

Interpretive Sign Design Internship
OPRA Foundation Administrative Grant Report
Outdoor Sylvania Community Parks, Sylvania, Ohio
December 1, 2023

Grant Objectives:

The objective of this grant project was to provide a stipend for a student internship. The intern would be a full time student who would research information relevant to interpretive signage and design those signs for the park district.

Background:

Outdoor Sylvania Community Parks is located in Sylvania, Ohio, in the northwest part of the state. Formed in 1958, the park district was created under ORC 1545, and operates under a tax levy, voted on by Sylvania School District residents every five years. Outdoor Sylvania owns and manages 5 parks totaling 420 acres, with 5 miles of trails.

The park district added the majority of its properties between 2000 and 2014, implementing infrastructure as our budget allowed between 2006 and the present day. As we've installed trails, playgrounds and restrooms, one aspect of connecting with our community has been pushed to the side repeatedly. The park district has very few interpretive signs in its parks. We have a number of very interesting stories to tell, and we want to help the community realize what great benefits we provide. Well designed interpretive signs are one way to accomplish this.

To that end, Outdoor Sylvania included \$20,000 in its 2022 budget for the construction of signs for our parks. We did not allocate funds for design. We anticipated that work would be done in-house. Unfortunately, due to a shortage of staff, we were unable to devote the necessary time to make that happen.

Funds from the OPRA Foundation Administrative Grant were allocated toward compensating a local art student to help with this project. We used the grant to compensate this intern at a rate of \$15 per hour for 100 hours. Match for this grant was in-kind as staff time on the part of the director, who oversaw this project and supervised the intern.

Project Activities and Timelines:

- July 2022 - Grant Application submitted to OPRA Foundation
- August 2022 - OPRA Foundation Program Development Grant Awarded
- September 2022 - Student contracted to work on project.
- September 2022 - Grant Funding Received - \$1500.00
- December 2022 - Sign design completed
- November 2023 - Signs purchased with installation anticipated in Dec. 2023

- Outdoor Sylvania changed logos and the completion of the project was delayed until the sign designs for the entire park district were agreed upon.

Activities and Key Decisions:

Once the student, Alex McDonnel, was selected to work on the project, Erika Buri, Outdoor Sylvania Executive Director, and Alex met weekly for progress reports and to answer any questions Alex might have about content.

After several weeks of research, Alex started design on the signs in early October 2022 and completed her project in December 2022. Erika refined the designs in 2023 as a result of feedback from staff. The intention was to ensure that signs were thematically similar throughout the parks. As a result, construction and installation were delayed until a final decision was made by the Outdoor Sylvania parks board regarding the design of the main signage for the parks.

Signs have been ordered, and installation at Fossil Park is anticipated in December 2023.

Actual vs. Proposed Budget:

Outdoor Sylvania did not anticipate hiring a student for this project, so matching funds consisted of the park director’s salary in hours spent assisting the intern. Alex’s hours were tracked through the park district’s volunteer database. Erika’s hours consisted of a weekly 1 hour meeting for 12 weeks (12 hours), an additional hour of communication via email every two weeks (6 hours) and the remaining 23 hours refining the designs to comply with the updated park district logo and design themes.

Description	Proposed Budget			Actual Budget		
	Est. Cost ea.	Qty.	Est. Line Total	Act. Cost ea.	Qty.	Act. Line Total
Intern Stipend	\$15	100 hours	\$1500.00	\$15	100	\$1500.00
Director salary	\$35.80	41 hours	\$1500.00	\$35.80	41 hours	\$1500.00
	Proposed Total ====>		\$3000.00	Actual Total ====>		\$3000.00

Evaluation of Outcomes and Key Takeaways:

While we were hoping to create signs for multiple parks, our timeline was too ambitious for that to take place. We completed four interpretive signs for Fossil Park to be installed at the end of this year. The new signs are well designed, informative, and coordinate well with the guidelines created in 2023 for all signs in the park.

These designs will be used as templates to create additional interpretive signs for our other parks over the next year.

Sign Images

WELCOME TO FOSSIL PARK

Quarries are open-pit mine sites where stone, silicates, and gravel are extracted. They are used as building materials for roads, buildings, landscaping, and glass making.

