

# MANAGEMENT PLAN FOR SELLECKS KARST PRESERVE

## INTRODUCTION

The Northeastern Cave Conservancy Inc. owns and manages the Sellecks Karst Preserve. The preserve consists of about 15 acres. Of these 12.2 acres are in a roughly square parcel containing Sellecks Cave, Cave 575, Natural Bridge, and numerous sinks. The remaining acreage is contained in a 50-foot wide strip owned in deed and running from Kniskern Road to the main parcel, a little over 2000 feet. Levy's Cave may be contained in this strip. A survey may verify this.

## PURPOSE OF A MANAGEMENT PLAN

The purpose of a management plan is to describe what is on a property and how it should be managed. It is an operating manual for the preserve. A plan is not a static document that once written is placed on the shelf and forgotten. It is a document that is to be used and referenced on a regular basis. The property manager must follow the plan unless there is a compelling and over-riding reason for doing otherwise. Unless there is an immediate need, nothing should be done at a property that is not in the plan. If something new is desired, the plan should be amended only after careful, complete, and thorough analysis of the proposed changes or additions. Then, the amendments must be approved by the NCC board.

If the management plan is the basis for a management agreement with a third party, then the changes must also be approved by the third party.

## HISTORY OF THE PROPERTY

There is little known about the history of the caves on the proposed Selleck's Karst Preserve. In *Underground Empire*, Clay Perry reports, "Dr. [John] Cook tells us that George Sibley and J. C. Sellick first visited the cave in the year 1841..." However, this is not substantiated by a review of Cook's 1906 paper. Even the origin of their names is unclear. Selleck is a local family name. However, French's Gazetteer (1860) mentions a Selkirks Cave. Selkirk is also a local family name.

The caves were visited by Edward Rew and Arthur Van Voris in the 1920s and they wrote about it in the 25 October 1928 *Cobleskill Times*.

The caves appear in the 1958 and 1966 Schoharie County Guides. John Mylroie mapped them in 1976 as part of his research published in 1977 as *Speleogenesis and Karst Geomorphology of the Helderberg Plateau*, Schoharie County, New York.

In 1991, John Schweyen made an effort to dive the sumps in Sellecks. The upstream sump yielded about 700 feet of passage. He was unable to penetrate the downstream sump.

In December 1987, Carl Snyder, Clayton Pauley, Paul Rubin and Jill McMahan digging at the end of Levy's Cave, broke through and extended the cave by 170 feet to a waterfall and sump.

In the last 10 years the surrounding area has seen a significant increase in the construction of houses. One informal survey estimates that the number of houses within two miles of the caves has doubled or tripled. One of the concerns is that economic forces will make it necessary for the current landowners, the Wards, to subdivide their farm.

## UNDERGROUND RESOURCES

Biological - No Troglodites are known to exist in the cave. It is possible that *Stygmobromus Alleghaniensis*, an amphipod, exists in the cave. They have been found in McFails which is hydrologi-

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cally related. Also, likely to be present would be a cave cricket, *Ceuthophilus maculatus*, the cave moth, *Scoliopteryx Libatrix*, harvest men, *Leiobunum sp.*, and snails, *Mesomphix sp.*

There have been no bat counts in Sellecks or Cave 575. (Natural Bridge, due to its small size, and Levy's Cave, due to its flooding, are not expected to serve as bat hibernacula.) There should be a caver reconnaissance of Sellecks and 575 in the fall. If bat's are found, a bat count by the NYS Department of Environmental Conservation should be scheduled. (In conversations with Alan C. Hicks of NYSDEC he says they see many more bats in the summer than they can account for from their counts in bats hibernacula. He believes there are many more hibernacula to be found in NY).

Geological & Hydrological - The caves on the preserve are formed in the Kalkberg, Coeymans, and Manlius limestones.

Sellecks Cave - The entrance to Sellecks is a very steep slope that ends in an 18- foot drop into the cave. The entrance passage follows the main joint set for the area for 175 feet. Overall, there is about 215 feet of passage in the main part of the cave, inclusive of a major fault that is exposed in the wall of the cave. A stream crosses the main passage from north to south. While Sellecks Cave does not take a surface stream, it does provide a window into the McFails Cave watershed. In 1989 Mark Gottlieb performed a dye trace from Doolittle's Cave. Bugs were placed in the upstream and downstream sumps in Sellecks, in the Northwest Passage in McFails, and in Doc Shauls Spring. Positive traces were found in all of these bugs. This indicates that the water sinking at Doolittle's Cave is going to McFails via Sellecks Cave.

