## Cow Knob Salamander

## Potential Impact of the Atlantic Coast Pipeline

he Cow Knob Salamander (Plethodon punctatus) is a woodland salamander found primarily on Shenandoah Mountain in Virginia and West Virginia between 2,400 and 4,300 feet in elevation. The Cow Knob salamander is listed as:

- "Species At Risk" by the U.S. Fish and Wildlife Service;
- "Species of Special Concern" in Virginia and West Virginia;
- "Near Threatened" on International Union for Conservation of Nature's Redlist.

Nearly the entire range of the Cow Knob Salamander lies within the George Washington National Forest (GWNF). These endemic salamanders are a source of regional pride and are a part of some of the most amazing biodiversity found anywhere.

This species is terrestrial and is usually found living in rocky outcrops that occur in moist areas. It is threatened by logging, roadbuilding, forest fragmentation, and deforestation.

In 1994, the U.S. Fish and Wildlife Service and the GWNF entered into a Conservation Agreement to keep this at-risk species from needing to be listed under the Endangered Species Act. This Conservation Agreement established the Shenandoah Mountain Crest Conservation Area with written guidelines that protect habitat for the Cow Knob Salamander along with 28 other at risk species of plants and animals. According to the 2014 GWNF forest management plan, the Conservation Area is unsuitable for designation of new utility corridors unless there is an over-riding demonstrated public

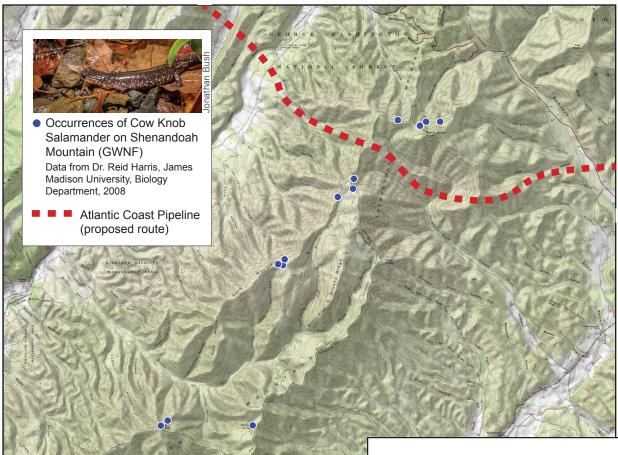
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Cow Knob Salamander (above right) and Cow Knob Salamander habitat on Shenandoah Mountain in the vicinity of the proposed pipeline route (right).



Steven David Johnsor

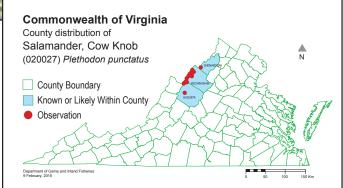


need or benefit. No new roads may be constructed in Cow Knob Salamander habitat. If Cow Knob salamanders are found in areas outside the boundaries of the Shenandoah Mountain Crest Management Area, those areas will be subject to the same management measures.

The proposed Atlantic Coast Pipeline passes through Cow Knob Salamander habitat about 10 miles south of the Shenandoah Mountain Crest Conservation Area. Numerous occurrences of Cow Knob Salamander were documented on Shenandoah Mountain south of Rt. 250 in 2008, by Dr. Reid Harris, Professor of Biology, James Madison University. These occurrences, shown on the map above are in close proximity to the proposed pipeline.

Eastern Mennonite University students photographed Cow Knob Salamanders in the Signal Corps Knob area of Shenandoah Mountain, within the vicinity of the pipeline route in October 2014, providing evidence that healthy populations are present.

If built, the Atlantic Coast Pipeline would bisect an area with known populations of Cow Knob Salamander, creating an uncrossable barrier that would isolate populations and cut off genetic exchange. Habitat fragmentation and deforestation from construction and maintenance of a permanent pipeline corridor would further endanger this sensitive species, found nowhere else on earth.





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