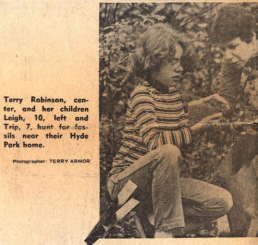


# Rock around the town'

## Cincinnati's hillsides and landslides attract fossil lovers from everywhere



Fossils such as these found in the area make Cincinnati a household word in all the world's museums worthy of the name.



Terry Robinson, center, and her children Leigh, 10, left and Trip, 7, hunt for fossils near their Hyde Park home.

BY MARY LINN WHITE

A landslide — in Clifton, Mt. Adams or Riverside — is a thing of beauty to Richard Davis. The rangy, red-bearded resident authority on fossils at the Cincinnati Museum of Natural History, in this fossil capital of the world, takes busloads of people out just to enjoy the slides in these areas.

"Cincinnati is blessed with classic landslides," explains the geologist with a PhD from the University of Iowa. "I was so sad when they fixed Hillside Avenue. It was a beauty. When they took off the old (paving) material, the asphalt was eight feet thick (indicating a consistent slide over the years).

"From a geologist's point of view, Cincinnati is a nice place to be!" DAVIS IS SO fascinated with hillsides here — and there are more "classic beauties" along I-75 and I-275 where clay has been graded and graded — that he occasionally gives a class called "Rock Around the Town" or "It's a Feast to Build a Street in the Cincinnati Mud."

Cincinnati, "it is fair to say, is famous for the excellence of its fossils," Davis says in his precise, deliberate way. "Cincinnati fossils are in every significant natural history museum in the world." It has the most and best Ordovician (480 million years old) fossils just lying around ready to be picked up, according to Davis.

And many people do just that, rushing into the museum on Gilbert Avenue with "dinosaur teeth" — which are no such thing because no dinosaurs ever lived here. "The rock is too old and the soil too young. The 'teeth' are actually common horn coral.

BUT WHAT YOU can find here, he says, is mammoth (ancient elephant) teeth. Some brought one in just recently. "That's from a much younger period, Pleistocene."

"One fellow brought in what was sure as a petrified unborn lamb. And

from his viewpoint and based on his education, it was a very good guess — but wrong.

"What he'd found was a fossil so big (demonstrating with his hands about eight inches apart) with a bump on each end and what looked to him like little whorls of petrified hair all over it. It was a colonial coral (all in a colony)."

Fossils which look like claws, another form of marine life here long ago, are often brought to Davis for identification.

"What amazes me," the geologist muses, "is to see a chunk of fossiliferous (fossil-bearing) rock and to know that all those creatures (imprinted) in it once lived. I conjure up what the sea floor here must have been. It's hard to believe but there had to be up to 200 feet of sea water here and it had to be salty."

THIS HAS BEEN deduced — detective-like — from the facts that the sea animals contained in the rock here are like contemporary ones surviving in sea water. "One fossil here (crinoid) is like a starfish on a stem with roots. It is a relative to the starfish, sand dollar and sea urchin, which all now are marine."

This area "must have been crawling with creatures!" Davis chortles. The museum has a Diorama illustrating the profusion of underwater life here. Davis found similar abundance of animal life while snorkeling for pearly nautilus (a hand-sized critter in a whorly white shell) in Fiji and New Caledonia.

Davis, the fossil-hunter, isn't so keen on shell collectors who kill the shell-occupant to possess its colorful home. The attitude presupposes that human beings are No. 1 on the planet and that's not Davis' estimation. He is a true egalitarian: a spider is as important as a person to him ecologically.

THIS IS IT THAT he is comfortable about fossil-collecting. He considers it "the cheapest hobby. All you need is an inquiring mind. You don't even need a pick. Then, if a collection is to be more than a cigar box of pretty objects, you have to know about it. You'll want to label your treasures and we're (the Museum) the best place in town to learn about fossils."

His own favorite is the cephalopod, that's Greek for head-foot and it is a sort of octopus, with no body.

"That'll tell people not to be afraid of these complex-sounding names. They're not to scare people off. All creatures are given names and 85 percent of the English we speak comes from Latin or Greek."

DAVIS USUAL approach with children who are asking "how did those things get in there?" is to answer that "they were alive once." And he enjoys watching their eyes widen when he tells



Richard Davis of the Cincinnati Museum of Natural History examines trilobites, found in the Queen City's "classic landslides," textbook examples for geology students.

low it was in Cincinnati 450 million years ago.

