Robinson Ladder Cave and Property Management Plan Crawford County, Indiana

(As approved June 18, 2005)

INTRODUCTION: The Indiana Karst Conservancy, Inc. has purchased a 40-acre tract containing Robinson Ladder Cave. The cave serves as a US Fish and Wildlife Service (USFWS) Priority III Indiana bat (*Myotis sodalis*) hibernaculum. As such, Robinson Ladder Cave will be managed first and foremost to protect this endangered species. When not in conflict with the primary goal, the Conservancy will manage Robinson Ladder Cave so that it can be available for limited recreation and scientific study by responsible cavers. The surface property will be managed to enhance the overall natural setting while protecting the sub-surface resources.

HISTORY OF THE CAVE: Robinson Ladder Cave has been known and visited for over a century. The early explorers left records of these visits by leaving signatures and dates. The earliest period of visitation was from 1882 to 1885. Totten, whose family's name is found nearby on Totten Ford Road, visited the cave in 1883. The oldest signature found was S.W. Miller, Feb 5, 1882.

The next period of visitation was from 1920-1930 with only a few names and dates found in the cave. Then in the 1960's, the Schotter family from nearby Milltown visited the cave several times, leaving their names in the Graveyard, an area in the main passage where people have piled up slabs of rocks to look like tombstones. Organized cavers have been visiting the cave since that time.

It is believed "Robinson" was the owner of the cave and property in the 1960s. There was also once a primitive pole "ladder" in the entrance, thus the cave's name.

Recent ownership of the property includes Walter and Aletha Guthrie from the mid-70s until January 4, 1988, then Mel and Dianna Carver who sold the property to the IKC on March 4, 2005.

SUBSURFACE RESOURCES: Robinson Ladder Cave has approximately 1700 feet of surveyed passage (see map in Appendix A). The cave is mostly a single horizontal passage, but has a dome complex at its entrance as well as another one about half way back. The entrance to the cave is located in steeply sloping sinkhole. The bottom of the sinkhole intersects the top of one of the domes. This necessitates a rope, cable ladder, or extension ladder to negotiate its 13-foot flowstone-covered entrance drop. Descending a short breakdown slope, one enters a second dome. The passage to the remainder of the cave is on the right, near the top of this dome, requiring an exposed 15-foot climb-up. A hand line or preferably an extension ladder here will assist ascending and descending.

Beyond the climb-up, is a narrow hands-and-knees crawl, but this soon enlarges to walking dimensions. About 500 feet from the entrance, the second dome-pit complex is encountered on the left. Working down several levels in the first pit, one finds a 44-foot blind pit. Continuing in the horizontal passage, one must crawl through a hole in breakdown, which quickly re-opens into walking passage. The remainder of the cave alternates between walking and crawling. The cave does not have many speleothems, but there are several large flowstone formations near the entrance and some nice gypsum towards the back.

The primary resource of interest is several hundred Indiana and Little Brown bats that use the cave for their winter hibernation. The majority of the bats are located in the first dome complex area, although occasionally some can be found in the crawlway beyond the climb-up. Due to the entrance sinkhole and down-sloping dome geometry, the front part of the cave acts as a cold-air trap, sufficiently cooling the cave to be suitable for the bats. There is often ice at the bottom of the second dome 50 feet into the cave.

There is also evidence (significant guano) that bats occasionally use the back of the cave during the summer months. An old woodrat latrine has also been noted in the cave, but the cave is now outside their known range.

A detailed biological inventory is lacking.

MANAGEMENT PERSONNEL: Within this document, the following personnel will have management responsibilities:

- **IKC Executive Board** The membership-elected governing board of the IKC. Management decisions about the cave and property not specifically granted to other management personnel must be presented to the Board.
- **Property Manager** –The Property Manager's primary responsibility is to oversee and manage surface resources on the preserve per this document. The Property Manager is required to make an annual report to the IKC Executive Board pertaining to the property. The Property Manager will function as the backup for the Cave Patron when the Patron is unavailable. This position is appointed and approved by the IKC Executive Board.
- Cave Patron The primary responsibility of the Cave Patron is to oversee the caves on the property per this document. This includes arranging access, monitoring impact, and maintaining usage and liability waiver records. The Cave Patron is also required to make an annual report to the IKC Executive Board pertaining to the cave, visitation usage, incidents, etc. This position is appointed and approved by the IKC Executive Board. The Cave Patron and the Property Manager may be the same person.
- **Grotto Liaisons** These are approved representatives from the NSS grottos that have signed a cooperative agreement with the IKC for arranging access to specific caves covered in that agreement for the Liaison's respective grotto members. The Grotto Liaison has the authority to grant access to visit Robinson Ladder Cave starting May 1, 2006 (for the first year, access will be arranged through the Cave Patron).

