

## What type of fossils can I find?

Life in the Ordovician Period was diverse, but much different than the ocean today. There were no fish to be seen. The sea floor was rich in invertebrate animals.

- Shells were dominated by brachiopods, a simple bivalve that was anchored to the sea floor and fed on abundant plankton.
- Clams and snails weren't rare, but are often poorly preserved.
- Bryozoans were abundant, resembling branches and small mounds with pin-point size openings where the tiny animals lived.
- Corals are common in certain layers while sponges are rare.
- Trilobite molt fragments are common, but complete specimens are rare.
- Echinoderms like starfish, sea lilies (crinoids) and other (now extinct) forms are generally rare. Circular disks of the crinoid column are most common, typically 2 to 3 mm in diameter.

## What was the top predator?

The top predators were squid-like creatures called cephalopods. They were ancestors to the chambered nautilus, squid and octopus. Their muscular tentacles grabbed anything that moved.



**Treptoceras duseri**

*Treptoceras duseri* looks like a segmented tube. The largest were nearly 3-feet (1-meter) long, most were less than 1-foot (30 cm).



**Cephalopod**

Drawing courtesy of Kentucky Geological Survey

## How old are the fossils around Taylorsville Lake?

The fields, forests, lakes and communities of Spencer County are underlain by rocks from the upper part of a time known as the "Ordovician Period". This was approximately 450 million years ago.

## What type of rocks can I find?

There are two types of sedimentary rock in Spencer County:

**Shale (also called mudstone)** is formed by clay and silt washed in from nearby lands. It's the most widespread rock under Spencer County.

**Limestone** is formed by exoskeletons of creatures and calcium carbonate (CaCO<sub>3</sub>) formed in warm sea water and occurs in thin layers here.



### Visit these other Ohio Valley Fossil Trail locations

#### Indiana

Monroe lake  
Clifty Falls State Park  
Indiana Caverns  
Falls of the Ohio State Park  
Charlestown State Park

#### Ohio

Caesar Creek Lake  
Trammel Fossil Park  
Cincinnati Museum Center

For information on these other sites, visit:  
[www.gosoin.com/ohio-valley-fossil-trail](http://www.gosoin.com/ohio-valley-fossil-trail)

#### Kentucky

Big Bone Lick State Park  
The Parklands of Floyds Fork  
Blue Licks Battlefield State Park



Visit [Taylorsville.com](http://Taylorsville.com)

# DISCOVER FOSSILS IN SPENCER COUNTY

A stop along the Ohio Valley Fossil Trail

The road cuts along the highways in Spencer County attract fossil collectors from around North America.



Begin your prehistoric discoveries at the Taylorsville Army Corps of Engineers' Visitor Center



2825 Overlook Road  
Taylorsville, KY

**502-477-8882**

# FOSSIL IDENTIFICATION GUIDE

## Brachiopods

Kentucky's state fossil, these plankton eaters were the most common shelled animal in Spencer County's rocks. They have bilateral symmetry. There are many types, but these three are the most abundant.



## Bivalves

Ancestors of clams, these bivalves are rarely preserved with shells intact. Most of the time, it's the internal mold, where the mud filled inside as it was buried. They don't have bilateral symmetry.



## Gastropods

Fossil snails don't look much different than those living, except today we have a great variety of shapes. Most are internal molds of shale, but occasionally, the shell is preserved.



## Stromatoporoids (Sponges)

A Primitive hand sponge called a stromatoporoid lived on the sea floor. Some were massive like corals forming mounds over 3-feet (1 meter) across. In Spencer County, *Aulacera* was the most common. It grew long and rounded like a paper towel roll and lived along side Ordovician corals. While many fossil sponges occurred worldwide, *Aulacera* is only found in North America.



## Corals

Horn (rugose) coral is common where the coral beds are found. It often has holes - trace fossils from an unknown organism (called *Trypanites*). Rugose corals became extinct about 250 million years ago.



Tabulate (honeycomb-see below left) corals occur in patch reefs (coral beds). The most common species is *Foerstephyllum vacuum* occurring in coral heads as big as 300 pounds! it is recognizable by the polygonal corallites (chambers that make up the colony).



*Calapoecia huronensis* (see above right) has round corallites and is a smaller coral. Tabulate corals became extinct about 250 million years ago.

## Trace Fossils

Evidence of soft-body creatures that moved over or in the ancient sea floor, or burrowed into other creatures (like horn corals or shells).



## Bryozoans

If you find something that looks like a petrified twig or branch, it's a bryozoan. Look close and you will see tiny polygonal chambers.

These are the most abundant colonial fossils in Spencer County. Bryozoans are still around today, and in fact are in Taylorsville Lake. Freshwater varieties don't form an exoskeleton like those in the sea.



These are among the most difficult fossils to identify to species. They occur in a wide range of forms from encrusting to flat to dome-shaped.

## Trilobites

Some of the most commonly sought fossils, trilobites were mostly scavengers, except for the biggest ones. They shed their exoskeleton as they grew and generally are mostly found in fragments. Look for brown to orange pieces. Sometimes they are confused by broken brachiopods which are usually gray.



## Worms

You might not think soft, squishy worms would be found as fossils, but many worms have a hard exterior tube or jaws. *Cornulites* is a tubeworm. Scolecodonts are annelid worms with shiny black jaws less the 3mm long.

