



CLIFTY FALLS STATE PARK INTERPRETIVE MASTER PLAN 2019



Memories made naturally.

DNR
Indiana Department
of Natural Resources

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Introduction

The Indiana Department of Natural Resources, Division of State Parks, has requested an interpretive master plan for Clifty Falls State Park. The goal is to assess current conditions and recommend improvements.

The plan provides a resource overview to understand the natural, cultural and management stories of the property. Existing conditions address assets and liabilities. The recommendations take into consideration facilities, audiences, programs, partnerships, media and staff. The plan ends with phases for the recommendations.

Clifty Falls has experienced the retirement of long-term employees. As a result, the time is right for evaluation, planning, and new directions.

Resource Overview

Introduction

Clifty Falls State Park was dedicated in 1920 and became Indiana's third state park. At that time, the park consisted of the falls and canyon. The scenic beauty and fascinating geological features made this acquisition an important public property. With the geological story came the natural history of the canyon. Cultural stories about railroads and mills also give a nod to the rugged geology and flowing waters of Clifty Falls.

Protecting the property through careful management is an important part of ensuring the park's importance for generations to come.

Natural Resources

Geology

Bedrock

Approximately 444-359 million of years ago, Indiana was covered by a warm, shallow sea inhabited by abundant sea life. Snails, clams, corals and other animals lived and died, depositing their boney exoskeletons and shells. The marine debris accumulated and over time was compressed down into solid limestone bedrock.

Periodically, muddy water flowed into the sea. The mud settled and was similarly compressed down to form shale. As a result, the bedrock of Clifty Falls is alternating layers of limestone formed while a sea, and shale, formed when the region was infiltrated with mud.



Extent of inland ocean

Fossils

Fossils are abundant at Clifty Falls. Fossils formed when an animal was buried under marine debris. Soft tissue decomposed, but shells and other hard parts of the animal did not. These parts were gradually replaced by minerals and formed solid rock.



Fossil formation

The most common fossils found at Clifty are bryozoans, corals, brachiopods and crinoids. Other fossils include gastropods, pelecypods, trilobites and cephalopods.



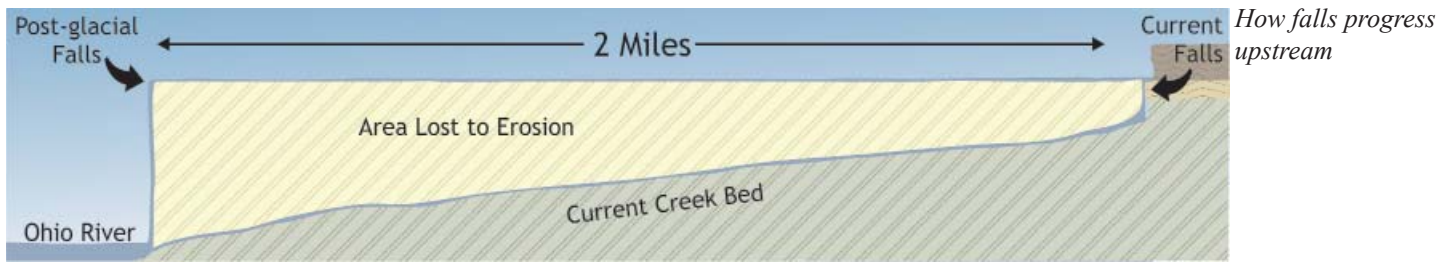
How glaciers form and move

Ice Age

During the Pleistocene Epoch, 2.5 million to 12,000 years ago, global cooling resulted in massive ice sheets. Snow fell, but instead of melting, the snow compacted down, and under its own weight, spread outward to the south. Glaciers reached the region of Clifty Falls. Prior to glaciation, rivers in the region flowed to the north. Advancing glaciers blocked these older rivers and their valleys, forcing new pathways for water. As the glaciers receded and melted, large volumes of meltwater carved new river valleys, included the Ohio River.

Waterfalls and the Canyon

Glacial meltwater formed streams such as Clifty Creek. Streams cut through glacial debris down to bedrock. Clifty Creek's path ended with a waterfall high above the Ohio River. As time went on, the waterfall eroded upstream, carving the canyon.



A hard bedrock layer resting on a soft bedrock layer is what creates a waterfall. A stream erodes the lower soft layer at a faster rate than the upper hard layer, resulting in the lip of the falls. Eventually, the upper harder layer cannot support itself and collapses, moving the falls further upstream. There are four major waterfalls at the park: Big Clifty, Little Clifty, Hoffman and Tunnel Falls.

Water

Several streams with a steep gradient flow southward toward the Ohio River, located at the southern end of the park. Principal streams include Clifty Creek, Little Clifty Creek, Dean’s Branch, Hoffman Creek and Little Crooked Creek.



Clifty Creek

These warm water streams frequently dry up during the late summer.

Ecosystems

Before European settlement, southeastern Indiana was heavily forested. Forests were primarily beech-oak-maple-hickory.

