

American Malacological Society (AMS) Conservation Committee Imperiled Species News August 2019*

*(A modified copy of this report was first presented at the American Malacological Society Executive Council Board Meeting in August 2019)

Activity within the U.S. Fish and Wildlife Service regarding Endangered Mollusk species has seen some changes and updates. Two species were listed as threatened while proposals to list three others were found to be unwarranted. Included here was the first cephalopod to be listed by the Endangered Species Act, the chambered nautilus, *Nautilus pompilius*, now listed as Threatened. The listing of this species resulted in the formal creation of a new taxonomic level within the framework of the Act, CEPHALOPODS, approved on April 8, 2019; approved some five months after the species was listed. Listing of marine invertebrates under the Endangered Species Act is rare given the fact that overall range and occupied habitat are too difficult to determine accurately. Candidate listings for 10 species were proposed for review and one Recovery Plan created. Five-year status reviews were up for 38 species.

U.S. Fish and Wildlife Endangered Species Regulations:

Endangered/Threatened Species Listings [2 Threatened, 3 not warranted]

- 4/26/2019: *Glyptostoma gabrielense* San Gabriel chestnut snail listing proposal not warranted
- 12/19/2018: *Eua zebrina* no common name, *Ostodes strigatus* no common name listing not warranted because species is extinct
- 10/11/2018: *Fusconaia masoni* Atlantic pigtoe listed as Threatened
- 9/28/2018: *Nautilus pompilius* chambered nautilus listed Threatened (new category CEPHALOPODS created 4/8/2019), critical habitat not determined

Candidate Listings and Reviews [10 Reviews, 1 Recovery Plan]

- 6/27/2019: *Leptoxis foremani* interrupted rocksnail public review solicited
- 6/27/2019: *Lampsilis altilis* finelined pocketbook, *Medionidus parvulus* Coosa mockasinshell, *Pleurobema georgianum* southern pigtoe, *Pleurobema decisum* southern clubshell, *Pleurobema perovatum* ovate clubshell, *Pleurobema hanleyianum* Georgia pigtoe, *Pleurocera foremani* rough hornsnail, *Elliptio steinstansana* Tar River springmussel, *Pyrgulopsis ogmorhapse* royal marstonia review solicited
- 8/17/2018: *Lampsilis rafinesqueana* draft recovery plan created

5-year status reviews [38 reviews]

- 7/16/2019: *Pyrgulopsis chupaderae* Chupadera springsnail, *Pseudotryonia adamantina* diamond Tryonia, *Tryonia circumstriata* Gonzales Tryonia, *Pyrgulopsis texana* phantom springsnail, *Tryonia cheatumi* phantom Tryonia, *Pyrgulopsis bernardina* San Bernardino springsnail, *Pyrgulopsis neomexicana* Socorro springsnail, *Juturnia kosteri* Koster's springsnail, *Assimineia pecos* Pecos assimineia, *Pyrgulopsis roswellensis* Roswell springsnail
- 4/11/2019: *Lampsilis powellii* Arkansas fatmucket, *Villosa choctawensis* Choctaw bean, *Pleurobema stodeanum* fuzzy pigtoe, *Fusconaia escambia* narrow pigtoe, *Lampsilis rafinesqueana* Neosho mucket, *Quadrula cylindrica* cylindrical rabbitsfoot, *Fusconaia rotulata* round ebonyshell, *Ptychobranthus jonesi* southern kidneyshell, *Hamiota australis* southern sandshell, *Fusconaia burkei* tapered pigtoe, *Mesodon clarki* Nantahala noonday snail, *Pyrgulopsis ogmorhapse* royal Marstonia
- 8/8/2018: *Alasmidonta heterodon* dwarf wedgemussel, *Epioblasma torulosa rangiana* northern riggleshell, *Pleurobema clava* clubshell, *Villosa perpurpurea* purple bean, *Triodopsis platysoyoides* flat-spined three-toothed cheat snail, *Novisuccinea chittenangoensis* Chittenango ovate amber snail

- 8/6/2018: *Elliptoideus sloatianus* purple bankclimber, *Medionidus penicillatus* Gulf moccasinshell, *Medionidus simpsonianus* Ochlockonee moccasinshell, *Pegias fabula* littlewing pearlymussel, *Pleorobema pyriforme* oval pigtoe, *Lampsilis subangulata* shinyrayed pocketbook, *Elliptio chipolaensis* Chipola clubshell, *Elliptio spinosa* Altamaha spiny mussel, *Amblema neisleri* fat threeridge, *Orthalicus reses* Stock Island tree snail

Other Conservation:

