

HUNTING HISTORY

Trilobite!

Ohio Scouts don't have to look far and wide for evidence of ancient life. It's right beneath their feet.



*Above: Taylor Dauterman scans an ordinary-looking rock for extraordinary fossils.
Right: Jared York shows off his find: a trilobite.*



BASIC RULES OF FOSSIL HUNTING

- Check and abide by your state's fossil hunting laws.
- Collect fossils from the surface only.
- Don't use large tools such as shovels. They do too much unnecessary damage. Leave No Trace!
- The fossils that you take – including the rocks in which they are preserved – cannot exceed the size of your hand.
- The fossils you collect are for your enjoyment only. Don't sell them!
- Don't climb any rock walls or outcroppings. This is a fossil hunting trip, not a rock climbing outing.

By Tammy York
Photographs by John R. Fulton Jr.
Illustrations by Kevin Hurley

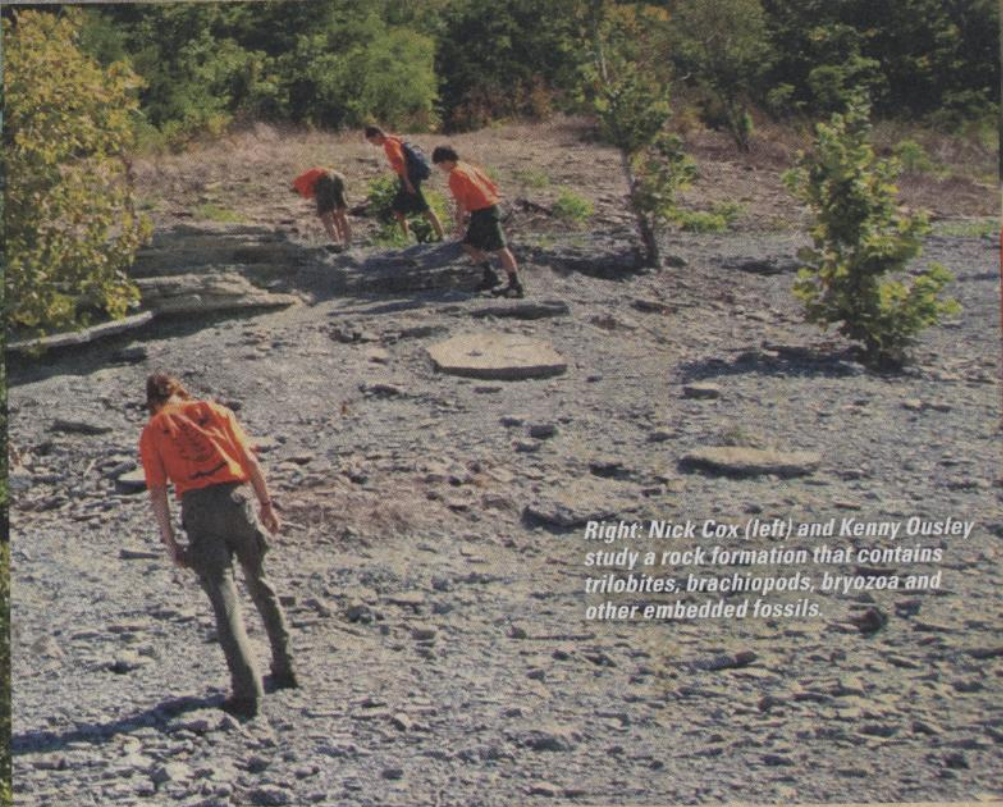
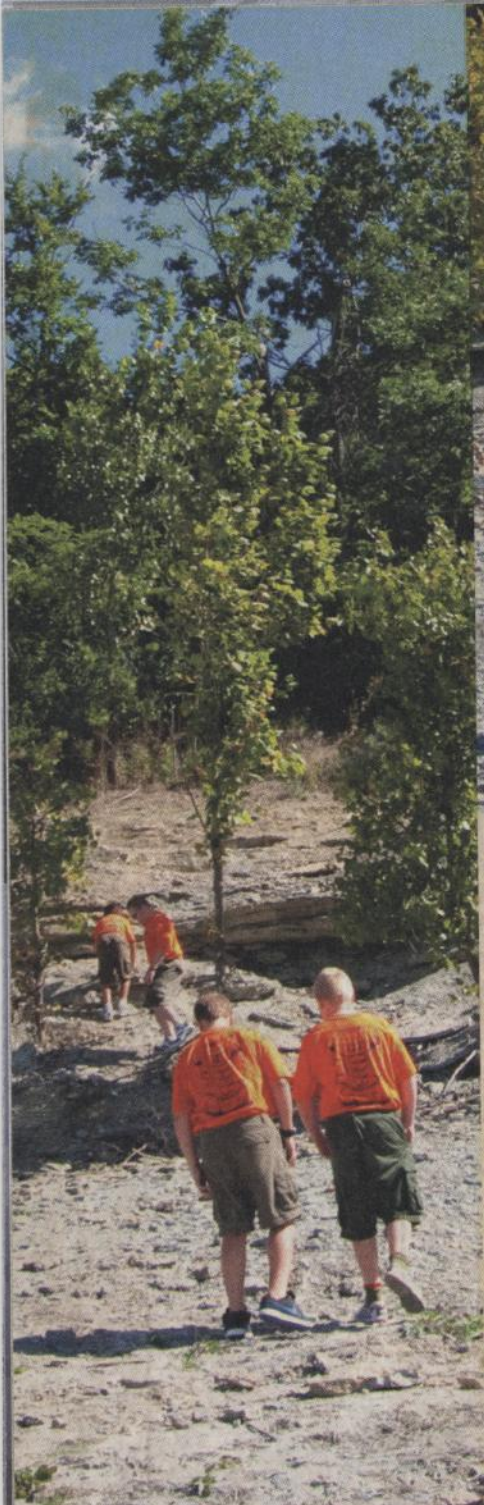


