large, reddish buds.

**7. DEN TREE**

Notice the hole (cavity) in the tree in front of you. Den Trees are used by a number of wildlife species such as wood ducks, raccoons, blackbirds, and squirrels just to name a few. Firewood cutting has taken a toll on Den Trees the last few decades. Den Trees produce only marginal firewood and should be left standing for wildlife benefits.

**8. RED OAK (*Quercus borealis*)**

This is one of the most beautiful trees in the forest. The Red Oak grows tall and straight and is a member of the Black Oak family. The tips of the leaves come to a point (bristle) compared to that of the White Oak family which are rounded at the lobe. The leaves of the Red Oak can be deep red when they emerge in the spring and red to brown in the fall. Acorns produced by the Red Oak are eaten by deer, turkeys, squirrels, wood ducks, and other species of wildlife.

**9. USE YOUR SENSES!**

When walking the trail, take time to stop and use your different senses to fully take in all the outdoors has to offer. Sounds such as birds, frogs, and insects fill the air. Feel the different textures of bark on trees and leaves on plants. See all the different colors of the different seasons. This trail and area changes in all these ways at different times of the year.

**10. WATERFOWL NESTS**

The open-topped half barrel is a goose nest most often occupied by the Canada Goose. The other structures are wood duck nests. At one time, wood duck populations were low due to lack of nesting cavities. Wood duck populations began increasing when nesting boxes were introduced. Wood ducks will readily accept artificial nesting boxes. If you are interested in building a wood duck box, call the Guthrie County Conservation Board office at (641) 755-3061.

**11. FARM POND**

Farm ponds provide habitat for wildlife and recreation for people. The original pond was built in 1954. Over the years, the pond silted in to a depth of only 6 to 7 feet which could not support a fishery. In the fall of 2005, the pond was drained, the silt removed, a silt retention pond put in, and then the dam resealed. The

pond filled back up with water over the next year. The pond is now 12-14 feet deep and has been restocked with catfish, bass, and bluegill. Questions about farm pond management should be directed to area Fisheries Biologist (712) 769-2587.

#### **12. DEER TRAIL**

Whitetail Deer use timber habitat wherever available. Most deer trails connect a feeding area to a bedding area. Many years ago, the sight of a Whitetail Deer made news; now they are common. Sport hunting plays a major role in controlling Whitetail Deer populations. As you walk the nature trail, you may see where Whitetail Bucks have rubbed their antlers on trees to define their territory prior to the breeding season (rut). A Whitetail Buck will shed his antlers in late winter or early spring. Rodents chew on the antlers to get minerals and nutrition. This is why it is hard to find deer antlers which have been shed.

#### **13. MORMON TRAIL**

The Mormons made two trails across Iowa—one that crosses Adair County and one that crosses Guthrie County. As you look behind Marker Post 13A, you will see what is known as the Handcart Trail which was used in the 1850s. The Handcart Trail went from Iowa City to Newton, to Adel, Panora, and Guthrie Center,

to Bear Grove and on west. According to Dr. Sutcliffe, a Mormon woman passed away in Guthrie County and is buried in Bear Grove Cemetery.

#### **14. CABIN**

The cabin was built by the Sutcliffes in 1954 and served as a place to stay while they were out working and enjoying their woodland.

#### **15. SHAGBARK HICKORY (*Carya ovate*)**

The grove of trees in front of you are predominantly Shagbark Hickory. As the tree matures, the bark becomes rough with large partially detached strips making it easily recognizable. Large terminal buds are obvious during the winter and spring. The mast (nuts) of the Shagbark Hickory are edible if you can find them before the squirrels do.

#### **16. PRICKLE ASH (*Xanthoxylum americanum*)**

This shrub can form dense thickets and is common to dry soils in oak woods. Prickle Ash is a citrus and all parts are aromatic. When the leaves are crushed, they give off a lemon-like odor. Both the fruit and the bark have been used for home remedies. The stems are armed with nodal pairs of broad-based thorns giving it the name of Prickle Ash.

