MASTER PLAN FOR

BUDDHA KARST NATURE PRESERVE

The following is hereby adopted as the Master Plan for Buddha Karst Nature Preserve being dedicated as a Nature Preserve:

1. This Master Plan applies to a Nature Preserve containing caves, springs, sinkholes, and karst geological features. It is owned and under the administration of the Indiana Karst Conservancy (IKC). It is located in Guthrie Township in Lawrence County, Indiana, a more detailed description being contained in the "Articles of Dedication" for Buddha Karst Nature Preserve of which this Master Plan is a part and to which it is attached.

The management, custody, and use of the Nature Preserve shall be the responsibility of the Indiana Karst Conservancy pursuant to the Nature Preserves Act, the Articles of Dedication of Buddha Karst Nature Preserve, and this Master Plan.

The Nature Preserve may be used for all purposes stated in the Nature Preserves Act, but subject to the provisions of this Master Plan. Action required or permitted by this Master Plan may be taken only by the Indiana Karst Conservancy, or by parties designated in writing by the Indiana Karst Conservancy for particular actions. All development and natural area management on the Nature Preserve shall require the joint approval of the Indiana Karst Conservancy and the Director of the Division of Nature Preserves. All provisions of this Master Plan shall be interpreted in the light of the basic intention of this Master Plan that the Nature Preserve shall be managed to maintain and/or restore its natural ecological conditions and be dedicated for the purposes of the Nature Preserves Act and in furtherance of the public policy of the State of Indiana declared by this Act. In the case of this Nature Preserve, the main purpose of the dedication is to

protect and preserve the karst features (caves, springs, sinkholes) and their associated biota, and to restore and maintain the natural terrestrial communities associated with such karst features.

- 2. The following developments, structures, and facilities may be permitted within the Nature Preserve:
 - a. Boundary markers and boundary fences may be placed as needed around the perimeter. Such developments should be installed with the least possible disturbance to the soil, plants, and animals.
 - b. A parking lot of not more than 4,000 square feet may be established within the Nature Preserve. The site for this lot may only be selected after a survey has been conducted to insure that no unique or significant features will be impacted.
 - c. Foot trails, foot bridges, boardwalks, trail markers, interpretative signs, observation sites, an interpretative kiosk, and/or ditch or stream crossings may be constructed and maintained after sufficient study is completed to help determine proper placement. Existing trails may be maintained at the discretion of the Indiana Karst Conservancy.
 - d. Fire breaks to insure safety during prescribed burning may be established at locations approved by the Indiana Karst Conservancy and the Division of Nature Preserves.
 - e. The Indiana Karst Conservancy may install a locked gate or other suitable barrier on cave entrances to restrict access. Installation of such gates may only be pursued when cave resources have been determined to be threatened, and must be installed in accordance with a detailed plan that has been approved by the Division of Nature Preserves.
 - f. Such other developments, construction, or improvements that are 1) approved jointly by the Indiana Karst Conservancy and the Director of the Division of Nature Preserves of the Indiana Department of Natural Resources, or his / her designee and 2) are not inconsistent with the intent of this document may be established and maintained.
- 3. Management activities within the Nature Preserve shall be governed by the following rules:
 - a. Water levels shall not be altered intentionally except when essential for the restoration or maintenance of natural conditions or in regard to any existing regulated drains.
 - b. Erosion and soil deposition may be controlled.
 - c. No action shall be taken to alter natural growth or natural features in the Nature Preserve for the purpose of enhancing the beauty, neatness, or amenities of the Nature Preserve or any part thereof.
 - d. There shall be no cutting of grass, brush, or other vegetation, thinning of trees, removal of dead wood, opening of scenic vistas, or planting, except as allowed elsewhere in this Master Plan.
 - e. There shall be no removal or use of any natural material, product, or object from the Nature Preserve and there shall be no intentional introduction of any material, product, or object into the Nature Preserve except as permitted elsewhere in this Master Plan.

- f. Except as permitted elsewhere in this Master Plan, all fires shall be brought under control as quickly as possible. After a fire there shall be no clean-up, fire hazard reduction, or replanting except for safety purposes.
- g. Trees or branches that constitute a safety hazard to persons on established trails or in any other authorized use areas may be felled but shall be left to decompose naturally.
- h. Species of plants and animals that are considered noxious by State Law, and exotic and aggressive native species that are detrimental to the quality of the Nature Preserve may be controlled. In the case of plants, the control and removal shall be by manual methods (chain saw, brush cutters, and hand tools) and/or prescribed burning. Herbicides and biological agents proven to be effective and safe in natural area management may be used in conjunction with such manual methods. Except in situations where heavy infestations make this approach impractical, herbicides should only be used if directly applied to cut stumps or to the species to be eradicated. In the case of animals, the control and removal shall be by the most current, acceptable methods, and in accordance with state wildlife regulations.
- i. Control of biotic succession by artificial means may be undertaken only if 1) preservation of a particular species is determined by the Indiana Karst Conservancy and the Division of Nature Preserves to be consistent with the purpose of the Nature Preserve and/or 2) such control is necessary for the maintenance or restoration of the natural communities for which the Nature Preserve was dedicated. Acceptable control measures are the same as those allowed elsewhere in this Master Plan.
- j. Controlled burning shall be permitted only as a properly used tool to maintain and/or restore natural conditions on this Nature Preserve. The Nature Preserve or a portion of the Preserve may be burned annually for natural community management, as determined by the Indiana Karst Conservancy and the Division of Nature Preserves. The burning shall be done in accordance with the most current information available on fire management, and shall be done only using the methods and materials specified in a Burning Plan prepared and approved by the Division of Nature Preserves.
- k. It is recognized that on the date of the dedication of this Nature Preserve that the terrestrial biological communities do not represent natural conditions, and that long-term restoration activities may be implemented to eventually return the surface communities to a more natural state that would have originally occurred here. Species of plants may be introduced into previously disturbed areas of the Nature Preserve for the purpose of re-establishing a native natural community or improving a degraded natural community which exists at the time of the dedication of this Nature Preserve. Only species which would normally occur in this type of natural community may be introduced. Except as permitted elsewhere in this Master Plan, native plants and animals may only be introduced, re-introduced, or removed from the Nature Preserve under the conditions listed below. Limited treatment with herbicides, selective mowing, or other best-practice methods may be used to encourage survival of planted species.

