

Species: Timber Rattlesnake (*Crotalus horridus*)

Global Rank: G4

State Rank: S3S4

State Wildlife Action Plan: Species of Immediate Concern, and Pennsylvania
Responsibility Species

Climate Change Vulnerability: Not Vulnerable/Increase Likely

Confidence: Moderate

Habitat (adapted from NatureServe 2010):

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). Hibernacula are typically located in rocky areas where underground crevices provide shelter for overwintering.

Threats (adapted from NatureServe 2010):

Primary threats to the species include: loss of habitat, habitat fragmentation and isolation of populations, and direct mortality caused by humans and vehicles.

Main Factors Contributing to Vulnerability Rank:

Although the timber rattlesnake may be potentially at risk due to land used meant to mitigate climate change (specifically wind turbines on ridges and associated transmission lines), may be sensitive to changes in hydrology due to their need for stable groundwater in hibernacula, are currently known from sites with a narrow physical habitat type, and are somewhat philopatric which could make them more vulnerable than other species that readily disperse/migrate, the CCVI suggests that the abundance and/or range extent within Pennsylvania is likely to increase by 2050.

Literature Cited:

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.

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.