



## **STARVED ROCK & MATTHIESSEN STATE PARK(S)**

*for students, educators, scout leaders, staff, and volunteers.*

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## NATURAL HISTORY OF STARVED ROCK

<https://isgs.illinois.edu/outreach/geology-resources/glaciers-smooth-surface>

### **Geology**

Starved Rock, now mostly appreciated as a state park for its natural beauty, has a wealth of prehistoric and historic importance. About 600 million years ago, Northern Illinois was part of a broad upland that was undergoing extensive erosion. The erosion wore the land down to near sea level. Erosion that forms a near-sea level surface is called a peneplain. This peneplain was submerged several times by seawater and several layers of sediment were laid on the surface.

The drainage was different from today's drainage system. There was a major north-south river located about 30 miles west of Starved Rock. There was also a major east-west river about 90 miles south of the rock. The north-south river was the predecessor to the Mississippi River and the east-west river was one of its tributaries.



<https://isgs.illinois.edu/outreach/geology-resources/build-illinois-last-500-million-years>

### **Glaciers**

Starved Rock State Park was once covered with 3000-5000 feet of glacial ice. This ice was part of the continental glacier which invaded this region several times in the past 700,000 years. The maximum thickness of this glacier has been estimated at up to two miles thick.

Glacial ice can only move forward, never backward. When a glacier is said to be retreating, it is melting faster than it is moving forward. If the ice moves forward faster than it melts, it is said to be advancing. If it melts at about the same rate as it is moving forward, then it appears to be stagnant and the forward motion of the ice has stopped.

As glacial ice can only move forward, it picks up rocks and carries them within the ice. When the ice melts, these rock particles are dropped at the point of melting. All dropped rock material is called drift. Drift found at the point of melting is called till. Till is unsorted glacial drift. When the glacier is stagnant, the drift accumulates into a pile called an end moraine. After the glacier has retreated, it leaves a range of irregular hills which are the end moraines. The Marseilles Moraine and the Farm Ridge Moraine are two of the closest moraines to the Starved Rock Region. The meltwater of the glacier was so great in volume that it would accumulate behind the moraines and form vast lakes. The Kankakee Torrent was produced from one of these glacial lakes that broke through the Farm Ridge Moraine and flooded the area creating the Illinois Valley. The streams that drained these lakes were gigantic compared to today's streams. The Illinois Valley was formed by one of these streams.

## **Rocks**

All rocks found at Starved Rock are sedimentary rocks, but a few glacial erratic found on the trail (granite boulder on the bluff trail from French to Wildcat Canyon). Sedimentary rocks are formed from deposits of pre-existing rocks or pieces of once-living organisms that accumulate on the Earth's surface. If sediment is buried deeply, it becomes compacted and cemented, forming sedimentary rock. Most of the rocks were formed along the bottom of a sea that existed in Illinois about 460 million years ago, during a period called the Ordovician Period of the Pennsylvania Era.

Sandstone is a soft rock made of a hard mineral. You can often crumble sandstone with your bare hand, but if you look at the sand with a hand lens, you see frosted, well-rounded grains of a mineral, quartz, that rates 7 out of 10 on the hardness scale. Because the grains are not very well cemented together, it is very susceptible to erosion by wind, water, and biological activity, resulting in the sculpted shapes you see here. The exposed surfaces of the rock appear to be red because of the iron particles that have been concentrated on the surface due to evaporation and leaching.

The St. Peter Sandstone, being extremely pure quartz, is used for the manufacture of glass, filter and molding sand, as an abrasive, and in the hydrofracturing of oil and gas wells. For this reason, there are several glass factories and quarries located in the Starved Rock region.

## St. Peter Sandstone (Sedimentary)



> St. Peter Sandstone was formed during the Paleozoic Era in the Middle Ordovician Period, 450 Million years ago. Sediment was deposited in shallow seas covering most of the United States.

### Texture

Very fine grained and well sorted sandstone.

### Minerals

Consists almost entirely of mineral quartz. It is mined in many parts of the Midwest as raw material for glass manufacturing, silica sand for abrasive uses, and for foundries to make sand castings (Geology, 2014).



## Formations

Formations are successive units of rock that have some degree of uniformity or are characterized by distinctive rock features. The dominant rock formation at Starved Rock is St. Peter Sandstone, which is named for the St. Peter River in Minnesota, now called the Minnesota River. A formation can be divided into members. A member is defined as a persistent subdivision of a formation that can be distinguished from adjacent parts of the formation. The St. Peter Sandstone is subdivided into the Kress, Tonti, and Starved Rock members. The Kress Member appears as layers of sheet green and white shale, white claystone, sandstone, and conglomerate. The Tonti Member is fine-grained sandstone. It can be viewed at the lower ledge above the river at Starved Rock. The Starved Rock Member is made of coarser sand than the Tonti Member and can be found at Lover's Leap, and all of Starved Rock, but for the lower 20 feet.

The numerous canyons that are prominent features at the park were carved in the bedrock by water as upland streams drained into the Illinois River. About 16,000 years ago, a catastrophic flood, known as the Kankakee Torrent, surged through this region as meltwater from glaciers was released. When the flood receded, much of the landscape had been scoured down, exposing the bedrock of St. Peter Sandstone, including Starved Rock. Five miles east of here the same stone is exposed at Buffalo Rock State Park. To the west, however, beyond Split Rock, the bedrock is buried 1,000 feet below the surface.

The layers of St. Peter Sandstone appear to be horizontal, but they are dipping slightly toward the east. The rocks at Starved Rock State Park form the east limb of an asymmetrical anticline called the LaSalle Anticline. An anticline is a group of rock strata bent upward due to folding, as in the form of an arch.

Rock strata that are exposed at the surface are called outcrops. Wind, rain, plants, and animals all combine in a process called weathering, which breaks down the rocks. The particles of which a rock consists are held together by a mineral precipitant called cement. This cement is usually either silica, calcic, or iron.



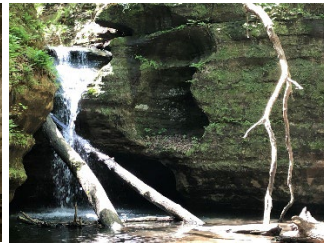




Starved Rock



Ottawa Canyon



Kaskaskia Canyon



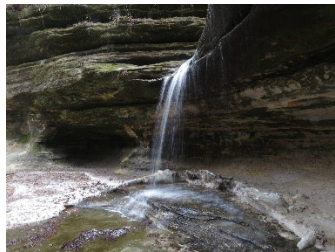
Lovers Leap



Eagle Cliff Overlook



French Canyon



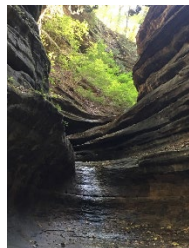
LaSalle Canyon



Tonti Canyon



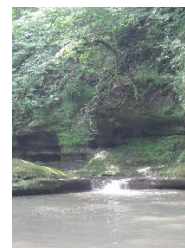
St. Louis Canyon



Aurora Canyon



Wildcat Canyon



Illinois Canyon

## Flora

Starved Rock State Park has a large diversity of plant life. Most notable are the trees; the park is a mix of coniferous and deciduous forests. Naturally occurring are a variety of oak species, identified by their many-lobed leaves and acorns. Trees with compound leaves, such as hickories, walnuts, and ashes, are also prevalent. Coniferous tree species like white pine, Canada yew, and red, and white cedar can be found along the canyon walls, and outcrops. While some of the white pines may have been established naturally when seeds were brought south from advancing glaciers, most of the pines found at the park were planted by the Civilian Conservation Corps to help prevent erosion of the land along the Illinois River.

Many native wildflowers can also be found throughout the park. One of note is the harebell, a delicate, small plant with narrow leaves and lavender petals in groups of five. This plant is specifically adapted to growing in sandy soils and can often be seen growing on the slopes of Starved Rock, Lover’s Leap, and Eagle Cliff. Other species that can be found along the trails include columbine, tall bellflower, jewelweed, Virginia bluebells, trillium, and more. Several species of ferns, which do not produce flowers but instead reproduce by microscopic spores, can also be seen along the trails. They often grow in shady, moist locations close to the waterfalls.

One of the most prominent species in the park has gained notoriety from an old adage warning of its itchy reputation: “Leaves of three, let it be.” This describes poison ivy, which will always develop its leaves in groups of three, regardless of the form it takes. This versatile plant can grow as a ground cover, a climbing vine, a shrub, or even as a small tree. Many animals use this plant as shelter or food, and humans are one of the few species for which the plant triggers an allergic reaction. It produces an oil called urushiol, which, when exposed to skin, will often produce a red, itchy rash. If you think you have been exposed to poison ivy, wash the affected area with soap and water as soon as possible to break down the oil.

A wide variety of mushrooms, lichens, and moss occur at the park thanks to the cool and damp sandstone along the canyon walls and outcrops. Scale-like green plants called liverworts creep along the wet canyon walls and can be seen up close at places like French Canyon. Liverworts, like mosses, are land plants that do not have a vascular system. The lack of vein-like tubes to conduct moisture and nutrients throughout the plant limits them to a small size. Like ferns, they produce spores instead of seeds. Their form of reproduction usually requires them to be in wet or moist places like the canyon walls found at Starved Rock and Matthiessen state parks.

## **5 Common Wildflowers at Starved Rock**

### **Common Blue Violet**

**Size:** 6 inches across, 4 inches high

**Habitat:** Prairies, parts of woodlands, savannas.

**Bloom Time:** Mid to late spring for 1 to 1.5 months

**Fun Fact:** State flower of Illinois. Has self-pollinating flowers. Often seen as a weed but are an important food source for wildlife.





### **Virginia Bluebells**

**Size:** 1 to 2.5 feet tall

**Habitat:** Moist woods, often in colonies

**Bloom time:** Mid to late spring for about three weeks

**Fun Fact:** The plant has clusters of light blue bell-shaped flowers. When it forms large colonies in the spring, it provides protective cover for wildlife.



### **Garlic Mustard**

**Size:** 2 to 3.5 feet tall

**Habitat:** Shaded and semi-shaded woodlands

**Bloom time:** Late spring, early summer, for 1 to 2 months

**Fun Fact:** Highly invasive, crowds out other plants in the understory. It is biennial, meaning it has a two-year life cycle.



### **Mayapple**

**Size:** 1 to 2 feet tall

**Habitat:** Woodlands and savannahs, often in colonies

**Bloom time:** Between March and June, lasts 2 to 3 weeks.

**Fun Fact:** The flower is between the leaf stalks and only last 1 to 2 days. Fruit develops after May and is edible in small amounts. The underground stem is toxic, and the foliage is bitter.



### **Zigzag Goldenrod**

**Size:** 2 to 3 feet tall

**Habitat:** Woodlands, shaded calcareous glades and limestone cliffs

**Bloom time:** Late summer or early fall, for about one month

**Fun Fact:** There are bee pollinators of goldenrods, they only pollinate these flowers. Goldenrod does not cause allergies; the pollen is too large and sticky to become airborne and inhaled.



## **5 Common Mushroom Species found at Starved Rock and Matthiessen State Parks**

### **Chicken of the Woods**

**Habitat:** Grows on living and dead oak trees, throughout Eastern North America and Europe.

**Season:** Common summer and fall.

**Fun Fact:** Do not eat raw mushrooms. This mushroom is edible when cooked but know how to identify it first. This mushroom earned its name because when cooked it tastes and has a similar texture to cooked chicken.





### **Hen of the Woods**

**Habitat:** Grows on decaying hardwood trees. Common in the Eastern half of the United States.

**Season:** Fall

**Fun Fact:** Called hen of the woods because it looks like the tail of a hen or bird. Also called maitake. Edible.



### **Jack O'Lantern**

**Habitat :** Grows around decaying hardwoods, especially oaks in Eastern North America.

**Season:** Fall

**Fun Fact:** This species is bioluminescent and can glow in the dark. NOT EDIBLE.



### **Stump Puffball**

**Habitat:** Grows on decaying hardwoods and conifers throughout North America.

**Season:** Found in large dense clusters spring through fall. Edible in spring.

**Fun Fact:** They are the only puffballs to grow on deadwood and not soil. Named "puffballs" because they puff out spores in the fall once they have ripened.



### **Turkey Tail**

**Habitat:** Found growing in dense clusters on decaying or dead hardwoods throughout the world.

**Season:** May through December. Edible by grinding into a powder and used in tea.

**Fun Fact:** Named for the fan shape and band coloration that resembles the tail of a turkey.



## **5 Common Tree Species found at Starved Rock and Matthiessen State Parks**

### **White Oak**

**Bark and Branches:** Clay to light gray patchy plates with shallow fissures. Alternate branching.

**Foliage:** Deciduous (seasonally loses leaves). Leaves have 7 to 9 lobes. The lobes are rounded without bristle tips.

**Wildlife:** Birds, insects, and mammals for habitat and food.

**Fun Fact:** Used for the hull planking on the USS Constitution, the oldest warship in the U.S. It is the state tree of Illinois.



