

# Mudpuppy (*Necturus maculosus*)

*Pennsylvania Amphibian Species of Concern*  
State Rank: S3S4 (vulnerable), Global Rank: G5 (secure)

## Description

The mudpuppy is a large salamander that averages 8–13 inches in length. The head is flattened, the eyes are small and bushy gills are evident on either side of the head. Mudpuppies belong to a family of salamanders that retain external gills as adults. The body is gray-brown in color with dark blotches across the back.

## Habitat and Natural History

The habitat of the mudpuppy is variable and includes lakes, ponds, and canals, as well as fast flowing streams and rivers. Found only in the western third of the state, mudpuppies are absent from the Delaware, Potomac, and Susquehanna drainages. They hide under rocks and logs during the day, and at night, forage and feed opportunistically on aquatic insects, mollusks, crustaceans, small fish and other salamanders. They in turn are prey for hellbenders, fish, snapping turtles, herons and crayfish.

The mudpuppy reaches sexual maturity at about 5 years of age and may live for nearly 30 years. Breeding takes place in the fall and nesting occurs the following spring. The female excavates a depression under a log or rock and deposits eggs on the underside of these overhanging structures. She tends the eggs until they hatch some two months later. The young, which have alternating yellow and brown stripes, remain in the nest another six to 8 weeks until they have absorbed their attached yolk sac. Juveniles tend to favor pools with silt and organic debris or a rocky retreat not already occupied by an adult salamander or fish. Mudpuppies are active year round.

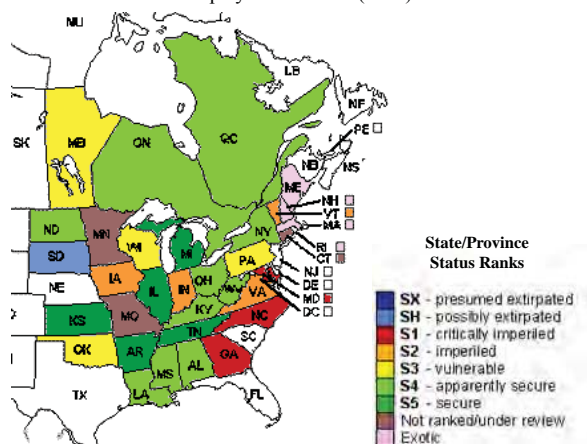


Charlie Eichelberger (PNHP)

Occasionally caught by fishermen, the mudpuppy is completely harmless to humans, and serves an important role in the ecology of Pennsylvania's waterways.

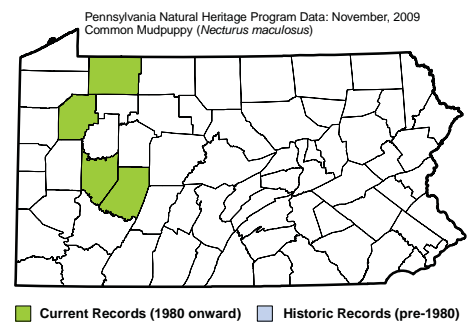
## North American State/Province Conservation Status

Map by NatureServe (2009)



## Conservation Status

While the mudpuppy occurs throughout much of eastern North America, it was recently added to the watch list in Pennsylvania. The Pennsylvania distribution map reflects the fact that this species is newly tracked. As additional data is collected, the distribution map will be updated. The fate of another Pennsylvania species of concern is closely tied to that of the mudpuppy. The mudpuppy serves as the only known host for the larva of the threatened salamander mussel, *Simpsonia ambigua*.



## References

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