### **17. EDGE EFFECT**

An edge effect is two different habitat types coming together (ecotones). A power line came through the Sutcliffe area to the cabin creating a grassy area. Where the grass meets the timber is an example of an edge. Many species of wildlife prefer edge habitat because of the plant diversity that the added sunlight creates.

### **18. PINE PLANTING**

In 1955, Dr. Sutcliffe planted these Red and White Pines. The White Pine (*Pinus strobes*) has cones that are 4 to 8 inches long, generally 5 inches, and has needles in bundles of five. The Red Pine (*Pinus resinosa*) has needles in bundles of two, and cones that are 1½ to 2½ inches. It takes a long time for trees to reach maturity which makes it important to plant some trees every year.

### **19. BUR OAK (*Quercus microcarpa*)**

The Bur Oak has deeply furrowed bark that evenly covers the bark of seedling trees. The typical Bur Oak leaf is almost cut in half where the sinuses meet. The acorn has an extra deep cup covering at least half of the nut with an outer fringe that suggests a small bird's nest. This tree is very adaptable and can be found in prairies, dry slopes, and river bottoms.

### **20. IRONWOOD (*Ostrya virginiana*)**

This is a common tree in the middle story of the forests and timbered areas of Iowa. The name Ironwood was given to the tree by the early pioneers. When they attempted to cut down this tree, the settlers often broke their primitive tools. Ironwood is the heaviest and hardest wood we have next to hickory. The bark grows in very thin strips while the leaves are smooth and resemble delicate elm leaves.

### **21. STUMP SPROUT**

This Bur Oak has several trunks coming from a main trunk. Many years ago, this tree was cut down with a saw. The stump began to grow by producing suckers ending up in what you see today. Most woodland and timbers in Guthrie County have been harvested at one time or another. Many were harvested during the 1920s and 1930s. Some uses were railroad ties, building materials, and firewood. The tree you are looking at is a good example that shows timber can be harvested, but needs to be managed carefully. When this happens, we will have continuing natural resources for decades and generations that will follow.

**22. VIRGINIA CREEPER (*Parthenocissus quinquefolia*) -- Seasonal**

The Virginia Creeper is a high climbing vine that usually climbs on trees in the forest. During the fall, the leaves of this plant turn a bright red and stand out. Its main support for climbing on trees are the tendrils, which are coiling, thread-like organs that clasp for the vine's support. This plant should not be confused with Poison Ivy. Poison Ivy has three leaves and Virginia Creeper has five leaves.

**23. BLACK CHERRY (*Prunus serotina*)**

The easiest way to identify the Black Cherry is by the bark. The old trunk is almost black and made up of small broken pieces of the original young, smoother cherry bark. This tree grows 50 to 60 feet tall with a narrow, open crown. The fruit of the Black Cherry may attract up to 70 different species of birds. The Black Cherry occurs on rich, moist soils commonly mixed with hardwoods.

**24. MAIDENHAIR FERN (*Adiantum pedatum*) -- Seasonal**

The Maidenhair Fern is one of the best known and most distinctive ferns of the forest. It can be recognized by its shiny purple-brown strip that is divided at the top. The leaves can be recognized by their nearly circular shape.

Notice the slope that the plant is growing on. It is the type of area in which a fern prefers to grow. The early Indians used this plant to make an ointment to heal skin irritations.

**25. BITTERNUT HICKORY (*Carya cordiformis*)**

During the winter and spring, the buds of the Bitternut Hickory are yellow. The bark is smooth and the leaves are 6 to 9 inches long with 7 to 11 leaflets. This species is not as long lived as other hickories, and its fruit is bitter, giving the tree its name.

**26. FRUIT TREE (Wolf River Apples)**

Dr. Sutcliffe planted several apple trees, raspberries, and even had a garden below the pond when he owned the farm. Mike Wallace, former director of the Guthrie County Conservation Board, tells the story of meeting Doc Sutcliffe on the area one day and Doc had forgotten his lunch. He fixed his own lunch on the site by catching a few fish from the pond and picking fruit from the garden and trees he had planted. No one had a better lunch that day than Doc Sutcliffe. If the apples are ripe, you may help yourself; but please leave some for the next person.

