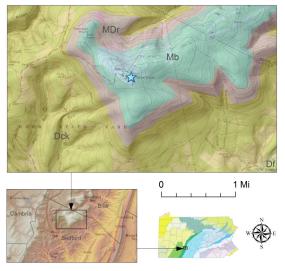
OUTSTANDING GEOLOGIC FEATURE OF PENNSYLVANIA BLUE KNOB, BEDFORD COUNTY

Stuart O. Reese, 2016



Location

Blue Knob State Park, Bedford Co., Pavia Twp., lat: 40.2886, lon: -78.5616; Blue Knob 7.5-minute quadrangle



Geology

Blue Knob Mountain is the second highest location in Pennsylvania at an elevation of 3,146 feet, just 67 feet less than Mt. Davis. It is located in Bedford County in the Allegheny Front section of the Appalachian Plateaus physiographic province. Topographic relief around the mountain to the south and east is typically over 1,500 feet within about 2 miles. The area of Blue Knob is a promontory of the Allegheny Front to the southeast because of localized folding in the rocks along the front.

The Burgoon Sandstone (Mb) underlies the top of the mountain and the ridge to the northeast. Just beneath, the Rockwell Formation (MDr) is also predominantly sandstone. These rocks are relatively more resistant than the Catskill Formation (Dck) underneath, and have steeper slopes along Blue Knob. The Catskill Formation, with its cyclic sandstone to shale sequences (upward), is mostly comprised of finer grained rocks. Thus, the slopes are less steep.

Like Mt. Davis, Blue Knob is also relatively flat topped. Explanations for such flat summits have pointed to slow weathering of resistant rocks under very cold, near-glacial conditions during the Pleistocene. The rocks are also gently inclined. The Appalachian Plateaus have been weathering since the end of the Alleghanian mountainbuilding event about 250 million years ago. Since that time, erosion has been the dominant force across the region, with glaciation occurring in northern Pennsylvania from 2 million years to about 20,000 years ago.



View from Blue Knob to the northeast. Photograph by Peter Reynier, Pennsylvania Geological Survey intern.

Recommended Reading

Blue Knob State Park web page of DCNR.