Williams et al. AFS Conservation Status of Freshwater Mussels of the U.S., Canada, and Mexico: on hold
Atlas of Freshwater Mussels of North America: only 27 of 356 first draft accounts complete as of 3
November 2018

Mussel ID App: in preparation by Freshwater Mollusk Conservation Society

U.S. House Bill:

On August 10, 2018, Indiana House Representative Todd Rokita proposed bill (H.R. 6668: Mussels Act) that would “amend the Endangered Species Act of 1973 to remove freshwater mussels from the list of endangered and threatened species.” The bill claimed removal was necessary to restore water levels in lakes that had been previously drawn down for the purpose of supporting endangered mussel populations. The bill had only one sponsor and he was not re-elected; and therefore was not enacted.

National Museum of Brazil Collection Soliciting Donations: reprinted from Ellipsaria 20(4), December 2018

As already well-publicized within the global academic and scientific community, the Section of Malacology of the National Museum of Brazil, Rio de Janeiro, was destroyed during the terrible fire in the main historical building of the museum, on September 2, 2018.

The facility and contents of the Section of Malacology were lost, including books and separates, optical equipment, computers and the entire collection. Thanks to the professional and personal commitment of the technician of the Section, Claudio José Fernandes da Costa, with the help of some colleagues and the firemen, the drawers with type- material were saved. All the remaining collection, including more than 40,000 registered lots, a countless number of specimens and around 20,000 lots waiting to be processed were destroyed. Among them were specimens currently studied by us, students and collaborators, as well as specimens borrowed from other scientific institutions. Similar situations are faced by other sections of the museum, in the Departments of Entomology, Anthropology, and Geology and Palaeontology.

The Section of Malacology of the National Museum, in addition to holding one of the largest and most important collections of molluscs in Latin America, source of study for many researchers from Brazil and abroad since early in the twentieth century, has an extensive history of scientific production and educational activities covering the systematics and diversity of molluscs and contributing to the formation of many graduate students at the MS and PhD, some of them currently head of laboratories and research groups in Brazil and other countries.

The Section of Malacology has contributed significantly to the development and success of Malacology in Brazil, with the decisive leadership and participation of some of your members in the Brazilian Society of Malacology (SBMa). Former Curator, Prof. Dr. Arnaldo Campos dos Santos Coelho, was one of the founders of the Society in 1969, its President for two terms and organizer of three Brazilian Malacological Meetings (EBRAM). More recently, Dr. Alexandre Dias Pimenta was vice president of SBMa and collaborated in the organization of five EBRAM, in Rio de Janeiro. Staff at the Section of Malacology have also participated actively in the Congresses organized by the Asociación Latinoamericana de Malacología (ALM) and Unitas Malacologica.

The Section of Malacology intends to and will, as will the National Museum as a whole, restructure itself physically to continue its scientific and academic activities and fulfil its fundamental mission of developing and disseminating malacological research, especially in the formation of new generations of researchers and the maintenance of its malacological scientific collection. Since the day of the fire, the National Museum has activated several fronts of action, aiming to ensure the continuity of its activities, especially its graduate programs and educational activities. To support these actions, procedures were created to allow for the receipt of donations of collections of objects and literature. We are also prepared to receive much needed

financial donations, designated to the Museum as a whole or to specific sections. This aid will be of fundamental importance for the acquisition of equipment and consumables, among many other immediate needs.

Consequently, the Section of Malacology of the National Museum of Brazil invites professional and amateur malacologist colleagues, including members of the Brazilian Society of Malacology (SBMa), Asociación Latinoamericana de Malacología (ALM), Unitas Malacologica (UM) and other malacological and conchiliological associations, to participate in the reconstruction of the Malacology of the National Museum through the following avenues:

1. Donation of samples, collections and bibliography: Material to reassemble the collection of Mollusca and malacological bibliography should be sent through a letter of intent directed to the Direction of the National Museum. This letter should mention the kind of item(s) to be donated and mentioning that the gift is meant to help with the reconstruction of the Section of Malacology. It is not necessary to quantify or specify in detail the items offered. Please send the letter to our e-mail: malacologia.mnrj@gmail.com

2. Financial donations: Aiming at the continuity of basic activities including the purchase of consumables, new equipment and the execution of much-needed collecting trips, donations must be made through a deposit in a bank account managed by SAMN (Associação Amigos do Museu Nacional), based at the museum:

Bank account information for financial contributions in Brazil:

Banco do Brasil, Agência: 3010-4, Conta corrente: 60.618-9, CNPJ: 30024681/0001-99

Bank account information for financial contributions from other countries:

Corporate name: Associação Amigos do Museu Nacional CNPJ: 30024681/0001-99

Address: Rua das Marrecas, 40, sala 413-parte, Centro, Rio de Janeiro, RJ, Brasil. Zip code: 20031-120 SWIFT code:

BRASBRRJBHE

Account number/IBAN: BR3200000000030100000606189C1

Account name: SOS MUSEU NACIONAL

Linked agency: 3010-4 EMPRESA B. MESQUITA (RJ)

Linked account: 60.618-9

*Important: after the deposit, please send an e-mail to sosmuseunacional@samn.org.br copied to

malacologia.mnrj@gmail.com attaching the receipt of deposit and mentioning that the donation is destined to the Section of Malacology.

