

WHERE **SCIENCE****HISTORY****AND****ART** CONNECT

To: Raven Hill friends
From: Cheri
Date: December 7, 2024
Re: Timelines flow

Deer Creek Timeline



*We will miss the “plunge pool,”
aka swimming hole,
and the wild rides through the
culvert, but we will respect
Deer Creek’s return to its
original natural flow.
—Photo taken summer of 1994*



*Deer Creek at Fuller Road is
shown here with the culvert in
place. —Photo taken on
April 18.2021*

I love timelines! They appear many places here at Raven Hill. Think about it. Even Raven Hill’s vision refers to building an “awareness of the world as it was, is and might be.” The **Exploring Beyond Jurassic Park** Pathway illustrates the time periods of Earth’s geologic history. The **Evolving Technology Building** features timelines from the Stone Age to the modern Information Age. The Schoolhouse has desks from 1885 to modern times. The **Taxonomic or Taxi Trail** has tree families planted from our oldest evergreens to the more modern Rose family, which includes our fruit trees. Inside Raven Hill there are many smaller timelines: a data storage timeline, a materials usage timeline and an indoor geologic time scale illustrating Earth’s fossil record in the Center’s current **Under Michigan & Beyond** Exhibition.

Even the **Periodic Table of the Elements** is a timeline of “cosmic proportions,” reflecting a sort of chronological creation of elements, beginning with hydrogen and helium, formed during the Big Bang almost 14 billion years ago. It is also a timeline record of human discovery from those discovered early in human history to more recent discoveries of synthetic elements that are not found naturally here on Earth. The **Periodic Table** is more than just a chart of chemical properties; it’s a layered narrative of time, from the universe’s origins to our modern exploration of matter.

Timelines provide a clear way to understand the progression of events, changes, or developments over time. They allow us to connect the past, present, and future. Timelines help us clarify and organize information. They make it easier to see how one moment leads to another. Timelines allow us to remember milestones—personal, cultural, or natural—by providing a structured way to reflect on the journey and appreciate growth or change. Timelines help visualize goals and predict outcomes, creating a framework for actionable steps toward the future. Whether showing a single day’s events or millions of years of evolution, timelines reveal how moments connect to broader contexts, giving small details their place in the larger story. Timelines are very much a narrative, turning a series of events into a story. They show us how one moment sets the stage for the next, emphasizing continuity and flow. Timelines are more than tools—they are pathways to understanding.

Deer Creek Timeline continued



*Hands-on career experiences include donning waders and collecting macroinvertebrates in Deer Creek to understand what it's like to be a Water Quality Specialist, one of the featured career explorations in Raven Hill's 2023 Math Science Career Expo.
—Photo taken May 10, 2023*



This is the calm before the culvert removal. —Photo taken Monday, December 2, 2024 at 9:54 am



*The culvert is OUT!
—Photo taken on Monday, December 2, 2024 at 2:30 pm*



*Restoration begins and Deer Creek flows freely once again, weaving through the landscape—connecting life and carrying stories yet untold.
—Photo taken Friday, December 6, 2024 at 12:30 pm*

This week there was a major milestone on Deer Creek's timeline with the removal of the culvert under Fuller Road. Now the timeline shifts toward recovery and a return of the creek to its natural state. This timeline shift occurred as soon as the culvert was pulled out of the water. There was an immediate restoration of open water flow and the starting of sediment transport. From here on, the timeline slows. It may take a few years for aquatic habitats to recover as sediment redistribution stabilizes. Early vegetation will establish itself along the creek banks. It will take the next five to ten years for the banks to become well-vegetated and the aquatic species to fully recolonize. The creek's pathway will stabilize as it widens and slows. New sandbars, pool and bends may form, shaping the land with each turn. Through the next few decades, Deer Creek will gradually reach a dynamic equilibrium, allowing its waters to return to a more pristine condition. This transformation will unfold beneath and because of a wide new modern bridge, replacing the constraints of the old narrow culvert & restoring the Creek's inherent balance as its timeline continues.

Over time, with the removal of the culvert, the stream will remember its wild nature, reclaiming its former life as it moves freely once more. No longer confined, it can weave through the landscape with purpose, connecting life and carrying stories yet untold. This is restoration—not just of Deer Creek, but of the harmony between nature & the passage of time.

We hope you visit soon. Raven Hill is open weekends all year long. We are also always open during the week by appointment at this time of year. During the coming holidays, we will be open during our regular hours: Saturdays from noon to 4pm, Sundays from 2pm to 4pm and other times by appointment. Bring your friends and family and start a new holiday tradition that includes hands-on fun and discovery at Raven Hill. To schedule a weekday visit, email cheri@miravenhill.org or call 231.536.3369. No appointment is needed **IF** you come during our regular weekend hours.

During bridge construction, Raven Hill is accessible via the detour—east on C-48, south on Bergman Road, west on Rogers Road and north on Fuller Road past the Center's Ancient World exhibit to the main campus. Upon completion, the new bridge will mark a significant milestone not only in Deer Creek's timeline, but also in the personal stories of the

Creek's neighbors and the wider community. As a safer and scientifically improved structure, the bridge will link our past to our future, as it becomes part of our shared narrative—allowing us to remember milestones—personal, cultural and natural.

We are excitedly counting the days until we can share this next milestone in everyone's timelines!

Cheri