

Apr 17, 2019 By Marcus Schneck

The eastern hellbender – an aquatic salamander that can grow to more than 2 feet in length – is one signature away from becoming Pennsylvania's official amphibian.

The Pennsylvania House of Representatives on Tuesday approved Senate Bill 9, which passed the Pennsylvania Senate in early February, and sent it to Gov. Tom Wolf for his signature to become law.

The designation as an official symbol of Pennsylvania brings no additional protections for America's largest salamander, which earlier this month was denied listing under the federal Endangered Species Actby the U.S. Fish and Wildlife Service.

The Center for Biological Diversity had petitioned the USFWS to protect the eastern hellbender under the ESA in 2010, and had pursued court action to two settlements in which the agency agreed to expedite protections.

Hellbender moves toward official status in Pennsylvania, but feds deny protection



This undated photo provided by Peter Petokas, a research associate at the Clean Water Institute of Lycoming College's biology department, shows an adult Eastern hell-bender, an aquatic salamander that can grow up to two feet long, making them the largest North American amphibian according to the Center for Biological Diversity. (Peter Petokas via AP)

But the USFWS instead proposed protection for the Ozark hellbender, a subspecies that occurs only in Missouri and Arkansas.

In announcing that it would not propose the eastern hellbender, the USFWS said a status review of the species "determined that most populations of the eastern hellbender are not in danger of extinction and do not warrant listing under the Endangered Species Act. However, the eastern hellbender population in Missouri is a distinct population segment and the Service is proposing to list this DPS as endangered." According to the USFWS, the status assessment found that about 61 percent of the species' historic populations remain, all of which are associated with large river drainages.

Elise Bennett, a Center for Biological Diversity attorney working to protect reptiles and amphibians, said the decision "flagrantly ignores the reality of the hellbender's diresituation and gives these imperiled animals a big shove toward extinction."

She disputed the USFWS finding of 61 percent and instead claimed that 78 percent of historically known hellbender populations have disappeared or are in decline. They face threats from chemical pollution and sedimentation caused by development, deforestation and dams.

The hellbender is particularly vulnerable to water contamination because of its permeable skin and sensitive eggs, which it lays in water.

Disease can also cause catastrophic loss of hellbenders. Emerging infectious diseases are on the rise, particularly among salamander populations, and hellbenders are showing symptoms of fungal infection across their range.

In addition to Pennsylvania, eastern hell-benders are found across 14 other states: northeastern Mississippi, northern Alabama, northern Georgia, Tennessee, western North Carolina, western Virginia, West Virginia, Kentucky, eastern Illinois, southern Indiana, east-central Missouri, Ohio, western Maryland and southern New York.

Some states have given the species protected status, but Pennsylvania has not.

The move in Pennsylvania to designate the hellbender as the state's official amphibian began more than 2 years ago with the Chesapeake Bay Foundation's student leadership council. Aided by Lycoming College's Clean Water Institute, students studied hellbenders, installed nesting boxes in several Pennsylvania streams and wrote the first draft of a bill that did not make it through the entire legislative process last year.

Hellbenders, which have a colorful set of nicknames that includes mud devil, devil dog, ground puppy, snot otter, lasagna lizard and Allegheny alligator, are an indicator species for clean water in that they survive where there is cold, clear, swift-running water. Folds of wrinkled skin provide a large surface through which the salamanders draw most of their oxygen.

A lack of streamside trees along Pennsylvania's waterways allows waters to warm, polluted runoff to enter rivers and streams, and silt to build up in streambeds. As a result, habitat for hellbenders has been degraded and hellbender numbers have been decimated in streams where they were plentiful as recently as 1990.