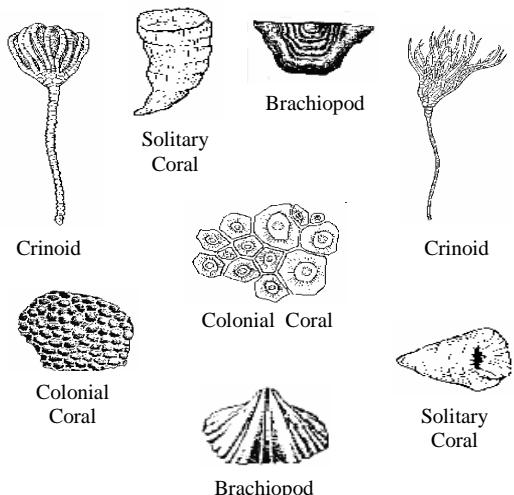


SITE FACTS

The Dam: Completed in 1958 on the Iowa River upstream from Iowa City, this structure was built primarily for flood reduction. The outlet below the dam is designed for a maximum release of 20,000 cubic feet (150,000 gallons) of water per second.

The Flood Of '93: During the summer of 1993, a record flood brought 41,000 cubic feet per second of water into Coralville Lake. The Emergency Spillway just west of the Dam released the excess flow. The overflow lasted 28 days and reached 17,000 cubic feet per second as the Lake level rose 5 feet above the top of the Spillway. The road and campground at the base of the Spillway were washed away together with as much as 17 feet of soil, exposing the Devonian age seafloor beneath.

The Fossils:



Did You Know?

- Iowa was once located near the equator and was covered by warm, shallow seas similar to the Caribbean Sea today.
- Devonian age fossils are almost 200 million years older than the first dinosaurs.
- The Limestone industry contributes over 400 million dollars annually to Iowa's economy.

What Is Devonian Fossil Gorge?

- A unique opportunity to explore a 375 million-year-old seafloor and discover fossil remains of the sea life that once inhabited this tropical marine environment.
- A place to "read" a past chapter of Iowa's diverse geological history and study the depths of geologic time.
- An opportunity to learn about the geologic origins of valuable limestone resources that improve the quality and safety of life in Iowa. Limestone is used in road and building construction, cement and asphalt, agriculture, landscaping, and erosion control.
- An interpretive facility, completed in 2001, made possible by the contributions of over 200 private citizens and organizations, private industry, state and local government agencies, the U.S. Army Corps of Engineers, and Devonian Fossil Gorge, Inc. of Iowa City.

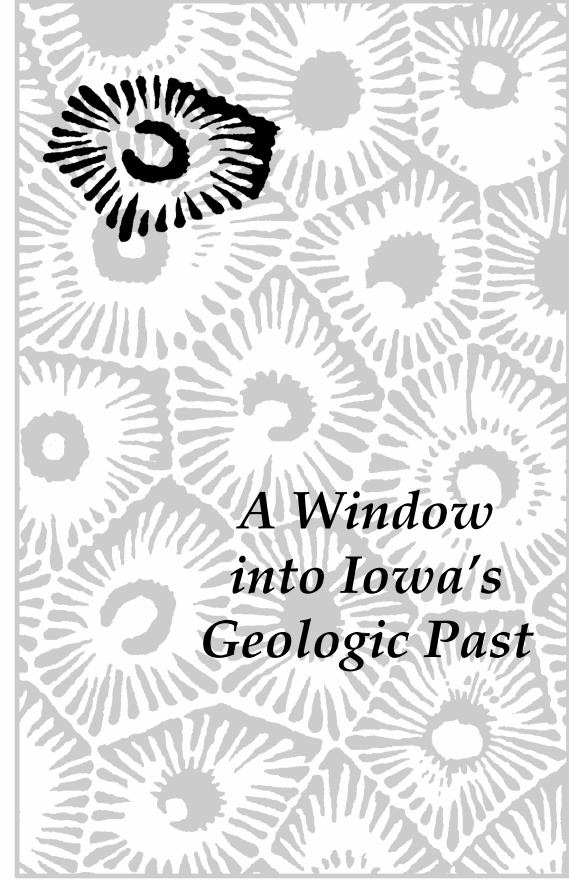
Want More Information?

