

Sanctuary at a Glance:

Location: Presque Isle County

Size: 76 acres

History: Acquired in 2008 as a joint partnership with the Michigan Karst Conservancy

About MNA:

The Michigan Nature Association is a nonprofit conservation organization working to protect Michigan’s rare, threatened and endangered species by protecting the lands and waters they need to survive.

Established in 1952, MNA’s members, donors, and volunteers have built a remarkable network of more than 170 nature sanctuaries across the state – the largest network of natural areas established and maintained by a nonprofit conservation organization in Michigan.



Michigan Nature Association

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Photo: Randy Butters

Located in Presque Isle County, the 76-acre Mystery Valley Karst Preserve and Nature Sanctuary is home to one of the largest karst “collapse valleys” in the Great Lakes region. The MNA acquired joint ownership of this special sanctuary in 2008 in a partnership with the Michigan Karst Conservancy—the first cooperative ownership of a sanctuary in which the MNA has participated. The land was first purchased by the Michigan Karst Conservancy in 2005; the MNA then assisted with completing the land protection project by paying off the remainder of the loan and becoming joint owners.

Mystery Valley was formed by the collapse of the surface into a network of underground chambers created by water erosion of the rock below. The collapse has created the 1.5 mile long valley—150 feet deep and up to 1500 feet wide—and its many sinkholes, shafts, and caves. Visitors can explore the incredible earth cracks and valley formed by the erosion of limestone beneath the surface. On the 1-mile Earthcrack Trail, hikers can observe the large cracks caused by the moving rock, which span more than 100 feet deep in places. The half-mile Valley Trail passes fossils of marine life embedded in the rock that inhabited the area 350-400 million years ago.

The unusual surface and subsurface structure of the area creates the unique geology found at Mystery Valley. Water rising from beneath the surface often creates a lake that covers the west and lower ends of the valley. Most of the water reaches the surface through a sinkhole in the bedrock at the valley’s west end. Snowmelt and rain runoff also contribute to the water levels. As water flows through the underground drainage system toward Lake Huron, Mystery Valley’s “disappearing” lake drains back through the sinkhole...and disappears.

The Michigan Karst Conservancy and MNA will continue collaborating to ensure the protection of Mystery Valley.

Traverse Group rocks below Mystery Valley Karst

Karst geology forms a dynamic and ever-changing landscape that results from the dissolving of the bedrock below it—usually consisting of limestone, dolomite, or gypsum. A thick layer of Devonian limestone and shale, known as the Traverse Group, underlies Alpena and Presque Isle counties. Eight hundred feet below the Traverse Group is the Detroit River Group, which contains large amounts of the evaporites anhydrite and gypsum. These minerals dissolve at a faster rate than limestone, and as the Detroit River Group rocks erode and create caverns, Traverse Group rocks above collapse into the caverns.



Photo: Randy Butters

An assortment of trees

The coarse-textured ground and slightly acidic soil at Mystery Valley supports a northern-mesic forest, dominated by sugar maple, beech, and hemlock. The proportion of conifers and hardwoods often vary based on groundwater or bedrock influencing the rooting zone. In stands dominated by hemlock, hardwoods that share the canopy often include yellow birch, red maple, American beech, and white pine.



Photo: Katherine Hollins

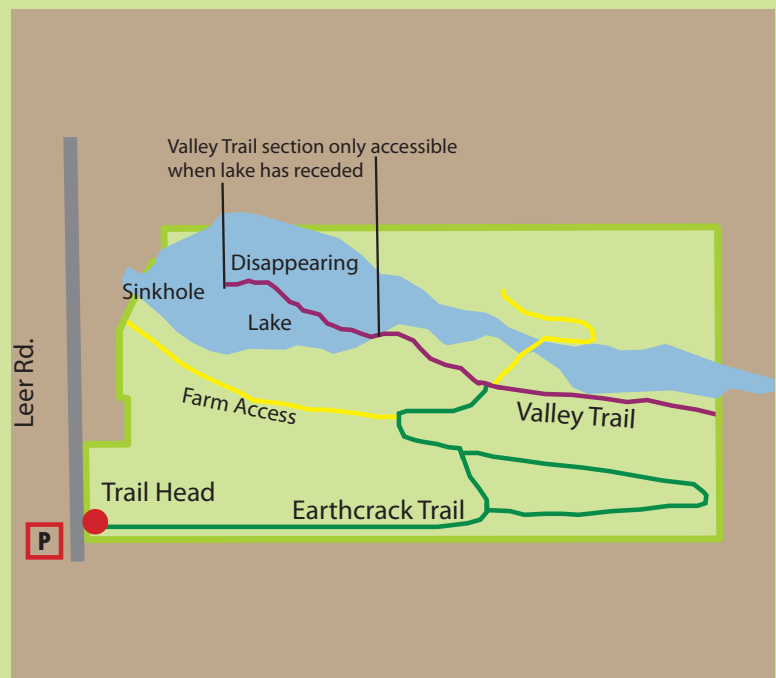
Planning Your Visit:

Fall at the sanctuary is a good time to view the different colors in tree types.

How To Get There

The Mystery Valley Karst Preserve and Nature Sanctuary is located in Presque Isle County, off of Leer Road, approximately .8 miles from Long Lake Highway. Park on the east side of the road.

For additional information, contact the MNA office at (866) 233-2231.



Sanctuary Map