Today park community types are defined by moisture amount and soil depth. Communities include:

Dry Upland Forest

This forest is found at the canyon rim. Soils are dry and drain rapidly because of the steep, exposed slope. Predominant tree species include chestnut oak, post oak, and black oak. Animal species include ground skink, five-lined skink, fence lizard and summer tanager.

Dry-mesic Upland Forest

This community has a higher moisture level than the previous community. Trees grow more quickly as a result. Common tree species are white oak, red oak, and black oak.

Mesic Upland Forest

Soil moisture is ideal for creating a dense overstory. The understory contains shade-tolerant species. This community occurs on north-facing slopes and where there is level ground and high moisture. Tree species include sugar maple, beech, red oak, and basswood.

Barrens

Barren conditions are found along the canyon rim and where bedrock outcroppings occur. Soil is thin to non-existent. Plants found include side oats gramma, obedient plant, pale Indian plantain, whirled rosinweed, and little bluestem.

Flora

The state park’s original acreage has not been logged or disturbed in over 70 years, making it a very high-quality forest. Fifty-four tree species have been recorded in the park. An individual yellow buckeye holds the record for being the largest of that species in Indiana. Ten plant species found at Clifty are listed species.

Twenty-three shrubs, 13 ferns and 30 fungi species have been identified in the park.

Invasive/Exotic Species

Clifty Falls has a major problem with invasive plant species. This problem is most obvious in the portion of the park formerly owned by the Madison State Hospital. Invasive species have out-competed native species, and altered the ecosystem. Spring wildflower populations have disappeared. Reptile and amphibian populations have declined or are absent.

Invasive plants of particular interest include: Tree of Heaven, Princess Tree, Mimosa Tree, Japanese Stilt Grass, Autumn Olive, Privet, Multiflora Rose, Jetbead, Asian Bittersweet, Japanese Honeysuckle, White Mulberry, Amur Honeysuckle, Periwinkle, and Wineberry.



Cave salamander

Fauna

Thirty-three mammals have been documented at Clifty Falls as well as 15 reptile species and 16 amphibian species. One-hundred and fifty bird species have been recorded within the park. A 20-year winter bird survey conducted by William Overlease identified some declines as well as some increases (see the park's Natural Resource Management Plan). Four animal species are listed species.

Clifty Canyon provides a nice corridor for migratory songbirds. Black and turkey vultures are known to have roosts at the park.

The railroad tunnel provides a unique ecosystem. Cave salamanders, bats and other troglotauna reside in the tunnel. The presence of white-nose syndrome in bat populations has resulted in stricter control of cave access during hibernation.



Tunnel Cave

Cultural Resources

Pre-history



Early mill

Archaic and Woodland artifacts have been identified at the park. A complete listing of artifacts is found in the Natural Resources Management Plan.

European Settlement

One of the earliest deeds recorded for land that includes present-day Clifty Falls was to John McMillan in 1809. This was seven years before Indiana's statehood. McMillan's property was later sold to James M. Todd of Kentucky in 1834, where it became known as Todd's Hill. James Todd was related to both President James Buchanan and Mary Todd Lincoln.

Grist mills were important for early settlers. A gristmill ground grain into flour. Many early grist mills included a sawmill for converting logs into boards. Clifty Creek once provided a source of power for a grist and sawmill owned by James Edwards. It was located above the main falls. The remains of the mill race were still visible when the park was dedicated.

Todd House

The Todd House, once located near the southern entrance to Clifty Falls, was significant in that it was part of the Underground Railroad. The Underground Railroad was established by abolitionists as a means to help escaped slaves reach freedom in Canada. Houses along the Underground Railroad were frequently built with secret

rooms for hiding people. Kentucky was a slave state, so crossing the Ohio River into Indiana was the first step to freedom.

John Todd built his home in the 1830s. A secret room was constructed on the second floor next to the chimney. The room had enough space for two adults and a child. John Todd's brother assisted in the operation from the Kentucky side of the river. If the way was clear, John Todd would beat a brass kettle, or leave a light in a window. His brother would then ferry the slaves across the river.

After John Todd died, the house passed through other hands, with the secret room being discovered only years later. The house was torn down in 1909.

One account notes a family cemetery for the Todd Family near what is now the Nature Center (formerly the saddle barn).

The Jefferson County Historical Society has researched the Todd House and pinpointed its location. It is hoped that an archaeological study of the site can be conducted.

Brough's Folly

Brough's Folly refers to Ohio politician and entrepreneur John Brough, who purchased the Madison and Indianapolis Railroad from the State of Indiana in the 1850s. At issue was the 400 foot rise from the Ohio River to the surrounding uplands. Running a railroad up the steep grade had proved too difficult and expensive for the State.



John Brough

The State's stipulation with Brough's purchase was that he find a route out of the Ohio River Valley. Brough chose a route up Clifty Canyon. Seven hundred men were working on the route during its height. Unfortunately, Brough was unsuccessful and went bankrupt two years later.

Several railroad structures in the canyon are still visible today. Among the remnants of the railroad are a tunnel, stone retaining walls, and trestle abutments. The tunnel is especially significant as it has become a bat hibernaculum.

