



Students join effort to protect hibernation habitat for local, rare bats

Utilizing Michigan's only 4-H Welding Club, Alpena initiative plans to re-purpose an old quarry tunnel creating a mutually beneficial situation for Rockport State Recreation Area and migrating bats

Bat Cave! Alpena area students are working to promote conservation and wildlife habitat restoration by helping to protect two local winter hibernacula for bats at Rockport State Recreation Area.

A Rare Opportunity

When the Michigan Department of Natural Resources (DNR) Wildlife Division in conjunction with researcher Dr. Allen Kurta of Eastern Michigan University discovered bats hibernating in this unique site in the Northern Lower Peninsula, they knew something had to be done to conserve this critical habitat.

Therefore, a project was set in motion to conserve the bats habitat and ensure public safety at the site. An equally important dynamic to the project involves raising awareness of the beneficial role of bats in our environment and stewardship opportunities by including local students, community members and partners.

Rockport State Recreation Area

- Deep-water protected harbor, great for boating, fishing, shipwreck diving and snorkeling
- Historic limestone quarry featuring many fossils
- Unique series of sinkholes
- Dedicated Besser Natural Area
- Variety of trails and recreation opportunities
- Broad range of land types and cultural resources

www.michigan.gov/rockport



Tri-colored Bat - *Perimyotis subflavus*
Photo courtesy of Tim Carter

The Organization for Bat Conservation visited Alpena and discussed the importance of bats in our ecosystem displaying live bats from Michigan, South America and Africa.

Importance of Conservation

Michigan DNR Wildlife Biologist Bill Scullon said the bat hibernacula at Rockport State Recreation Area are unique; because Michigan's Northern Lower Peninsula lacks abandoned mines and caves, which are common places for large populations of bats to hibernate. There is only one other known bat hibernaculum in the Lower Peninsula, Tippy Dam in Manistee County. A recent bi-national Lake Huron Biodiversity Conservation planning project -led by MI SeaGrant and The Nature Conservancy- identifies the importance of habitats for aerial migrants, further illustrating a broader importance of these hibernation habitats for migrating bats.

Another major factor contributing to the importance of the project are the bat species found in the hibernation areas. Recent biological surveys conducted at Rockport revealed little brown, big brown and tri-colored (formerly known as eastern pipistrelle) bats using the hibernacula. Tri-colored bats are a

species of special concern in Michigan, which further added to the importance of protecting this critical habitat along the Lake Huron shoreline.

Getting Students Involved

The hibernation areas are located in what used to be a Rockport Quarry tunnel used for moving and transporting material during mining operations. Therefore, public safety is another important factor contributing to this project. Alpena High School industrial arts teachers Scott MacKenzie and Zach Grulke are enthusiastic about supporting their student's involvement in helping protect not only the bats using the hibernacula, but the public as well.

Power in Partnerships

As partners to this project, teachers and students are supported with grant funding and professional development support from the Northeast Michigan Great Lakes Stewardship Initiative (NE MI GLSI), Michigan DNR, U.S. Fish and Wildlife Service, 4-H Youth Programs and the Organization for Bat Conservation; which is sharing an educational training with live bats for students, teachers and key community partners such as Friends of Rockport/



Project Partners



Besser Natural Area. MacKenzie's welding students will be helping make specially designed steel gate structures to protect the hibernacula. These gates will protect the bats habitat by safely excluding the public from accessing these dangerous tunnels while enabling the bats to come and go freely. Additionally, the gates will minimize disturbance to the hibernating bats; which can increase their chance of survival.

Learning with goal of Teaching

Getting students involved in the project from start to finish it will allow them a sense of ownership and stewardship in their community. The industrial arts program at Alpena High School is unique in that it gives students real life experiences. John Suzsek, 4-H welding club leader working with students at Alpena High School, said they have students punch in and keep a record of their day; which teaches students to be

responsible and allows them to better understand what it would be like to have a career in the welding field. By having a real life project for the students to work on will help them to better understand the manufacturing process from start to finish –or implementation in this case.

Looking to the Future



Alpena HS Woodshop students building summer bat houses to be placed at the park.

“By using their learned skills to build a system that helps protect the bats, this gives the students a sense of ownership in the project.”

*-Mr. Scott MacKenzie
Alpena High Industrial Arts Instructor*

Showcasing the bat hibernacula project to recreation area users is an important aspect of this project. The future goal is to have a self-guided interpretive program and displays at Rockport depicting the ecological importance of bats, their habitat and the historic village of Rockport.

This is an exciting project with many community partners involved. Students are playing an imperative role in this project through the NE MI GLSI. If you are interested in learning more on the bat project in a broader scale please contact Jennifer Kleitch, Wildlife Biologist with the Michigan DNR at 989-785-4251 ext. 5230 or e-mail at kleitchj@michigan.gov.

What is Place-Based Education?

Place-Based Education (PBE) or Community Based Education (CBE) utilizes the local, natural and built environments as a context for learning and in doing so brings students into closer contact with their communities. This method is proven to develop knowledgeable and active stewards of the environment. When schools and communities work together, everybody wins!

Why:

This education strategy protects Great Lakes ecosystems, strengthens Northeast Michigan communities and provides critical support to schools as they strive to serve the academic and developmental needs of their students.

How:

Teachers and students are supported through project mini grants, connection to resource partnerships, and high-quality Professional Development that provides essential tools and techniques for fostering a collaborative culture of place-based learning within and among schools and their communities.

Supporting Community Development and Resource Stewardship Priorities through education:

Since 2006, numerous local and regional partners have engaged in Great Lakes education, networking and planning efforts across Michigan's "sunrise side." These efforts mobilized a network of school and community partners committed to identifying needs and developing strategies for enhancing coastal access, education, and sustainable resource management. Empowered through funding support from the Great Lakes Fishery Trust (GLFT), this collaboration now comprises the Northeast Michigan Great Lakes Stewardship Initiative, one of nine regional hubs through which GLFT furthers the principals and practices of place and community-based education as the Great Lakes Stewardship Initiative.

You are invited:

If you care about Northeast Michigan and want to make a difference for the future of our region, please contact NEM GLSI to find out how you can get involved.

Phone: 989.356.8805 x41 or daniel.moffatt@noaa.gov

Northeast Michigan GLSI network programs and materials are open to all without regard to race, color, national or ethnic origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status, or veteran status.

How can I participate in the NE Michigan GLSI Network?



Many partners are currently exploring community- or place-based education development opportunities within the NE Michigan region. For more information, visit us on the web: www.nemiglsi.org

Who Can I Contact?

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