American Malacological Society (AMS) Conservation Committee Imperiled Species News July 2021*

*(A modified copy of this report was first presented at the American Malacological Society Executive Council Board Meeting in June 2021)

Conservation Activities for U.S. Mollusks

Since the last virtual meeting in 2020, there is very little activity to report from the Conservation Committee. Legal action on rare and endangered mollusk species in the U.S. has been limited in the past year. Few Federal Register reports have provided mollusk proposals, listings, or reviews. These are summarized below:

After careful review, on May 11, 2021, one species, the triangle pigtoe (*Fusconaia lanceolata*) was not approved for listing as either Endangered or Threatened under the U.S. Endangered Species Act. The species has been determined to be a junior synonym of the much wider ranging Texas pigtoe (*Fusconaia askewi*). Text for the ruling is online <u>https://www.govinfo.gov/content/pkg/FR-2021-05-11/pdf/2021-09748.pdf</u>.

Critical habitat for the yellow lance (*Elliptio lananensis*) was finally designated on April 8, 2021, along 319 river miles in North Carolina, Virginia, and Maryland following 10 years of advocacy and litigation by the Center for Biological Diversity. Text for the ruling is online



https://www.govinfo.gov/content/pkg/FR-2021-04-08/pdf/2021-06736.pdf.

Photo credit: Sarah McRae

The comment period to list the Atlantic pigtoe (*Fusconaia masoni*) as threatened and critical habitat designated was reopened September 22, 2020, due to revision of occupied critical habitat. Comment period has closed but the agency will accept new information anytime https://www.govinfo.gov/content/pkg/FR-2020-09-22/pdf/2020-19095.pdf.

Other Conservation Actions:

The most encouraging news I can provide relates to changes that will be made to wildlife conservation law by the Biden Administration. This is fantastic news for the future of wildlife conservation of all wildlife in the U.S., including mollusks. In response to drastic changes in the U.S. Endangered Species Act (50 CVF Part 24 Endangered and Threatened Wildlife and Plants; Revision of the Regulations for Listing Species and Designating Critical Habitat) President Biden announced June 4, 2021, he will rescind or revise five regulations that sharply undercut protections for the nation's endangered species. As I reported in last year's AMS conservation report, these major revisions include:

(1) Put economic costs on saving species (adding or removing); removal of "best available science without reference to possible economic or other impacts of such determination"

(2) Consideration of Critical Habitat for listing ONLY for *currently occupied* habitat (can still *designate* unoccupied Critical Habitat)

(3) Removal of blanket protection of Threatened species (formerly same as Endangered Species) such that species assessed on an individual basis

(4) Removal of threat in "foreseeable future" when assessing Threatened species (e.g. climate change)

(5) Removal of ability to take climate change into consideration when making listing assessments

These 2019 rules opened the door to consideration of economic factors in decisions for species protections, weakened protections for critical habitat and left threatened species without guaranteed protections. Critical habitat rules that sharply limited what could be defined as protected for species by narrowly defining habitat to include only places that can currently support a species and rules that excluded habitat based on economic claims *will be rescinded* by the Biden administration. The rule weakening the consultation process to prevent harm to endangered animals and habitat from federal agencies *has also been rescinded*. Also, the rule curtailing designation of critical habitat from future impacts (including climate change) *has been rescinded*. The rule weakening the listing process by allowing economic considerations in the listing process *will be eliminated*. Finally, automatic protection for wildlife newly designated as "threatened", rescinded by the Trump administration, *has been rescined*.

On May 21, 2021, the U.S. Congress introduced the Extinction Prevention Act, which would fund conservation of the four groups of endangered species at the greatest risk of extinction. These groups are North American butterflies, *freshwater mussels*, desert fish and Hawaiian plants. North America has the highest diversity of freshwater mussels in the world, but unfortunately much of this diversity is threatened. Freshwater mussels are the most endangered group of organisms in the United States; 70% are at risk of extinction, and 38 species have already been lost. The legislation would establish four grant programs that each provides \$5 million per year.

Canada COSEWIC:

Canada completed its assessment of three mollusk species in their Committee on the Status of Endangered Wildlife in Canada (COSEWIC), Canada's equivalent of the U.S. Fish and Wildlife Service, in 2021 (none in 2020). The Black Hills mountainsnail (*Oreohelix cooperi*) has been designated Endangered in May 2021. This terrestrial snail is confined to four mountainous "sky islands" on the Great Plains of North America occurring patchily in Canada only in the Cypress Hills of Alberta and Saskatchewan. The Atlantic mud piddock (*Barnea truncata*) was designated Threatened in May 2021. It is one of only two marine species protected under COSEWIC (the other being the northern abalone, *Haliotis kamtschatkana*). It is restricted to small regions of Minas Basin in Nova Scotia where it is entirely dependent on the mudstone facies geological formation where it bores into mudstone immobile as an adult. The purple wartyback (*Cyclonaias tuberculata*) was designated Threatened in May 2021. The mussel occurs only in large rivers in southeastern Ontario with continued projected threats in habitat quality.



Photo credit Rob Forsyth

Major Conservation-Related Books and Monographs:

Ferreira-Rodriguez, N. et al. 2019. Research priorities for freshwater mussel conservation assessment. *Biological Conservation* 231: 77-87.

- Graf, D. and K.S. Cummings. 2021. A 'big data' approach to global freshwater mussel diversity (Bivalvia: Unionoida), with an updated checklist of genera and species. *Journal of Molluscan Studies* 1-36; doi:10.1093/mollus/eyaa034
- Propst, D., J. Williams, K. Bestgen, and C. Hoagstrom. 2020. *Standing Between Life and Extinction: Ethics and Ecology of Conserving Aquatic Species in North American Deserts*. University of Chicago Press. 496 pp.
- Vileisis, A. 2020. *Abalone The Remarkable History and Uncertain Future of California's Iconic Shellfish*. Oregon State University Press. 293 pp.

