

OUTSTANDING GEOLOGIC FEATURE OF PENNSYLVANIA

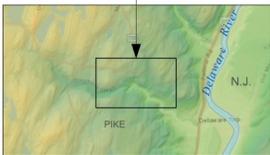
DINGMANS AND SILVERTHREAD FALLS, PIKE COUNTY



Stuart O. Reese, 2016

Location

Delaware Water Gap National Recreation Area, Dingmans Falls Visitor Center, Pike Co., Delaware Twp., lat: 41.22937, lon: -74.88732 (parking); Lake Maskenzoha 7.5-minute quadrangle

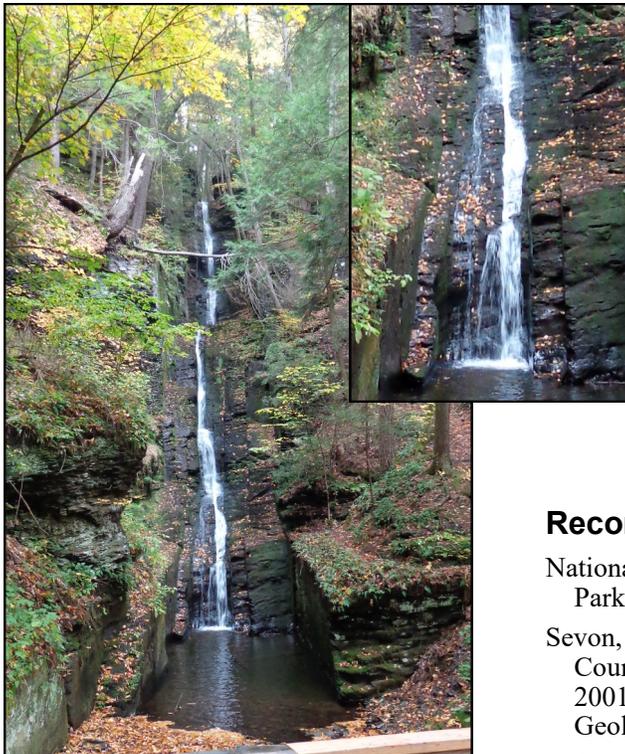


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Geology

Dingmans Falls, on Dingmans Creek, and Silverthread Falls, on a tributary, are two spectacular waterfalls within a quarter mile of each other. Both falls spill over flat-lying siltstone of the Mahantango Formation (Middle Devonian age, approximately 390 million years old), but their appearances are very different. Dingmans Falls is a much wider waterfall that formed during several glacial episodes, which ended about 20,000 years ago. Postglacial rushes of high-volume meltwater created multiple notches in the bedrock face of the falls, and two stages of notching may be seen in its upper part. Early glaciation may have diverted part of the creek above the current falls into a former tributary. Silverthread Falls has a much smaller volume of flow, draining less than a square mile. It is in a steep, narrow channel constrained by prominent joint faces. The northeast-trending joints funnel the water and limit the width and path of the falls, shaping a thin silver thread of water as it cascades over the rocks.



Looking at Dingmans Falls from the boardwalk. Note the limited and widely spaced jointing. Dingmans Creek drains about 14 square miles.

Recommended Reading

National Park Service, 2010, [Trail guide to Dingmans Falls ravine](#), National Park Service, 1 p.

Sevon, W. D., and Inners, J. D., 2001, The falls on Dingmans Creek, Pike County, northeastern Pennsylvania, *in* Inners, J. D., and Fleeger, G. M., eds., 2001—a Delaware River odyssey: Annual Field Conference of Pennsylvania Geologists, 66th, Shawnee-on-Delaware, Pa., [Guidebook](#), p. 136–145.

[Delaware Water Gap Visitor Centers](#) web page of the National Park Service.

Silverthread Falls follows the conspicuous, closely spaced, vertical joints oriented to the northeast.

Published by the [Pennsylvania Geological Survey](#).