## Red Oak

**Bark and Branches:** Bark on lower trunk dark grey with deep fissures. Alternate branching.

**Foliage:** Deciduous (seasonally loses leaves). 7-11 bristle-tipped lobes (points) on each leaf.

**Wildlife:** Birds, insects, and mammals for habitat and food.

**Fun Fact:** It is used for bridge timbers, flooring, furniture, and fuel.



## White Pine

**Bark and Branches:** Dark gray to brown bark that is fissured, showing ridges and deep indents. Branches grow horizontally from the trunk in a whorl around the trunk.

**Foliage:** Evergreen (foliage year-round). Up to 5, 3-inch long needles per bundle or cluster.

**Wildlife:** Pine seeds are favored by rabbits, squirrels, and many birds, especially red crossbills.

**Fun Fact:** In colonial days, the best of the trees were set apart by the king for masts on British ships.



## Shagbark Hickory

**Bark and Branches:** Peeling strips of grey to brown bark that looks like it is shedding. Alternate branches.

**Foliage:** Deciduous (seasonally loses leaves). 5 ovate leaflets per petiole/stem. Largest leaflet at the top/end.

**Wildlife:** Bats like the Indiana brown bat use the snug crevices between the shedding bark as shelter. Foxes, mice, chipmunks, squirrels, rabbits, and several birds enjoy the nuts every fall.

**Fun Fact:** The wood is excellent for burning, and it's used to produce flavorful food like hickory-smoked bacon.



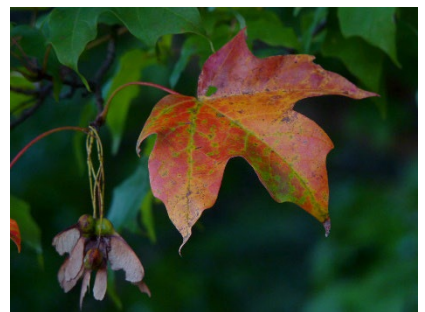
## Sugar Maple

**Bark and Branches:** The bark is burrowed and scaly dark brown to light grey. Branches are opposite.

**Foliage:** Deciduous (seasonally loses leaves). 5 squarish lobes and the 3 largest have pointed tips.

**Wildlife:** mammals and birds both benefit from buds, twigs, seeds, and leaves of the maple tree.

**Fun Fact:** The Sugar Maple was the premier source of sweetener, along with honey, for both Native Americans and early European settlers. Sap was collected in winter and boiled into sugar and syrup.



## Fauna

A wide diversity of wildlife frequents the woodlands, prairies, rivers, canyons, and wetlands found at Starved Rock and Matthiessen State Parks. White pelicans migrate through every March and stay through November. They can be seen bobbing along the surface of the Illinois River searching for fish. Another large bird the wild American turkey can be found roaming the woodlands at both parks in search of nuts and berries as it forages through the leaf litter. Other migratory birds such as tanagers, warblers, chats, cuckoos, and cormorants can be seen and heard through the spring and summer months at Starved Rock and Matthiessen state parks.

Bald eagles have been sighted in the park on occasion, particularly during severe winters. The northern eagles' main flyway is the upper Mississippi River; however, in severe winters, when water freezes over, they go in search of open water. The water below the Starved Rock Dam does not freeze because of the turbulence generated through the dam. This serves as an excellent fish buffet for the bald eagle.

Other residents of the area include mammals like white-tailed deer, gray and red foxes, groundhogs, striped skunks, opossums, chipmunks, ground squirrels, voles, moles, beavers, and even river otters!

Amphibians thrive in the park's wetland areas at the west entrance, canyon creeks, Matthiessen Lake, and along the shallow wide waters of the Illinois and Vermillion Rivers. A few of those species found in the park are the tiger salamander, northern leopard frog, cricket frog, chorus frog, green frog, bullfrog, wood frog, grey tree frog, and the American toad.

Reptiles like the common water snake, garter snake, rat snake, and little brown snake can be found sunning themselves along the outcrops or crawling through the leaf debris on the forest floor. Other reptiles to note are the snapping turtle, painted turtle, and spiny softshell turtles found in the Illinois River.

Fish such as the bullhead catfish, long-nosed gar, short-nosed gar, black spotted crappie, bluegill, sunfish, carp (and invasive Asian carp), sauger, muskie, and more swim the waters of the Illinois River at the park.

### 5 Common Fish Species found at Starved Rock and Matthiessen State Parks

#### **Yellow Bullhead Catfish**

**Size:** 6-14 inches | 2-4 pounds.

**Food:** Opportunistic feeders, live or dead organisms.

**Habitat:** Shallow ponds and clear, turbid waters with a large amount of vegetation.

**Fun Fact:** Catfish do not have scales.





### **Longnose Gar**

**Size:** Up to 3 feet | 5-6 pounds.

**Food:** Fish and large invertebrates.

**Habitat:** Sluggish pools, backwaters, and oxbows of rivers, streams, and lakes

**Fun Fact:** Gars can use their swim bladder to help them breathe, supplementing their gills in oxygen-deficient waters.



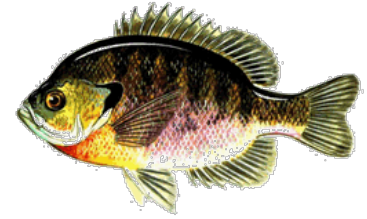
### **Bluegill**

**Size:** 8-10 inches | 1/4<sup>th</sup> pound.

**Food:** Generalist hunters, meaning they will eat anything that fits in their mouths.

**Habitat:** A variety of aquatic habitats with warm water and vegetation

**Fun Fact:** The bluegill is the Illinois state fish.



### **Walleye**

**Size:** 14-30 inches | Up to 20 pounds.

**Food:** Mostly fish.

**Habitat:** Open waters with clean bottoms of gravel, rock, sand, or clay.

**Fun Fact:** Walleyes are named such due to their unique eyes which have a shiny appearance that helps to give them excellent vision.



### **Copi (Asian Carp)**

**Size:** 3-5 feet | 60-150 pounds.

**Food:** Plankton, mollusks, and invertebrates depending on the species.

**Fun Fact:** The “Asian Carp” in Illinois consists of 4 different carp species that originate from Asia. The Silver Carp, the Bighead Carp, the Black Carp, and the Grass Carp. These are nonnative fish introduced to the United States in the 1960s and 1970s. These fish were originally released in Arkansas and spread into the Mississippi and its watershed. Three electric barriers currently help to try to keep the Asian carp from spreading into the Great Lakes.



## **5 Common Insect Species found at Starved Rock and Matthiessen State Parks**

### **Rusty-Patch Bumblebee**

**Size:** 0.5 inches.

**Food:** Nectar.

**Habitat:** Prairies and grasslands.

**Active:** April – October

**Status:** Endangered

**Fun Fact:** All bumblebees are eusocial. Meaning they live in a colony with few reproducing females and a working caste.





### **Northern Walking Stick**

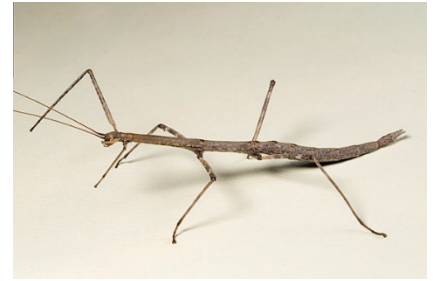
**Size:** Females 3.75 inches | Males 3 inches.

**Food:** Leaves of deciduous trees and shrubs.

**Habitat:** Deciduous woods and forests.

**Active:** Spring – Fall | Nocturnal

**Fun Fact:** As juveniles, walking sticks can regrow lost limbs.



### **Chinese Mantid**

**Size:** Up to 5 inches.

**Food:** Primarily other insects.

**Habitat:** Meadows and gardens, on tall herbs, flower clusters, and shrubs.

**Active:** Nymphs hatch in late spring. Mating pairs are seen mostly in September.

**Fun Fact:** All mantids are mantises but not all mantises are mantids. Mantis refers only to the genus Mantis, while mantid refers to the entire order.



### **Eastern Dobsonfly**

**Size:** Body: 2 inches | Wingspan: 4.8 inches.

**Food:** Larvae: Aquatic insects | Adults: Nothing.

**Habitat:** Near fast-flowing water, on woody vegetation.

**Active:** Adults emerge in early summer.

**Fun Fact:** The male has large mandibles incapable of harming a person. But the female has smaller, though still large, mandibles that can draw blood if bit.



### **Weevils**

**Size:** Less than 1/16<sup>th</sup> inch – 1.6 inches depending on the species.

**Food:** Various kinds of plants.

**Fun Fact:** Weevils belong to the family Curculionidae which is the largest family of insects. There are 40,000 species worldwide and 2,500 of those are found within North America.



## **5 Common Reptiles Found at Starved Rock**

### **Common Water Snake**

**Size:** 22 to 42 inches

**Food:** Small fish, large insects, birds, mammals, other snakes

**Habitat:** Streams, lakes, ponds, and marshes

Females give birth in July or August to 20 to 50 young.

**Fun Fact:** Often mistaken for the cottonmouth, but is actually nonvenomous.



### **Common Garter Snake**

**Size:** 18 to 26 inches

**Food:** Worms, amphibians, insects, mice, and small birds

**Habitat:** Forests, meadows, marshes, streams, vacant city lots

Females give birth to 15 to 80 live young in late summer or early fall.

**Fun Fact:** One of the few species of snakes that give birth to live young.



### **Blanding's Turtle**

**Size:** 5 to 7 inches

**Food:** Crustaceans, insects, frogs, snails, berries, and plants

**Habitat:** Marshes, bogs, lakes, and streams with mud floors

Females will travel up to 2 miles to lay 6 to 15 eggs in May or June

**Fun Fact:** Endangered in Illinois due to habitat loss. At risk greater from cars and predators during migration. McHenry and Lake County completed a large reintroduction in 2021.



### **Painted Turtle**

**Size:** 5 to 7 inches

**Food:** Plants, insects, crayfish, mollusks, fish (live and dead), amphibians

**Habitat:** Shallow water with vegetation and mud bottoms

The males have exceptionally long claws that they use to stroke female's heads to initiate mating.

**Fun Fact:** During brumation, their heart rate drops down to 8 beats per minute.



### **Snapping turtle**

**Size:** Average of 12 inches

**Food:** Insects, fish, crayfish, birds, amphibians, reptiles, mammals

**Habitat:** Permanent bodies of water

**Fun Fact:** They only eat in water; they need the pressure to swallow food.



## **5 Common Amphibians Found at Starved Rock**

### **Eastern Tiger Salamander**

**Size:** 7 to 8 inches

**Food:** Worms and insects

**Habitat:** Moist burrows in woodlands, swamps, and fields.

**Fun Fact:** Males deposit spermatophores underwater for females to absorb.

### **Four-toed Salamander**





**Size:** 3 to 4 inches

**Food:** Small invertebrates and crustaceans.

**Habitat:** Near peatlands where sphagnum is found.

**Fun Fact:** Have four toes on both their fore and hind feet.

They can lose their tail; it will keep wiggling to distract predators.



### **Gray Tree Frog**

**Size:** 1 to 2 inches long

**Food:** Arthropods

**Habitat:** In woodlands near water.

**Fun Fact:** Spends the winter frozen in trees or in leaf debris.

Glucose in their system acts as antifreeze so ice does not form in their cells.



### **American Toad**

**Size:** 2 to 3.5 inches

**Food:** Insects and earthworms

**Habitat:** Shallow pools with vegetation

**Fun Fact:** The males call for mates with a long, musical trill. Females lay strips of thousands of eggs along the bottom of the pond to be fertilized.



### **Green Frog**

**Size:** 2 to 3.5 inches

**Food:** Spiders, insects, worms, and small mollusks

**Habitat:** Weedy bodies of freshwater

**Fun Fact:** The males' breeding call sounds like 1 to 3 banjo twangs.



## 5 Common Bird Species found at Starved Rock and Matthiessen State Parks

### **Black Capped Chickadee**

Size: 4-6 inches

Food: insects, seeds, and berries.

Habitat: Forested areas. Nest in tree cavities.

Call: "Chickadee dee dee"

Fun Fact: Incredible memory to recall where they have cached food.



### **Northern Cardinal**

Size: 8-9 inches

Food: seeds/ground forager

Habitat: Open woodlands. Build a nest in shrubs.

Call: "Cheer o Cheer o What What!"

Fun Fact: State bird of Illinois



### **Gray Catbird**

Size: 8-9.5 inches

Food: insects

Habitat: Open woodlands. Build nests in shrubs.

Call: "Meeoow" sounds like a cat.

Fun Fact: Members of the Corvid family like crows and jays and can copy other bird calls.



### **American White Pelican**

Size: 50-65 inches/9-foot wingspan

Food: Fish

Habitat: Lakes and Ponds. Nest on the ground.

Call: garbled croaking/quacking noise.

Fun Fact: Do not dive for food like the brown pelican but dip and scoop.



### **Bald Eagle**

Size: 28-38 inches with 6-8 ft wingspan. The female is larger than the male.

Food: Fish and mammals.