Sylvania's quarries were established in the mid-1800s, where settlers primarily mined for materials to make cement and glass. Rocks were transported by horse-drawn carriage. As mining operations increased, further infrastructure was needed to move the stone greater distances.

In 1902, the Toledo Angola and Western Railroad Company was established to ship quarried materials out of Sylvania. This drew in much larger companies that boosted the economy of the area and expanded the industry. With this success, Toledo and Sylvania became a hub for large-scale quarry activity.

This land once belonged to Medusa Quarry in the 1940s. It was sold to Hanson Aggregates, now Heidelberg Materials, in 1995. In the early days, the quarry was open to the public for fossil hunting. As mining operations intensified, it was no longer safe for people to enter the quarries.

In 2001, two employees reached out to the City of Sylvania to find a way for people safely hunt for fossils again. With the quarry company agreeing to supply materials from their quarries, and maintenance from Outdoor Sylvania, Fossil Park was established!

STONES OF THE QUARRIES

Brassfield Limestone
This limestone is one of the hardest limestones found in Ohio, making it very good for building material. It gets its hardness from its high calcium content that comes from fragments of fossils!

Dolomite
Also known as dolostone, is a fine-grained sedimentary rock similar to limestone that contains crystalline mineral structures. It is often used in cement making.

Silica Shale
Shale is a sedimentary rock made up of compacted fine grains of silt and clay. This stone is often used to make bricks, clay for ceramics, and cement.

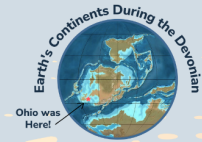
Fossil Park is known as one of the best locations for Devonian Era fossil hunting in the United States!

Fossil Park is made possible through partnerships with:

Heidelberg Materials, Outdoor Sylvania Community Parks



A SHALLOW DEVONIAN SEA



Why No Dinosaurs?

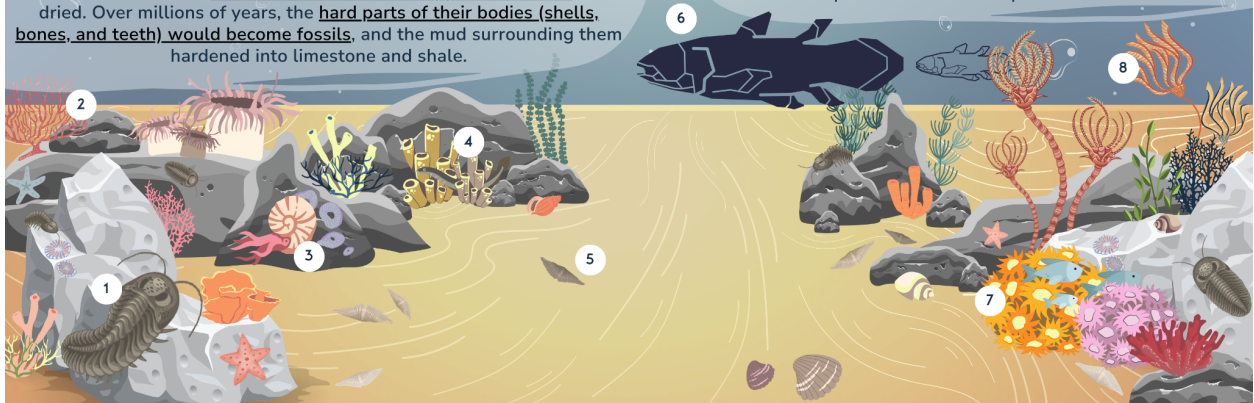
You won't find any dinosaur fossils here because dinosaurs didn't exist during the Devonian Period. These fossils are much older!

Abundant Fossils

Ohio was once part of a shallow sea that went through phases of drying up. This created prime conditions for fossil formation! As the sea retreated, all kinds of animals would become trapped in the mud as it dried. Over millions of years, the hard parts of their bodies (shells, bones, and teeth) would become fossils, and the mud surrounding them hardened into limestone and shale.

What did the Devonian look like?

The Earth during the middle Devonian looked vastly different from Earth as we know it today - Ohio was in the subtropics! Its waters were teeming with living things like coral reefs, early sea sponges, brachiopods, trilobites, ammonoids, and small fish. Most life existed within the oceans, but some early forms of plants and insects occupied the land.