Park History

In the early part of the 1900s, Colonel Richard Lieber spearheaded a movement to create a state park system in Indiana. After acquiring McCormick's Creek and Turkey Run in 1916, he turned his eyes on Clifty Falls.

At the time, the property was owned by several different individuals. Community involvement was instrumental in purchasing the original 570 acres that included the falls and canyon. Jefferson County citizens raised half of the purchase price, and the State of Indiana provided the rest.

The 1920 creation of Clifty Falls came on the heels of WWI. Clifty Falls was dedicated as a war memorial, and a gift to the community.

In 1965, the state acquired acreage from the Madison State Hospital, nearly doubling the park's size. The upland acreage had been farmed and provided an open, level area for constructing facilities such as the pool, service area and campground.



Entrance to the Clifty Inn

Clifty Inn

The Clifty Inn has had several incarnations over the years. The rapid pace of expansion and remodeling indicates the high demand for rooms and meals at Clifty Falls State Park.

The first inn was an old stone house with six sleeping rooms. Della Luke, the wife of the property manager began cooking and feeding people. In 1923, an adjoining barn was equipped with 16 sleeping rooms. In 1925, a new building was constructed over the basement of the stone house. The building had a large dining area on two floors. In 1928, the roof of this building was raised, and an unheated 3rd floor added.

Another large addition adding 36 rooms occurred in 1964. Unfortunately in April of 1974, a tornado destroyed the Clifty Inn, and the building had to be torn down. A 36-room annex structure was constructed.

Between 2000 and 2005 the Clifty Inn was completely renovated into the building we have today.

Civilian Conservation Corps

The Great Depression of the 1930s resulted in President Franklin Roosevelt's creation of the Civilian Conservation Corps (CCC). This program hired single, young men to work on conservation and park projects. The timing of this program worked well for the fledgling state parks, many of which were lacking in basic infrastructure.



CCC Fountain Remains

Two hundred men were stationed at Clifty Falls between 1933 and 1938. CCC projects completed at Clifty Falls include shelter houses such as Clifty Shelter. Other projects were: a brick pump house, foot bridges, horse bridges, 14 miles of hiking trails, horse trails, gatehouses at both entrances, the stone arch bridge over Little Clifty Creek, and a high trestle bridge over Crooked Creek. The current nature center was built by the CCC to serve as a saddle barn.



Power Plant

While working at the park, a CCC camp was built that included barracks, a dining hall, latrines, shower houses and other structures. The Clifty Falls CCC camp was located directly across the road from the nature center entrance. This camp later served as a park campground. This site is now overgrown, and no visible structures remain.

Power Plant

While not part of the park proper, the adjacent Indiana-Kentucky Energy Corporation's Clifty Creek Plant (IKE) is a visible presence. The plant was built in the early 1950s to supply power to a uranium enrichment facility in southern Ohio. As this need diminished, the plant began to provide power to regional customers.

In the 1980s, taller stacks were constructed. Emissions are released at a level higher than the river bluffs, allowing them to better dissipate. Its location on the Ohio River allows the plant to withdraw water for its cooling processes. Barges deliver coal to the plant.

Resource Management

Resource management is an ongoing interpretive story at the park. Stewardship oversight is the responsibility of the interpretive service, with help from park management. Explaining the stewardship of the park's resources



Autumn Olive

helps visitors gain an understanding and appreciation for Clifty Falls. Recent and ongoing resource management projects include:

Invasives Removal

Until recently, no comprehensive control measures were implemented at the park. This has resulted in ecosystem degradation. Invasives of concern include: Tree of Heaven, Princess Tree, Mimosa Tree, Japanese Stilt Grass, Autumn Olive, Privet, Multiflora Rose, Jetbead, Asian Bittersweet, Japanese Honeysuckle, White Mulberry, Amur Honeysuckle, Periwinkle, and Wineberry.

The interpreter supervises a crew whose focus is invasives removal. Several acres of the park have been treated. Volunteers and youth groups also participate in invasive removals.

Tree planting and removal

Saplings were purchased and planted in the campground. Tree removal focused on opening the view at overlooks.

Deer Management Hunts

Deer management hunts at Clifty Falls are ongoing. Thirty-three deer were removed in 2018. The next reduction will take place in November of 2019.

Other projects

The interpretive service oversees the installation of bluebird nesting boxes, conducts bat surveys and has other projects as required.

References

- Indiana Geologic Survey brochure: *Clifty Falls*
- Natural Resource Management Plan, 2005, Janice Kleopfer, Richard Davis
- Conversation with former interpreter, Richard Davis
- History Presentation notes, courtesy Kayla Leach
- "*The Todd House and its Relation to the Underground Railroad*" Harry Lemen, 1909
- "*History of Clifty Falls*", Joe McDonald, inn manager 1943-1953
- Brough's Folly brochure
- Indiana-Kentucky Energy Corporation website

Existing Conditions

Audiences

General Public. The general public makes up the largest attendance group. The public includes those staying in the campgrounds or inn, as well as day users.