Habitat: Woodland edges of forests.

Call: High-pitched cackle.

Fun Fact: Bald eagles develop their white head and tail feathers by 4-6 years of age.





## 5 Common Mammal Species found at Starved Rock and Matthiessen State Parks

### **Red Fox**

**Size:** 36-50 inches head to tail and weighs up to 15 pounds.

**Diet:** Omnivore and will eat small mammals, birds, reptiles, berries, and more.

**Habitat and Range:** Found throughout North America from rural to urban areas.

**Fun Fact:** A group of foxes is called a “skulk”. Foxes have over 20 different calls.



### **Groundhog**

**Size:** 25 inches in length and up to 14 pounds in weight.

**Diet:** Primarily herbivores dining on vegetation but will occasionally eat insects and worms.

**Habitat and Range:** Found throughout rural and urban areas in Eastern United States and Canada.

**Fun Fact:** Other names are woodchucks, land beavers, and whistle pigs.



### **Raccoon**

**Size:** 23 to 38 inches in length and up to 20 pounds in weight.

**Diet:** Omnivore and will eat berries, clams, frogs, eggs, and worms.

**Habitat and Range:** Found throughout North America.

**Fun Fact:** Nocturnal with excellent vision and their black masks serve as antilare devices.



### **Eastern Chipmunk**

**Size:** 8 to 10 inches long and up to 5 ounces in weight.

**Food:** Omnivore which feeds on nuts, eggs, insects, worms, and more.

**Habitat and Range:** Forest and woodland edges in both rural and urban areas from the Eastern United States to Canada.

**Fun Fact:** Chipmunks have several calls including a high shrill and a low clicking sound almost like a turkey cluck. They do not hibernate but go into a state of torpor during extreme cold in winter.



### **White-Tailed Deer**

**Size:** Up to 3 feet tall at shoulder. Males can weigh up to 300 pounds while females can weigh up to 200 pounds.

**Diet:** Herbivores that eat leaves, twigs, buds, grasses, and other vegetation.

**Habitat and Range:** Thrive in a variety of habitats. Found throughout North America but for Northern Canada and areas of Western California.

**Fun Fact:** Only male deer grow antlers and shed them every year.



## The Legend of Starved Rock

IDNR YouTube Video: Starved Rock Snap Shot, Legend of Starved Rock

<https://www.youtube.com/watch?v=a5shZhiyk6Q>



*Chief Pontiac of the Ottawa Tribe*

The name Starved Rock comes from a legendary incident that was said to have occurred in the year 1769. According to legend, the Illinois tribe was trapped on the summit of Starved Rock, surrounded by their enemies the Odawa (Ottawa) and Potawatomi tribes. Unable to obtain food or water, the Illinois were said to have died on the summit of Starved Rock.

The story begins in Cahokia, Illinois, across the Mississippi River from St. Louis. It was there in 1769 that the Odawa chief Pontiac was killed by an Illinois Indian at a trading post. Learning of his death, Pontiac's allies, the Odawa and Potawatomi, allegedly came to Illinois to avenge his murder. According to the legend, the two tribes chased the Illinois to the top of the sandstone butte (now called Starved Rock). When it was over, the Illinois Indians were said to have no longer existed.

What do we know about the Odawa, Potawatomi, and Illinois Indians? In 1769 the Odawa Indians lived in northern Michigan and fished in Lake Michigan and other inland lakes. One group of Odawa lived near Toledo, Ohio. The Potawatomi Indians had left their villages in southern Michigan and migrated into today's state of Illinois. They lived in small villages along rivers and creeks of northern Illinois and in wooded areas called groves where they hunted and fished, and grew, corn. In 1769, the Illinois Indians lived in southern Illinois, hundreds of miles from Starved Rock. The Illinois were mainly farmers who lived in large agricultural villages along major rivers where they grew corn, squash, and beans.

Although the legend of Starved Rock is well known, there is no credible evidence that the Illinois Indians were killed at Starved Rock after the death of Pontiac. What is known is that the Illinois continued to live in southern Illinois until 1832 when they sold their remaining land to the United States government and moved to today's Kansas.

You will not find any fact-based, hard evidence of the total extermination of the Illinois. However, there are a few accounts of the alleged battle on top of the "rock" told by Chiefs who experienced the occurrence. Meachelle, an old Pottawatomie chief told his side of the story to Judge J.D. Caton in 1833. According to Caton, "Meachelle was present at the siege and the final catastrophe, and although a boy at the time, the terrible event made such an impression on his young mind that it ever remained fresh and vivid"

(Mark Walcynski, *Massacre 1769: The Search for the Origin of the Legend of Starved Rock*). Chief Meachelle claimed that the Illinois were extinguished and no more after this battle. According to Judge Caton the tale was true. Henry Schoolcraft, who explored the area near Starved Rock in 1821 also gave an account of the legendary battle on top of “the rock”. He supposedly found fragments of antique pottery and stones that he claimed to have belonged to the Illini and therefore supported the legend. Fur traders, settlers, and visitors of the rock years later gave secondary accounts of what they saw. Most of them claimed to have seen bones of the defeated Illinois. Dr. J.H Goodell states in his article that an early settler, Simon Crosiar, told him that the ground of Starved Rock was literally covered with human bones (Walcynski).

Several versions of the “Legend” have been told over the past few hundred years. Some say Pontiac was stabbed to death at a conference near present-day Joliet, Illinois by a Peoria brave who was hired by the British to silence Pontiac's attempts to stop trade between the British and various Native American tribes in the region. All versions state that the Ottawa and Potawatomie attacked the Illinois village across from the “rock” and the remaining Illinois fled across the river to seek refuge on top of the sandstone butte, but the Ottawa and Potawatomie returned and surrounded the rock eventually starving out the Illinois trapped on top. One version mentions several Illinois braves who escaped by hiding at night on a sandstone ledge then stealing enemy canoes and paddling downriver where they told their tale.

### **The Legend of Lover’s Leap**

Lover’s Leap was named from a legend that contends an Illinois boy and a Potawatomi girl from enemy tribes met and fell in love. Since the two tribes were at war, neither chief would allow them to marry. Since they were forbidden to be with one another in life, they proceeded to the cliff, joined hands, and jumped off so they could be together for all eternity in death.

## **HUMAN HISTORY OF STARVED ROCK**

<https://www.youtube.com/watch?v=2SkG-0MVRDc>

IDNR YouTube Video: Starved Rock Snap Shot, Native American History Timeline

### **Indigenous People’s History**

Archaeologists have found evidence of humans living in the area now known as Starved Rock as far back as 8000 B. C. or 10,000 years ago. These were known as the Paleo Indians and later the Archaic people. They lived, for the most part, by hunting and gathering. From 8,000 BC until 1673 various kinds of people, such as the Hopewellian, Woodland, and Mississippian cultures frequented the area. The Illinois Confederation during the 1400s through the 1800’s was divided into sub-tribes, the better-known ones being the Kaskaskia, Peoria, Cahokia, and Tamaroa. The Kaskaskia village known as La Vantum by the French

extended along the north bank of the river directly across from the park with an estimate of 500-600 houses in the village by 1675. The cabin-like dwellings known as wigwams were of small, rectangular shape, constructed of wooden poles and covered in mats made of rushes (grass-like plants that grow in wetland areas). They had one doorway, a central fireplace that served as a source of heat for warmth and cooking as well as lighting.

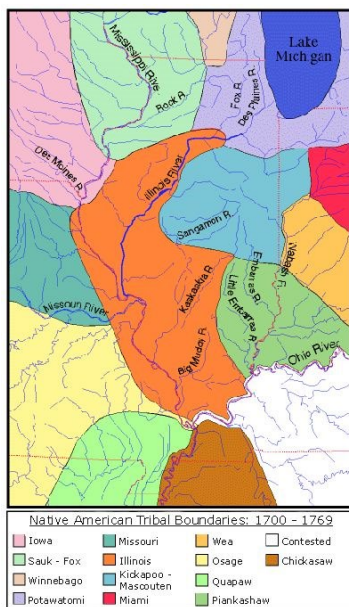
### The Illinois Confederation

IDNR YouTube: Starved Rock Snap Shot, Illinois Confederation

<https://www.youtube.com/watch?v=FyFqU6dftSs>

The Illinois Alliance consisted of, at the time of first French contact with the tribe, about twelve subtribes. Some of these subtribes included the Kaskaskia, Peoria, Tamaroa, Cahokia, and Michigamea. The Illinois called this inter-tribal alliance, *Inokha*. During the 1670s the Illinois appear to have numbered between 9,000 and 10,000 people. They occupied a territory that, at times spread from modern-day Missouri to near the shores of Lake Michigan, north into today’s Wisconsin and as far south as the Arkansas River. In 1673, the Kaskaskia subtribe of the Illinois alliance lived along the Illinois River and across the river and upstream from Starved Rock.

Between 1673 and 1680, numerous Illinois subtribes joined the Kaskaskia at their village. By 1677 the village population grew to between 7,000 and 8,000 inhabitants. The village was abandoned by the Illinois in 1691 when the Illinois groups relocated to Lake Peoria. In 1700, the Kaskaskia left Lake Peoria and established themselves first in present St. Louis, Missouri, and then, in 1703, along the Kaskaskia River in Randolph County, Illinois. By the mid-1700s all Illinois subtribes lived in settlements along the Mississippi in Southern Illinois. In 1832, the Illinois sold their remaining land to the United States government and relocated to the Osage River in Kansas where they were joined by the Wea and Piankashw (Miami subtribes) in 1854, becoming the Consolidated Peoria tribe. In 1868, the Consolidated Peoria moved to Miami, Oklahoma where they became the Peoria Indian tribe of Oklahoma.





## Culture

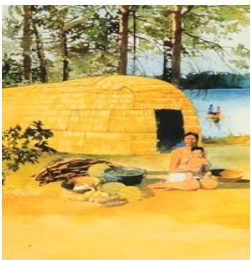
The Illinois lived in a seasonal cycle related to cultivation of domestic plants and hunting, moving from semi-permanent summer villages to winter hunting camps, and then returning to summer villages in the spring. Their summer “cabins,” as the French called them, were constructed of reed mats that could be disassembled and carried to new village sites. They planted maize (corn), beans, and squash, known as the "Three Sisters". They prepared dishes such as sagamite, a combination of domestic vegetables that was oftentimes mixed with animal fat or meat. Plum Island located west of the Starved Rock Lock and Dam was once an agricultural field and garden for the local Illinois tribes. They also gathered wild foods such as nuts, fruit, roots, and tubers. During the summer, the Illinois participated in the summer bison hunt, which lasted between three to five weeks. Illinois men also hunted deer, elk, and bear. Illinois women prepared the meat for preservation by drying thin strips of meat over a low temperature fire, essentially making jerky from the flesh. They also prepared skins for weapons, clothes, blankets, and more. The surrounding woodlands, wetlands, and prairies were their one stop super Wal-Mart with groceries, hardware, clothing, pharmacy, and more.

## Where did the Illinois live?

The Illinois were original inhabitants of modern-day Illinois, Missouri, Wisconsin, and Iowa. The Illinois tribe lost a considerable number of people during the late 1700’s and early 1800’s due to disease and illness unknowingly introduced by European explorers and settlers.

## Shelter

The Illinois lived in large rectangular houses with walls made of woven reeds called wigwams and longhouses.



*Wigwam*



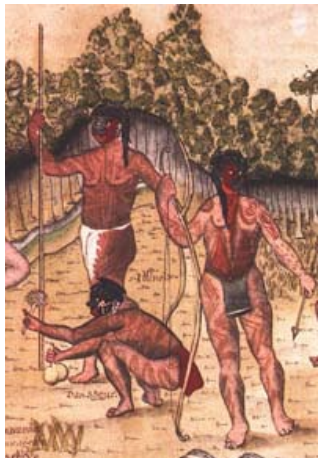
*Kaskaskia*

## Clothing

The Illinois sometimes wore a beaded headband with a few colored feathers in it like a wreath on top of the head. Illinois women usually wore their hair in long braids. Illinois men often shaved their hair short on the sides with bangs or a spike of hair on top and long in the back similar to the 1980s mullet or mohawk. The Illinois painted their faces for different occasions and also tattooed themselves with more permanent

designs. French journals record the Illinois as illustrated men and women with tattoos from head to toe.

[http://www.museum.state.il.us/muslink/nat\\_amer/post/htmls/id\\_tattoos.html](http://www.museum.state.il.us/muslink/nat_amer/post/htmls/id_tattoos.html)



### **Transportation**

The Illinois made dugout canoes by hollowing out large trees such as cottonwood. Overland, Illinois used dogs as pack animals. There were no horses in North America until colonists brought them over from Europe. The dogs carried backpacks or pulled wooden drag sleds called travois.

### **Weapons and Tools**

Illinois hunters and warriors used bows and arrows, spears, and clubs made from animal bones, stone, wood, shells, and clay. Metal and guns were later used during the 1600s after trade with the French and British flourished. Illinois men would also use shields of buffalo hide to deflect enemy arrows.



