

Order Adopting Amendments

COMMONWEALTH OF PENNSYLVANIA PENNSYLVANIA FISH AND BOAT COMMISSION

Title 58. Recreation Part II. Fish and Boat Commission Chapter 75 Fishing

Preamble

The Fish and Boat Commission (Commission) amends 58 Pa. Code Chapter 75 (relating to endangered species). The Commission is publishing this final-form rulemaking under the authority of 30 Pa. C.S. (relating to the Fish and Boat Code) (code). The amendments add the Rabbitsfoot Mussel and the Snuffbox Mussel to the list of endangered species and the Sheepnose Mussel to the list of threatened species.

A. *Effective Date*

The final-form rulemaking will go into effect immediately upon publication of an order in the *Pennsylvania Bulletin*.

B. *Contact Person*

For further information on the final-form rulemaking, contact Jason E. Oyler, Esq., P.O. Box 67000, Harrisburg, PA 17106-7000, (717) 705-7810. This final-form rulemaking is available on the Commission's website at www.fish.state.pa.us.

C. *Statutory Authority*

The amendments to §§75.1 and 75.2 (relating to endangered species; and threatened species) are published under the statutory authority of section 2305 of the code (relating to threatened and endangered species).

D. *Purpose and Background*

The final-form rulemaking is designed to update, modify and improve the Commission's regulations pertaining to endangered and threatened species. The specific purpose of the amendments is described in more detail under the summary of changes.

E. *Summary of Changes*

(1) Salamander Mussel (*Simpsonaias ambigua*). The Salamander Mussel was proposed as an addition to the endangered species list. However, the Commission deferred any action to list the species for at least 60 days.

(2) Rabbitsfoot Mussel (*Quadrula cylindrica cylindrical*). The notice of proposed rulemaking indicated that the Rabbitsfoot met the criterion for population reduction over the next three generations (A.2) for the endangered criterion. After further analysis and reevaluation, the Commission determined that the Rabbitsfoot does not meet the A criterion but rather meets the B criterion as follows. The Commission therefore adopted the amendment adding the Rabbitsfoot to the endangered species list.

CRITERIA B

B.4.a

As related to fragmentation, six extant locations for Rabbitsfoot are known. Based upon its historic range in this Commonwealth, the Rabbitsfoot population is severely fragmented.

B.4.b

B.4.b.3. A total of thirteen historic subpopulations are known for the Rabbitsfoot: Allegheny River (pools 5, 6, and 9), French Creek, LeBoeuf Creek, Muddy Creek, Conneautee Creek, Pymatuning Creek, Shenango River, Beaver River, Ohio River (New Cumberland and Montgomery pools), Monongahela River. Seven subpopulations are considered extant: Allegheny River (East Brady, Althom), French Creek, LeBoeuf Creek, Muddy Creek, Conneautee Creek, and Shenango River, representing a 46% subpopulation decline. Aside from the French Creek subpopulation, remaining subpopulations are small and vulnerable to pollution events.

B.4.b.4. The number of areas of occupancy is conservatively projected to decline by at least 40%. Based upon recent survey data (within the past 25 years), seven subpopulations are known. The Conneautee Creek (0.75 river miles), LeBoeuf Creek (0.75 river miles), Shenango River (0.1 river mile), Allegheny River (2 subpopulations, totaling 5 river miles) and Muddy Creek subpopulations are considered vulnerable to the threats of chronic (sedimentation) or localized pollution events.

(3) Snuffbox (*Epioblasma triquetra*). The notice of proposed rulemaking indicated that the Snuffbox met the criteria for population reduction of greater than 80% in the next ten years (A.2) and a documented continuing decline (*B.4.b*). After further analysis and reevaluation, the Commission determined that the Snuffbox also meets the criteria for endangered status for a 80% population reduction over the past three generations (A.1) and severe fragmentation and continuing decline (*B.4.a*, and *B.4.b*). The Commission therefore adopted the amendment adding the Snuffbox to the endangered species list.

