Clarksville Cave Preserve
Management Plan

INTRODUCTION

Clarksville Cave is likely the best-known and most-visited, undeveloped cave in the Northeast. People routinely visit the cave from New York, New England, New Jersey, Pennsylvania, Ontario, and Québec. It has been visited by groups ranging in size from solo cavers to three bus loads of school children. It is visited by experienced cavers and unescorted, poorly-equipped neophytes. People have routinely camped on the property near the Wards entrance. The property has also been a party spot for individuals from New York's greater Capital District.

Clarksville Cave has about 4800 feet of passage and three entrances: Thook, Wards, and Gregorys. The north entrance has been filled in by the current owner. The Osborn Entrance on the same parcel as Gregory's provides dive access only. The cave is generally divided into five sections. From the extreme upstream end of the cave to the upstream end of the sump leading from the Lake Room is Pauley Avenue. From the Lake Room downstream to where the water sinks near the Big Room is Perry Avenue. The area from the Big Room to the Bathtub is unnamed. From the Bathtub to Brinley's Sump are Upper and Lower Cook Avenues, and from Brinley's Sump downstream to the Gregory entrance is called Colvin Avenue. The Thook Section comprises the Pictograph Crawl and passages leading to the Thook entrance.

The Northeastern Cave Conservancy (NCC) owns a 10.7-acre parcel containing the Wards Entrance and the related, but unconnected Ladder Cave. It also owns a 0.5-acre parcel containing the Gregory and Osborn Entrances. The two parcels are not contiguous. Preliminary discussions with the owners of Thook indicate that they may be willing to permit the NCC to manage that entrance.

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. A plan is not a static document that once written is placed on the self 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. Think of the management plan as an operating manual for a preserve.

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

Clarksville Cave has one of the longer histories of any New York cave. The earliest datable petroglyph in the cave is from 1811. The first known description of the cave comes from a letter authored by Teunis Houghtaling in 1818. (There were at least two Teunis Houghtalings living in the area at the time, so it is unclear which one wrote the letter.) The descriptions given are very specific indicating that Houghtaling in some way measured the Gregory and Wards sections of the cave. The letter first describes the Gregory section of the cave giving its length as 348 to 350 feet. Next, the Wards section was described.

An early description by an individual writing under the pseudonym of Viator, suggests that the Gregory end of the cave was commercialized. Viator's description matches Verplanck

Colvin's image from his 1869 article. This suggests the cave may have been commercialized for at least 50 years.

About the same time the cave was visited by the Reverend Sylvester Eaton, the brother of Amos Eaton, geologist and one of the founders of RPI. In the second edition of *An Index to the Geology of the Northern States* published in 1820, Eaton noted:

> The largest of these caverns is the great cave at Bethlehem [New Scotland was not yet a separate town], twelve miles southwest of Albany. This is a few feet more than a fourth of a miles in length. Throughout its whole extent we can trace the fissure overhead; though the edges of the rocks above have pitched in against each other so as to close it.

The cave was described in the *1824 GAZETTEER OF THE STATE OF NEW YORK* by Horatio Gates Spafford. He writes:

> In the limestone of this Town, there have been discovered some extensive Caverns, one of which has been explored for a quarter of a mile in length, and the other about 40 rods. [There are 16.5 feet in a rod. 40 rods = 660 ft.] The principal one is at Bogardus's, or Mrs. Ludlow's, 12 miles SW from Albany, where people, fond of such excursions, may go a great distance underground, and see a long, dark, crooked, dirty, great hole, where the water once ran, perhaps see some toads, and bats, spiders, and so forth, get comfortably tired, dirty enough, and make a good escape in getting out of it. I have explored some of these wonderful Caverns, and, excepting now and then a stalactite, have found nothing worth the trouble. A gentleman tells me he can perfectly recollect seeing a smart stream issue from one of these Caves, some years since, and well remembers the time, though not the year, when it ceased to flow out of it, having probably found some other passage, underground. Professor Eaton, in his *GEOLOGY*, page 231, suggests the idea that these Caverns have been formed by the action of water, in the mere fissures of lime rock: there are Caverns, however, which seem not to have had an origin of this sort, such as that in Anthony's Nose, Canajoharie, and many others.