SUBSURFACE MANAGEMENT: Robinson Ladder Cave will be managed for the protection of the bats. The cave will be closed to all visitors from September 1 through April 30, as prescribed by the US Fish and Wildlife Service. The exception will be the biennial census or other bat-related research visits approved by both the USFWS and the IKC Executive Board.

A gate on the entrance to Robinson Ladder Cave is neither anticipated, nor desired. Electronic monitoring for unauthorized visits should be implemented to assess the effectiveness on the nogate and closure policies.

Robinson Ladder Cave will be managed as a natural "wild" cave. No improvements for the convenience of visitors will be allowed or desired. Digging or other alterations for exploration/expansion of the cave is prohibited without approval of the IKC Executive Board.

Cave restoration, other than trash removal, is limited to IKC sponsored trips. The purpose is to keep all restoration techniques consistent with IKC approved practices.

Due to the concerns about the impact of food, cooking, elimination, and the like, camping will not be allowed in the cave. Likewise, no smoking or the use of alcohol or other substances of abuse is permitted in the cave.

Other caves on the property will be managed to protect their resources.

CAVE ACCESS POLICY: During the period from May 1 to August 31, Robinson Ladder Cave is open to competent, responsible cavers. Those wishing to visit Robinson Ladder Cave should contact the appropriate personnel to arrange access. All persons entering Robinson Ladder Cave will be asked to sign a liability release, follow surface and subsurface rules established by the IKC, and agree to protect the cave's natural resources. The Cave Patron/Grotto Liaisons can authorize or deny ordinary cave trips. Trips for other purposes (e.g., for collecting biota, conducting research), must be approved by the IKC Executive Board.

All trips are to have a designated trip leader. The trip leader is responsible to see that conservation and safe caving practices are followed as defined by the established rules. The leader will be held accountable for the actions of others in the party.

Recommended minimum group size is no less than three. The Patron may determine an appropriate maximum group size. There must be an adult of the immediate family for every child under the age of 12. Due to the difficulty of this cave, it is suggested that visitors have some caving experience prior to going into Robinson Ladder Cave. Because two vertical climbs are required to visit the cave, visitors must be physically and mentally prepared for such exposures. It is suggested that an extension ladder or cable ladder with a handline, or vertical gear is used at the entrance and an extension ladder, hand line, or vertical gear is used at the nearby climb-up. Vertical equipment and skills are required to drop the in-cave pits.

Prior to the trip, the trip leader will receive a liability waiver/information form (Appendix B) and the visitation rules (Appendix C) to be followed while on the property. Participants under 18 years of age must have a parent/guardian signature on the liability waiver/information form.

The trip leader will be responsible for having each participant read and sign a copy of the liability wavier/information form, then return the waivers to the Cave Patron/Grotto Liaison. The trip leader will also inform all participants of the visitation rules before entering the property. The rules cover appropriate precautions and conduct while on the property, keeping a low profile, the parking location and path to take to the cave entrance, precautions related to the weather, and information pertaining to emergencies. Any improper behavior reported to the Cave Patron/Grotto Liaison may result in denial of future visits. Organizations such as the Boy Scouts are expected to fully comply with their internal rules related to "wild" cave trips in addition to the policies outlined by the IKC.

Monetary compensation of the trip leader (cave-for-fee) is strictly prohibited.

New waivers should be signed each calendar year. Multiple trips within the same calendar year will not require a second waiver to be signed. The Cave Patron, with assistance from the Grotto Liaisons, will maintain a log of trips and visitors to the cave to assess visitation impact on the resource. The Cave Patron will retain the liability waivers for an additional calendar year.

Access to other caves on the property also requires permission and a signed liability waiver. Access to those caves can be granted at any time of the year.

The Conservancy will vigorously prosecute any violations of the Federal Endangered Species Act, the Indiana Cave Resource Protection Act, IC 35-43-3 (Appendix D) or any other vandalism on the property.

SURFACE RESOURCES: The property consists of 40 acres of mixed pasture and wooded terrain. The property is approximately one-quarter mile square. The cave entrance is located near the western border of the property. The property has approximately 150 feet of vertical relief, being lowest at the north-west corner of the property with a high ridge across the middle and east side of the property. There is a small shed (approximately 20 feet by 40 feet in size) at the west end of the upper pasture.

SURFACE MANAGEMENT: The forested areas will not be heavily managed and no trees will be cut other than for safety considerations or to maintain existing road/trail access. The control of invasive plant species will be undertaken as needed. The monoculture grass pasture areas may be converted to a more natural vegetative state, consistent with best management practices. All management of the surface shall be consistent with maintaining or enhancing bat habitat.