CRITERIA A

A.1

As related to a decline in area of occupancy, extent of occurrence and/or quality of habitat, twenty subpopulations of Snuffbox are known from the Commonwealth: Ohio River (New Cumberland and Montgomery pools), Allegheny River (pools 5, 6, 7, 8, Kinzua Dam downstream to pool 9), French Creek, LeBoeuf Creek, Woodcock Creek, Muddy Creek, West Branch French Creek,

Conneaut Outlet, Beaver River, Shenango River, Pymatuning Creek, Little Shenango River, Dunkard Creek, Little Mahoning Creek, and Lake Erie. No recent surveys have documented live Snuffbox in Lake Erie, Ohio River (New Cumberland and Montgomery pools), Beaver River, or the Allegheny River (pools 5, 6, 7, and 8). The upper Allegheny River, LeBoeuf Creek, West Branch French Creek, Conneaut Outlet, Little Mahoning Creek, Shenango River, Little Shenango River, and Dunkard Creek subpopulations are considered very small, unknown or declining. This status provides a suspected 80% population reduction decline over the past three generations (~81 years).

A.2

As related to a decline in area of occupancy, extent of occurrence and/or quality of habitat, twenty subpopulations of Snuffbox are known from the Commonwealth: Ohio River (New Cumberland and Montgomery pools), Allegheny River (pools 5, 6, 7, 8, Kinzua Dam downstream to pool 9), French Creek, LeBoeuf Creek, Woodcock Creek, Muddy Creek, West Branch French Creek, Conneaut Outlet, Beaver River, Shenango River, Little Shenango River, Pymatuning Creek, Dunkard Creek, Little Mahoning Creek, and Lake Erie. No recent surveys have documented live Snuffbox in Lake Erie, Ohio River (New Cumberland and Montgomery pools), Beaver River, or the Allegheny River (pools 5, 6, 7, and 8). The upper Allegheny River, LeBoeuf Creek, West Branch French Creek, Conneaut Outlet, Little Mahoning Creek, Shenango River, Little Shenango River, and Dunkard Creek subpopulations are considered very small, unknown or declining. Combined with threats, a projected total population reduction of 80% is expected in the next three generations (~81 years).

As related to actual or potential levels of exploitation, the lock and dam system in the Allegheny and Ohio Rivers, combined with maintenance/commercial sand and gravel dredging have destroyed Snuffbox habitat, eliminated habitat continuity and genetically isolated upstream subpopulations from other subpopulations. Large impoundments such as the Allegheny Reservoir, Pymatuning Reservoir and Shenango River Lake have also destroyed Snuffbox habitat and eliminated genetic/host connectivity to downstream subpopulations.

As related to the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites, zebra mussels have destroyed the Lake Erie subpopulation and colonized the Allegheny River, Ohio River and French Creek. Mortality from zebra mussel infestation is expected.

Anthropogenic disturbances such as acute or chronic pollution events could destroy remaining live Snuffbox in Dunkard Creek or other subpopulations. Sedimentation from oil and gas developments, forestry and agricultural practices could have an adverse effect on mussel/host interactions. The Snuffbox uses a unique strategy (fish capture) to lure hosts and transmit glochidia (parasitic larvae phase of freshwater mussels). Excessive turbidity associated with increased sedimentation would likely alter host numbers or behavior and reduce Snuffbox recruitment.

CRITERIA B

B.4.a

The Snuffbox is severely fragmented across its present range in the Commonwealth. This means that the Snuffbox is found in small and relatively isolated subpopulations that may go extinct with a reduced probability of re-colonization.

B.4.b

B.4.b.3. Twenty historic subpopulations of Snuffbox are known from the Commonwealth: Ohio River (New Cumberland and Montgomery pools), Allegheny River (pools 5, 6, 7, 8, Kinzua Dam downstream to pool 9), French Creek, LeBoeuf Creek, Woodcock Creek, Muddy Creek, West Branch French Creek, Conneaut Outlet, Beaver River, Shenango River, Pymatuning Creek, Little Shenango River, Dunkard Creek, Little Mahoning Creek, and Lake Erie. No recent surveys have documented live Snuffbox in Lake Erie, Ohio River (New Cumberland and Montgomery pools), Beaver River, or the Allegheny River (pools 5, 6, 7, 8, Kinzua Dam downstream to pool 9). The upper Allegheny River, LeBoeuf Creek, West Branch French Creek, Conneaut Outlet, Little Mahoning Creek, Shenango River, Little Shenango River, and Dunkard Creek subpopulations are considered very small, unknown or declining. This status provides an inferred 80% decline.

