

## WHERE SCIENCE HISTORY AND ART CONNECT

To: Raven Hill friends  
From: Cheri  
Date: May 10, 2025  
Re: Spring plans and projects

Leo Tolstoy once said, "Spring is the time of plans and projects." His statement resonates perfectly with Raven Hill Discovery Center's recent initiatives, particularly the development of the **Living STEM Lab at Deer Creek**. This project embodies the spirit of forward-thinking that Tolstoy associates with spring.

Waders on



*Suit up and discover the hidden life below the surface of Deer Creek!*

Viewing platform



*Tucked just upstream from the footbridge, the new STEM shed will stand near the banks of Deer Creek—within easy reach of the water. This small but vital structure will keep waders, nets, and tools dry, organized, and ready for students to launch hands-on investigations into the health of the creek and surrounding ecosystems.*

Thanks to funding from both the Charlevoix County Community Foundation and the Petoskey-Harbor Springs Area Community Foundation, the **Living STEM Lab at Deer Creek** will become a reality with construction slated to begin after Memorial Day. The focal point will be a simple but essential structure—a weatherproof storage shed that will serve as the staging hub for **STEM Lab** participants. It will safely house waders, nets and other field equipment to be used by visitors, students and educators as they engage in hands-on exploration of local ecosystems. Conveniently located near the creek, but above the floodplain, the shed will ensure that tools for water quality monitoring, biological sampling, and

environmental observation are organized, accessible, and protected from the elements. The shed will also serve as a gathering place for sharing instructions and information, as well as a convenient area for donning waders before entering the stream.



The **Living STEM Lab** initiative is designed to engage Raven Hill visitors in hands-on STEM experiences that foster environmental stewardship and real-world problem-solving skills. Once the Lab is up and running, participants will be invited to explore the Deer Creek habitat. They can collect and analyze data related to the geosphere, atmosphere, and hydrosphere, deepening their understanding of ecological interconnections. Activities include collecting macroinvertebrates in Deer Creek to assess water health, conducting plant population studies along the creek banks and recording air temperatures. Data points will be recorded and displayed at Raven Hill, allowing visitors to see their numbers in relation to past statistics. Engaging in such fieldwork transforms observations from single data points to monitoring changes over time. Visitors will gain meaningful scientific insights as they monitor the rise and fall of air temperatures at ground level and a meter above the ground or when they can see the differences in the water level before and after a rain or after a dry weather spell.

Collecting bugs



*Student scientists at work—using macroinvertebrate sampling to assess ecosystem health and practice real-world STEM skills.*

Up close and personal



*Investigating stream health one macroinvertebrate at a time—field science in action at Deer Creek.*

This project continues Raven Hill's longstanding commitment to experiential learning. Since 1992, the Center has provided immersive, interactive experiences that inspire curiosity and discovery. The **Living STEM Lab at Deer Creek** will allow participants to explore Deer Creek and the surrounding Raven Hill air, land and water through hands-on activities, learning how to collect data, connect figures and understand how the past influences the future. The program will include data collection, the establishment of a long-term dataset, and the creation of a digital display to share findings with Raven Hill visitors.

In the spirit of spring's plans and projects, Raven Hill is excited to bring the **STEM Lab** to fruition. This endeavor reflects the Center's dedication to evolving its educational offerings and providing students with opportunities to explore the

natural world through science, history, and art. As Tolstoy suggests, spring is indeed a time for launching new projects, and Raven Hill exemplifies this through its innovative approach to STEM education at the "soon to be" **Living STEM Lab at Deer Creek**.

Raven Hill Discovery Center is open year round for regular weekend hours, which are noon to 4pm on Saturdays and 2pm to 4pm on Sundays. Between Memorial Day and Labor Day, the Center is also open weekdays from 10am to 4pm. To make an appointment for other times, email us: [info@miravenhill.org](mailto:info@miravenhill.org) or call 231.536.3369. Go online to our website: [miravenhill.org/learn](http://miravenhill.org/learn) to check out our classes and workshops, as well as upcoming events. Sign up soon and often! We look forward to seeing you here.

Cheri