"Once you accept that the fossils once lived," he explains, "it follows that they had to behave as living things do today. They had to have ecological needs and you can figure the environment out."

"If you accept that they evolve in some coherent pattern it's possible to form a time framework and date events in the history of the earth using fossils like the hours on a clock."

THE MUSEUM officially encourages fossil hunting as a summer hobby for children. It has programs and field trips on this and other natural history subjects and maintains a shop stocked with excellent reference materials at reasonable prices.

The museum is in the midst of its first membership drive for 100 new members, headed by Mrs. James Anderson and Mrs. Clifford Craig, culminating April 25 with the unveiling of the new dinosaur habitat group. Membership per family is \$15 per year; information: 621-2889.

DAVIS ESTIMATES that there are "thousands of persons with an interest in fossils" in the area, and he enumerates clubs in Middletown, Dayton, as well as the Cincinnati Dry Dredgers which meet at the University of Cincinnati. Olga Kock at 661-6746 is the president of the group. The Cincinnati Mineral Society also has fossil hunters in its membership. Information: Gayle Firman, 635-2323.

The magnitude of fossil-popularity is such, Davis says, that "anyplace there's a rock exposure, you're going to have someone there on the week-end."

## So you want to go on a fossil hunt...

BY TERRY ROBINSON

Special to The Post

How often has a parent heard the pitiful cry: "There's NOTHING to do?"

We've been through "365 Ways to Amuse a Child," "215 Ideas to Keep Children Happy," and "1001 Creative Activities for Your Child" and still, sometimes, there IS nothing to do.

### HOW ABOUT a fossil hunt?

A fossil is the hardened remains or traces of animal or plant life such as a footprint or leaf imprint, a bone, or a shell which has been preserved in the earth's rock formations. Happily, two factors in Cincinnati's geologic past have combined to make this one of the richest areas in the country for fossil hunting.

Geologists tell us about 450 million years ago a warm, shallow sea covered what we now know as Cincinnati. As the water evaporated the aquatic life died, sank to the ocean floor, and became encased in the mud, which eventually hardened to form rock. A gradual uplifting of the earth's surface in our area, the Cincinnati Arch, allowed erosion to expose fossils as much as 450 million years old.

The beauty of a fossil hunt is that it can take place any time and under almost any condition. If a sunny day is ideal, an overcast day is a close second, and what a marvelous excuse for being outdoors in a warm spring rain. My family has even brushed away a light snow cover from a favorite road-cut in search of fossils.

HERE'S HOW YOU can do it, too. The children will love it!

Our first move was to buy a basic fossil book complete with illustrations. I rounded up my two children, aged seven and 10, and announced that they were to dress in

their grubbier clothes and sturdiest shoes for a new adventure. We drove out to a nearby road-cut where the hillside was exposed revealing telltale layers of blue-gray limestone in which many fossils are found. Our tools consisted of a hammer and chisel, which we never used, paper and pencil to record location, and five grocery bags.

My fears of coming home with empty pockets were unfounded. Like McDonald's Farm it was here a fossil, there a fossil, everywhere a fossil. The rocks were brimming with them.

Soon the kids were scrambling up the hillside, shrieking over their finds, delighting in their new discoveries. The seven-year-old in particular was enamored of brachiopods, "lampshells" which range in size from minute to about two inches across. Common also are bryozoans, which look like tufts and branches of various sizes; crinoid stems, parts of the ancient "sea lily" which look like discarded screws; horn corals, which resemble the modern sea anemone; and my favorites, the trilobites, relatives of today's crabs and spiders.

ANY PLACE WHERE a cut has been made into the earth—stream beds, road-cuts, old quarries, railroad beds—is likely to provide good fossil hunting.

After an hour of hunting we went home, dirty and tired, but pleased with our treasures—five shopping bags full! At home one of the children stumbled over the stone steps on the way to the front door and instead of the usual wail, I heard, "Hey, Mom! We have fossils right here in our yard!" There they were, embedded in every square inch of the walkway. They had been there all along.

Uncles, cousins, grandparents, friends, whoever visits and wonders what they can do, the cry goes up: "Let's go fossil hunt. Nothing to do? There are millions of fossils out there just for the hunting."