Schools. In 2018, nine school programs were offered, representing 12% of the programming. After not emphasizing school programs for a number of years, the current interpreter is working to build relationships with the local schools and encourage field trips to the park. As a result, the number of school programs has increased, and should continue to do so.

Scouts. Programs geared to scout badge completion and work projects are popular at Clifty Falls.

Seniors on bus tours. Tour groups make Clifty Falls a stop. The interpreter provides interpretive programming for this audience.

Athletic training. Clifty Falls has rugged terrain that helps people get in shape for other challenges. The guided hike of the Brough's Folly railroad structures is frequently attended by those wanting a more rigorous hiking experience.

Pool users. The interpreter conducts programs at the pool for swimmers taking a break.

Facilities for Programs

Nature Center

The Clifty Falls Nature Center was built by the Civilian Conservation Corps in the 1930s to serve as the park's saddle barn. In 1981, the building became the nature center.

Converting a building designed for a different function into a nature center is never a good solution. Spaces needed for nature center exhibits, a program room, storage and office space have to fit into the existing space. Public amenities such as restrooms, lighting, heating and cooling may be inadequate.

Challenges with the existing nature center include:

- No Program Room. There is no program room in the building. Programs are conducted in the middle of the exhibit space where noise and other distractions diminish the program experience. Additionally, the area is small and inadequate for larger groups and school classes.
- No Reception Area. The building has no reception area to welcome visitors, introduce the theme, and provide a visible presence.
- No Exhibit Flow. Exhibits are randomly placed where space allows with no progression of information, or theme development.
- Inadequate Restrooms. There is only one toilet per gender. This is insufficient for school groups and busy public visitation days.
- Inadequate hallway lighting.
- Water Leaks. A leaking chimney allows water to flow into the office when it rains.



Nature Center



Nature Center Program Room

- Live Animal Support. A water source and cleaning area is not close to aquaria, making maintenance difficult. Due to space constraints, tanks are scattered throughout with no logical flow.
- Inadequate work space.
- Inadequate storage space.
- Inadequate office space.
- Difficult Flooring. Flagstone floors in the office are a tripping hazard, do not meet ADA regulations, and are difficult to keep clean. Carpet in the exhibit area is a difficult surface to keep clean.
- Unusable outbuilding. The storage building behind the nature center has a hole in the roof and is unusable.
- Poor Location. The location is at the southern end of the property. Most visitors, with the exception of Inn guests, use the northern end of the property.



Dark entry hallway



Storage room



Campground Amphitheater

Clifty Inn

The inn is located near the Nature Center at the southern end of the park. The hilltop location offers a wide view of the Ohio River Valley. The inn includes several meeting rooms which are reserved for indoor programs and events.

Amphitheater

An amphitheater is located in the campground. The facility includes a series of benches, a low stage, and a screen.



Clifty Shelter

Clifty Shelter

Clifty Shelter is a large CCC-constructed shelter at the north end of the park. More visitors enter at the north gatehouse as it is located near the falls. The shelter is a roofed, open-sided building with picnic tables. The facility can be reserved for programs and by the general public for reunions and other events.

Pool

A public pool is located toward the southern end of the park. During the summer season, this space is used for programs.



Swimming Pool

Poplar Grove Shelter

This shelter is located near a large open play field, making it a good location for star programs.

Trails

Clifty Falls State Park includes over 14 miles of trails. Trails lead to destinations such as the falls, tunnel and observation tower. As a linear park, trails travel parallel to each other along the creek, along the canyon, and at the rim of the canyon. A few trails are in the upland area, which features successional habitat.

During a brief visit to the falls area, the author got turned around. She encountered two other groups of people who were similarly confused. At another location, a sign marker was propped up against a tree, directing people in the wrong direction to a dead end. An unofficial trail was developing as the result of people walking the



Observation Tower

wrong direction. This experience is frustrating for people who want to get to their destination.

Observation Tower

The observation tower is a short walk from the Nature Center. The tower offers a view of the power plant and the Ohio River Valley. Vegetation is encroaching on the view.

Off-site locations

Scheduled off-site programs are conducted at the local library, the county fairgrounds and other locations.

Staff

Current staff includes:

One full-time interpreter

Two seasonal interpreters (one 180-day position; one 90-day position)

Two resource management positions (full-time May – Oct)

Volunteers

Volunteers also assist with tasks and staffing. Volunteers include:

One individual who works Saturdays at the Nature Center. This individual will conduct roving interpretation.

Two Campground Hosts.

Indiana Master Naturalists. IMN do painting, carpentry, and invasives removal.

Programs

The interpreter's 2018 annual report has the following break-down:

Hikes. 118 hikes with an average attendance of 18. Popular hikes were waterfall hikes, owl prowls, and railroad hikes.

Talks. 27 talks for an average attendance of 27. Popular talks included live animal programs, live raptor programs and "Going Batty" programs.

Special Activities. 139 activities with an average attendance of 28. Special activities include workshops, crafts, school groups, tunnel tours, patch programs, outdoor skills, arts in the parks and off-site activities.

