

OUTSTANDING GEOLOGIC FEATURE OF PENNSYLVANIA

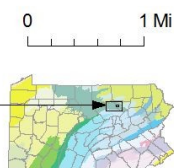
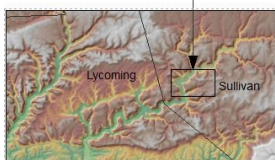
HIGH KNOB OVERLOOK, SULLIVAN COUNTY

Stuart O. Reese, 2016



Location

1860 High Knob Rd., Muncy Valley, Pa., Loyalsock State Forest, Sullivan County, Hillsgrove Twp., lat: 41.44378, lon: -76.67861; Hillsgrove 7.5-minute quadrangle



Geology

High Knob Overlook, at nearly 2,000-foot elevation, provides an outstanding view of the rugged terrain of the Deep Valleys section of the Appalachian Plateaus physiographic province. The bedrock in the area is basically flat lying. The sandstone and siltstone of the Mauch Chunk Formation (Mississippian age) underlie the overlook point. Below the Mauch Chunk are the Burgoon Sandstone and Huntley Mountain Formation, both of which comprise most of the slopes that can be seen. The floor of Loyalsock Valley to the west is underlain by Catskill Formation red and gray shale, siltstone, and sandstone. These four units account for most of the bedrock of the terrain that is visible from the overlook. Sandstone and conglomerate of the Pottsville Formation (Pennsylvanian age) underlie the highest elevations of the area to the north and east. Ice advanced across the entire area in a south-southwest direction during the Wisconsin glacialiation about 20,000 years ago and deposited varying thicknesses of glacial till (a poorly sorted mix of rocks and sediment with a wide range of particle sizes). As the glaciers melted, glacial outwash deposits were added to the valleys. Later, streams added alluvium over much of the till and outwash in the valleys.



View looking to the southwest over Loyalsock Creek valley in the Deep Valleys physiographic section. The relief of the area is approximately 1,200 feet. Most of the terrain in the foreground is underlain by Burgoon Sandstone. The flatter area to the left is covered by glacial till, which is up to 30 feet thick. For some of the tributary valleys to Loyalsock Creek, glacial deposits are more than 100 feet thick. Photograph by Kevin Tarbert, Pennsylvania Geological Survey intern.

Recommended Reading

Braun, D. D., 2005, Surficial geology of the Hillsgrove 7.5-minute quadrangle, Sullivan and Lycoming Counties, Pennsylvania: Pennsylvania Geological Survey, 4th ser., [Open-File Report OFSM 05-01.0](#), 15 p., 1 map, scale 1:24,000.

Royer, D. W., 1980, Worlds End State Park, Sullivan County—Geologic features of interest: Pennsylvania Geological Survey, 4th ser., [Trail of Geology 16-012.0](#), 6 p.

[Loyalsock State Forest](#) web page of DCNR.