The Section of Malacology of the National Museum of Brazil is committed to use all the donations received exclusively in the reconstruction and maintenance of its research and educational activities. In a timely manner, we will indicate the amount received and its application on our Internet page -www.museunacional.ufrj.br/malacologia

The professors, technicians and students of the Section of Malacology are grateful for all the support they have received so far from all their colleagues in Brazil and the world. If you have any question, please contact us: malacologia.mnrj@gmail.com

Best regards,

Dr. Alexandre Dias Pimenta

Dr. Vinicius Padula

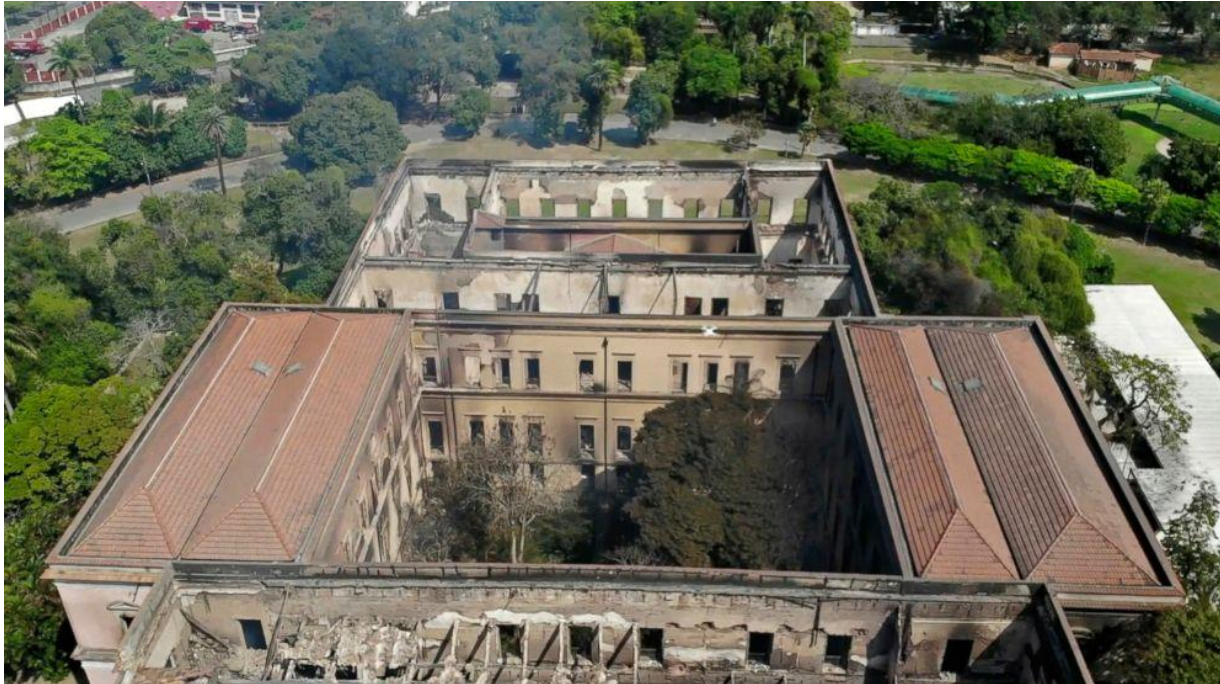


Photo credit National Museum in Brazil: Mario Lobao, September 2018

Current Political Climate Impacting Malacology

On August 12, the U.S. Fish and Wildlife Service (USFWS) announced drastic changes to regulations set forth in the U.S. Endangered Species Act (ESA). I am notifying the Society (AMS) of these changes as they will have lasting, and likely deleterious effects on conservation of mollusks in the United States far into the future. The U.S. government says that “these updates will ease the burden of regulations and increase transparency into decisions on whether a species warrants protections.” I believe the revisions will severely limit the ESA’s ability to protect species, including mollusks, and lead to rapid increase in species decline and extirpation; especially from human disturbance and development. These regulatory changes will affect three aspects of the ESA, as implemented.