A parking area will be designated in the existing lower clearing. A primitive trail will be flagged and maintained to the cave entrance. Other trails may be established on the property at the

discretion of the IKC Executive Board. The property boundaries will be marked and permanent corner posts will be set, contingent upon the property being surveyed. An informational kiosk or other unobtrusive signs may be constructed. One or more small, primitive camping sites may be established in the existing clearings. The access right-of-way and driveway on the property will be maintained as required.

Collecting on the property will be prohibited with the exception of mushrooms, berries, and nuts. Hunting will be prohibited unless required to manage wildlife that becomes detrimental to the property, and then only at the discretion of the IKC Executive Board. The discharging of firearms, fireworks, or other explosive devices will not be allowed or tolerated. Digging or other surface modifications are prohibited without approval of the IKC Executive Board.

If qualified, the property shall be enrolled in the Classified Forest and/or Classified Wildlife Habitat programs to minimize property taxes and promote proper natural stewardship.

SURFACE ACCESS: Walk-in access to the property by the public will neither be encouraged nor discouraged. Permission to hike on the property will not be required. However other surface activities will need permission and coordination through the Property Manager. A locked gate will be maintained on the access lane to discourage unauthorized activities on the property.

CAMPING: Camping on the property will be allowed, but highly restricted. Camping privileges will be granted only to IKC members and their accompanying guests. The behavioral expectations of those camping on the property will be that the campers are quiet and maintain a low profile. Camping will be arranged only through the Property Manager or Cave Patron. Camping will be restricted to designated areas only. Campfires will only be allowed in designated fire rings. Firewood may not be collected from the property. All trash must be packed out.

APPENDIX A: PROPERTY MAP



APPENDIX B: RELEASE AND WAIVER LIABILITY FORM

Current form is available for download from the IKC web site.

APPENDIX C: ROBINSON LADDER CAVE VISITATION RULES

All visitors should review the following rules before entering onto the Robinson Ladder Cave property. These rules must be followed to protect the cave, the property, the IKC, and all visitors. It is also important to follow these rules to maintain a good relationship with the adjacent landowners. Remember you are a guest on this property and represent all cavers that come after you. Please be on your best behavior.

- 1. Follow all rules and requests of the Property Manager, Cave Patron, and Grotto Liaisons.
- 2. Keep a low profile at all times while on the property.
- 3. Park in the location designated.
- 4. Do not change clothes in sight of the road or nearby property owners.
- 5. Follow the designated path from the parking area to the entrance of the cave.
- 6. Lock the lane gate behind you so unauthorized entry does not occur. Do not lose or duplicate the key, or publicize lock combinations
- 7. Do not enter the Robinson Ladder Cave during the period September 1 through April 30.
- 8. Do not enter any cave on the property under the influence of alcohol or other intoxicating substances.
- 9. Do not smoke in any cave on the property.
- 10. No pets in any of the caves. For protection of wildlife, dogs must be on leash while on the property.
- 11. Before leaving the parking area, be sure to pick up all trash, clothing, etc.
- 12. Never cave alone. Wear a helmet. Carry three sources of light. Tell someone where you have gone and when you will return. For rescue call the Indiana State Police at 812-332-4411 or the Indiana Cave Rescue Pager at 812-337-7050.

APPENDIX D: INDIANA CAVE PROTECTION LAW

IC 35-43-1-3 (cave resource protection law):

Enacted 1983

(a) As used in this section:

"Cave" means any naturally occurring subterranean cavity, including a cavern, pit, pothole, sinkhole, well, grotto, and tunnel whether or not it has a natural entrance.

"Owner" means the person who holds title to or is in possession of the land on or under which a cave is located, or his lessee, or agent.

"Scientific purposes" means exploration and research conducted by persons affiliated with recognized scientific organizations with the intent to advance knowledge and with the intent to publish the results of said exploration or research in an appropriate medium.

- (b) A person who knowingly and without the express consent of the cave owner:
- (1) disfigures, destroys, or removes any stalagmite, stalactite, or other naturally occurring mineral deposit or formation, or archeological or paleontological artifact in a cave, for other than scientific purposes;
- (2) breaks any lock, gate, fence, or other structure designed to control or prevent access to a cave;
- (3)deposits trash, rubbish, chemicals, or other litter in a cave; or
- (4) destroys, injures, removes, or harasses any cave-dwelling animal for other than scientific purposes;

commits a Class A misdemeanor.

APPENDIX E: PROPERTY PROJECTS

A list of tasks needing to be accomplished in the short-term by the Property Manager:

- A permanent parking area will need to be delineated and maintained.
- Camping area(s) will need to be designated and accessibility enhanced.
- A trail from the parking/camping area to the cave entrance needs to be delineated and maintained.
- Permanent "monuments" need to be installed at the property's survey markers (once a survey is completed).
- Efforts to enroll the property in the DNR's Classified Forest and/or Classified Wildlife Habitat programs shall be undertaken.