

Species: Timber Rattlesnake (*Crotalus horridus*)

Global Rank: G4

State Rank: S3S4

State Wildlife Action Plan: Immediate Concern Species - Responsibility Species

Climate Change Vulnerability: Not Vulnerable/Presumed Stable

Confidence: Very High

Habitat:

Timber rattlesnakes inhabit mountainous or hilly deciduous or mixed deciduous-coniferous forests, often with rocky outcroppings, steep ledges, and rock slides (Peterson and Fritsch 1986; Brown 1993; NatureServe 2010). Hibernacula are typically located in rocky areas where underground crevices provide shelter for overwintering. The historical range of the species extends from central New England southward to the Florida panhandle and westward through the eastern third of Texas. In the west, their range extends north through eastern Oklahoma, Kansas, and Nebraska and terminates in extreme eastern Minnesota. The species is absent from most of the Great Lakes states. In Pennsylvania, the range of the timber rattlesnake extends throughout the Ridge and Valley Province, the Laurel Highlands, and the more mountainous regions of the Allegheny Plateau (Hulse et al. 2001).

Current Threats:

Primary threats to the species include loss of habitat, habitat fragmentation and isolation of populations, and direct mortality caused by human persecution of the species and vehicles (NatureServe 2010).

Main Factors Contributing to Vulnerability Rank:

Although the timber rattlesnake may encounter anthropogenic barriers while trying to shift its range in response to climate change and occupies a rather specific habitat type within its range, the CCVI score of Not Vulnerable/Presumed Stable indicates that available evidence does not suggest that abundance and/or range extent within Pennsylvania will change substantially by 2050. The species may be less affected by climate change in the near future (2050) due to several life history characteristics such as the ability to physically move to new locations, more general dietary requirements (i.e., a variety of small mammals), and little dependence on specific moisture requirements during the spring and summer months. However, additional stressors that may affect the species are not considered in the CCVI and should be evaluated when planning conservation related activities.

References:

Brown, W.S. 1993. Biology, status, and management of the timber rattlesnake (*Crotalus horridus*): a guide for conservation. SSAR Herp. Circ. No. 22. vi + 78 pp.

Hulse, A.C., C.J. McCoy, and E. Censky. 2001. Amphibians and reptiles of Pennsylvania and the Northeast. Comstock Publishing Associates, Cornell University Press, Ithaca. 419 pp.

NatureServe. 2010. NatureServe central Databases. Arlington, Virginia. USA.

Petersen, R.C., and R.W. Fritsch, II. 1986. Connecticut's Venomous Snakes: The Timber Rattlesnake and Northern Copperhead. Second Edition. State Geol. Natural History Survey. Connecticut Bulletin 111: 48 pp.