*Line drawing of bison-scapula hoe, composed of the shoulder blade of a bison lashed to a wood handle. (drawing by Frederick Wilson)*

### **Recreation**

The Illinois tribe was known for their Native American quillwork, beadwork, and embroidery.

The Illinois enjoyed several types of recreation, including a field sport similar to lacrosse and games of chance played with straws or dice. These games were similar to those played by other tribes living in eastern North America. However, different tribes often had different rules for how to play the game or keep score.



*Game of lacrosse being played by members of the Choctaw tribe.*

### **Tribal Interactions**

The Illinois traded with other tribes of the Great Lakes region, and sometimes with more distant tribes. The Illinois fought with many tribes, including the Miami, Iroquois, Sioux, Fox, and Winnebago.

## **THE FRENCH IN THE STARVED ROCK REGION**

IDNR YouTube Video: Starved Rock Snap Shot, Fort St. Louis

<https://www.youtube.com/watch?v=iwqF-JQbZPM>

### **The Jolliet-Marquette Expedition**

During the summer of 1673, Jesuit missionary Jacques Marquette, and French-Canadian fur trader Louis Jolliet, explored the central parts of the Mississippi River, becoming the first people of European descent to do so. Jolliet, Marquette, and five French men paddled from present-day St. Ignace, Michigan in two birch bark canoes as far south as an Indian village located on the Arkansas River. Their return trip took them back up the Mississippi and then up the Illinois River. A short distance upstream from Starved Rock, the group stopped at a village of Kaskaskia Indians, a site known today as the Grand Village of the Illinois Historical site, making the first contact with the Indians of today's state of Illinois. The French group continued up the Illinois, later ascending the Des Plaines River. After portaging to the Chicago River, the group paddled to Lake Michigan. Heading north, the French arrived at a Jesuit mission located near today's De Pere, Wisconsin where Marquette remained until October 1674. Jolliet continued on to his trade post at Sault Ste. Marie. Jolliet was the first on record to suggest a canal to bridge the continental divide between the Great Lake and the Illinois River.





Louis Jolliet



Fr. Jacques Marquette

The next Frenchmen to come through this area were Robert Cavalier Sieur de LaSalle, his lieutenant, Henri Tonti, and 20-30 voyageur paddlers. It was their mission to build a chain of forts so King Louis XIV's claim in the new world could be maintained. LaSalle came down the Illinois River around 1678 and stopped at the Kaskaskia village, noted the sandstone butte across the river, and continued down to the Peoria area where they built Fort Creve Coeur in 1680. LaSalle left Tonti in charge and went back to Canada to supervise operations. In the spring of the next year, LaSalle heard that there had been trouble with the Native Americans of the area as well as with his men. The fort had been destroyed, and all the men had deserted except Tonti, who was later found by LaSalle at the Kaskaskia village. For the next few years, LaSalle was involved in a trip down to the Mississippi Delta, which he took possession of for France. On the return journey, his party built Fort Frudhomme near present-day Memphis, Tennessee.

In the winter of 1682-83, LaSalle and his men constructed Fort St. Louis on top of the 125-foot-tall sandstone butte known as Starved Rock today. The fort commanded a strategic position on the Illinois River and offered protection to the Illinois people of the area from the marauding Iroquois from the east. The Iroquois hated the French for their intrusion on the land and wanted the Illinois farmland. Many battles occurred during the next 20 years including an attack on the fort which did not succeed.

In the intervening years, a very successful trade flourished between the French and the Illinois. There was an abundant supply of wildlife in the area, including beavers. There was a great demand for beaver pelts in Europe, due to the fur's two different layers and rich oil coating which allowed it to repel water. Beaver hats and coats were in high fashion. The Native Americans would trap and trade beaver pelts for French goods such as beads, blankets, tools, and cloth. The alliance grew between the French and the Illinois while the French manned the fort through 1691. LaSalle seldom stayed in one spot for very long. He went in search of the Mississippi Delta from the Gulf Coast. He overshot the Delta, and he and his party ended up along the Texas coast. LaSalle was murdered in 1687 by members of his disgruntled party. Tonti went to the Peoria area in 1692 and built a fort at the village of Pimitoui now known as the city of Peoria.

In 1702, a royal proclamation from King Louis XIV ordered Fort St. Louis to be abandoned and trading rights suspended. Both the French and Native American populations moved down to the lower Illinois River and into the Mississippi, eventually settling at the new posts of Cahokia and Kaskaskia. Fort St. Louis was

used as a stopover place for hunters and trappers. It was reportedly dismantled in 1720 after being destroyed by fire.

Tonti may have died in 1704 from yellow fever after he traveled south to join the governor of the French colony of Louisiana at Old Biloxi. Another account says he was brought back to the old fort in 1718 by a faithful Native American companion to die. Supposedly, before Tonti died, he buried his fortune of gold, which he had accumulated over the years. He gave a map of its location to a priest, but the priest drowned in a river and the map has never been found.

• Robert Cavalier, Sieur de LaSalle • Henri de Tonti



### Illinois-French-Statehood Timeline

|         |   |      |  |
|---------|---|------|--|
| 1650's  | Increased attacks by the Iroquois tribe drive the Illinois west of the Mississippi River.   | 1756 | Illinois ally themselves with the French to fight against the British and other tribes allied with the British. Beginning of the French and Indian War.      |
| 1663    | France claims title to the unexplored Illinois Country.   | 1760 | Illinois becomes part of English rule.   |
| 1673    | Louis Jolliet and Pere Jacques Marquette explore the Mississippi and Illinois Rivers. They visit the Illinois village across from Starved Rock.   | 1775 | Starved Rock Legend-Chief Pontiac's Death<br>Beginning of American Revolution against England.   |
| 1681-83 | Tonti and LaSalle build Fort St. Louis on top of Starved Rock "Le Rocher" as a French center for trade and diplomacy. Native American tribes return to the area to seek protection from the Iroquois and trade with the French at the fort. It becomes known as LaSalle's Colony. | 1783 | Treaty of Paris is signed. England gives up the Illinois Country to the United States.   |
| 1712    | The Illinois number about 6,730 people. They occupy villages at Starved Rock, Pimetoui, Cahokia, and Kaskaskia.   | 1803 | Treaty of Vincennes, Kaskaskia tribe gives up land east of the Mississippi River.  |
| 1717    | Illinois Country incorporated into the French colony of Louisiana.  | 1809 | Organization of the Illinois Territory   |
|         |   | 1818 | Treaty of Edwardsville, Peoria tribe/Illinois give up their Illinois territory.<br>Illinois becomes a state; Kaskaskia is named it's capitol.                |
|         |   | 1832 | Kaskaskia and Peoria tribes settle on reservation in Kansas. Later moved to current reservation in Oklahoma and became the Greater Peoria Tribe of Oklahoma. |

## ARCHAEOLOGY AT STARVED ROCK

[http://www.museum.state.il.us/muslink/nat\\_amer/post/htmls/arch\\_starv.html](http://www.museum.state.il.us/muslink/nat_amer/post/htmls/arch_starv.html)

### Top of Starved Rock/Sandstone Butte



*Archaeological excavations at the Starved Rock site, 1949. Archaeologists passed the excavated sediment through metal screens mounted on wood frames, as seen at the right, to systematize the recovery of artifacts. Illinois State Museum (ISM 195-97)*

Excavations were undertaken on Starved Rock in 1947 by the joint Illinois State Museum and University of Chicago crew working at the Zimmerman site. The Museum-University team continued its work on the rock in 1948-1949, and in 1949-1950 it was joined by a crew from the Illinois Department of Public Works and Buildings. Some additional work was conducted at the site in the 1970s and 1980s.



*Archaeologist Richard Hagen standing in the excavated cellar (Feature 13) at Starved Rock, 1949. The cellar probably underlay a powder magazine or warehouse built in 1683 as part of La Salle's Fort St. Louis. Strings mark a grid of 5-foot squares used to orient the 1949 excavations. Illinois State Museum (ISM 1957-97)*

The Starved Rock excavations uncovered the remains of a long series of prehistoric Native American occupations dating from the late Paleo-Indian period of more than 10,000 years ago to more recent cultural periods. Evidence of La Salle's Fort St. Louis includes numerous artifacts of European manufacture.

The structure burned after the fort was abandoned, partially filling the cellar with charcoal, ash, and building hardware. Eroded sediment then washed into the cellar depression, and several Native American graves were then buried in this fill. One of these, the grave of an infant who died before the age of three, was buried with several strings of glass beads and a leather necklace strung with ten brass Jesuit rings. The Jesuit rings date to a specific time and indicate that these and other historic graves on Starved Rock are affiliated with the Peoria tribe's 1711-1722 occupation of the site.



## Zimmerman Site/Grand Village of the Kaskaskia



*Archaeological excavation at the Zimmerman site, 1947, looking southwest toward Starved Rock.*

The The  
The

The Zimmerman site is believed to be the location of the Grand Village of the Kaskaskia, which was occupied intermittently by the Kaskaskia and Peoria tribes from 1673 to 1691 and may have been re-occupied by the Peoria in the early 1700s. However, the site's history is complicated by the fact that it also contains the remains of several prehistoric occupations. Archaeologists from the Illinois State Museum and the University of Chicago conducted a joint excavation at Zimmerman in 1947, and the La Salle County Historical Society sponsored three seasons of excavation beginning in 1970. Additional work has been undertaken at the site in connection with the state's acquisition of the property in 1991 and its designation as the Grand Village of the Illinois Historic Site. The site was named for the Clara Zimmerman family, former owners of some of the land on which the site is located.

A historic occupation at Zimmerman called the Danner culture is thought to be affiliated with the Illinois Indians. Danner is recognized by its association with several distinct types of shell-tempered pottery (e.g., Danner Grooved Paddle) and a variety of French trade goods including brass beads, coiled brass hair ornaments, a brass compass, blue glass beads, iron ax heads, iron knives, and an iron tomahawk head. The site also yielded an abundance of traditional artifacts including several kinds of chipped-stone tools (small triangular arrowheads, bifacial knives, scrapers, drills), ground-stone tools (sandstone pendant, sandstone abrader, granite pipe), and tools made of bone or antler (mat needles, awls, shaft wrench, projectile points, bison-scapula hoes, turtle-shell bowl). Other items were native adaptations of European materials, including arrowheads and ornaments (tinkling cones) that were cut and reformed from brass kettles.



*Archaeologist Elaine A. Bluhm excavating a rock concentration at the Zimmerman site, 1947.*

Excavators discovered the remains of oval to elongate houses and other residential structures at the Zimmerman site. They found several rock concentrations composed of fire-cracked granitic cobbles that may have been associated with small, dome-shaped sweat lodges.

Excavators also found traces of subsurface pits. Some pits were used for food storage and trash disposal, while others were roasting pits evidently used to cook large tubers like the *macopine*. Plant remains confirm that corn, beans, and watermelons were important Illinois crops. Animal remains indicate that bison provided over half the total meat supply, although elk, deer, bear, dog, and fish were also consumed.

<https://anthrosource.onlinelibrary.wiley.com/doi/pdf/10.1525/aa.1976.78.4.02a00660>

### **Hotel Plaza/ North of French Canyon entrance**

The Hotel Plaza site reflects a series of occupations going back thousands of years, but the main occupation consists of the late Prehistoric and early Historic periods. There is a book in the Le Rocher bookstore that goes further into depth on this woodland period occupation just before French Canyon.

### **Property History**



*Starved Rock Hotel 1890-1938*

## Early Years

The British occupied the Illinois Valley and Starved Rock in 1773, while on a geological expedition searching for copper. It wasn't until 1789 when a U.S. Army expedition arrived with Americans mapping the Illinois River.

The land was privately owned by Daniel F. Hitt who purchased it in 1835 from the U.S. Government as part of his settlement for back pay from the Army. He sold Starved Rock and 100 acres in 1890 to Ferdinand Walther for \$15,000 and an option to buy 265 acres more.

Mr. and Mrs. Walther tried to develop the Starved Rock area as the "Gibraltar of the West" in the 1890's. A large frame hotel was located at the base of the south bluff below Starved Rock. You could rent a room for \$3 a night. An artesian fed swimming pool was located just south of Devil's nose by French Canyon cove. The club house contained a dance hall, bowling alley, ice cream parlor, apartments, and a porch and was located within a circle drive approaching the hotel and concession area (where the present day visitor center sits now). Traveling and local bands played at the dance pavilion. A family owned garage with a hand crank gas pump was located south of the pavilion. Most visitors coming to the park at this time traveled from the Chicago area via the inter-urban railway that ran on the other side of the river. A depot was across from the park. Passengers for the park would disembark and then take a ferry boat across the river into French Canyon Cove.

280 acres of land, including Starved Rock, was purchased from the Walthers by the State of Illinois for \$146,000 on June 10, 1911 when the Illinois Parks Commission was petitioned by concerned citizens in the community that the land was going to be sold to the mining industry as a quarry for the St. Peter Sandstone. Starved Rock became the 2<sup>nd</sup> state park in Illinois. Fort Massac in southern Illinois was the first.