The cave was shown on David Burr's 1829 map of Albany and Schenectady Counties.

The earliest known, published "lengthy" description we have of the caves at Clarksville comes from an anonymous article entitled "The Clarksville Caves" and printed in the September 17, 1842 issue of the *New York State Mechanic*. The editor of the *Mechanic* at this time was Ephraim George Squier who went by E. George Squier. This description is likely his work. In fact, his reference to the "cave mania" at the beginning of the article slyly refers to his own article describing Balls and Howes Caves that appeared in the September 3, 1842 *New York Tribune*.

The caves were briefly described the following year in 1843 by William Mather, an early New York State Geologist and author of *Geology of New York - Part 1 comprising the Geology of the First Geological District*:

> The cave at the village of Clarksville...had a current of air passing out of its mouth at the time I explored it, so strong as to make it difficult to enter it with a lighted candle.

Later he writes:

> Small objects that would remain suspended in the water, and that were left in the water of the cave, are stated to come out of the spring [at the Mill Pond.]

From the beginning visitors to the caves at Clarksville have quite literally left their mark on the caves, by carving their names or initials in the walls. This sort of defacement is frowned upon today, but the petroglyphs provide a record of 19th Century visitation to the cave. (Squier says his group, "traced our names in the rock.") There are scores of these. A few notable examples are:

Year	Petroglyph	Notes
1811	G W L	earliest known carving
1816	John Mann	
	Amos Eaton	updated and in script (possibly done in 1831)
1832	S W Williams	possibly Stephen Williams, a local resident then between 40 and 50
1839	E Brinley Amboy NJ	at Brinley's Sump
11/22/1844	JJ Sherman / E P	either Joseph or Josiah Sherman – both lived in the area and were of an appropriate age
11/15/1850	M E Blodget / AAC / JJS	Mary E Blodget (one of only 2 women known to have left their names in the cave) – the JJS is in the same style as JJ Sherman (1844)
May 1862	Joel Y Bloomingdale	of New Salem, was a house and carriage painter
1863	Oscar Sager	an Oscar Sager of Clarksville married Margaret Pangburn of Unionville 5/12/1872
8/12/1864	D C Gould	general merchant and fish & fruit peddler in Clarksville
June 1869	William Osborn	for whom Osborn Cave is named
8/18/1887	J McIntosh	John McIntosh – carpenter in Clarksville
8/17/1890	Maggie Houck	the 2nd woman
1888	W C Bailey N Lebanon	possible Rev. William Bailey, the temporary pastor at the First Reformed Church of Bethlehem
7/29/1890	Lewis Van Etten	

French's 1860 *Gazetteer of New York* also briefly describes the caves at Clarksville:

> Near Clarksville are two caves, extending respectively 1/8 and 1/2 mi. under ground. Streams flow through each of them.

Verplanck Colvin probably visited the Clarksville Caves many times. He describes them at length in his article about the Helderbergs published in *Harper's Monthly Magazine* in October 1869.

> At Clarksville, twelve miles from Albany, and eight or ten miles southeast from the Indian Ladder, are more caves. Two of these are well known; the entrance of one is in the backyard of one of the village houses. The subterranean river is the house well; a pair of steps lead down into a crevice in the rock. They have no other water. For drinking it is unsurpassed but it issues from lime rock, and is therefore hard and unfit for washing. This same river bursts forth near by in the bed of the Oniskethau, and aids that stream to run a

> saw and paper mill. Chaff thrown upon the river in the cave is soon found floating on the mill-pond.

Colvin seems to have been the first, at least in writing to surmise that the two caves in Clarksville are, in fact, a single cave:

> These two caves are said to be respectively one-eighth and one-half a mile in length. They should not be called two caves however, for the "river" seems to flow from one to the other and forms a connection which a person who likes ice-water baths might explore. Taken as one cave they may exceed a mile in length.

