OUTSTANDING GEOLOGIC FEATURE OF PENNSYLVANIA

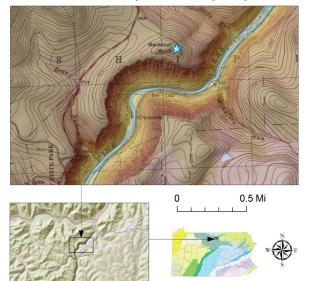
BARBOUR ROCK, TIOGA COUNTY

Stuart O. Reese, 2016



Location

Barbour Rock, Tioga State Forest, Tioga County, Shippen Twp., lat: 41.7202, lon: -77.4506; Tiadaghton 7.5-minute quadrangle



Geology

From Barbour Rock, the visitor enjoys a spectacular view of <u>Pine Creek Gorge</u>—otherwise known as the "Pennsylvania Grand Canyon." The gorge depth here is over 850 feet, and the distance from rim to rim reaches 2,000 feet. The site was named after Samuel Barbour, a logger who died in the 1890s on the river below during a log jam at the Owassee Rapids.

Barbour Rock is an outcrop of gray, crossbedded sandstone of the Catskill Formation. Crossbedding in rocks can develop when, for example, sand migrates as a dune or sand wave across the bed of a stream and builds out sloped layers relative to the main bed layer. Crossbeds can be clues to the original current direction of deposition. The Catskill Formation formed during the Late Devonian, about 370 million years ago.

The Barbour Rock vista can be accessed from the mile-long Barbour Rock Trail off of Colton Road in Tioga State Forest. There is also a handicap-accessible trail to the overlook.



Catskill Formation sandstone crops out along the cliff across the gorge. Photograph by Peter Reynier, Pennsylvania Geological Survey intern.



View looking southwest over Pine Creek. Photograph by Peter Reynier.

Recommended Reading

McGlade, W. G., 1971, Leonard Harrison and Colton Point State Parks—The Grand Canyon of Pennsylvania: Pennsylvania Geological Survey, 4th ser., <u>Trail of Geology 16–005.0</u>, 4 p.

Colton Point State Park web page of DCNR.

<u>Leonard Harrison State Park</u> web page of DCNR.

Tioga State Forest web page of DCNR.



