OUTSTANDING GEOLOGIC FEATURE OF PENNSYLVANIA

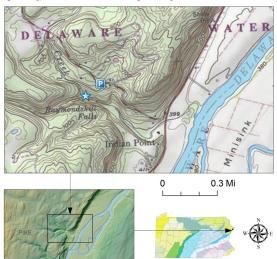
RAYMONDSKILL FALLS, PIKE COUNTY

Stuart O. Reese, 2016



Location

Raymondskill Rd., Delaware Water Gap National Recreation Area, Pike Co., Dingman Twp., lat: 41.29021, lon: -74.84112 (parking); Milford 7.5-minute quadrangle



Upper falls 547 Middle falls Lower falls 421

Elevation contours along Raymondskill Creek. Blue shows the trace of the stream through the falls; contour interval is 10 feet. Above the falls, Raymondskill Creek occupies a small gorge in the Mahantango Formation.

Geology

Raymondskill Falls are three successive waterfalls that together make one of the highest falls in Pennsylvania. Raymondskill Creek drops about 126 feet over a distance of 250 feet of stream channel. Water flows over nearly flat-lying beds of Mahantango Formation sandstones and interbedded shales and siltstones. The creek is a tributary of the Delaware River. The falls formed as a result of three episodes of Pleistocene glaciers moving southward into northern Pennsylvania, deepening the Delaware River valley and leaving Raymondskill Creek hanging on the valley wall above the river. Through cycles of glaciation and postglacial meltwater surges, headward erosion moved the waterfalls from the river to their present location. The upper and middle falls were at one time combined, developing a large plunge pool at the base of the middle falls.





Top: View of Mahantango sandstone at the top of the upper falls, which begins on the left side of the photograph. A plunge pool and small falls are seen on the right side. Bottom left: View of the middle and upper falls of Raymondskill. Bottom right: Lower falls and small accompanying falls known as Bridal Veil, which originates from a tributary. Photographs by Stuart Reese, Pennsylvania Geological Survey (PGS), and Kevin Tarbert and Peter Reynier, PGS interns.

Recommended Reading

Witte, R. W., Monteverde, D. H., and Ferrence, Jeanine, 2001, Stop 12, Raymondskill Falls—Mahantango Formation, origin of water falls, and plant ecology of the gorge, *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., <u>Guidebook</u>, p. 271–283. [Full online guidebook consists of two files.]

<u>Delaware Water Gap</u> web page of the National Park Service.