In the early 1900s there was, apparently, a fatality in the Gregorys section. An older resident of Clarksville explained that as a result of this, the entrance to Gregory's Cave had been closed by piling debris against the entrance. This has not been verified, but it does explain the change in the appearance of the entrance from Colvin's 1869 drawing and its current looks. (The illustrations in Colvin's 1869 article seem to be based on Colvin's own drawings.)

Sometime during the 1930s or earlier, the McNabs ran pipes into the Wards Entrance to draw water for his strawberries. (Clay Perry mentions this on page 44 of *Underground Empire*.) The pipes are still in the Big Room in the cave.

Until 1963, there were 2 caves in Clarksville. Colvin had conjectured that they were really a single cave, but no one had proven it. In that year, there were two independent groups that pushed the limits of the caves. On July 4th Marlin Kreider, Dan Hoyt, and Warren Stranahan from the Boston area and Chuck Porter then living in Knox dug out a crawlway near the entrance to Wards Cave and got into a downstream extension of the cave.

About the same time some local cavers had found that drought conditions had lowered the level of Brinley's Sump and they entered the upstream extension of Gregory's Cave. These were Tom Grant, Rich Guarriello, Mike Nardacci, Benny Sano, and Bill Wacy.

On July 5th, Grant and Wacy looking for an access from the Wards side discovered the July 4th dig. They entered that section of the cave. While they were in there, Marlin Krieder decided that his group should not have left the crawl open, returned to the cave, and sealed the entrance with rocks. (The area between the two caves was well decorated.) When Grant and Wacy returned to the crawl, they weren't sure if the way was blocked or if they were just disoriented. Either way, they exited the Gregory entrance and thus became the first people to do a through-trip from entrance to entrance.

In February 1977, Malcolm Baker and Thom Engel were skiing the area north of the Ward entrance. They came upon a shallow fissure blowing out a column of stream. Returning in April with Bill Ritz, they started to dig in the fissure. (Engel was unable to interest any cavers in the dig and recruited co-workers.) After going down 11 feet they broke into open cave. It was named Thook Cave.

In 1980, Shawn Veltman was in the south corner of Thook. He heard voices and smelled cigarette smoke. He heard the scraping of someone crawling. One voice said: It ends. Another asked: Are you sure? Yes, said the first voice and the two crawled away. Shawn waited for a while, moved a few rocks, and crawled into the end of the Pictograph Crawl.

In the mid to late 1980s Paul Rubin and Engel started a study of the hydrology of the cave. Much of this was based on an aborted plan by the Town of New Scotland to use the cave as a water supply for Clarksville. (It was during this time that the Bathtub Feeder and the nearby Orifice Passage were first found and entered.) The study demonstrated that the stream in the cave

was coming from the Lake Room at the upstream end of the cave. This prompted a group of cavers – including Norm Channing, a cave diver – to excavate the floor of the Lake. After several sessions a tight entrance to an underwater passage was revealed.

Norm Channing dove the sump, but only reached an air bell near the far end. A short time later, John Schweyen dove the sump and after about 200 feet surfaced in air-filled passage. On subsequent dives he explored this with Jim Brown and discovered 1000 feet of passage. The upstream end of the cave terminates in a breakdown pile.

It was with the hope of eventually re-entering this passage that four RPI students and graduates started removing breakdown from the Lake on February 26, 2001. When done digging for the night, Rob Svensson decided to enter the sump for a quick look. Entering the sump with only 3 to 6 minutes of air, he became disoriented, quickly used up his air, and drowned.

Other minor discoveries have added to the cave. In the 1970s Warren Hall used dive gear to explore the Pinch Passages near the upstream end of Perry Ave. In the 1980s, Engel and Rubin discovered the Bathtub Feeder. Clayton Pauley found and pushed the Orifice Passages "downstream" of the Slickenslide Block Room.

The Ladder Cave was originally a grike or fissure-depression about ten feet deep. Thom Engel and Doug Hauser began the dig in the 1970s and they got down around three feet before giving up. A Connecticut group (possibly led by Gordon Burritt) then continued with the dig.