Special Events. 17 special events were conducted in 2018. This number will be reduced to nine in 2019. The three most popular special events were: Charity Ride for Indiana State Parks, KDH Run the Falls 5K and the Howl-o-Ween Weekend. Other events included: First Day Hike, Trail Hike and Cleanup, Spring Bird Count, and Frozen in Time: Fossils and Geology.

88% of the programs were for the public, with the remaining 12% for schools and other groups. Most of the programs took place at the park, with only four group programs being conducted off-site.

Media and Self-Guided Interpretation

Self-guided interpretation covers interpretation not conducted by interpretive staff. Items such as brochures, signs and exhibits fall into this category.

Existing conditions for self-guided interpretation include:

Brochures

“Brough’s Tunnel and White Nose Syndrome” deals with the disease affecting bat populations.

Signs

Current interpretive sign topics are:

Brough’s Tunnel, Brough’s Folly, White-nose syndrome (located at the tunnel), and the Falls. A sign about the Power Plant was created, manufactured and delivered, but never installed. Current staff has not seen it. After several searches, the sign was not found.

Nature Center Exhibits

Exhibits in the Nature Center cover natural, geological and cultural history topics. Included are: live animal exhibits, fossils, tree identification, historic clam shell buttons, touch boxes and table, taxidermy mounts and a relief map of the park. The nature center also includes a children’s corner with activities.

Bulletin Boards

Bulletin boards are interpretive and provide information on the park and upcoming events. Bulletin boards are scattered throughout the park. Additional bulletin boards will hopefully be added at the campground bathhouses in 2019.

Movie

The state park “Origins” movie runs at the nature center. This program covers the history of the state park system.

Social Media

Social media serves the dual function of publicizing upcoming programs while providing interpretation. Social media at Clifty Falls includes:

A park Facebook site

An eNewsletter that visitors can subscribe to

A television channel at the Inn.

Partnerships

Several organizations work with the Clifty Falls State Park interpretive service. Assistance is provided in a number of ways.

Oak Heritage Conservancy

Located in nearby Hanover, Indiana, the Oak Heritage Conservancy (OHC) is a land trust covering several southeastern counties. They hold outright ownership and easements for properties. OHC partners with the park on events including a “Park Hop” which encourages people to visit several properties including Clifty Falls.

Indiana Master Naturalist

The Indiana Master Naturalist (IMN) program educates and trains individuals with the mission of fostering understanding, and promoting volunteerism. Master Naturalists help with tasks at the nature center including carpentry and painting.

Scout Projects

Scouts form a large audience at Clifty Falls. In addition to helping with stewardship projects to fulfill badge requirements, eagle scouts work on large-scale projects for the park.

Friends Groups from Other Parks

At this time, Clifty Falls does not have a Friends Group, however, Friends Groups from nearby parks assist with events and programming.

Jefferson County Historical Society

The historical society's mission is to educate the public about county history. They have provided research assistance and information to the park.

Walmart and Lowes

Both of these stores assist with special events by providing gift cards for prizes.

Individuals

Many tree saplings were donated to the park by an individual.

Regional Offerings

Southeastern Indiana offers other cultural and natural history experiences. Among them:

City of Madison

Nearby Madison is an historic river town. Historic homes and shops line the streets. On occasion, homes are open for tours. Additionally, there are museums such as the Schroder Saddletree Factory Museum and the Dr. William Davies Hutchings Office and Museum.

Lanier Mansion

The Lanier Mansion is managed as a State Historic Site. The home and grounds are located on the Ohio River in Madison. The mid-1800s Greek Revival mansion offers tours.

Other DNR Properties

Four state properties are close to Clifty Falls. They include.

a. Hardy Lake, 21 miles away

Hardy Lake is 2,178 acres with a 741-acre lake. In addition to fishing and boating, a raptor rehabilitation center conducts programs and offers viewing experiences.

b. Charlestown, 30 miles away

Charlestown was originally a 15,000-acre ammunition plant during WWII. The portion turned over to State Parks is 5,100 acres, and was dedicated in 1996. The park borders the Ohio River and includes Rose Island, the site of a late 1800s amusement park.

c. Versailles, 31 miles away

Versailles State Park is 5,988 acres, containing a 230-acre lake. Originally, the park was managed by the National Park Service and contains CCC projects. In 1943, the park was turned over to the state.

d. Clark State Forest, 33 miles away

The 24,000 acre forest includes two nature preserves and permits camping, fishing, picnicking and hunting are permitted.

Federal Properties

a. Muscatatuck National Wildlife Refuge, 34 miles away

The 7,724-acre refuge is managed for wildlife. The refuge is a “continentally important” bird area. The refuge includes a Visitor Center. Hunting and fishing are permitted.

b. Big Oaks National Wildlife Refuge, 8 miles away

The NWR was formerly part of the Jefferson Proving Ground and encompasses 50,000 acres in three counties. Activities include guided refuge tours, photography, hiking, hunting and fishing.