- To learn more about the geology of this site, stop in at the Corps of Engineers' Visitor Center at the east end of the Dam. Also, visit "Iowa Hall" at the University of Iowa Museum of Natural History, located in Macbride Hall on the Pentacrest in downtown Iowa City.
- If you have further questions about the site or would like to schedule a guided tour, please visit the Corps of Engineers' Visitor Center or call (319) 338-3543.

-Thank You for Your Visit-

Devonian Fossil Gorge
U.S. Army Corps of Engineers
2850 Prairie Du Chien Road NE
Iowa City, IA 52240

Welcome to Devonian Fossil Gorge



Directions: I-80 Exit # 244, North 2.6 miles on Dubuque Street N.E., then East 1.3 miles on West Overlook Road to Coralville Lake and Dam.

Discovery Map



- 1 **Entry Plaza** – A place to find basic information about the Dam, the Flood of '93, and fossils within the Gorge.
- 2 **Quarried Slabs** – Successive slabs along the walkway down into the Gorge are from progressively older layers of the same Devonian limestone exposed in nearby Conklin Quarry.
- 3 **Biostrome Plaza** – A prominent ledge of densely packed fossil corals, sponges, brachiopods, and crinoids forms a life-layer known as a "biostrome". Here the rock is composed almost entirely of fossils.
- 4 **Creviced Bedrock Surface** – Parallel grooves cut into the limestone surface were formed by the dissolving action of groundwater flowing along natural fractures in the rock thousands of years before the Flood of '93.
- 5 **Crinoid Fossils** – Often called "sea lilies", crinoids are actually animals related to star fish. They lived anchored to the Devonian sea floor by flexible segmented stems. A rock slab was sawed from here for publication as a new species, and permanent Museum storage.
- 6 **Arthrodire Site** – A head plate from an 8-ft long armored fish was recovered here and is on display at the Visitor Center.
- 7 **Geologic Faults** – These parallel surfaces mark fractures through the limestone where movement occurred in the geologic past. Note fine grooves marking the direction of vertical rock movement.
- 8 **Brachiopods** – These clam-like fossils, sometimes called "lamp shells", are one of Iowa's most familiar fossils. Look for specimens with two shells hinged together.
- 9 **Crinoids** – Complete crinoid specimens are rare. However, their broken skeletal remains are abundant. Separated stem fragments are sometimes called "Indian beads".

Visitors are encouraged to explore, discover, and learn about the geologic features and fossils of the Devonian Fossil Gorge. The "Discovery Points" listed in the adjoining columns match the numbers on metal markers found along the Gorge. The six-sided (hexagonal) design used on the interpretive elements throughout the site represents the cross-section of an individual animal of the colonial coral *Hexagonaria*, one of the most distinctive fossils found in the Gorge.

- 10 **Limestone Slab** – This slab of rock was torn by floodwaters from near the end of the Spillway. It lodged here and deflected the flow of water, thus protecting a mound of glacial-age sediment from further erosion.
- 11 **Limestone Ledge** – The coarse grains seen in this rock layer and their lens-shaped outline indicate rapid deposition during storms. This is the type of rock commonly used in road and building construction.
- 12 **Floor of Ancient Iowa River** – This smooth, gently undulating rock surface marks a former bed of the Iowa River.
- 13 **Oriented Rock Slabs** – These slabs of limestone can be traced to the end of the Spillway. Layered like shingles, they tilt into the direction of flood flow.
- 14 **Pitted Limestone** – These rounded "pot-holes" were formed by the swirling abrasion of stones kept in motion by currents of the ancestral Iowa River. The "pot-holes" were later enlarged and joined by groundwater dissolution.
- 15 **Geologic Contact** – Note the boundary between two Devonian-age rock units: the (older) coarse-grained limestone below (Solon) and the fine-grained limestone above (Rapid).
- 16 **Wetland** – A habitat for wetland plants is developing in the lower portion of the Gorge.
- 17 **Overlook Plaza** – See the big picture, from the downstream wetland area to the upstream bedrock surfaces.
- 18 **Biostrome Revisited** – This is the upper surface of the original continuous biostrome that is exposed in vertical section across the road at marker #3.
- 19 **Spillway Area Biostrome** – Here the upper coral-rich zone is underlain by beds of other fossils, including brachiopods and bryozoans ("moss animals") and branching corals.
- 20 **Highwater Mark** – The blue and white sign at the top of the Spillway marks the highest point reached by the Flood of 1993.