In the early 1990s Jim Kapusta, Mike Myers (killed October 1994 in the South End of Albany), and Jason Scheen took on the project and removed lots of old bottles, cans and goat bones from the hole. A ladder was installed, and Dave Waters began helping out. They hoisted out massive amounts of material with a big green garbage can and a mechanical-advantage pulley system. Dirt around the top was removed to bedrock, and excavated rock slabs were laid up in a stone wall around the dig.

Bill Cox, the old-timer known as Popeye who hung out at Clarksville, also "provided moral support," according to Dave. Others, including Tom Ebert, Ed Lucas and Tom Rider, took over the dig later on.

Ed Lucas remembers that once the entrance shaft got down to cave passage, the first digging effort was to the southwest. Then the diggers worked northeast, with exciting finds of ribbon formations there. Finally they returned to the southwest passage and were rewarded with flat crawls requiring minimal digging and abundant small formation grottoes. Most of these formations were subsequently looted from the cave.

UNDERGROUND RESOURCES

Biological – The heavy visitation to the cave has left it unused as a bat hibernaculum, though a bat is occasionally seen.

The invertebrates found in the cave are not endangered and do not appear to have been affected by human visitation. These include: *Stygmobromus allegheniensis*, an aquatic, troglobitic amphipod; *Scoliopteryx libatrix*, the cave or herald moth; and *Ceuthophilis maculatus*, a cave cricket. The cave also seems to be a location where mosquitoes over-winter.

Geological – Clarksville Cave is formed in the middle Devonian Onondaga Limestone. It is developed on the strike of a system of faults that can be followed thought the entire cave and outside as far south as Onesquethaw Cave and as far north as Thacher Park. (The fault can be seen in several places in the cave. Most notably in the Slickenslide Block Room and near the south end of Perry Ave.) The result of this fault has been to thrust the underlying Schoharie

sandstone up into the east side of the cave. (This is best seen at the Waterfall Passage where is intersects Lower Cook Cave. The broad ledge over which the water flows is the Schoharie.)

In several parts of the cave there are hints that the original passage was a phreatic tube. This is best seen in parts of Perry Ave. At some point the water drained from the system and the tube was altered by vadose water. This passage was subsequently filled by significant amounts of glacial material. (The pebbles in the fill are imbricated implying deposition by water.) In places on the top of this fill there are varved clays and sand. These were likely deposited at a time when the cave was flooded, probably from a proglacial lake formed as the glaciers were receding, at the end of Pleistocene. (The lake may have filled the upper valley of the Onesquethaw west of the east side of Bennett Hill.) As the glaciers continued to recede, the lake drained, and water started to flow in the cave. It is possible that some of the potholes seen in the ceiling of the cave were formed at this time. Much of the fill in the cave was removed, but in places the water found a new route rather than using the old passage. Two examples are seen just downstream of where the Pictograph Crawl enters Perry Ave. and downstream of the Lake Room where one can either crawl over the fill or walk through the water.

Hydrological – The water in the cave comes from two sources: Onesquethaw Creek, which sinks in several places, and a recharge area generally bounded by Stove Pipe Rd, NY Rt 85, and NY Rt 443. There is compelling evidence that the stream seen in Diddly Cave is the same stream in Clarksville Cave. Flows can be as low as 2 to 3 gallons per second to as high as 60,000 gps.

Where the Onesquethaw Creek comes off the Union Springs shale onto the Onondaga limestone, the Town of Bethlehem maintains the Wolf Hill Dam. The function of the Wolf Hill Dam is to shunt most of the water in the upper Onesquethaw to the Vly Creek Reservoir via a pipeline. (The outlet of the pipe is near Airport and Overhead Caves.) This redirection of the water which was approved by the state in 1964 seems to be the primary reason why Brinley's sump now generally has air space whereas it didn't historically. The dam is supposed to be maintained to permit 2.5 cubic feet/second (1.6 million gpd) to pass under the dam through a small pipe. Due to shale washed down from upstream, this pipe frequently gets plugged. So, depending on the status of the pipe, the flow regime in the cave might vary.