Gen. Butler State Resort Park (Kentucky)

Located 16 miles away, the park has a lodge, campgrounds and a restaurant. Activities include touring the Butler-Turpin State Historical House, biking, birding, boating, tennis, swimming, canoeing and fishing.

Interpretive Theme

The geology of Clifty Falls defines its *rugged landscape*, its *human challenges*, and its *sensitive ecosystems*.

Sub-Themes

1. Rugged Landscapes

- a. Oceans and animals created the foundation of Clifty Falls.
(includes the stories of bedrock formation and fossils)
- b. Since the end of the Ice Age, water has carved the features we know today.
(includes the stories of the canyon, falls, and Ohio River)

2. Human Challenges

- a. The Ohio River formed a barrier and a highway.
(includes stories of the Todd House and power plant)
- b. Getting a train from the Ohio River up the canyon proved to be folly.
(includes stories of Brough and the tunnel)
- c. Making the difficult topography an accessible outdoor experience took skill and hard work.
(includes stories of the Civilian Conservation Corps, CCC structures and their use of native materials)

3. Sensitive Ecosystems

- a. Many plants and animals have adapted to the geology and topography of Clifty Falls.
(includes stories of vultures, bats, and canyon life)
- b. Human interaction with the resources at Clifty Falls have resulted in problems and solutions.
(includes stories of invasives, restoration and wildlife management)

Recommendations

Audiences and Programs

The interpretive staff is doing a good job addressing traditional audiences that use the park. School groups, which were a neglected audience, will increase as staff continues its outreach efforts.

Groups that are currently underserved include:

1. Ethnically Diverse Audiences

By 2050, Caucasian people will be the minority in America, but currently make up 78% of National Parks attendees. (*National Geographic "Changing the Face of National Parks", 2017*). Increasing ethnic diversity in our parks not only sends a message of inclusivity, but also creates the next generation of advocates for our parks and natural resources. Parks need minority participation.

Some ideas for increasing diversity:

a. Recruit minority staff.

b. Market hikes or other programs to minority audiences. This could be through churches frequented by minorities, or other local venues.

c. Develop programs around minority stories. The Todd House (which will be addressed later in the recommendations) was a stop on the Underground Railroad. Solicit African American input for program planning and presentations.

2. Local Seniors

While senior bus tours visit the park, local seniors are not visiting the park or attending interpretive programs. Marketing interpretive programs to seniors off-site or at the Inn will increase participation. Programs such as talks and workshops can be attractive to senior groups.

3. Pre-school Programs

Programming for this age group includes working with organized pre-schools, and parents with pre-school aged children. A short weekly "class" can be offered that guides a parent and child in activities and walks.

The benefits of such programming is that it gets children outdoors at a very early age. It also gets parents in the park, increasing their likelihood of returning and advocating for the park.

4. Hanover College

Students from the college are frequent park visitors for recreational gatherings. Offering program, research and volunteer opportunities can tap into this existing visitation.

Facilities

1. Restore the existing Nature Center to a Civilian Conservation Corps educational building

The existing building should be replaced with a nature center that serves both the visitors and the Interpretive Service. Once this occurs, the historic CCC building can be restored to its former Saddle Barn appearance and used as a self-guided experience and public space. The focus would be on the CCC, the construction of the building, and its use as a saddle barn.



CCC-built Nature Center

2. New Nature Center

a. Location

The bulk of the visitors come through the North Gate to see the waterfalls. The new nature center would be located in the flat, level area near the Clifty Shelter.



*New Nature Center location
near Clifty Shelter*

b. Design Considerations

Designing and building a nature center to meet both visitor needs and expectations, and meet the needs of the Interpretive Service should include the following:

- ADA Accessible. All doorways, walkways, changes in elevation, restrooms, labels, etc. must meet the requirements of the Americans with Disabilities Act.
- Program Room. The building will include a program room with a 50-100 seat capacity. The room will also double for workshop and meeting space. Chairs will be movable to allow configuration options. A small kitchenette in a side room will make the program room functional for workshop activities and all-day meetings. The kitchenette will include a sink, refrigerator, small stove and microwave. Restrooms will be located near the program room.
- Reception Area. A staffed reception area will be visible upon entering the building. The area will be equipped with space to work, a computer, and phone. Brochures and other take-home information will be displayed.
- Heating and Cooling. Adequate heating and cooling is for the comfort of visitors, staff and live animals. Proper heating and cooling also ensures the longevity of exhibits and taxidermy mounts.
- Restrooms. Design large restrooms with at least six stalls per gender. Restrooms should be visible from the entryway.
- Lighting. Well-lit public areas are important for safety. Additionally, spot lights are used to draw attention to specific exhibits or messages. Lighting in the exhibit room must be adaptable to accommodate changes to exhibits or traffic flow.
- Floors. Floor surfaces must be a easily cleaned of the daily mud, spills, aquarium leaks, etc. Surfaces must meet standards for wheelchair use.
- Storage Space. Program props and materials include items such as taxidermy mounts, historic artifacts, costumes and rock samples. A lot of space is needed to store materials that don't stack well. Adequate storage space with wide covered shelves must be designed.
- Office Space. Staff needs desks, computers, a copier and shelving for books and office supplies. A kitchen with refrigerator, microwave, cabinets and sink is included to accommodate the fact that the interpreter is on duty during lunch and dinner hours.
- Work Space. A work area with large tables, a work bench and tools is used for exhibit construction and repair, special event prep, aquarium repair, etc.