A FEW THOUSAND sea creatures, 440 million years old, are lurking beneath Star Scout Noah Dillinger's feet.

"We're finding huge clumps of fossils—bits and pieces of a coral-like animal," says Noah, 14, pointing to the hillside where his fellow Scouts are hunting for the remains of prehistoric organisms.

"It took me only about two minutes to walk up the hill and find fossils," says First Class Scout Chris Baldasare, 13, as he points to the specimens preserved

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Right: Nick Cox (left) and Kenny Ousley study a rock formation that contains trilobites, brachiopods, bryozoa and other embedded fossils.

in a small, triangular-shaped rock. “This rock has fossils of [twig-like bryozoa] and seashells in it.”

Scouts from Troop 121 in Mansfield, Ohio, journeyed to the world-renowned Cincinnati Arch region to dig up some ancient treasures.

Looks like they hit the jackpot.

The group of 19 Scouts found all kinds of Ordovician fossils at the Trammel Fossil Park in Sharonville, Ohio, just north-east of Cincinnati.

Scientists believe that during the Paleozoic era, the sea level was 600 feet higher than today, and an expansive shallow sea rich in life once covered this section of southwestern Ohio as well as parts of Indiana and Kentucky. Brachiopods, bryozoa, trilobites, crinoids, horn corals, cephalopods and snails used to swim and crawl here.

Perfectly Preserved History

As the sea creatures died, they would sink to the bottom, where their shell remains accumulated, were replaced by minerals and became fossils. During a timeframe known as the Ordovician period (489 to 443 million years ago), hurricane-force storms swept through this region and deposited even more sediment layers, burying sea life that would later become fossils.

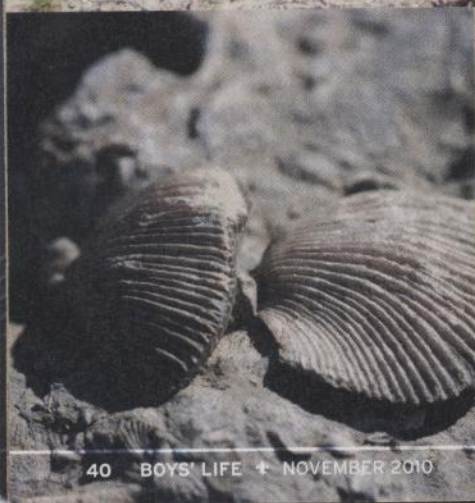
Over the next several million years, the earth’s crust shifted, pushing the ancient ocean floor up and creating a dome-shaped area. When a series of Ice-Age glaciers bulldozed younger rock layers off the top of this dome, millions of perfectly preserved specimens were revealed. This fossil-rich area is now called the Cincinnati Arch.