The speed with which water can rise in the cave in response to rain events or snow melts is dependent on a number of factors. The most significant seems to be how saturated the ground is to begin with. A frozen or saturated ground results in a fairly quick response in the cave.

As the water rises in the cave it takes different routes in that part of the cave between the downstream end of Perry Ave and the Waterfall Passage.

- At low flow the water flows off to the east side at the downstream end of Perry Ave and then is next seen at the upstream end of the Waterfall Passage.
- As the water rises, it overflows the bedrock "chute" at the extreme downstream end of Perry Ave. This water is next seen at the upstream end of the Bathtub Feeder.
- As flow increases, the water splits in the Bathtub Feeder and some of it flows into the Slickenslide Block Room. This water flows down into the Orifice Passages and is next seen in the Waterfall Passage.
- At the highest flows, the water flows two directions from the Bathtub. Most of the water flows into Lower Cook Ave, but some of the water flows back toward the Slickenslide Block Room. This runs into the Orifice Passages before getting there.

As the result of flooding there are several areas of concern in the cave. These are, from north to south: the Big Room, the Bathtub, Brinley's Sump, and Gregory entrance area. The Big

Room can flood with four feet of water. When this happens the downstream end of Perry Ave can also sump. There is an upper crawl that bypasses this sump.

The Bathtub can also sump. A more serious concern than the sump is the power of the water flowing out of the Bathtub and down into the upstream end of Lower Cook Ave. Passing through the Bathtub at high flow can be dangerous. A handline is recommended for this.

Brinley's Sump typically has several inches of air, though it readily sumps shut. When shut the passage is readily passable, however, there is evidence that water can back up the Chutes a significant distance. There have been two rescues here caused by individuals diving the sump when there is no air. These were the Simon Yee rescue in 1984 and the rescue of two Berkshire Community College students in 1988.

The lower end of Gregorys also floods. When water is overflowing out of Osborn, the Gregory entrance is flooded. (This is especially true since the concrete was placed in Osborn to stabilize the lip of the entrance.) At times the water in this part of the cave can get deep enough to rise up and flow out of the Gregory entrance.

Paleontological – The cave contains large deposits of Pleistocene-aged fill. While no bones have been found in the cave, it is possible that some bones may turn up. The hydrologically-related Diddly Cave has yielded significant deposits of a Pleistocene micro-fauna including deposits that have been carbon-dated to interstadial periods. (Periods of warmer conditions during glacial periods.) Diddly is the northernmost fossil location of the pack rat (*Neotoma floridana*).

The bedrock contains no unusual fossils.

Archeological – No archeological resources are known from the cave.

Historical – Clarksville Cave contains many 19th century petroglyphs documenting visitation to the caves from 1811 to the turn of the century. The best of these exist in the Gregorys and Osborn sections of the cave, but they are found throughout the cave. (See table on page 3.)

SURFACE RESOURCES

Biological – The predominant tree on the property is the sugar maple (*Acer saccharum*). Hemlocks (*Tsuga canadensis*) are common on the ridge along the east side of the parcel around the Wards Entrance. Elsewhere oaks (*Quercus* sp.), cherry (*Prunus serotina*), and shagbark hickory (*Carya ovata*) are found among the maples. There are some trees of significant size, though much of the northwest section of the parcel is relatively young forest.

Near the parking area along with the maple, staghorn sumac (*Rhus typhina*) is dominant. This is also the area where the invasive species garlic mustard (*Alliaria officinalis*) is found in the greatest concentration, though it is found in places all over the property. An effort should be made to eradicate the plant from the preserve and keep it off. Buckthorn (*Rhamus cathartica*), another invasive species, has been found on the property. Most plants have been cut and they are being monitored. In 2006 bittersweet (*Celastrus orbiculatus*) has become a problem near the beginning of the trail by the upper parking area.

