

OUTSTANDING GEOLOGIC FEATURE OF PENNSYLVANIA

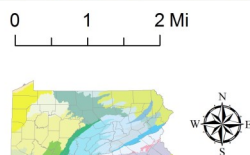
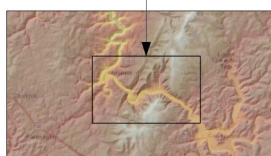
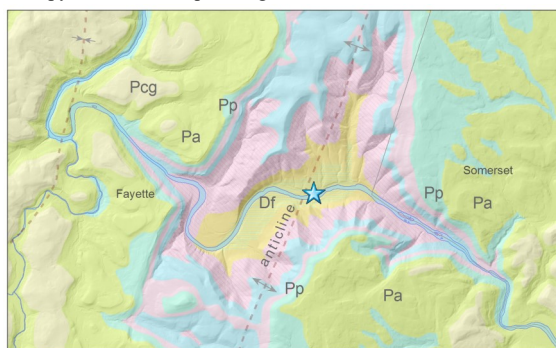
OHIOPILE GORGE, FAYETTE COUNTY

Stuart O. Reese, 2016



Location

Ohiopyle State Park, Fayette Co., Ohiopyle, lat: 39.85, lon: -79.45;
Ohiopyle 7.5-minute quadrangle



View of the gorge at Ohiopyle State Park. Photograph by Jim Shaulis, Pennsylvania Geological Survey.

Geology

The Youghiogheny River crosses Laurel Hill in a deep, winding gorge through Ohiopyle State Park. Like the Conemaugh River about 45 miles to the northeast, the Youghiogheny River has eroded through nearly flat-lying sandstones, siltstones, and shales at the crest of an anticline (upfold) to form a magnificent gorge, one of the deepest in Pennsylvania. Unlike the Conemaugh River, which cuts a fairly straight line across the ridge, the Youghiogheny River bends and winds its way through the ridge. This is likely a result of inherent, intersecting patterns of weakness in the rock. The water has followed the least resistant path as it erodes headward through Laurel Hill.

The rock exposures and the landscape of the gorge reveal a geologic history of sedimentation, deformation, and erosion that is typical of the Allegheny Mountain section of the Appalachian Plateaus province. The highest rocks in the park are Pennsylvanian in age: the Allegheny (Pa) and Glenshaw (Pcg) Formations. Massive sandstones of the Pottsville Formation (Pp) form the sharp rim of the gorge near the top, and progressively older rocks are exposed toward the center of the gorge, where the sandstones and siltstones of the Devonian Foreknobs Formation (Df) lie at the core of the anticline.



The Youghiogheny River near [Victoria Bend](#). The gorge opens up slightly in this area. Photograph by Jim Shaulis.

Recommended Reading

Bushnell, Kent, 1971, Ohiopyle State Park—Geologic features of interest: Pennsylvania Geological Survey, 4th ser., [Trail of Geology 16-007.0](#), 3 p.

[Ohiopyle State Park](#) web page of DCNR.