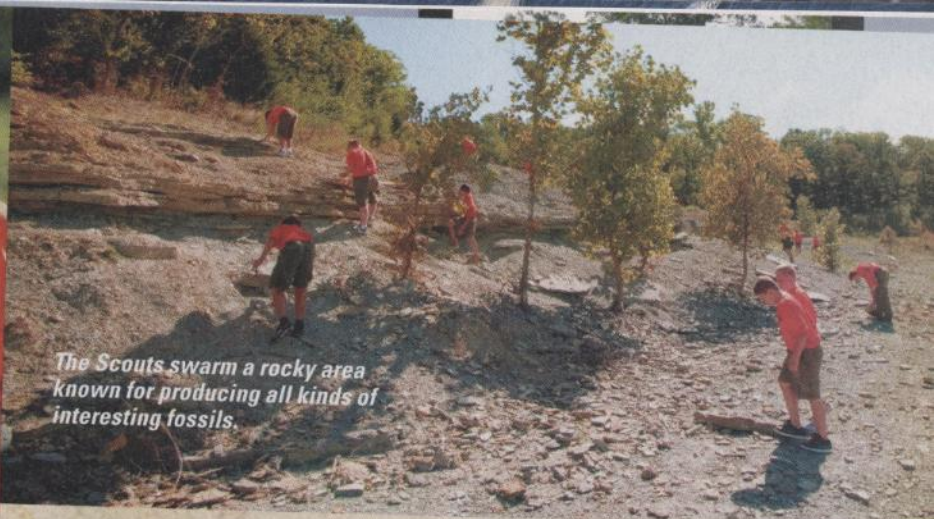
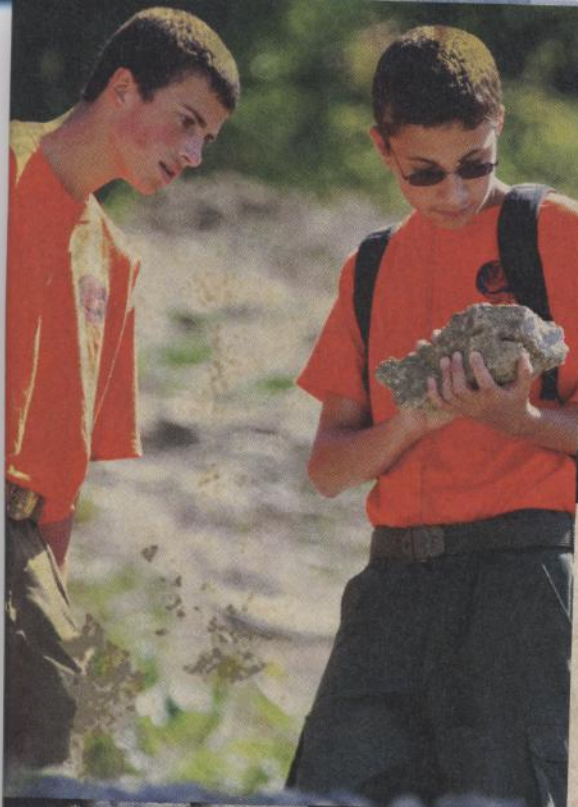
“It’s amazing that over millions of years the fossils are still here,” says 13-year-old First Class Scout Reid Studer.

A representative from the Cincinnati Dry Dredgers, an association of amateur geologists and paleontologists, helped the Scouts on their quest for fossils. Dry Dredger Greg Courtney displayed his collection of fossils so the Scouts would have a better idea of what they were looking for as they scoured the rough, rocky hillside.

The Scouts worked their way across the landscape—some shuffled along looking closely underfoot on the flat areas while others scrambled ahead to the areas with larger shelves of overhanging rocks.

“Sometimes you just see the imprint of the animal,” says Life Scout Ben Cox, 16, as he points out impressions in three different nondescript brown and grey rocks. “The shell isn’t there anymore, but you can see what the animal looked like by the impression it left.”





The Scouts swarm a rocky area known for producing all kinds of interesting fossils.



WHERE YOU CAN FIND FOSSILS

Fossil parks like the one in Cincinnati provide hunters with a centralized location to search for fossils. But you can actually find fossils in almost any location that features sedimentary rocks such as limestone, shale and sandstone.

Look for areas in which the rock has been cut open or exposed, either by natural causes (creeks, hillsides and outcroppings) or man-made causes (road construction and quarries).

The best source of information for fossil hotspots in your area is an expert who has been there and done that. With help from a trusted adult, search the Internet for fossil-collecting and rock-collecting clubs in your area. Go to the library and look for books about fossil collecting in your region.

Go to a local museum, read books and search the Internet for pictures of fossils. They're a lot harder to find if you don't know what you're looking for.

For more information go to boyslife.org/links/drydredgers

FOSSIL HUNTING PACKING LIST

- Safety glasses (You might kick up some dirt and dust, which can be painful if it gets in your eyes.)
- Small flathead screwdriver for prying up fossils
- Fabric bag or resealable plastic bag to hold the fossils
- Film canister or pharmacy pill bottle for delicate fossils
- Newspaper or paper towels for wrapping fossils so they don't scratch each other
- Work gloves
- Magnifying lenses
- Camera
- Drinking water
- Sunscreen
- Basic first-aid kit
- Pencil or pen and small notebook to record where fossils were found

Hands-On Experience

Without the reference materials from the Dry Dredgers, most people would look at these rocks and not even notice a thing. But now that the Scouts are informed fossil hunters, they start seeing things others would miss.

"We found small fossils embedded in the rocks, and shell imprints," says 14-year-old Star Scout Kenny Ousley. "I think it's really cool this area used to be a sea. Plus, it's pretty unique how it all wound up being here."

The Scouts compared their finds while Courtney assisted in fossil identification.

"Here you can see history and touch it," says Noah. "Rather than some building where you go in and just look at the fossils, here you get to hunt for them and keep what you find." ✦