All such actions require the written permission of the Director of the Division of Nature Preserves. The species to be introduced must constitute a normal component of a natural community occurring within the Nature Preserve and its introduction must 1) have a positive effect on the natural quality and integrity of the Nature Preserve and/or 2) correct a negative effect caused by its absence. In order to minimize the possibility of introducing non-native ecotypes into the area, the source of the organisms to be introduced should, if possible, be from within the Mitchell Karst Plain or Shawnee Hills Escarpment Natural Regions as defined by Homoya, et al. 1985, "The Natural Regions of Indiana". *Proc. Indiana Academy of Science*. 94: 245-268.

Individual specimens of certain species may be removed from the Nature Preserve for the purpose of re-establishment in a similar community type in another Nature Preserve or in a high quality natural community provided that sufficient individuals of the species are present so that this removal does not endanger the population. Other potential sources should always be explored before allowing a species to be removed from the Nature Preserve. In the case of plants, the removal of seeds for planting elsewhere shall take precedence over the removal of entire plants.

- 1. Appropriate actions may be taken to correct existing conditions within the Nature Preserve which 1) result from direct or indirect human activities and 2) adversely affect the natural features for which the Nature Preserve was dedicated. Such actions should only be undertaken if reasonable assurances exist that said actions will not have unforeseen detrimental effects on the natural communities and species of plants and animals contained within the Nature Preserve.
- m. All caves within the Nature Preserve will be managed as natural, wild caves. No improvements for the convenience of visitors will be allowed. Digging or other alterations for the exploration or expansion of a cave is prohibited without the prior approval of the Indiana Karst Conservancy. Cave restoration activities (other than trash removal) is limited to activities sponsored by the Indiana Karst Conservancy in order to keep all restoration consistent with approved practices.
- n. With the exception of archaeological artifacts, remnants of previous human activities (e.g. wire fencing, fence posts, trash, and debris) may be removed at the discretion of the Indiana Karst Conservancy, if such activities can be accomplished with little or no adverse impact on existing natural communities.
- 4. Human use of the Nature Preserve shall be governed by the following regulations:
 - a. Ingress and egress shall be allowed only at such locations and under such conditions as are established from time to time by the Indiana Karst Conservancy. Permission to visit and explore the caves on the Nature Preserve will be reviewed and granted through the designated representative of the Indiana Karst Conservancy. Similarly, night visitation is allowed only for those purposes and time periods for which the Indiana Karst Conservancy has granted express permission.

- b. The primary visitor activities in the Preserve shall be walking, observing, nature study, and cave visitation. These activities shall be permitted only to the extent that the Nature Preserve can tolerate them without substantial deterioration. Visitors lacking permission for cave visitation or without permits for research or collecting activities shall generally be permitted only on trails and may otherwise be restricted in movement when deemed advisable.
- c. Scientific and educational activities may be permitted only to the extent that the Nature Preserve can tolerate them without substantial deterioration. Collecting, Research, and Educational Permits may be jointly issued for scientific or educational purposes by the Division of Nature Preserves and the Indiana Karst Conservancy.
- d. No structure, easement, right-of-way, or other intrusion, development, impairment, disturbance, or use which is not permitted by this Master Plan shall be established or be allowed to continue, excepting only the continuance of a use or uses of easements which use existed on the date of this dedication.
- e. Hunting and trapping under the laws of the State of Indiana may be permitted within the Nature Preserve upon approval by the Indiana Karst Conservancy and with the written approval of the Director of the Division of Nature Preserves, in order to control problems of overpopulation of specific animal species. It is understood that this Nature Preserve is intended foremost as a refuge for wildlife and plant communities, and such action may only be taken when specific animal populations threaten to degrade the natural integrity of the Nature Preserve by substantially decreasing other plant or animal populations.
- f. Visitors having received permission either for night visitation or for cave visitation may eat or sleep within the designated parking area.
- g. Except to the extent permitted in this Master Plan, the following activities are prohibited, but their inclusion herein shall not restrict the right of the Indiana Karst Conservancy to prohibit other activities it considers inconsistent with this Master Plan or the purposes for which this Nature Preserve is established: timbering, grazing by domestic animals, farming, the gathering of firewood or other plant products, mining, quarrying, or other surface excavation, drilling for oil or gas, the harvesting of fruits, nuts, mushrooms, fur bearers, or other animals, the dumping, burying, or spreading of garbage, trash, or other waste materials, picnicking, camping, lighting of fires, participating in sports (excluding the visitation of caves), the use of vehicles (except for emergency and service use), horseback riding, hunting, trapping, the removal, disturbance, molestation, or defacement of minerals, plants, animals, or natural features, and the gathering of specimens except by permit.

IN WITNESS WHER	EOF, the Department of	of Natural Resources of the State of Indiana has adopted this
Master Plan as of the	day of	, 200
		STATE OF INDIANA
		NATURAL RESOURCES COMMISSION
ATTEST:		
		Michael J. Kiley, Chairman
John R. Goss, Secretary		