Native ground cover includes ferns and wild sarsaparilla (*Aralia nudicaulis*). Wild flowers include wild columbine (*Aquilegia canadensis*) and both the round-lobed and sharp-lobed hepatica (*Hepatica americana* and *H. acutiloba*).

The preserve is used by a variety of animal species ranging from the sharp-shinned hawk (*Accipiter striatus*) to the red eft (*Notophthalmus viridescens*). Most common animals are the red-

backed salamander (*Plethodon cinereus*), chipmunks, (*Tamias striatus*), the eastern gray squirrel (*Sciurus carolinensis*), and the northern flying squirrel (*Glaucomys sabrinus*).

Geological – Most of the two parcels are underlain by the middle Devonian Onondaga limestone. This is a reef limestone. The limestone is generally covered by a thin layer of soil derived from forest duff. Along the west side of the property there is a small area where the soil is not present revealing a bedrock pavement with clints and grikes.

Hydrological – Excepting the overflow channel from Osborn Cave, there is no surface water on the property. All rain water and snow melt sinks into joints and sinkholes.

Paleontological – No paleontological resources are known to exist. Some filled grikes or shafts may contain such resources.

Archeological – No archeological reconnaissance has been done on the property.

Historical – No historical resources have been found on the property.

ACCESS POLICY

Clarksville Cave is managed in a park-and-go caving manner.

The NCC should commit to the use of weekend stewards for at least much of the 1st year of ownership if not longer. (The NCC board should evaluate the need for more time.) Stewards would be volunteers (preferably at least 2 people at a time) and should be on site from 8AM until 4PM on Saturdays, Sundays, and holidays. Scheduling of stewards would be one function of the preserve manager. Steward functions would include:

- Informing groups of the new ownership and the mission of the NCC.
- Informing improperly equipped groups of what constitutes acceptable caving equipment. At this time, groups should not be kept out, but that time may come. The NCC might consider providing spare flashlights for under-equipped groups.
- Preventing single individuals and inappropriately-sized groups from entering the cave.
- Preventing visitors from carrying inappropriate material (like beer) into the cave.
- General clean-up of recent trash on the surface including the parking area.
- Reminding visitors not to litter and to take their wet and muddy clothes with them.
- Replacing posted signs as needed.

This is the single most important aspect to managing Clarksville Cave. Without committing to this, the NCC will be no better than an absentee landowner and should, perhaps, let a local buy the cave.

Other important rules are:

- Boy scouts need to comply with their own rules including those on group size.
- The owners of the Thook entrance have requested that Boy Scout groups be told that they may not use it.
- No groups of more than 15 individuals should be allowed in the cave except by special written permission. This is both a safety for the group and safety for the cave issue.
- Groups where any money has exchanged hands such as camps and cave-for-pay must indemnify the NCC for use of the cave.

- Special posted signs mentioning proper caving equipment and limitations on group size should be made and posted.
- The cave and property shall be closed during rescues.

If the ladder in the Ladder Cave should deteriorate further, it should be replaced or removed altogether. Removal is recommended.

At the discretion of the preserve managers, the property boundaries may be posted.

USE CONFLICTS

There does not appear to be a potential for conflicts. Clarksville Cave contains no known endangered species and only an occasional bat is found.

EXPLORATION RULES

The potential for expanding the cave exists upstream through the sump in the bottom of the Lake Room. Special written permission from the preserve manager for diving anywhere in the cave is required. Any person wanting to dive anywhere in the cave must be certified in cave diving by the NSS-CDS or an equivalent organization.

Any digging projects must 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 shall be considered abandoned and any subsequent work in the same area will require manager approval.

Results of exploration trips will be conveyed to the preserve manager. All new exploration will be map-as-you-go.

PUBLICITY POLICY

The NCC should make an effort to reach out to colleges, school districts, and Boy Scout Councils to inform them of new rules regarding group size and the need for the NCC to be indemnified. At a minimum, schools in the following New York counties should be contacted: Albany, Columbia, Dutchess, Greene, Rensselaer, Saratoga, Schenectady, Schoharie, Ulster, Warren, and Washington. Schools in Berkshire County in Massachusetts should also be contacted. It is recommended that camps in the same counties be contacted.

