ARCHBALD POTHOLE STATE PARK

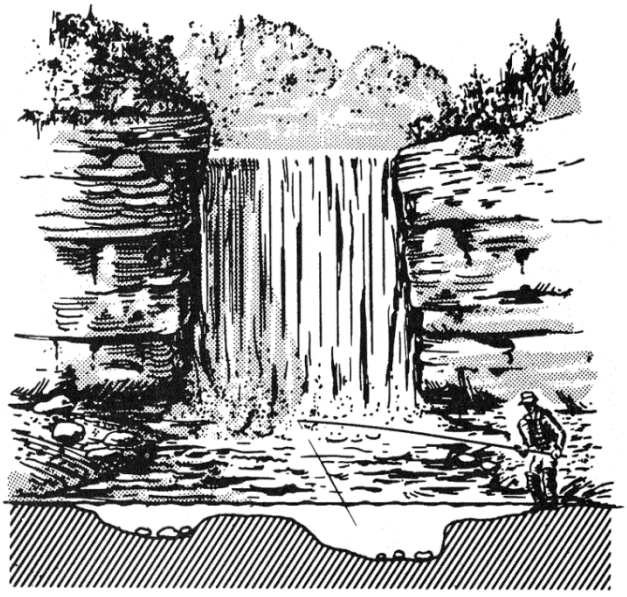
ARCHBALD POTHOLE

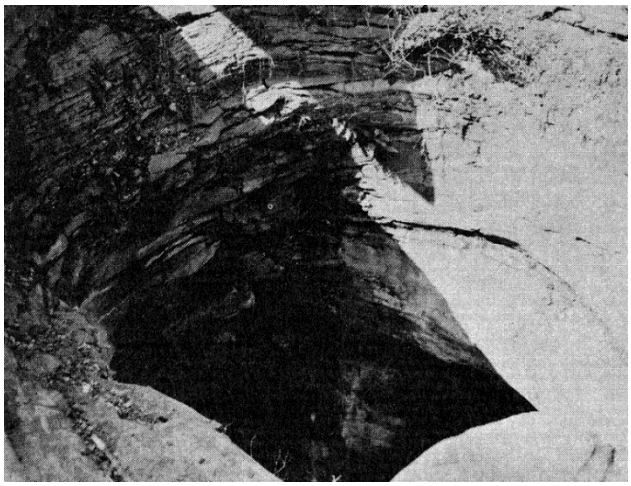
The World's Largest—Discovered 1884

Not to be outdone by Texas, Alaska, or others, Pennsylvania lays claim to the largest pothole in the world—38 feet deep, largest diameter 42 feet, shortest diameter 24 feet. The diameter decreases downward and at the bottom it measures 14 feet by 17 feet. The hole is not vertical but is inclined slightly to the west. Fortunately, this hole has been preserved high and dry instead of being a real hazard to fishermen and others in an active stream bed.

Potholes are a common feature in the bedrock of many streams in Pennsylvania, as well as elsewhere in the world. Many fishermen can attest to near drownings, or at least a good soaking, as they stepped into footsized holes near the base of waterfalls or in the rapids of a fast-moving, excellent fishing stream.

The Archbald Pothole was discovered in February of 1884 by coal miners working in



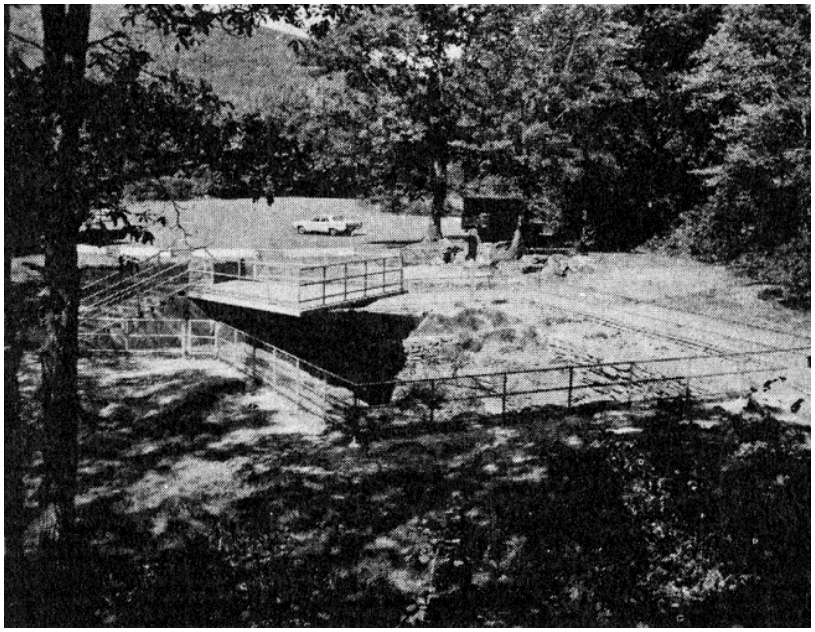


the area. The miners encountered a mass of rounded stones weighing from 1 to 6 pounds each, making a barrier across the face of the workings and extending down to within a foot of the bottom of the coal bed. The miners worked around the barrier leaving an oval pillar of rounded stones. They began to remove the barrier and discovered that the mass of cobbles extended through the rock to the surface 40 feet above. After the pillar of cobbles was excavated the form of a pothole became apparent.

