# About the MKC

The Michigan Karst Conservancy is dedicated to the preservation of examples of Michigan's Karst areas. It was formed in 1983 by people with an appreciation for Michigan Karst features, when it became apparent that no other groups were interested and able to actively protect such areas for their inherent geological interest. The purposes of the Conservancy are the acquisition, management and protection of the finest examples in Michigan of Karst areas and features, as well as scientific study and conservation education regarding Karst.

There is only a finite time within which to establish protection for the most significant areas. Indiscriminate use of sinkholes in Alpena County as dumps and landfills is still occurring, which results in groundwater pollution and degrades and obscures these fascinating features. Many sinkholes have also been filled in for farming. In the Upper Peninsula, one large and several small caves have been quarried away (in a state with very few caves, and in a situation where the caves could have been preserved with negligible cost or trouble). In other areas, erosion damage is occurring due to uncontrolled foot and vehicle traffic.

Risks of further loss of the relatively few remaining significant features by activities that would not preserve them are very great. It is, in fact, the small sizes of the remaining significant Karst areas that make them an opportunity for preservation. Because the areas are small, it is possible to acquire the land and hold it in trust for informed

The MKC owns three preserves. The 480 acre Fiborn Karst Preserve in Michigan's Upper Peninsula, purchased in 1987, includes an extensive and nearly complete Karst drainage system with features such as sinkholes, caves and disappearing streams. The 31 acre Stevens Twin Sinks Preserve west of Alpena, purchased in 1990 and enlarged in 1996 by the donation of the 2.5 acre Bruski Sink, contains examples of sinkhole habitats unique to that area. Research and educational programs are conducted at both preserves. In addition, the MKC co-owns (with the Michigan Nature Association) Mystery Valley. This 76+ acre sinkhole near the Stevens Twin Sinks Preserve is being prepared for educational use. Please recycle this brochure by returning it to the kiosk for others to use. Thank you.

Michigan Karst Conservancy 2805 Gladstone Ave. Ann Arbor, MI 48104 www.michigankarst.org

# Stevens Twin Sinks And Bruski Sink Karst Preserve



Aerial view of Stevens Twin Sinks and Bruski Sink (Google)

# Stevens Twin Sinks and Bruski Sink Karst Preserve

Welcome to the Stevens Twin Sinks and Bruski Sink Preserves. These properties are owned and managed by the Michigan Karst Conservancy, Inc. (MKC) Purchase of the properties were made possible by the generous donations of the Bill and Archie Stevens, Edward Bruski and the members of the MKC.

#### Trails policy

The objective of the Michigan Karst Conservancy is to protect karst areas in Michigan and to educate the public about the value of karst lands and the safe and proper use of these lands.

One aspect of this objective is to provide educational trails on its karst preserves. These trails are narrow footpaths that often go through wet or muddy areas; across or around rocks and boulders; and often have steep, narrow, hilly, or sideways tilted surfaces. Some cross bare rock or cross a stream on a narrow rustic bridge.

These trails are not suitable for personal assistance mobility devices such as walkers, manual or motorized wheelchairs, power scooters, golf carts, off-road or all-terrain vehicles. Use of such equipment on MKC trails is not reasonable and is likely to do damage through soil erosion, trail widening, plant and root damage, and is thus prohibited.

Visitation to MKC preserves is at the visitor's own risk. MKC normally will not have staff or volunteers or emergency phones or equipment present at a preserve. The preserves are a significant distance from emergency medical facilities. Cell phone coverage is limited or non-existent, especially in the Upper Peninsula.

#### Stevens Twin Sinks

Two self-guided trails are located on the preserve. One trail generally follows the perimeter of the sink holes with a side spur to interesting earth cracks. This trail is unmarked but obvious. The second trail is found off the spur trail and takes visitors through woods and meadows. It is marked with yellow and red flagging.

## Sink Hole Trail

This trail starts immediately behind the kiosk and runs counterclockwise around the sinks and returns the visitor to the parking area. The sinks are collapse sinkholes formed in a stack of Devonian limestone and shale called the Traverse Group. Below the Traverse (800 feet) is the Detroit River Group, most of which is limestone but also contains some gypsum and anhydrite, both minerals that dissolve in water much faster than limestone. The collapse of the Traverse Group into the Detroit Group led to the creation of the sinks. The sinkholes are now intriguing geological features and unique habitats for some plants not found locally at the surface. Geological and biological studies are being conducted on the Preserve. Be sure to follow the mowed pathway about 200 feet down the trail and leading to the right. This spur leads to earth cracks. The cracks are indications the sinkhole is slowly continuing to collapse and the surface is sliding toward the sinkhole. Not today, but someday, the sinkholes will be much wider. Do not descend the sinkholes, in order to prevent erosion of their walls. (Note: Reascending requires technical climbing skills.) Please also "take nothing but pictures: leave nothing but footprints." Anything thrown into the sinkholes can damage natural features, or contaminate groundwater. Stay back from the sinkhole edges, in order to prevent erosion or accidents! Be especially cautious with children.

#### Nature Trail

This trail begins at the earth crack spur mentioned above and is flagged with red and yellow flagging tape. Monthly, beginning in April, the trail is mowed by MKC volunteers to make walking easier. The trail takes one through some interesting areas. One will be observe a farm field that has been abandoned and is beginning to return to a wooded area. Look for a clump of trees where there is a large central tree with a ring of young trees seeded by the central tree. You will find a very pleasant beech grove on your walk. The trail rejoins the sinkhole trail and follows to the right past a large flow channel that diverts spring run-off from the upper farm fields into the sinkhole.

## Bruski Sink.

For years Bruski Sink was used as an unauthorized trash dump. When the MKC acquired the property in 1996, the sink hole was 85-feet deep. In 1999 MKC began cleaning the trash from the sinkhole. Using a 75-ton crane from Moran Iron Works, eight car bodies were removed from the sinkhole in the first year In succeeding years 10-17 MKC volunteers would descend and the crane operator would lower a dumpster into the hole where volunteers would load it. Refrigerators, washers, dryers, and coils and coils of wire fencing were hauled out. Most disturbing were the dozens and dozens of rusting 2- and 5-gallon pails that contained insecticides, paint thinner, and motor oil ... disturbing because sinkholes are a direct path to our underground waters. How much of this trash ended up in the wells of area residents? It took nine years to accomplish the clean-up of this sink—27 feet of trash were removed. That's right—this sinkhole is now 112 feet deep. Project 319 federal funds were used to fence the sinkhole to discourage dumping. In 2010, Leer Road was resurfaced and the intersection of Leer and Maple Lane was redesigned so that Maple Lane was moved away from the sinkhole to provide safer left and right turns onto Leer. We are very optimistic this move will provide a large buffer and further discourage dumping. The short trail follows the south and east wall of the sink and ends where the 75-ton crane was positioned to remove trash laden dumpsters from the sinkhole. Be careful walking this trail. and do not enter the sinkhole—technical climbing

skills are required to reascend! Take hold of your children.