In 1918 the park purchased a miniature steam locomotive from Lincoln Park in Chicago. The miniature railroad encircled the artesian fed swimming pool.

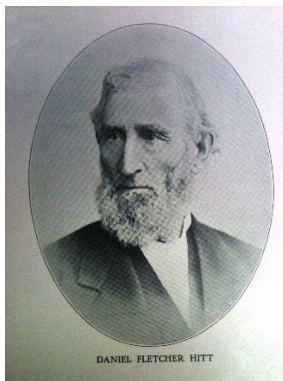
The original campground stood where the lodge is located today. The Starved Rock Hotel stood until the new lodge was constructed in the 1930's. It had 3 floors with a complete restaurant on the bottom floor.





*Picture of dance hall once located where present day visitor center sits.*

The land manager (now known as a superintendent) of Starved Rock State Park was “Officer” P.H. Harbeck. Harbeck would sometimes act as “sheriff of Starved Rock” but dress in the uniform of an English “bobby” style policeman. The Illinois Park Commission managed state parks in Illinois at this time and was the precursor to the Department of Conservation which led to our present-day Department of Natural Resources.



*Daniel Hitt*



*P.H Harbeck (middle with bobby hat)*

## **Civilian Conservation Corps**

IDNR YouTube Video: Starved Rock Snap Shot, Civilian Conservation Corps

<https://www.youtube.com/watch?v=MLefuBao4ho>

The Civilian Conservation Corps was a federal program (New Deal) developed by President Franklin Roosevelt in the 1930’s during the Great Depression. The goal was to conserve our natural resources, reforest degraded land, stop soil erosion, and bring the country out of the Depression by putting unemployed male youth to work. The participants earned \$25-35 per month, but they were only able to keep \$5-7 as the rest was sent home to their families to buy food and clothing. The term of enlistment was 6 months with the opportunity to re-enlist for up to 2 years, which many of the young men did.

There were three different companies stationed at Starved Rock in the seven-year period that the CCC was active. Companies 614, 1609, and 2601 were made up of young men 17-23 years old. Many of the men in

these companies came from the local towns of Utica, Oglesby, LaSalle-Peru and Ottawa. The men were housed in barracks at camps located where the park maintenance and visitor center sit today (2601), just off of route 71 where Parkman’s Plain/LaSalle Canyon parking lot is today (1609-largest camp), and along the river where the present day boat ramp and picnic area are located (614). They built the Lodge cabins, kitchen, dining room, and main lobby known as the Great Hall complete with a fireplace at a cost of \$200,000. The hotel section was built by private contractors at a cost of \$250,000. Construction occurred from 1927 and was completed in 1939.

The recruits on site, built bridges such as the bridges hikers cross today at Wildcat Canyon and LaSalle Canyon. They also used their skills as masons and carpenters to construct picnic shelters like the one seen at Lone Point Shelter along route 71, Sunrise and Sunset Shelters at the Lodge, and the shelter located by the Visitor Center.



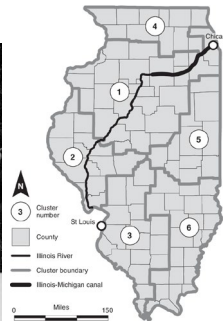
*CCC men constructing LaSalle Canyon bridge.*

### **Plum and Leopold Islands**

Leopold Island is the small island just below the dam and is owned by the federal government. Plum Island is just down the river from Leopold Island and contains 23 acres. It is privately owned by the Illinois Audubon Society.

Up to 1975, there was an airstrip on Plum Island where small planes would give park visitors a short ride directly over the park. This private concession also had a cable car ride from the park to the island.

Both of these islands provide roosting spots amongst the trees for bald eagles that frequent this area in cold winter months to feed on fish they find in the unfrozen turbulent water just below the dam. Today Plum island supports an active eagle’s nest.



*I & M Canal Tours Today at Lock #14, LaSalle, IL*

## **The I & M Canal to the Starved Rock Lock and Dam**

Illinois Waterway Visitor Center-US Army Corps of Engineers

<https://www.mvr.usace.army.mil/Missions/Navigation/Lock-and-Dam-Information/Starved-Rock-Lock-and-Dam/>

Illinois and Michigan Canal Corridor

<https://iandmcanal.org/>

The Illinois & Michigan Canal is the precursor to the Illinois Waterway. The Illinois River was difficult to navigate even by canoe. Possibly inspired by the Canal du Midi being constructed in France, Jolliet was the first person to recognize the need for a canal in 1673. The dream of the canal underpinned Illinois' foundation as a state. It was used as a bargaining chip to gain the territory its statehood in 1818 and was responsible for moving Illinois' border about 60 miles north from the southern tip of Lake Michigan. When the Erie Canal connected the Great Lakes to the Eastern seaboard of the early United States in 1825, the I&M Canal efforts increased. The Illinois and Michigan Canal was the first massive internal improvement project in Illinois and was built between 1836 and 1848 at a cost of \$9.5 million. It connected Lake Michigan via the Chicago River with the Illinois River to LaSalle. This connected New York to New Orleans through the heart of the continent, making the canal the link that integrated the primary trade networks of interior North America and led to Chicago's rise. The canal was 96 miles long, 6 feet deep, 60 feet wide and had a series of 15 locks, each 110 feet long and 18 feet wide. The towpath is a trail for the animals, such as mules, that pulled the packet boats and is now a hiking and biking trail. Passengers paid 6 cents per mile to make the 22-hour journey from Chicago to LaSalle. The boats carried lumber, pork, wheat, coal, and machinery, and were responsible for the creation and growth of Chicago and many other cities along the canal's route such as Joliet, Morris, Ottawa, and LaSalle-Peru. It also made Midwest agriculture profitable, by connecting it to the East Coast markets, and rapidly transformed the landscape of the Midwest. The canal was an immediate success in transportation, and through its toll charges and leasing of unused land, was also a financial success.

Six years after opening the canal, the Rock Island Railroad was competing for passenger and freight traffic, effectively ending passenger lines on the canal. Transportation on the Illinois River remained difficult. From LaSalle to the Mississippi River, the Illinois River had a minimum depth of 2 feet, which in most cases was sufficient for navigation; wooden locks and dams were constructed downriver in the 1870s, which ushered in the peak years of the I&M Canal.

In 1860, the city of Chicago deepened the canal so it could flush the Chicago River. In 1892, construction was begun on the Chicago Sanitary Ship Canal, making a larger waterway to get sewage to the Illinois River at Joliet. By the late 19<sup>th</sup> century, the canal was heavily polluted. By 1905, the I & M Canal was becoming a remnant of a by-gone era, although some freight and recreational use was made of it until the early 1930s when the Illinois Waterway opened and replaced it.

In 1974, the canal was transferred to the Department of Natural Resources for the development of a recreational area to be used for hiking, bicycling, canoeing, picnicking, fishing and snowmobiling.

The Illinois & Michigan National Heritage Area was established in 1984 when Congress enacted legislation that recognized the area's unique contributions to the nation's development. The 1984 law specified that the corridor's cultural, historic, natural, recreational and economic resources will be retained, enhanced and interpreted for the benefit and inspiration of present and future generations. The Canal Corridor Association was designated by Congress in 2006 as the local coordinating entity for the I&M Canal National Heritage Area. They operate a visitor center and mule-pulled canal boat tour in LaSalle that shares the history of the I&M Canal.



*Starved Rock Lock and Dam*

## **The Illinois Waterway**

The Illinois River is formed at the junction of the Kankakee and Des Plaines Rivers in Grundy County, Illinois. It flows 272 miles through north central Illinois where it joins the Mississippi at Grafton, IL.

The Starved Rock Lock and Dam is part of a “water stairway” that connects Lake Michigan to the Mississippi River. Prior to 1933, navigation on the river was extremely difficult. The Henry and Copperas Creek locks and dams were dismantled around 1928 after the Chicago Sanitary and Ship Canal (CSSC) was



finished in 1900 because they were not tall enough for the full capacity of water from the CSSC. Kampsville and the first LaGrange locks and dams needed to be adjusted to make them taller.

Four locks on the Illinois River predate the Illinois Waterway and were built to be an extension of the I&M Canal between the 1860s and the 1890s: Henry, Copperas Creek, LaGrange #1, and Kampsville. Henry and Copperas Creek were removed in the 1920s.

In 1920, The State of Illinois authorized 20 million dollars for the construction of five locks and dams. However, by 1929, the state had spent 80% of the funds but only completed 70% of the project. The U. S. Army Corps of Engineers took over and completed the project in 1933. The five new locks, along with two older locks and dams (Kampsville and LaGrange,) completed an eight-lock system called the Illinois Waterway, The Illinois Waterway linked the Great Lakes to the Mississippi River through four natural rivers and three manmade canals.

An average water depth of 18” combined with many sets of rapids and a river drop of 160 feet from Lake Michigan to the Mississippi River. Today’s locks are capable of handling eight barges and a towboat in one lockage or one towboat and 15 barges in two lockage’s.

Today, eight locks and dams make the river navigable and transition boats through a 160 ft elevation change. The Starved Rock Lock and Dam is number 6 in a series of 8 coming down from Lake Michigan and was completed in 1933. The U.S. Army Corps of Engineers maintains the 200 feet wide and 9 feet deep navigation channel along the 333-mile length of the waterway.

Over, 120 million tons of cargo pass through Illinois Waterway’s eight locks. Each lock varies widely in total commodities and dominant cargo so if you combine all eight locks and the cargos total, you can come up with a very hefty number.

Starved Rock Dam also contains a hydroelectric power station operated by the local town of Peru, Illinois and generates a peak of 7,600 kw of electricity.

The Illinois Waterway Visitor Center across the river has displays about lock and dam operations, historical artifacts, the area’s history as well as a pilothouse from the M/V John M. Warner towboat. From the observation deck, you can view the working lock.

## **MATTHIESSEN STATE PARK**

IDNR website-Matthiessen State Park page

[www.dnr.illinois.gov](http://www.dnr.illinois.gov)

### **Geology**

The many unique and beautiful rock formations exposed in the Upper and Lower Dell areas of Matthiessen State Park are composed primarily of St. Peter Sandstone. The St. Peters Sandstone is an

Ordovician formation meaning it was formed 470 million years ago when Illinois was part of an ancient shoreline that bordered a Paleozoic (ancient) sea. Sand from the sea formed layers on the shoreline and over time those layers cemented together creating stone - sandstone.

The Upper Dells begin at Matthiessen Lake and continue through Cascade Falls out to the Vermillion River and is considered a box canyon. The ends of the box canyons mark present day waterfalls and rapids that have retreated by headward erosion up a small creek from the Vermillion River. The canyon system is 1 mile long from the lake to the river.

Closer to the river area you will find limestone overlaying the sandstone, the rocks are folded, and dip steeply toward the river along the west portion of the LaSalle Anticline. As the Illinois River was deepening and cutting cascades through the sandstone, the Vermillion River was deepening and cutting through the overlying strata such as the limestone and dolomite. The rate of the deepening and headward erosion along this unnamed tributary was primarily controlled by the level of the Vermillion River until the tributary had cut down to the sandstone. Falls developed because the sandstone was more resistant to headward erosion than the limestone or dolomite.

As rainwater percolates downward through the sandstone, it dissolves a variety of chemicals and minerals from the sediments and rocks. By the time the groundwater reaches the St. Peter Sandstone it is highly charged with iron as well as other chemicals. Bright yellow, brown, or orange colorations along the canyon walls mark the locations of seeps and springs, where the water evaporates and the iron precipitates at the surface. Strawberry Rock and Devils Paint Box are two places to see these effects of chemical in water.

Potholes are formed in the sandstone where strong stream currents swirl cobbles and pebbles in eddies. The strong current flushes the sand from the hole. Giant's Bathtub is a good place to see one of these potholes.

The new "Annex" property was purchased in 2018 through the Illinois Lands Acquisition Grant. The property butts up against the southwest portion of Matthiessen State Park and south of route 71 just west of the Matthiessen Lake Shelter entrance. The site was once the location of the Lone Star Mining Company/Quarry. Plans are in motion to create recreational opportunities within the area. It is currently closed and off limits. There are rich limestone outcrops filled with fossils on site that some college groups are allowed to receive permits to study.

## **Ecology**

The flora and fauna found at Matthiessen State Park are for the most part the same as those found at Starved Rock State Park. White Pelicans and Common Water Snakes will be found at Starved Rock but will not choose Matthiessen as suitable habitat due to its distance from the Illinois River.



*The “big house,” Mattheissen’s mansion at Deer Park and Frederick Mattheissen*

## **History**

Mattheissen State Park, as with many other beautiful features of the Illinois River Valley, was the result of the generosity of philanthropist Frederick Mattheissen.

Frederick Mattheissen was born in Denmark in 1835 and had four brothers. His father died during his childhood days. Mattheissen went to the School of Mines in Freiberg, Germany, where he met his longtime friend and eventual business partner, Edward Hegler. Together, they developed an interest in zinc smelting, which requires large quantities of coal. They had formulated a new technique for zinc smelting in Pennsylvania, but their company did not have enough money to continue, and the endeavor was eventually abandoned. Mattheissen and Hegler next turned their sights to Missouri and Wisconsin to start another zinc processing plant.