**27. Green Ash (*Fraxinus pennsylvanica*)**

Notice the large stump sprout Green Ash. Green Ash is a popular hardwood tree that is commonly planted in yards throughout Iowa. As hardwoods go, the Green Ash is fairly quick growing with a shallow root system. The leaves are opposite facing in groups of seven to nine leaflets, finely toothed. The bark has thin brown shallow fissures and scaly ridges.

**28. EASTERN RED CEDAR (*Juniperus virginiana*)**

The Red Cedar is the most common conifer that is native to Iowa. The Red Cedar in front of you is one of the largest in Guthrie County. The leaves of the Eastern Red Cedar may be scale-like or awl-like, or may have both types of leaves on the same tree. It has evergreen foliage, dark green to blue-green or reddish cast. It grows in a variety of soil types and is a good tree for wildlife.

**29. OHIO BUCKEYE (*Aesculus glabra*)**

This tree has large compound leaves and can reach a height of 100 feet when it is mature. It is susceptible to a rust disease in the summer. The fruit of the Buckeye Tree has been a favorite of people for centuries. Some people believe that this tree was introduced to America from Europe by people carrying the seed across the ocean in their pockets.

**30. CORAL BERRY (*Symphoricarpos orbiculatus*)**

The Coral Berry or Buck Brush is a native shrub that occurs throughout Iowa. The flowers of this plant are very small and inconspicuous. The red fruit forms clusters along the sides of the plant that are very noticeable throughout the fall and winter. The fruits provide food for wildlife.

**31. PICNIC AREA/OUTDOOR CLASSROOM**

This area will be used by school groups for environmental education or by the general public for picnics and other family outings. It also signifies the end of the self-guided nature trail. The Guthrie County Conservation Board hopes you have picked up some valuable information and had an enjoyable time. Please contact the Guthrie County Conservation Board office at (641) 755-3061 if you have questions or comments.

## WILDFLOWERS

**1. SWEET WILLIAM (*Phlox maculata*)**

This is a common wildflower that grows in woods, road ditches, and river bottoms. The flower is blue to lavender in color and has purple spotted stems that are covered with down. This flower is common in spring, but can be seen throughout the summer.

**2. DWARF TRILLIUM (*Trillium nivale*)**

This is one of the earliest wildflowers to bloom. Three leaves and three petals are characteristic for all trilliums. This plant is very small (2 to 6 inches) and has white petals less than an inch long. It blooms from March to May.

**3. TROUT LILY (*Erythronium americanum*)**

Another name for this wildflower is Adders Tongue. It has two mottled basal leaves and reflexed yellow petals that often have a brownish-purple color beneath. Trout Lily can grow up to 10 inches and blooms from March to May.

**4. VIRGINIA BLUEBELLS (*Mertensia virginica*)**

The blue petals are on a stout stem and the flowers are nodding, almost trumpet-like. The leaves are oval and smooth. The plant reaches a height of 1 to 2 feet and blooms from March to May.

**5. BLOODROOT (*Sanquinaria canadensis*)**

Bloodroot has reddish-orange juice in the stems and roots that “bleed” when they are broken. The white single flower has eight to ten petals and blooms in early spring.

**6. HEPATICA (*Hepatica americana*)**

Another common name for this plant is Liverwort. The flower is light blue or pink-white in color. Three liver-shaped and lobed leaves have hairy stems. Hepatica grows 4 to 6 inches tall and blooms in early spring.

**7. DOWNY YELLOW VIOLET (*Viola pubescens*)**

This yellow flower has downy stems and leaves that are heart-shaped. This wildflower occasionally has one basal leaf and grows in dry woods. It blooms in early spring.