First, and perhaps most severe, the USFWS has limited default extension of prohibited actions protecting Federally listed Endangered and Threatened species to Endangered Species only. Threatened species are no longer automatically provided protected by extension. Instead, each Threatened species will be assessed on a case-by-case basis whereupon USFWS will determine which protection regulations are appropriate for species currently or newly listed as Threatened. This regulatory change will not affect any consultation obligations of federal agencies under ESA Section 7.

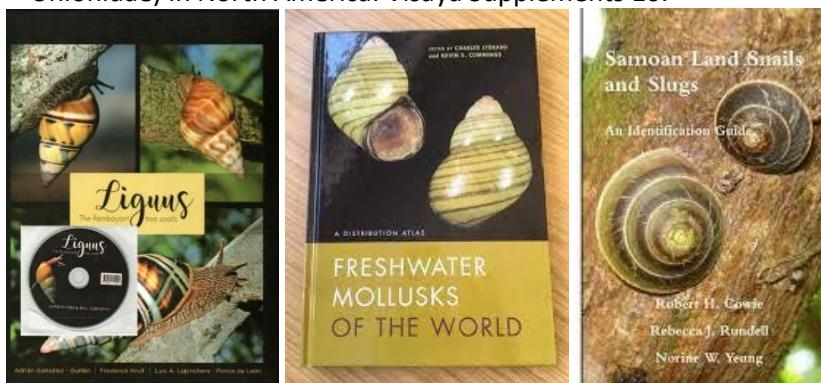
Second, in making listing determinations, the USFWS modified its framework for utilizing “for the foreseeable future” in making decisions regarding delisting Threatened species. Threats based on these terms are no longer considered; in particular, threats due to climate change. Although it did not include additional regulatory language regarding the definition of “habitat”, the USFWS clarified and severely limited thresholds for when it is appropriate to designate Critical Habitat unoccupied by a listed species and when Critical Habitat designations are “not prudent.”

Lastly, protective language prohibiting consideration of protection status regardless of economic impacts has been revised. In fact, financial considerations will accompany the listing criteria for all species.

First proposed in July of 2018, these changes, should they stand, will become effective 30 days following their publication in the U.S. Federal Register; expected out in the coming days. The attorney generals of Massachusetts and California have announced their intention to sue the Trump administration over these changes; which they call unlawful. Of the 1600 species protected under the ESA, there are currently 27 mollusk species listed as Threatened and listed as 117 Endangered with an additional 6 Candidate species. In its conservation policy, the American Malacological Society states “the interests of malacology (the scientific study of mollusks), of science in general, and of the well-being of the human race are best served by the protection of intact ecosystems and their naturally occurring biodiversity.” It also “supports measures at all levels of government and society, throughout the world to... *protect threatened and endangered species.*”

Books and Monographs:

- Berschauer, D.P. and R.N. Clark. 2018. Sea Shells of Southern California. Marine Shells of the California Province. San Diego Shell Club.
- Gonzales-Guillen, A., F. Krull, L.A. Lajonchere-Ponce de Leon. 2018. Liguus the Flamboyant Tree Snails. F. Krull.
- Kaufmann, M.S. and P. Kanner. 2018. Treasures of the Sea. The Unique Seashells of California. San Diego Shell Club.
- Lydeard, C. and K.S. Cummings (eds.). 2019. Freshwater Mollusks of the World. Johns Hopkins University Press.
- Petuch, E.J., D.P. Berschauer, and R.F. Myers. 2018. Jewels of the Everglades. The Fossil Cowries of Southern California. San Diego Shell Club.
- Ponder, W.F., D.R. Lindberg, and M. Ponder. 2019. The Biology and Evolution of the Mollusca, Volume 1. CRC Press.
- Signorelli, J.H. 2019. The Superfamily Mactroidea (Mollusca: Bivalvia) in American Waters: An Illustrated Catalogue of Recent Species. Springer.
- Cowie, R. et al., 2017. Samoan Land Snails and Slugs: An Identification Guide. Privately Published
- Patterson, M.W, et al., 2018. Freshwater Mussel Propagation for Restoration. Cambridge University Press.
- Watters, G.T. 2018. A preliminary review of the nominal genus *Villosa* of freshwater mussels (Bivalvia: Unionidae) in North America. *Visaya Supplements* 10.



Upcoming Events:

17-19 March 2020 Limpets 2020: Biology of Limpets: Evolution, Adaptation, Ecology, and Environmental Impacts London, UK

29 March – 2 April 2020 National Shellfisheries Association, Baltimore, MD
11-13 September 2020 International Association of Archaeomalacology Pune, India