The two businessmen were eventually drawn to the Illinois River Valley for its abundance of coal. There, in LaSalle, they broke ground for the Mattheissen and Hegler Zinc Company on Christmas Eve of 1858, later to be incorporated in 1871. Their company became a success from all of the zinc shipped in on the railroads from Wisconsin. They went on to invent and patent many things, such as the rotary gas furnace, the electric smelting furnace, and a similar smelting technique for aluminum, which is still in use today.

After becoming established in the Illinois River Valley, Frederick Mattheissen married Fannie Moeller in 1864, in Mineral Point, Wisconsin. Together, they had five children: Emma, C. Henry, Adele, Frederick Jr., and Otto.

The family had two homes: one on Ninth Street in LaSalle, and the other at Deer Park. The Deer Park home, or the “Big House,” was a large, 51 room, three story mansion. Also on the Deer Park property was a smaller 17 room mansion that belonged to Adele and her husband, and other buildings including a tool shed, a cottage, a heated four car garage, and homes for the caretakers of the property. The compound had its own electric power plant, sewer system, wells and even a private fire station. Nearly fifty men were

employed to make trails and bridges throughout Deer Park. The Matthiessen property grew to over 1600 acres and extended to the Illinois River.

Frederick Matthiessen made many generous and meaningful contributions to the communities of LaSalle, Peru, and Oglesby during his lifetime. One of his most important was the building and founding of LaSalle-Peru High School, of which he served as the president of the school board in 1897. He donated the land on which the school was built, furnished the building at his own expense, and led the building of many of the school's landmark features, including the science department, gym, and athletic fields. In total, it was estimated that he donated \$228,000 to the school alone.

Another important contribution by Frederick Matthiessen was his time serving as the mayor of LaSalle. His first action as mayor was to pay off \$46,000 in town debts with his own money. He also donated nearly \$30,000 towards town infrastructure, including a new water pump, new sewers, and the electric light plant. He also gave \$23,000 to pay for the Shipping's Port Vermillion River Bridge.

Matthiessen helped save many local businesses from bankruptcy. Among the businesses he helped were the LaSalle and Bureau County Railway, the LaSalle Machine and Tool Company, and the Western Clock Company or Westclox. Westclox went on to produce some of the best clocks in the world, creating a standard by which the production of many clocks is still measured today. To provide health care, Matthiessen built the Tri-City Hygienic Institute in 1914, and he also built a hospital and set aside \$10,000 for a medical library.

Frederick Matthiessen died in 1918. After his death, Deer Park was renamed Matthiessen State Park in his honor. Some of the original property was sold, and the state took possession of most of the land, after which Matthiessen State Park was opened as a public park. The small mansion that had belonged to his daughter Adele was sold to R.W. Conkey, and then later to the Illinois Department of Conservation, which used it as a training center. It was destroyed by a controlled fire in the fall of 1981. The "Big House" was torn down in the fall of 1979. All that remains of the houses today is a wall, grape arbor, and one of the cottages.



## HALFWAY HOUSE, SULPHUR SPRINGS HOTEL



Built in 1852 by Joel Smith the “old stone” house on Dee Bennett road just north of Starved Rock State Park on the shores of the Illinois River stands 4 stories tall built of sandstone from the area. Also known as the “Half-way House” due to its location on the stagecoach route in the mid 1800’s or the Sulphur Spring Hotel because of the rich medicinal springs in the area.

Joel Smith bought the property for \$399 and built the house due to the medicinal properties found in the springs of the area. The house was used as a hostel/hotel and called the Sulphur Springs House. It was used as a health resort for patrons to take medicinal baths in the sulfur springs located on the grounds.

The original building housed 12 guest rooms on the third floor, while on the 4<sup>th</sup> floor there was a ballroom with a theatre. Such world renowned entertainers as Ole Bull the violinist, Adelina Patti, and Jenni Lind graced the ball room lit by the glow of four fireplaces, while guests on the first floor enjoyed a game or two of poker as they threw back drinks from the bar. Supposedly (but never proven) Abraham Lincoln occupied a northeast room on the second floor at one time.

The property was sold in 1862 to J. Buell whose daughter turned the first floor into a school for a few years. The property was then purchased as a private residence by Ben Danner, then Henry Zimmerman in 1902. During this time the house and property served as a quiet family farmhouse. Rumors of the house serving as a stop on the underground railroad have circulated but have never been proven.

The interurban railroad from Chicago to Utica to Peoria passed by the front door of the Halfway House for over thirty years as visitors made their way to Starved Rock State Park or Buffalo Rock State Park.

The land that the “Halfway House” was built on is also known as the “Zimmerman Site” where the largest concentration of Native Americans in the Midwest once occurred between the 16<sup>th</sup> and early 18<sup>th</sup> centuries, known as the Grand Village of the Kaskaskia.

Three archaeological excavations have been completed on the grounds and you can view the artifacts at the LaSalle County Historical Society Museum in Utica, Illinois.

The house still stands today and is owned by the state of Illinois/Illinois Department of Natural Resources. It was placed on the National Register of Historic Places in 1986.

# THE ILLINOIS DEPARTMENT OF NATURAL RESOURCES



[www.dnr.illinois.gov](http://www.dnr.illinois.gov)

## **Mission Statement**

To manage, conserve and protect Illinois' natural, recreational, and cultural resources, further the public's understanding and appreciation of those resources, and promote the education, science and public safety of Illinois' natural resources for present and future generations.

IDNR for short, the Illinois Department of Natural Resources contains 16 different offices including the Office of Land Management which oversees and maintains state parks, state fish and wildlife areas, state trails, state campgrounds, state recreational areas, state nature preserves, and state historic sites.

## **STARVED ROCK AND MATTHIESSEN COMPLEX**

### **Acreage**

|  |      |
|--|------|
| Margery C. Carlson Nature Preserve                                     | 249  |
| Sandy Ford Nature Preserve   | 203  |
| Mitchells Grove Nature Preserve  | 185  |
| 2018 Annex/Matthiessen (NO ACCESS to the PUBLIC)                       | 2629 |
| Matthiessen State Park   | 1936 |
| Starved Rock State Park  | 3205 |
| Grand Village of the Kaskaskia/Halfway House (NO ACCESS to the PUBLIC) | 90   |

### **Park Staff**

|                                     |                   |
|-------------------------------------|-------------------|
| <b>Site Superintendent</b>          | Alvin Harper      |
| <b>Assistant Superintendent</b>     | VACANT            |
| <b>Natural Resource Coordinator</b> | Lisa Sons         |
| <b>Office Coordinator</b>           | Deborah Weis      |
| <b>Ranger</b>                       | Monty Bernardon   |
|                                     | VACANT            |
| <b>Site Technicians</b>             | Michael Governale |
|                                     | Alan Dryska       |
|                                     | James Taylor      |
|                                     | Steve Hilt        |
|                                     | Joseph Stanbury   |
| <b>Site Security</b>                | Greg Crabbe       |

## Starved Rock Visitor Center



The present-day Starved Rock Visitor Center is located off of the west entrance of the park from route 178 just past the boat ramp and lower parking -picnic area. Construction began in November of 2000 and the visitor center opened for business on October 9<sup>th</sup>, 2002 at the cost of \$2.1 million dollars. The center matches the overall aesthetic of the Starved Rock Lodge with its cedar shingle siding, wooden beams, and cathedral like ceilings. Inside visitors will find restrooms, water fountains, vending machines, Lodge owned and operated concession stand known as Trailheads, and the Interpretive Center which is owned and operated by the Illinois Department of Natural Resources.

The Interpretive Center contains a variety of exhibits showcasing various dioramas, displays, archives, and artifacts related to the history, geology, and ecology of the Starved Rock region. A movie theater is located next to the front desk where various films about the park can be requested by park visitors like *The Shadow of the Rock* (history and geology), *Civilian Conservation Corps at Starved Rock*, *Smoky the Bear and Friends*, *Wings of the Wind* (bald eagles), *Orientation* (short overview of the park's features and trails).

Open daily from 9 a.m. to 4 p.m. the Interpretive Center provides area information, trail maps, and general park information to visitors passing through. The Natural Resource Coordinator on site manages the visitor center exhibits, information, interpretive panels, movies, programs, events, field trips, tours, and wildlife exhibits such as the bird feeding stations and aquarium.

The aquarium is one of the main features in the exhibit hall at the visitor center. It is a 350-gallon tank recently refurbished thanks to funds from the IDNR's Office of Resource Conservation and the Starved Rock Foundation in July of 2021. The IDNR's Fisheries Biologist provided native fish such as sunfish and darters to form a community tank for visitors to enjoy.

## Park Maintenance

Park Maintenance is located just across the road from the visitor center. Two of the original Civilian Conservation Corps barracks are still used today as a wood shop and a storage warehouse.

There are several shelters located at both parks. Starved Rock shelters are located in the picnic area between the visitor center and boat ramp as well as Lone Point Shelter located off of route 71 at the east end of the park. Matthiessen shelters are located at the Vermillion River Access Area which is the second entrance heading south on route 178 away from Starved Rock State Park and the Fort Shelter located at the Dells entrance of Matthiessen State Park.

Starved Rock contains 13 miles of trails from west to east and is flanked by route 178 on the west and route 71 on the south. There are several parking lots located throughout the park: St. Louis Canyon, LaSalle Canyon/Parkman's Plain, Hennepin Canyon, Ottawa Canyon, Illinois Canyon, Lone Point Shelter, Overflow, Lodge, Boat Ramp Area, and the Lower Area parking lot by the Visitor Center.

Wooden boardwalks installed at Starved Rock:

- Starved Rock Deck 1981
- Original Overlook Decks 1982
- Lovers Leap and Eagle Cliff 1997-99
- Wildcat Canyon 1999

Starved Rock State Park operates a **133 site/Class A campground** just south of the park's entrance off of route 71. Sites are suitable for both tent and RV camping with a mixture of shade, partial shade, and full sun options to choose from. The campground comes with two shower buildings, dump station, water hydrants, a shelter, and a youth group camping area. The Campground Store is owned and operated by the Starved Rock Lodge. Camping reservations are made online at <https://camp.exploremoreil.com>

Matthiessen State Park contains over 11 miles of trails for visitors to utilize, between hiking, cross country skiing, mountain biking, and horseback riding trails (no horse rental in the area/bring your own). A horseback campground is located on site.





### **Present Day Starved Rock Lodge and Concessions**

The Starved Rock Lodge is a separate entity from the IDNR. The property and building are leased from the state by a private concessionaire who operates the lodging, cabins, restaurant, trolley tours, and boat tours. There are 69 hotel rooms and 17 cabins on site for reservations. <https://www.starvedrocklodge.com>

### **THE STARVED ROCK FOUNDATION**

[StarvedRockFoundation@gmail.com](mailto:StarvedRockFoundation@gmail.com)

[www.starvedrock.org](http://www.starvedrock.org)

Established in 1991, the Starved Rock Historical and Educational Foundation is dedicated to the preservation of the area's natural heritage and advancement of educational programming at Starved Rock and Matthiessen State Parks.

The Foundation is a non-profit 501©3 tax-exempt organization. The Foundation leases the Le Rocher Gift Store at the park's visitor center. The store is completely volunteer operated, and all proceeds stay in the park to help purchase program and event supplies, bird seed, fish food, interpretive panels, exhibits, displays, and educational presenters.