As noted in the History section, in 1991 John Schweyen dove the upstream sump in Sellecks and explored 700 feet of passage. He turned around at the 3rd sump. About the same time Schweyen unsuccessfully attempted to penetrate the downstream sump. The total cave length is about 915 feet. Recently cave diver Theodore Garlock has been trying to extent this with his recent dives.

Cave 575 - Cave 575 has about 100 feet of passage. The cave follows the same joint set as seen in Sellecks. There is an initial 15-foot drop below a fairly small entrance. Once in the cave there are three more drops: one to the north and two to the south of the entrance. These are 15, 25, and 30 feet respectively. The south end is 81 feet below the entrance, though very tight. The walls of Cave 575 are profusely covered with one of the best displays of fossils in the northeast. Through the small entrance an ephemeral stream enters the cave. This stream drains a small wetland situated south and southwest of the cave. It has not been dye-traced, but in all likelihood the water sinking here also goes to McFails.

Natural Bridge - Some people are fond of saying that Natural Bridge is the shortest mapped cave in Schoharie County. The trip under the bridge is only five feet. It occupies a portion of a large sinkhole south-southeast of Cave 575. This sinkhole takes two ephemeral streams. They drain the same wetland that goes to 575. In heavy rain, the sinkhole takes considerable amounts of water. Again, it has not been dye-traced, but in all likelihood the water sinking here also goes to McFails. Recent flooding from hurricane Irene has shifted fill and debris to expose a void in the west wall, which could be dug.

Levy's Cave – Levy's Cave lies at the downstream end of a large closed depression. A short crawl leads to where a dig significantly increased the length of the cave. A series of wet crawls led to a couple of climb-downs and walking passage. It ends in a sump. A perennial stream enters the east end of the closed depression and flows west and north before sinking within 20 feet of the entrance to Levy's. The combination of the stream sink and cave entrance are inefficient and in a time of heavy runoff the depression fills up with water to 25 to 30 feet above the entrance. The stream has been dye-traced to McFail's. The cave is 210 feet long.

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Paleontological - No significant or unique resources are known to exist.

Archeological - No significant or unique resources are known to exist.

Historical - No significant or unique resources are known to exist.

## **SURFACE RESOURCES**

Biological - Much of the surface is a typical late successional forest for the area. The predominant trees are hemlock (*Tsuga Canadensis*) and beech (*Fagus Grandifolia*). Other trees include: large-toothed poplar (*Populus Grandidentata*), ironwood (*Carpinus Caroliniana*), ash (*Fraxinus sp.*), sugar maple (*Acer Saccharinum*), hop hornbeam (*Ostrya Virginiana*), shagbark hickory (*Hicoria Laciniosa*), moose maple (*Acer Pennsylvanicum*), cherry (*Prunus sp.*), and oak (*Quercus sp.*)

Ground cover includes, but is not limited to: trout lily (*Erythronium Americarium*), ramps (*Allium Tricoccum*), barren strawberry (*Waldsteinia Fragarioides*), goldenrod (*Solidago sp.*), various violets (*Viola sp.*), spring beauty (*Claytonia Virginica*), white trillium (*Trillium Grandiflorum*), purple trillium (*Trillium Erectum*), sharp-lobed hepatica (*Hepatica Acutiloba*), and blue cohosh (*Caulophyllum Thaliatroides*). Gray dogwood and other dogwoods (*Cornus sp.*) are common on the access property.

Geological & Hydrological - There is little actual bedrock exposed at the surface. Some is visible near all four caves and is either Kalkberg or Coeyman's limestone. Of real significance are the sinkholes. Besides the 4 caves described above there are at least 12 additional sinkholes. Undoubtedly, all of these transmit water to the aquifer and, penultimately, to McFails Cave. As in any karst terrain, the few surface streams are short and quickly sink underground.

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## **ASSUMPTION OF RISK STATEMENT**

Cave exploration and hiking on karst terrain may involve risk or injury, even death from various hazards, both obvious and obscure, including, but not limited to, slippery and uneven ground, open pits, injury by acts of other people, falling, being struck by falling objects, becoming lost, the presence or sudden appearance of water, and hypothermia. All cave visitors will abide by the normally accepted rules of **safe and conservation minded caving** as outlined by the **National Speleological Society**, 6001 Pulaski Pike, Huntsville, Alabama 35810-1122.

## **ACCESS POLICY**

A kiosk/registration box has been constructed on the access property at the end of the parking lot on Kniskern Road. Everyone, cavers and non-cavers alike, using the property must sign the register when visiting the preserve.

For all caves, except Natural Bridge which is only 5 feet long, standard caving gear will be required. This includes helmet with a chinstrap; three (3) sources of light, one of which is mounted to the helmet; and at least 3 people in the party. For Sellecks Cave and Cave 575, all drops must be rigged and vertical gear is required. Each person should have their own gear and must be familiar with its use.