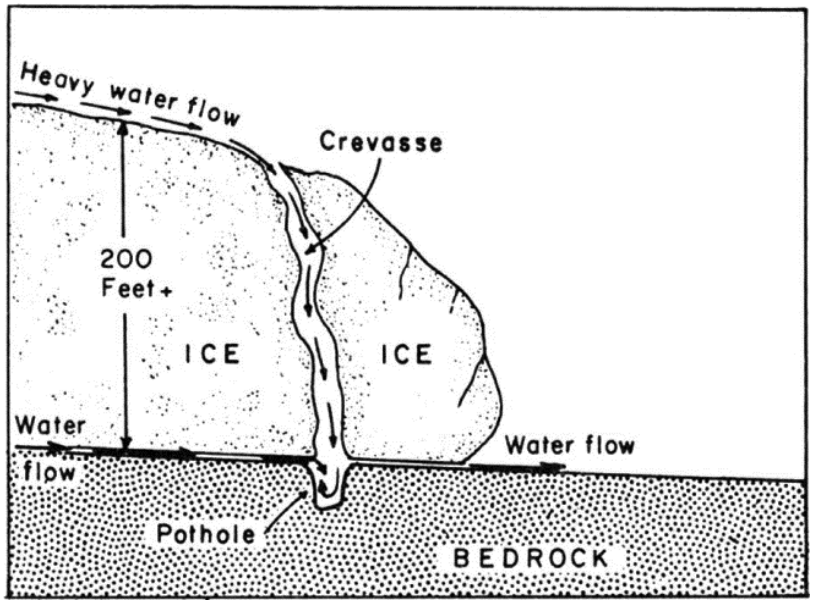
Since the discovery of the pothole, many professional and civic groups, as well as individuals, have worked on preserving this unique geologic feature. The Archbald Pothole State Park was formally opened to the public in 1961.

A pothole is a circular hole usually deeper than wide, which is worn into the bedrock of a stream at the base of waterfalls or in strong rapids. The hole is formed by the grinding action of sand, gravel, and rock fragments as they are spun violently by the force of the water as it falls onto or flows over the rock surface. Potholes may also be formed under

or near the edge of glaciers by the action of meltwater plunging down a crevasse (deep break in ice) or off the end of the glacier.

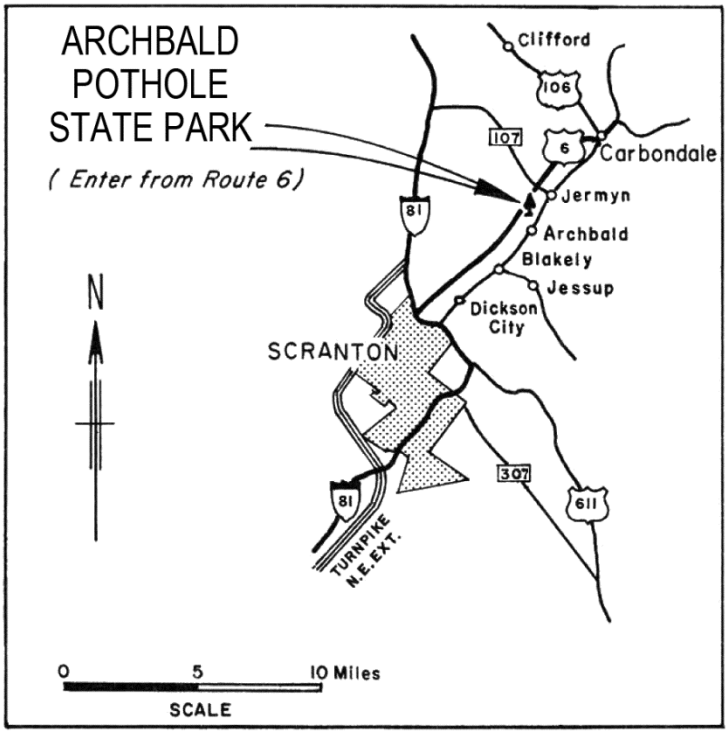


It is likely that the Archbald Pothole was formed by glacial stream action since there is no evidence of an origin by water falling on any portion of the present land surface. A surface stream flowing on a glacier probably broke through a crevasse in the ice of the glacier and fell to the bedrock located hundreds of feet below. Enough force would have been generated by the falling water to begin a whirling motion of rock fragments in an already existing small depression in the rock surface. As the rock fragments swirled and bumped each other and ground up the bedrock, they became smaller and smaller and the depression became deeper and larger. As time progressed, new rock fragments tumbled into the hole, enabling the grinding process to continue.



The Archbald Pothole cut through sandstone, shale, and coal in that order from top to bottom. The surface of the gray shale is particularly smooth and polished and shows a typical, well-rounded undulating surface. This feature is especially noticeable in the lower half of the northern side of the pothole. The southern and western sides of the hole are nearly vertical. The thin-bedded, sandy rock near the top of the hole tends to break up more rapidly than the tough shale below. The top of the pothole is considerably wider and terraced because of the loss of rock from the thin, sandy zones. Thus, the Archbald Pothole has remained virtually undisturbed since it was formed over 15,000 years ago.

—William G. McGlade, Geologist
Pennsylvania Geological Survey
1969



LOCATION MAP

Archbald Pothole State Park
U.S. Business Route 6
Archbald, PA 18403
Phone: 570–945–3239

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