NOTE: The Nature Center is where the Interpretive Service is housed. Storage, office and work space should equal or exceed the amount of public space (exhibit room, program room, etc.).

- Live Animal Exhibits. A water source, deep sink and wide counter should be located in an enclosed area behind the live animal exhibits.
- Exhibit display room. The exhibits will determine the design of this space, not the reverse. The room will allow for a defined path for visitors to enter and exit, moving through a "story" told by the exhibits. ***A thematic exhibit plan must be developed prior to display room design so that outlets, wiring, water, lighting, ceiling height and floor space will adequately support the exhibits.***
- Parking. Parking must be sufficient to accommodate large special events attended by several hundred people. A bus turnaround is needed for school field trips and for large RVs. Bus and RV parking is included.

- Outdoor program area/amphitheater. An outdoor presentation area near the nature center provides options for gathering a group before a hike, badge programs, and other programs that can take advantage of nice weather. The area would include amphitheater-style seating for 50+ people and a small stage area with electricity.

3. Improvements to Existing Nature Center

It is important to move forward with plans to replace the current nature center with a new one at the north end of the park. However, knowing that this process will take years, immediate recommendations for improving the current nature center follow.

a. Repairs/Improvements

- Remove the carpet and replace with an easily mopped surface.
- Remove the wall between the office and storage (horse stall) space to enlarge this area.
- Tear down the unusable storage shed behind the nature center.
- Repair the chimney leak.
- Install soft overhead lighting in the entrance hallway to brighten it up.
- Construct a roofed outdoor program area by the nature center with seating for at least 50 people and electricity. This location is preferable to chairs set up in the exhibit room. There would be fewer interruptions, distractions and noise. When not in use by the interpreter, the program area could be reserved.
- Repair entry door so that it stays closed.

b. Exhibits

Exhibits must be placed to present a progression of information based on a unifying theme. The theme “The geology of Clifty Falls defines its *rugged landscape*, its *human challenges*, and its *sensitive ecosystems*.” should be visible upon entering the building. Exhibits then explain the theme in a logical order. With this in mind:

- Theme statement. Although not close to the entrance, the theme could be presented on the stone wall that faces people at the end of the dark hall. Due to the current bright lighting, eyes are drawn to that area.
- Existing exhibits and their placement. The subthemes (Rugged Landscapes, Human Challenges, Sensitive Ecosystems) would flow counter clockwise in the exhibit room. For example, the fossil exhibit could remain where it is. The falls exhibit and the relief map would also fall into Rugged Landscapes at this location. The Human Challenges subtheme exhibits would include the exhibits on Brough’s Folly, Camp Clifty, fishing the Ohio River and the Power Plant. Lastly, the Sensitive Ecosystems subtheme would include the live animal exhibits, the tree stump, and the tree ID exhibit.
- New exhibits. Missing from the Clifty story are exhibits talking about resource management. The topics of invasive plant control and deer reduction need to be covered in exhibits. The invasive plant exhibit would feature the origin of specific invasive plants, how they got here, why they are a problem and how they are being managed.
- Exhibit evaluation. All existing exhibits should be evaluated for.
 - Damage
 - Hazards such as tripping hazards in the dark hallway.
 - Text. Too much? Clear message? Clear instructions on interactive exhibits?
 - Exhibits that do not fit into the thematic flow, or are damaged, old or faded should be removed. The Clifty Nature Center is a small building with a lot exhibits that have accumulated over the years. Decluttering will help visitors focus on what’s important about the park.



Vegetation blocking Big Clifty Falls overlook.

4. Clear vistas. Views of waterfalls and the Ohio River are important attractions at Clifty Falls. Some of the overlooks are increasingly blocked by vegetation.

Building a relationship with a tree removal service would help the park visitors see the views, and help the tree removal service with positive publicity.

5. Trail Orientation. There is a need for better trail orientation. Visitors are frustrated by not reaching or finding their destinations. Posted “You Are Here” maps would be helpful especially at the many junctions near the falls. An evaluation by a volunteer who is unfamiliar with the trails would be helpful in identifying problem areas.

6. Archaeological research at the Todd House location. The Todd House is an important addition to the Clifty story. While some documentation exists, an archaeological study of the site would provide more information on this Underground Railroad stop.

7. Trail between Inn and Todd House. A trail once existed between the Inn and the Todd House. This trail can be restored and used for guided hikes. A sign near the Todd House location is recommended in the “Signs” portion of the recommendations.

Staff

Clifty Falls State Park has experienced turnover of long-time management positions including the full-time interpreter. The opportunity exists to expand programming, develop a new nature center, build community relationships, and address critical resource management issues.

The current interpretive staff includes one full-time position, one 180-day position, and one 90-day position. It is recommended that the 90-day position be expanded into a second 180-day position to accommodate the anticipated increased workload.