Anyone can join the Starved Rock Foundation and yearly membership ranges from \$15 (individual) to \$500 (corporation). Further information and membership can be found on the Foundation's website at [www.starvedrock.org](http://www.starvedrock.org) and [starvedrockfoundation@gmail.com](mailto:starvedrockfoundation@gmail.com)

The Starved Rock Foundation board meets every other month at the Starved Rock Visitor Center. Board members include:

- |                          |                 |
|--------------------------|-----------------|
| • President              | Pamela Grivetti |
| • Board Member           | Ron Sons        |
| • Board Member           | Cindy Hopps     |
| • Board Member           | Frank Borkowsky |
| • Board Member           | Matthew Klein   |
| • Membership Coordinator | VACANT          |

- Bookstore Manager Robbin Keenan
- Treasurer/Accountant Kimberly Snell/LeeAnn Talty
- Park Historian Mark Walczynski

## **RESOURCES FOR EDUCATORS, PARENTS, AND YOUTH LEADERS**

- Junior Ranger Program
  - Booklets available at the front desk of the Visitor Center open daily from 9-4.
- K-2<sup>nd</sup> Grade Teacher Resource Packet [www.dnr.illinois.gov](http://www.dnr.illinois.gov)
  - Available to download and print from the IDNR website, Starved Rock, Interpretive tab.
    - 26 pages of activities that can be taught in the classroom/away from the park and onsite at the park!
- Starved Rock Saplings Seasonal Educational Packets [www.dnr.illinois.gov](http://www.dnr.illinois.gov)
  - Available for download and print from the IDNR website, Starved Rock, Interpretive tab.
    - Summer, Fall, Winter, and Spring
    - Suitable for 4 through 12-year-old learners.
- Starved Rock “Snap Shots” YouTube Videos on IDNR channel [www.dnr.illinois.gov](http://www.dnr.illinois.gov)
  - Available to view on the IDNR website, Starved Rock, About tab or the IDNR YouTube channel online.
  - 3–5-minute history soundbites from the Park’s archives based on original souvenirs from the early 20<sup>th</sup> century “Snap Shot” photo booklets.
    - Native American timeline and history
    - Fort St. Louis and French Occupation
    - Civilian Conservation Corps
    - Starved Rock Legend
- Trail Suggestions & Maps [www.dnr.illinois.gov](http://www.dnr.illinois.gov)
  - Available to download and print from the IDNR website, Starved Rock, Activities tab.
    - 4 trail suggestion maps outlined with details on how to follow stationary maps along the trail system and brown trail signs to some of the most interesting features along the 13-mile trail system at Starved Rock State Park.
    - Aids educators, parents, and specialty groups leading self-guided hikes with classes and groups.
- Movies, Programs, and Events at the State Park

- Movies are available by request at the Starved Rock Visitor Center! Just ask between 9 and 3:30 daily for one of our films.
  - In the Shadow of the Rock-15 minutes
  - Starved Rock State Park, Orientation-9 minutes
  - Civilian Conservation Corps-15 minutes
  - Smoky Bear and Friends-8 minutes
- Programs and Events (always FREE)
  - A calendar of events can be viewed with further program/event details on the IDNR website under the Activities tab. Updated each November-December for the following year.
- Volunteer!
  - Schools, scout/youth groups, businesses, and families can spend time at the park picking litter from the trails and cleaning off graffiti from park signs as a great community service project or teaching the values of volunteerism to help nature.
    - Pickers and garbage bags are available by request at the Visitor Center.
    - Trail clean-up backpacks are also available. (drivers license must be left behind with park staff to ensure the return of park items before or by 3:30 p.m. )
      - Graffiti backpack (red)
      - Trail Markers (green)
  - Anyone with an interest in the park, educating others, public speaking, or nature can always train to become a volunteer naturalist/hike leader.
    - Email Natural Resources Coordinator, Lisa Sons at [lisa.sons@illinois.gov](mailto:lisa.sons@illinois.gov)
    - Hike leaders and Naturalists are always needed to help with larger special events and school field trips.
      - Schools: fall and spring
      - Special Events: Fall Colors, Ghosts of Starved Rock's Past, Eagle Watch Weekend, and Junior Ranger Day.
      - Starved Rock Saplings Storytime-children's programming for 3 to 10 year olds.

## VOLUNTEER NATURALIST/HIKE LEADERS

- Identification and picture cards for seasonal hikes are available at the Visitor Center for volunteer naturalists/hike leaders to utilize.
  - Fall leaf and tree identification.
  - Bald eagle facts
  - Spring wildflower identification.
- Tangible and visual interpretive items such as historical pictures, pelts, and more are located in the guided hike backpacks hanging in the park office by the restroom. **YELLOW** or **BLUE**

### **General Guided Hike Outline**

**Delivery:** to use with all public groups, school field trips, and scout groups.

**Subject to change:** adaptable versions can be adjusted for special events or other destinations such as French Canyon, Wildcat Canyon, or the entire 2-mile loop including Eagle Cliff and Lovers Leap Overlooks.

**Destination:** Starved Rock

**Distance:** .6 miles total

**Timeframe:** 1 -1.5 hours.

**Location:** Visitor Center to Starved Rock, ending at 4-way trail intersection to French Canyon/Lodge/and VC.

### **Greeting**

- Hello, and welcome to Starved Rock State Park, part of the Illinois Department of Natural Resources.
- My name is \_\_\_\_\_, and I (affiliation with the park or experience related to leading guided hikes at the park, or college degree/work experience as it pertains to working at the park).
- Now that you know my name and a little bit about me, I would like to know where you are from and what brings you to the park today?
- Before we head out on the trail does anyone need to use the restroom or fill their water bottles? The restrooms and water fountains are located inside the visitor center by the front sliding glass doors. There are no restrooms or drinking water available on the trail.
- We will be taking a leisurely .3 mile-1 hour, hike to the top of Starved Rock, a sandstone butte that stands 125 feet above the Illinois River. The trail is paved and contains two large staircases and a slight incline. Along the way we will stop to discuss the parks history, geology, and ecology. If you need to leave the hike at any time or stop and rest, please feel free to do so. Questions are welcome at the end of each stop along the hike. Please follow me!

**Stop 1 – Map at 1<sup>st</sup> trail intersection before short stairs to the rock.**

**How to use trail maps and signs**

- Trail maps such as this one, are located at every trail intersection and parking lot at the park.



- They all point North and have a convenient yellow “you are here” dot.
- Each comes complete with a red 911 QR code to scan with your camera phone or use the grid code to communicate with the 911 dispatcher your exact location for a quick EMS response time.
- Let’s take a moment and go over some important information on the map that will help each of you find your way around the park’s trail system.
- Trail Markings will show as posts along the trails or metal discs on trees.
- Red follows along the overlooks and the Illinois River.
- One of the most common questions we receive at the park is “where are the waterfalls?”. The Green marked trails will either connect two trails or an Interior Canyon trail which will take hikers into the bottom of 8 of the 18 canyons. Tonti Canyon is closed, and signs will be posted.
- The Brown marked trails are Bluff trails that will take visitors on scenic hikes through the oak hickory forests at the park with views of the canyons from the top.
- Trail markers will also include dots. Yellow dots mean you are moving away from the parking lot, visitor center, or lodge. While White dots mean you are returning to the visitor center, parking lot, or lodge.
- The bottom left section of each map states the one-way mileage by destination from the visitor center. There are 13 miles of trails at Starved Rock State Park.
- You will notice behind you a brown park sign on the post. Each intersection will host both a map and a brown park sign. The signs list the park features such as canyons or overlooks you are approaching on the trail with directional arrows.
- Rules and Regulations are also posted online on each map, and entry signs at the park’s west and south entrances.
- The park experiences 1-3 accidents a month and 1-3 deaths a year due to visitors “not knowing before they go” and exploring off trail or climbing the canyon walls. Why? Because the sandstone that comprises the parks features is a fine grade of sand that can break and erode under pressure very easily. This is why all park visitors are asked to stay on the marked trails and not to climb any canyon walls or sandstone features. Conservation Officers will write tickets for \$195 or more for those in violation.
- Always “know before you go” by visiting a park’s website for trail suggestions, trail maps, and information on the park including park rules and regulations, before visiting a state or national park.
- Are there any questions?

## Stop 2 – Bench at the base of the Starved Rock staircase.

### Geology

- Before we head up the stairs to the top of Starved Rock I would like to take a moment and talk about the geology of Starved Rock. Why do we have 18 canyons and 7 overlooks of St. Peter Sandstone in the middle of Illinois?
- The rock peeking out from the trees to the left of the stairs is the land side of Starved Rock. What we call a sandstone butte. A butte is an isolated hill with steep sides and a flat top.
- Believe it or not the sandstone you see today was once grains of sand along a shoreline of a shallow sea. We would have to travel back in time 460 million years into the past to enjoy this sandy beach. North America was located along the Equator and the weather, geology, flora, and fauna of the time were quite different from what we see today.
- Over the course of millions of years, the movement of waves, weather, and erosion broke down rock on the seabed and washed it upon shore as sand. Each layer of sand compressed the layer laid below it. Over time the layers cemented together and formed a sedimentary rock we call St. Peter Sandstone today.
- What about the organisms who once lived in that shallow sea? Another sedimentary rock was created from their skeletons and shells called Limestone. Plant life in the area decayed over time and built up amongst the layers of limestone and sandstone in the Illinois Valley creating pockets of coal.
- But where did the limestone at Starved Rock go? Through time, wind, and weather the top layers of limestone eroded or wore away exposing the sandstone below that we see today along the bluffs and overlooks at Starved Rock. The LaSalle Anticline further exposed the sandstone in this region due to a folding and uplifting of the rock which just a mile north of the park is buried over 1,000 feet beneath the ground.
- During the Pleistocene epoch, or glacial period beginning 2 to 3 million years ago, at least two continental ice sheets further eroded and later buried the St. Peter outcrops under a variable thickness of glacial till; a mixture of clay and gravel. More recent erosion has removed some of this glacial drift exposing outcrops of St. Peter sandstone.
- 10,000-16,000 years ago, glacial meltwater from the Wisconsin Era Glacial Period swept through the area in an event called the “Kankakee Torrent” creating the Illinois Valley, Starved Rock canyons, as well as the present-day Illinois River channel.
- When floodwaters receded, much of the landscape had been altered including the channel or trail you are currently traversing. Starved Rock, Devils Nose behind you, and the bluff the Starved Rock Lodge sits upon today were once connected but the glacial floodwaters carved out channels splitting the formations off from one another.
- Does anyone have any questions before we head to the top of Starved Rock? Please stay to the right of the trail to allow passage for others coming down.

### **Stop 3 – 1<sup>st</sup> Platform**

#### **Starved Rock Legend**

- Welcome to the top of Starved Rock! (show picture of the rock).
- You are now 125 feet above the Illinois River.
- There is a legend tied to the name of our beloved park “Starved Rock”.
- What is a legend? Is it fact or fiction? Legends are stories or tall tales, and there are several versions of this particular legend.
- In 1769, Chief Pontiac of the Ottawa people held a large Native American alliance in southern Illinois to discuss the tide of English invaders to the land we now call Illinois.
- Pontiac was gravely concerned for his people’s culture and way of life. Too many of his people had become dependent upon trade goods from the British such as cotton, wool, livestock, and metal. Men and women both were distancing themselves from the “old ways” of a hunter and gatherer existence that supported the village or tribe as a whole.
- Chief Pontiac was later murdered at this conference by an Illinois brave from the Peoria sub-tribe. The Pottawatomie, Kickapoo, and Miami tribes who were allied with the Ottawa quickly sought revenge for Pontiacs untimely death.
- They attacked the closest Illinois tribe who happened to live in a village located just across the river from today’s Starved Rock. They chased the Illinois to the top of this very sandstone butte we are standing upon at this moment. The Illinois had no way to escape, no food, and no water.
- A few days later, traveling fur traders from Canada came across the decaying bodies on top of the rock and took with them the legend of the dead.....or so it was told by journalists in the early 1800’s such as Henry Schoolcraft who propagated the tall tales of the Starved Rock Massacre.
- Archaeologists in the 20<sup>th</sup> century conducted extensive excavations in the Starved Rock area. They never found any signs, clues, artifacts, or skeletal remains to support a mass starvation or siege of 2000 Native Americans on top of “the Rock”. They did find 2 Native American burials and evidence of smaller battles and skirmishes in the region.
- Any questions about the Legend of Starved Rock?

### **Stop 4 – 2<sup>nd</sup> platform facing the lock and dam**

*(please keep in mind that this deck can be one of the hottest spots on top of the “rock” with little to no shade. I try to minimize my time here and point out the highlights only such as the Lock and Dam). I do not personally talk about the I&M Canal anymore due to the time they are in the sun on the exposed deck. Fall through Spring it won’t matter.*

#### **Illinois and Michigan Canal**

- Not noticeable from this vantage point, but just beyond the tree line north of the river lies the Illinois and Michigan Canal. Built in 1848 it once connected Lake Michigan to the Mississippi by bridging the

Chicago River with the Illinois River. Products and people could travel by packet boats along the manmade canal. Packet boats were pulled by oxen or mule along a trail tied next to the boat in the water. (Show picture)

- By the turn of the twentieth century the canal was no longer a valuable transportation route for commerce possibly due to the construction of the Trans-Continental Railroad in 1869 and the cost of upkeep since the canal had to be continuously dredged to keep an operating water depth for transportation
- Today the I&M Canal is open to visitors in the Starved Rock region within the towns of Ottawa, Utica, and LaSalle, Illinois. The towpath now serves as a hiking and biking trail. The Canal Corridor on 1<sup>st</sup> Street and Route 351 in LaSalle offers an historical boat ride on one of the packet boats pulled by mules!