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## **USE CONFLICTS**

At present there does not appear to be any use conflicts. Should a conflict arise between recreational caving and digging, the recreational caving shall take precedence.

If bat counts reveal the presence of any endangered or threatened species, the cave containing them may be closed for the period recommended by the bat specialist of the Endangered Species Unit of the NYS Department of Environmental Conservation.

## **RESEARCH RULES**

All research carried out on the NCC preserve must meet the following criteria:

- 1) Researchers must initially contact the NCC science coordinator.
- 2) The goals and objectives of the research must be clearly defined.
- 3) There must be a clear beginning and end to each project, with the exception of long-term monitoring studies.
- 4) The work must not cause permanent damage to any caves, natural features, native biota, or historical resources nor interfere with natural hydrologic or chemical processes.
- 5) The research plan must assure the maximum safety of all concerned.
- 6) The work must not interfere with the "experience" of other property visitors.
- 7) Unless specifically authorized by the NCC Board, researchers must operate within the confines of the established management plans for each property

## **EXPLORATION RULES**

The main possibilities for exploration on the Sellecks Preserve are cave diving and digging.

Special permission and a signed release form will be required for any diving in any of the caves on the preserve. All dive trips must be approved by the preserve manager in advance. All cave divers must have cave diver certification issued by a recognized certification agency.

Any digging projects will have to be approved by the preserve manager. Persons proposing a dig project shall submit a plan to the manager detailing where they plan to dig, how long they plan to dig, and where they plan to dispose of the spoils. Plans should also include how the diggers plan to remediate the dig should it be abandoned. Projects that include potential passage modification require specific approval from the preserve manager. Any dig that is not worked on for more than one year, excluding cave closures for bat hibernation, shall be considered abandoned and any subsequent work in the area will require manager approval.

## **PUBLICITY POLICY**

The cave is not publicized in magazines or newspapers of general circulation. Cavers' publications like *The Northeastern Caver* and the *NSS News* may contain information on the latest discoveries. Some grotto publications may also have information, but again these have limited circulation and usually do not give locations.

## **SURFACE MANAGEMENT**

There is a partial trail that runs near Levy's Cave and follows near a stone wall that forms a property line with the Rogers to the north. The main parcel has several old roads that appear to have been used for logging. While these might serve as a partial basis for a trail, they do not consistently stay on the main parcel or the access property. A trail should be constructed from Kniskern Rd along the access property, to the main parcel. There a loop trail should be constructed that connects the three

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caves on that parcel. Where the proposed trail passes near Levy's Cave, a kiosk or register should be constructed so that it is out of sight of the road.

The property should be posted in accordance with the NYS Penal Law and the NYS Environmental Conservation Law. This will provide the NCC with the ability to better control access to the property. Otherwise individuals could hunt on the property without permission.

## **RESCUE CONSIDERATIONS**

Sellecks Cave - A rescue from Sellecks would appear to be fairly straightforward. An open steeply-sloping to vertical entrance appears to pose no unusual impediment to removing a patient in a stretcher. The bulk of the descent into the cave is on a very steep slope, but there is an 18-foot drop near the bottom. There are no really tight areas in the cave. A rescue would likely result from a fall. About 150 feet of rope would permit an efficient hauling rig.

Cave 575 - The entrance to 575 is a 15-foot pit that is about 3 feet wide by 4 long. To the north there is one 15-foot drop. The cave pinches. To the south there is a 25-foot drop followed by a very tight 30-foot drop. With slopes, the cave is about 81 feet deep. A rescue would likely result from a fall. A bolt would likely have to be placed to assist in hauling up a stretchered patient.

Natural Bridge - Natural Bridge lies in a sinkhole. It is five feet long. No special considerations are anticipated.

Levy's Cave - Levy's presents some of the greater potential rescue problems. It has some low, wet crawls, a 12-foot drop, and some tight passage. There are, however, no significant vertical pitches. A rescue would be either at Jills Falls or from being stuck in a tight fissure. A SKED stretcher would be needed along with a way to keep the patient dry and warm.

## **FUTURE PLANS & RECOMMENDATIONS**

1. Removal of wood in Parking Area,
2. Continued cleanup of the Levy's Sinkhole area
3. Bat counts should be performed periodically on the advice of the NYS Department of Environmental Conservation.
4. The property boundary lines should be walked on an annual basis to inspect posted signs. Signage will be replaced as necessary in accordance with the NYS Environmental Conservation Law and the Penal Law.
5. Cave 575 should have rigging bolts installed to facilitate a rescue effort. The bolts must be inspected on a regular basis.

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