- 1 TRILOBITE
- 3 AMMONID
- 5 BRACHIOPOD
- 7 RUGOSE CORAL
- 2 BRYOZOA
- 4 PORIFERA
- 6 PLACODERM
- 8 CRINOID

WANT TO LEARN MORE? CHECK OUT THIS INTERACTIVE 3D MODEL OF A DEVONIAN SEAFLOOR FROM THE UNIVERSITY OF MICHIGAN!

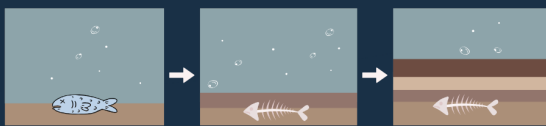


FOSSIL AND ROCK FORMATION

Fossils are the remains of living things that died a very long time ago

They can range anywhere from tens of thousands of years old to hundreds of millions of years old. Not all animals that die become fossils - fossil formation only happens under special conditions.

HOW DO FOSSILS FORM?



Once an organism dies, its remains are buried in clay, mud, or volcanic ash. Its soft tissues break down and only the hard parts of its body, like bone and shell, are left behind. As time passes and more sediments are deposited on top, the remains are compressed into solid sedimentary rock.



Cast Fossils

Cast fossils are the result of rock hardening around an organism, leaving an imprint. Over time, the rest of the organisms will dissolve and only the cast is left behind.

Mold Fossils

When an organism dissolves, a hollow space can be left behind in the rock. This space can fill up with more sediments, forming a perfect mold. These fossils can be a different color than the surrounding rock.



Trace Fossils

Sometimes just the evidence of an organism is fossilized, such as a footprint or trail. This is an example of many fossilized clam burrows.

Sedimentary Rock

Sediments are deposited in layers, then compressed into solid stone as more layers pile up. Sedimentary rock can sometimes contain fossils.



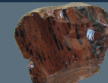
Metamorphic Rock

Metamorphic rock is created when sedimentary rocks are exposed to extreme heat and pressure as they get pushed into the Earth's crust.



Igneous Rock

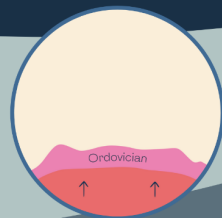
Igneous rock forms when metamorphic rock melts into magma and then cools back into solid rock. Like when lava flows out of a volcano and cools.



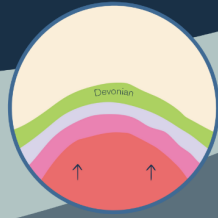
DEVONIAN FOSSILS & THE FINDLAY ARCH

The Devonian rocks and fossils here are 410-360 million years old. That's roughly 140-345 million years older than dinosaurs! Dinosaurs did live in Ohio around 240-65 million years ago, but the rocks that contained their fossils are no longer here. Rock and sediments are typically deposited from oldest to youngest - what geologists call the law of superposition. Outside forces, like tectonic plate movement, glacial movement, and weathering can push them closer to, and further away from the top.

Around 500 million years ago, two tectonic plates collided and created an fold in the Earth's crust called the Findlay Arch. Then, 10,000 years ago, glaciers scraped away millions of years of rock, and rivers washed away the glacial deposit, and those dinosaur fossils, bringing the older Devonian fossils close to the surface, right underneath Sylvania.



475 million years ago, during the Ordovician, the Earth's crust began to gradually rise as two tectonic plates collided.



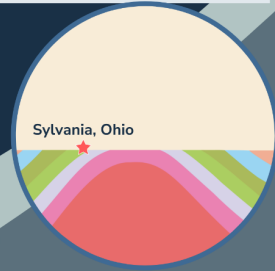
This uplift continued for 95 million years into the Devonian, pushing up the more recent layers of sediment.



The Findlay Arch finishes forming about 160 million years later, sometime after the end of the Pennsylvanian Era.



Sediments continue to be deposited and eroded for about 220 million years. Glaciers eventually cover the land.



Sylvania, Ohio

During the ice age, glaciers moved along the surface of Ohio, carving away the uppermost layers down to the Devonian layer.

- Permian (290 - 250 mya)
- Pennsylvanian (320 - 286 mya)
- Mississippian (360 - 320 mya)
- Devonian (410 - 360 mya)
- Silurian (440 - 410 mya)
- Ordovician (505 - 440 mya)