Media

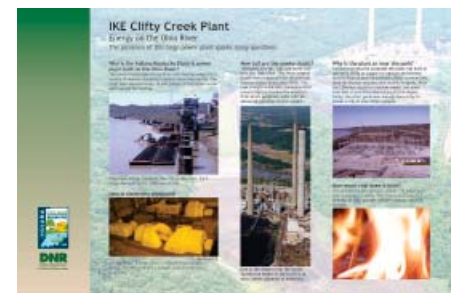
Signs

Interpretive signs can help answer common questions when an interpreter is unavailable. Below are some sign recommendations. Some topics are based on frequently asked visitor questions. Others address a previously unmarked site.

1. Power Plant. Several years ago, a sign explaining the power plant was manufactured but never installed. Its location is unknown. The design for this sign still exists and should be reviewed, edited if needed, and manufactured. The sign was to be placed at the observation tower.

2. Vultures. Two species of vultures are frequently seen from the Inn, circling over the river valley. Visitors are curious about the birds. The sign would distinguish the black and turkey vultures, explain their adaptations, and explain how vultures use thermals to keep aloft. The sign would be posted outside the inn, facing the river.

3. Civilian Conservation Corps Camp. A CCC camp was located just off the Nature Center parking lot. The site is overgrown and no structures are visible. The sign would focus on the CCC story, camp life, and projects at Clifty Falls. It would be located by the Nature Center parking lot visible from the front door of the Nature Center. Investigation of this site to provide detailed information would be a great project for a university through a DNR Historic Preservation Grant, managed through DHPA.



Power Plant sign design

4. Todd House. The Todd House was a stop on the Underground Railroad. The home was torn down, but the location was near the South Gatehouse. A sign would explain the Underground Railroad and the Ohio River, the Todd Family, and the unique home design. The sign would be placed near the South Gatehouse.

Partnerships

1. Building a stronger community relationship

With new staff, there is an opportunity to connect in a more meaningful way with Madison, creating community pride in Clifty Falls. This will lead to increased local attendance, increased volunteer participation, and increased partnership opportunities. A positive relationship will also increase advocacy regarding threats to the park such as development pressures along its periphery. In addition to developing programming specifically for the community, the park can build connections by reaching out to:

- Visit Madison. This group promotes the community and surrounding region. A partnership would help with promotion and collaborative special events with Madison.
- Madison art groups. The Madison Art Club already utilizes the Clifty Inn for exhibit space. A further partnership could include offering workshops or demonstrations at the Inn.
- Hanover College. Hanover College is a small liberal arts college in Hanover, Indiana – just to the west of Clifty Falls. The park could provide research, stewardship and programming projects for students.
- Master Gardeners. The state extension’s Master Gardener program is an educational program resulting in a certification. One of the requirements is volunteering a certain number of hours. The park could provide volunteer hours, while gaining program areas such as educational gardens (medicinal herbs, pollinator, hummingbirds, for example).
- Power Plant. The IKE power plant is heard and seen from the park, resulting in numerous questions. Taking interested visitors on plant tours would further the understanding of the plant.

2. Continue to develop a Friends Group

Work is in progress to create a Friends Group. Friends Groups allow the interpretive service to raise money for projects and provide volunteers to conduct programs.

3. Lewis and Clark Trail

The Lewis and Clark National Historic Trail runs 4,900 miles from Pittsburgh, Pennsylvania to the mouth of the Columbia River in Oregon. In Indiana, the trail runs along the state’s southern border past Clifty Falls. Visitor Centers and Museums are identified along the entire route. At this time, Falls of the Ohio State Park is the only site identified in Indiana. Clifty Falls should be added to the trail.

Phase	Topic	Site	Recommendation
Phase I	Audiences	Local Populations	Outreach to ethnically diverse populations
			Outreach to local senior groups
			Outreach to pre-school groups
			Outreach to Hanover College
	Facilities and Sites	Nature Center	Repair and improve structure
			Evaluate current exhibits
			Remove, replace and reorganize placement of current exhibits
		Vistas	Clear views at overlooks
		Trails	Improve orientation with “You Are Here” maps
		Todd House	Begin process of archaeological research
	Staff		Extend 90-day position to 180 days
	Media	Power Plant overlook	Evaluate existing design for accuracy and manufacture new sign
		Inn	Design and fabricate sign about vultures
		CCC Camp	Design and fabricate sign about CCC Camp
		South Gate	Design and fabricate sign about Todd House
	Partnerships	Local Groups	Pursue partnership with the town of Madison
			Pursue partnership with Hanover College
			Pursue partnership with Master Gardeners
			Pursue partnership with the Power Plant
		Friends Group	Continue development of a Friends Group
Lewis and Clark Trail (NPS)	Pursue getting the park identified on the Lewis and Clark Trail web map		
Phase II	Facilities	Saddle Barn	Restore current Nature Center to be a CCC/Saddle Barn museum
		New Nature Center	Design and build a nature center at the north end of the park.