### **Starved Rock Lock and Dam**

*(Depending on the group size, interests, and age level I will sometimes talk more about the ecology of the Illinois River and the animals that call it home rather than the history of the Illinois Waterway and Lock and Dam). Let me know if you would like the notes.*

- The Illinois River forms at the conjunction of the Kankakee and Des Plaines Rivers in Grundy County, Illinois. The Illinois flows 272 miles west to Hennepin, Illinois where it turns south and follows an ancient channel of the Mississippi River.
- By the turn of the 20<sup>th</sup> century a booming population placed higher demands on the country to provide goods and services in larger quantities.
- The U.S. Army Corps of Engineers set their eyes on the Illinois River and designed a series of 8 locks and dams called the Illinois Waterway system.
- The Illinois Waterway system consists of 336 miles of navigable water from the mouth of the [Calumet River](#) at Chicago to the mouth of the [Illinois River](#) at [Grafton, Illinois](#). It is a system of rivers, lakes, and canals which provide a shipping connection from the [Great Lakes](#) to the [Gulf of Mexico](#) via the Illinois and [Mississippi](#) rivers.
- There is a 160 foot drop in river levels from Chicago at the T.J. O'Brien Lock and the LaGrange Lock at Beardstown, Illinois before the river flows into the Mississippi. Starved Rock is the sixth lock along the waterway with an 18.7 foot drop in river level from east of the dam to west of the dam at "the Rock". (Point out the Lock).
- The transportation channels are located on the far side of the river. The [United States Army Corps of Engineers](#) maintains a 9-foot-deep navigation channel in the waterway. One barge has the capacity of 1,500 tons; 62,500 bushels, 453,500 gallons, or 70 semi-truck trailers full of grain, sand, or gravel. (Point out the channel or a barge if one is in the area).
- You can learn more about the Illinois River and its locks and dams by visiting the U.S. Army Corps of Engineers, Illinois Waterway Visitor Center located on Dee Bennett Road just North of the park. (Point out the brown building-visitor center).



- The overlooks such as Starved Rock are the perfect vantage point of the Illinois River. White pelicans migrate in during March and stay through November. While bald eagles nest on Plum Island and can be seen all year round with a larger number seen perched on the islands in winter due to the open pockets of water at the dam for fishing. The river provides the perfect buffet of fish for herons, egrets, terns, and gulls as well. (Show pictures of bald eagles and white pelicans. If you have your phone or the bird identifier (blue backpack) you can play the eagle call for your group).

### **Stop 5 - largest platform/#3**

#### **Illinois Confederation and Fort St. Louis**

*(Depending on group size, age, and time available I will sometimes point out various plants and trees on top of the rock by this deck and discuss their Native American and wildlife uses). Let me know if you would like those notes.*

- Humans have occupied the area we now call Starved Rock for the past 10,000 years!
- What did they eat, where did they seek shelter, what did they look like, how did they treat a common toothache?
- Take a moment to slowly turn in a circle and view the area around us. What do you see? What do you hear? If you lived here 400 to 10,000 years ago you would see the surrounding woodlands, wetlands, rivers, and prairies as your grocery store, pharmacy, and Home Depot.
- They made their clothing from animal fur and skin. They used animal bones, stone, and wood to make tools, weapons, and utensils. Plants were used for dye, food, and medicine. They fished the waters of the Illinois River, farmed maize or corn, squash, and melons on Plum Island, and hunted bison, elk, deer, bear, beaver, ducks, and turkey throughout the woodlands, prairies, and wetlands of the Illinois Valley.
- The best known and possibly the largest group of Native Americans to live in this area were the Illinois. They frequented the area along this stretch of the river for several centuries between the 16<sup>th</sup> and early 18<sup>th</sup> centuries.
- The tribe was divided into 12 sub-tribes, one of which was the Kaskaskia. Their village extended from the north bank of the Illinois River just east of where the lock and dam are located today.
- What did the Illinois people look like? Females wore their hair long and tied back in braids, while the men wore their hair in what we would identify today as a mohawk on top with longer hair in back, a mohawk mullet! Their hair was adorned with feathers of turkey, hawk, or eagle, and their bodies were covered in tattoos which was a ceremonial right of passage for those entering adulthood. No tattoo parlors back then-they used fish bones and dye they collected and mixed from local plants-OUCH! (Show pic of the Illinois illustration and wigwam on the back).
- They lived in cabins called wigwams and longhouses made from tree branches and reeds with a central fireplace for light, warmth, and cooking food. Ladies, you were the wigwam engineers, cooks, tanners of hides, and those who gathered berries, tubers, nuts, and more. The men of the tribe were the hunters and warriors.
- It was in 1673 when French explorer Louis Jolliet and a Jesuit Priest by the name of Pere Jacque Marquette first encountered the Kaskaskia at Starved Rock. This first introduction was the beginning of a

fruitful friendship of trade, commerce, and diplomacy between the French and the Illinois Confederation that would last for almost 100 years. (Show a picture of Jolliet and Marquette)

- Speaking of trade and commerce, the French returned to the region in 1681 to construct Fort St. Louis on top of the very rock we are standing upon today. Fort St. Louis built by Henry Tonti and Robert Rene Cavalier Sieur de LaSalle built the wooden fort out of timber they had logged from the sides of the sandstone butte. (Show picture of LaSalle, Tonti, and Fort St. Louis diorama)
- Fort St. Louis consisted of a wooden palisade or protective wall built 8-15 feet high with sharpened points at the top. Inside the palisade were several redoubts or wooden block houses that served as lookout points and soldier's quarters. Within the courtyard of the fort was a church, warehouse, gun powder magazine, and several Native American dwellings.
- The fort served as a center for French Trade and Diplomacy within the New World, providing a diversity of tribes with protection from continuous Iroquois attacks from the east. This large concentration of tribes at the "rock" was known as LaSalle's Colony.
- What were the popular trade items of the 17<sup>th</sup> century? Beaver was sought after by the Europeans for clothing apparel back home, while Native Americans desired metal utensils, tools, and weapons. (Pass around to group: beaver pelt, stone axe head, stone projectile point, cotton tunic, and metal axe).
- By 1691 trade had moved further south to present-day Peoria due to a depletion of natural resources in the Starved Rock region. By the early 1700's the Fort had been completely abandoned and later burned to the ground.
- Today you can view a diorama of Fort St. Louis inside the Starved Rock Visitor Center's exhibit hall.

### **Stop 6 – Railing or last deck on top of the rock with a view of the Lodge.**

#### **Civilian Conservation Corps at Starved Rock**

- When you look over the woodland canopy your eye glimpses the rustic and historic Starved Rock Lodge situated on the adjacent sandstone bluff. Completed in 1938 the log and stone building was constructed by the Civilian Conservation Corps also known as the CCC. Today the lodge contains 69 hotel rooms and 17 woodland cabins and is operated by a private concessionaire- not state park staff.
- The CCC was a program created by President Franklin D. Roosevelt as part of the New Deal during the Great Depression. The program was designed to help young men get back on their feet and support their families while working to help our nations parks and forests.
- The program was a collaboration between the U.S. Department of Defense, U.S. Department of Agriculture, U.S. Department of Labor, and the U.S. Department of the Interior. (Start passing out pictures)
- Starved Rock hosted 3 CCC companies from 1931-1941. Companies 614, 1609, and 2601 designed and built the Wildcat Canyon and LaSalle Canyon bridges, Lone Point shelter, log shelter by the visitor center, the Lodge cabins, the Lodge's great hall, kitchen, and dining room, and the Sunrise and Sunset Shelters located on either side of the lodge.

- How old were the CCC recruits? What did they earn for their work at Starved Rock? Each recruit between the age of 17-28 received anywhere from \$30-\$55 a month depending on their skills and work history, which gave rise to another nickname for the CCC “the Dollar a Day Boys”. Most of the money was sent back to their families to provide funds for food and shelter. This is the equivalent of \$600 a month today but remember food, shelter, clothing, education, trade skill training, and recreation were provided as well.
- Recruits were well cared for at camp. The camp provided shelter, 3 square meals a day, clothing, on-the-job training, healthcare, and education. Most recruits came into the CCC illiterate and malnourished but left their 6-month to 2-year term with 15 pounds of extra weight, a clean bill of health, a completed education, and a vocational trade skill that would help them become a responsible member of the economy and society which was one of the chief goals of the New Deal program.
- Camp 614 was located along the river where the present-day boat ramp is today. Camp 2601 set up the base where the present-day Visitor Center and Park Maintenance are today. Company 1609 was the largest CCC encampment at the “Rock”. It was once located on the bluffs of LaSalle Canyon off of Route 71 heading east from the park to Ottawa, Illinois.
- By 1941 the CCC camps had shifted from a social work relief program providing for the state and national park systems to military training bases preparing for World War 2. Starved Rock CCC camps were not used after 1941 and the barracks were all torn down but for 2 that remain today and are used as a wood shop and warehouse for park staff and operations.
- Does anyone have any questions? We will head back down the stairs to the main trailhead. Follow me, please.

### **Stop 7 – White Pines on the trail by short stairs to the trailhead.**

#### **1800s-1910**

*(Depending on group size, interests, and age level I will sometimes discuss White Pines: glacial remnant, wildlife connections, and Native American uses). Let me know if you would like those notes.*

- Daniel Hitt was a veteran of the Black Hawk and Civil War as well as the first American owner of the area we now know as Starved Rock State Park. Hitt purchased Starved Rock in 1835 from the United States government for \$85.00 and some back pay from the United States Army.
- Hitt sold the property to a Chicago businessperson, Ferdinand Walther in 1890 for \$15,000. Walther developed the area for the public as a private park and built the Starved Rock Hotel complete with cabins. The hotel was located here at the base of the rock. Nearby just before French Canyon Walther built a pool and pool house from the spring-fed sandstone. You can still see the original cement retaining wall of a portion of that pool.
- The hotel was a popular attraction through the 1920s and was torn down shortly after the Starved Rock Lodge was constructed. You could get a room for 1-3 dollars a night. Visitors could take the Interurban Rail line into Utica and board a ferry that would transport them across the Illinois River to French Canyon Cove where they would walk up the trail to the hotel.
- The property needed protection at the turn of the 20<sup>th</sup> century when mining companies were interested in purchasing the site from Walther to mine the sand and build another quarry. Concerned citizens stepped

in and petitioned the Illinois State Parks Commission to save the unique sandstone canyons and overlooks. The state of Illinois purchased Starved Rock and surrounding canyons for \$146,000 from Walther in 1910 and Starved Rock became the second state park created in Illinois. Fort Massac in southern Illinois was the first state park created by the state of Illinois.

- Does anyone have any questions?

**Closing and Thank You – bottom of the short staircase by the kiosk at trail intersection.**

- Does anyone have any questions about the tour or the park in general that I haven't answered?
- If you would like to become a member or volunteer at the park, please visit the Starved Rock Visitor Center and ask for a Starved Rock Foundation brochure. The Foundation helps with programs, exhibits, events, staffing the visitor center, trail clean-up days, prairie garden maintenance, and the Le Rocher Gift Store.
- You may also enjoy the exhibits, displays, movies, and further park information found inside the visitor center. The center is open daily from 9-4.
- Trails begin here and will take you out to the rest of the park. Just follow the brown park signs and trail maps found at every intersection and parking lot. Remember the white dot on trail posts guide you back to the visitor center or lodge.
- Thank you for coming, stay safe on the trails, and enjoy your time at the park.

**RESOURCES for VOLUNTEER NATURALISTS & FRONT DESK DOCENTS**

Supplemental material on history, geology, and ecology that may help with guided hike knowledge can be found at the Le Rocher bookstore or various similar titles for loan at the park's library located inside the Starved Rock Visitor Center.

- **Sharing Nature with Children**, by Joseph Cornell (Lisa and the Park Office have copies to loan out)
- **Interpreting for Park Visitors**, by William J. Lewis
- **Interpreting our Heritage**, Freeman Tilden
- **Personal Interpretation**, Lisa Brochu and Tim Merriman
- **The History of Starved Rock**, Mark Walczynski
- **Inquietus**, LaSalle in the Illinois Country, Mark Walczynski
- **Massacre 1769: The Search for the Origin of the Legend of Starved Rock**, Mark Walczynski
- **Starved Rock State Park, The First 100 Years**, Mark Walczynski
- **Hiker and Visitor Guide to Starved Rock State Park**, Mark Walczynski



- **Starved Rock State Park, The Work of the CCC Along the I & M Canal**, Dennis H. Cremin and Charlene Giardina
- **Illinois and Michigan Canal**, David A. Belden
- **Time Talks, The Geology of Starved Rock and Matthiessen State Parks**, by Department of Natural Resources, Illinois Geological Survey
- **Tree Finder** by May Theilguard Watts
- **Animal Tracks Illinois**, Tamara Eder
- **Field Guide to Birds**, Roger Tory Peterson
- **Illinois Wildflowers**, by Don Kurz
- **Mushrooms and Other Fungi of the Midcontinental United States**, by Huffman, Tiffany, Knaphus, and Healy.
- **Illinois Natural History Survey**, <https://inhs.illinois.edu/>
- **Illinois Department of Natural Resources**, [www.dnr.illinois.gov](http://www.dnr.illinois.gov)
- **Cornell Lab of Ornithology**, <https://www.birds.cornell.edu/home/all-about-birds/>
- **National Wildlife Federation**, <https://www.nwf.org/Educational-Resources>
- **National Geographic for Kids**, <https://kids.nationalgeographic.com/animals>
- **Illinois State Museum**, <https://www.illinoisstatemuseum.org/>
- **Greater Peoria Tribe of Oklahoma**, <https://peoriatribe.com/history/#top>
- **Illinois Wildflowers**, <https://www.illinoiswildflowers.info/>
- **Morton Arboretum**, [www.mortonarb.org](http://www.mortonarb.org)