Regarding publicity about the cave itself, except as noted below, the cave is not to be publicized in magazines or newspapers of general circulation nor on radio or television. Caver's 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.

Clarksville Cave is unique among NCC preserves is that it is located in a relatively populated area. As a result of this, consideration should be given to holding an annual preserve day where the public is invited to visit the preserve and learn about the mission and goals of the NCC. (Clarksville Cave is a very visible location and the NCC could use it as an opportunity to connect with others interested in conservation and to create interest in what we do.)

SURFACE MANAGEMENT

The two parcels comprising the Clarksville Cave Preserve will have 11.2 acres (10.7 around Wards and 0.5 acres at Gregorys). The well-known nature and the small-town setting of

the preserve create unique challenges in managing the surface and the cave.

- No camping shall be permitted on the property.
- No parties shall be permitted on the property except by special written permission of the preserve manager.
- No parking between 11PM and 7AM. The Albany county sheriff's patrol should be asked to assist in enforcing this rule. Without this function, it is impossible to enforce the party and camping bans. Someone would have to walk up to the cave to assure the bans are being followed. The sheriff deputies can't be expected to do this.
- A kiosk has been constructed and maintained near the parking area. The kiosk provides a list of rules, a well-secured map of the cave, and other material deemed appropriate. When the karst nature trail is constructed, this kiosk will serve as a source of information on trail.
- Quiet time should be from 9:30PM to 7AM. As the new neighbor, the NCC must endeavor to be a good neighbor. What the locals might have accepted from a longtime Clarksville resident, they likely will not accept from the NCC
- A roofless, two-part changing area near the parking area has been constructed.
- Managers need to converse with other entrance owners such as those that own Thook to arrive at consistent access rules. The NCC should consider entering into a management agreement with them so that the manager can speak authoritatively on access to the entire cave.
- No permanent or semi-permanent camps may be maintained on the property.
- Property should be a "Carry it in. Carry it out."
- No Hunting or trapping
- No wood cutting without written permission.

RESCUE CONSIDERATIONS

Clarksville Cave has one of the longest records of rescues in the Northeast. (Only Knox Cave may be longer.) Most rescues have resulted from visitors using extremely poor judgment. These fall into two categories: inexperienced individuals showing their inexperience, and poorly equipped visitors. It is hoped that over time, gentle reminders by NCC stewards will alleviate many of these incidents.

There remain two areas of concern. First, there has never been a stretcher rescue from between Brinley's Sump and the connection crawl. A mock rescue should be done from here; perhaps from the Root Room. It should be determined before a rescue is underway whether a person in a stretcher can be removed through the connection crawl or whether they need to be removed from the cave via Brinley's Sump. Removal via the sump may not always be possible as the downstream end of the cave floods.

Second, in the Beverly Schwartz rescue and the recovery of Rob Svenson rescuers relied on the small opening at the base of the former North Entrance to run wires and hoses. With this entrance now filled in, rescuers will need to resolve problems at the upstream end of the cave in a manner different from the past. Running communications lines should not prove to be a problem as this has been done before. It is 1100 feet from the Ward entrance to the Lake Room. Running hoses or extension cords this distance would not seem to be especially practical.

Another exercise that should be considered would be to see if the downstream end of the cave could be made accessible during a flood by pumping the water in Osborn Cave. The pumping would have to be done by the Onesquethaw Volunteer Fire Company and checking the Gregory end of the cave beyond McNab Hall would be done by cavers.

FUTURE PLANS

- A general clean-up still must be completed.
- Any unwanted trails should be eliminated.
- A karst nature trail on the surface should be constructed to educate the public about karst.
- Development rights on some or all of the land should be sold to the Albany County Land Conservancy.
- The wood in the Wards sinkhole should be removed. It should not be left to serve as potential firewood. (It might be cut up and taken to either the Schoharie or Gage cabins.
- Finish the new parking area below the changing area.