**8. DUTCHMAN’S BREECHES (*Dicentra cucullaria*)**

Dutchman’s Breeches have fragrant, yellow-tipped, drooping flowers on a tuft of fern-like foliage. The flowers resemble “breeches” on a slender clothesline with a nectar pocket on each leg. This plant blooms around the first of May.

**9. SPRING BEAUTY (*Claytonia virginica*)**

This wildflower has smooth, linear leaves midway up the stem. The petals on the flower are white or pink with darker pink veins. It blooms from April to May and grows 6 to 12 inches tall in most woods.

**10. WILD GINGER (*Asarum canadense*)**

The maroon flower is in the crotch between two leaves' stalks at ground level. It is cup-shaped with three lobes. The leaves are heart-shaped and have hairy stalks that conceal the flower beneath them. Wild Ginger blooms from April to May.

**11. RUE ANEMOE (*Anemonella thalictroides*)**

A small wildflower with two to three flowers on slender stalks above a whorl of small, three-lobed leaves. This flower can be seen in woods from March to May.

**12. WILD GERANIUM (*Geranium maculatum*)**

This flower has five-parted, hairy leaves. It grows 1 to 2 feet tall and blooms from April to June. The bloom is pink to lavender in color.

**13. JACK-IN-THE-PULPIT (*Arisaema atrorubens*)**

This wildflower has a flap-like spathe that is green or purplish-brown, often striped, and curves over a club-shaped spadix (the "Jack" or

preacher in the pulpit). In the summer, the spathe wears away revealing bright red berries. This plant blooms from April to June.

**14. COLUMBINE (*Aquilegia canadensis*)**

This plant has brightly colored, scarlet blossoms with five long curved spurs. Columbine has compound leaves and grows in rocky woods, slopes and shaded edges of the woods. It blooms from May to June.

**15. MAY APPLE (*Podophyllum peltatum*)**

Two umbrella-like leaves partially hide a white six- to nine-petaled flower that is attached to the fork below the leaves. This wildflower is often found in colonies and blooms from May to June.

**16. SOLOMON'S SEAL (*Polygonatum pubescens*)**

This wildflower has inconspicuous paired, yellow-green flowers that dangle underneath large sessile-like leaves. This plant grows in the woods or thickets and reaches a height of 1 to 3 feet and blooms from April to June.

**17. BLUE-EYED GRASS (*Sisyrinchium species*)**

This stiff, grass-like wildflower has six blue-violet petals, each tipped with a small point. It blooms from May to June. There are approximately nine different species of blue-eyed grasses in the Midwest.

**18. GOLDENROD (*Soldago canadensis*)**

The stem is smooth at the base and somewhat downy at the top. The leaves are dense and toothed. The flowers are yellow and massed in showy clusters. Goldenrod blooms from May to September.

**19. JACOB'S LADDER (*Polemonium vanbruntiae*)**

This wildflower has loose clusters of blue-violet bells and the ladder of paired leaflets. The plant is 1 to 3 feet tall and grows in woods and swamps. The bloom is from June to July.

**20. WOOD SORREL (*Oxalis montana*)**

This yellow wildflower has delicate heart-shaped, clover-like leaflets. The seed pods form sharp angles. It grows to 15 inches tall in woods and roadsides, and blooms from May to October.

**21. FALSE SOLOMON'S SEAL (*Smelacena racemosa*)**

The oval, pointed leaves alternate along a reclining stem which is tipped with a cluster of creamy white flowers. True Solomon's Seal (#16 in this brochure) differs from False Solomon's Seal by having thin flowers in leaf axils rather than in terminal clusters. This plant blooms from May to July.

**22. VIRGINIA WATERLEAF (*Hydrophyllum virginianum*)**

This white to pale violet wildflower has long protruding stamens and irregularly cut five to seven lobed leaves. It grows to 3 feet tall from May to August.

The Prairie Woodland Conservation Foundation is sponsoring this guide. The Foundation was set up to accept donations and promote Guthrie County Conservation Board programs and activities. If any group or individuals are interested in donating money, land or gifts, please call (641) 755-3061.