(4) Sheepnose (*Plethobasus cyphus*). The notice of proposed rulemaking indicated that the Sheepnose met the threatened criterion of 50% population reduction in the next ten years (A.2). At the time, the Sheepnose also met at least one endangered criterion. However, exercising its best professional judgment, the Bivalve Subcommittee of the Pennsylvania Biological Survey (PABS) recommended that it be listed as a threatened species due to evidence of reproduction and recruitment in the one subpopulation/location in which it exists. The Commission therefore proposed that the Sheepnose be listed as threatened. After further analysis and reevaluation, the Commission determined that the Sheepnose also meets the threatened criterion for extent of occupancy in stream or river miles (B.3) and the endangered criterion for historic population reduction (A.1). Despite the species' meeting at least one endangered criterion, the Commission adopted the amendment adding the Sheepnose to the threatened species list based on the PABS Bivalve Subcommittee's prior finding of evidence of reproduction and recruitment in the one subpopulation/location in which it exists.

CRITERIA A

A.1

As related to decline in area of occupancy, extent of occurrence and/or quality of habitat, nine historic subpopulations of Sheepnose are known from the Commonwealth: Allegheny River (pools 5, 6, 7, and 8), Ohio River (New Cumberland, Montgomery, and Pittsburgh pools), Monongahela River and Beaver River. This species was previously considered extirpated from the Commonwealth, i.e., a suspected 100% historic population reduction. However, a population of Sheepnose was recently discovered in the middle Allegheny River. This is the Commonwealth's only known extant Sheepnose population. In an historic context, if the middle Allegheny River (Kinzua Dam downstream to pool 9) population is assumed to be a historically present subpopulation, this provides a suspected 90% population reduction over the past four generations (100 years).

A.2

As related to decline in area of occupancy, extent of occurrence and/or quality of habitat, nine historic subpopulations of Sheepnose are known from the Commonwealth: Allegheny River (pools 5, 6, 7, and 8), Ohio River (New Cumberland, Montgomery, and Pittsburgh pools), Monongahela River and Beaver River. This species was previously considered extirpated. A recently discovered population in the middle Allegheny River subpopulation is the only subpopulation considered extant. This subpopulation appears to be thriving and expanding its range. With continuation of the threats detailed below, the Sheepnose status provides a projected 50% population reduction suspected to be met over the next three generations (~75 years).

A localized or catastrophic pollution event in this stretch of the Allegheny River would have a devastating impact on this population. Combined with the threats described below, the Sheepnose is likely to achieve a projected 50% population reduction over the next three generations (75 years).

As related to actual or potential levels of exploitation, the lock and dam system in the Allegheny and Ohio Rivers, combined with maintenance/commercial sand and gravel dredging have destroyed Sheepnose habitat, eliminated habitat continuity and genetically isolated subpopulations occurring in the Allegheny and Monongahela River systems. Sedimentation from oil and gas developments, forestry and agricultural practices could have an adverse effect on mussel/host interactions and reduce Sheepnose recruitment. The Sheepnose produces narrow, red lanceolate packets of glochidia called conglutinates. These conglutinates resemble fish prey items, specifically worms. Excessive turbidity associated with increased sedimentation would likely alter host numbers or behavior (e.g. ability of fish to find and consume conglutinates) thereby reducing Sheepnose recruitment.

As related to the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites, zebra mussels have colonized the Allegheny River and Ohio Rivers. Mortality from zebra mussel infestation is expected. Anthropogenic disturbances such as acute or chronic pollution events could destroy the remaining Allegheny River Sheepnose subpopulation.

CRITERIA B

B.3

As related to extent of occupancy, the Allegheny River subpopulation occupies 25 river miles. Greater than 10 river miles and less than 50 river miles meets threatened status.

(5) Rayed Bean (*Villosa fabalis*). The Rayed Bean was proposed as an addition to the threatened species list. However, the Commission deferred any action to list the species until such time as the results of ongoing and pending studies can be considered.

The Commission adopted the amendments to §§75.1 and 75.2 as set forth in Annex A.

F. *Paperwork*

The final-form rulemaking will not increase paperwork and will create no new paperwork requirements.

G. *Fiscal Impact*

The amendments will have no direct adverse fiscal impact on this Commonwealth or its political subdivisions. The amendments will impose no new direct costs on the private sector or the general public. The direct regulatory significance of designating a mussel species as endangered or threatened is limited to prohibiting persons from taking, catching, killing or possessing these mussels in this Commonwealth. Because none of the species listed have any commercial or recreational significance because of their rarity, there are no direct fiscal impacts from providing these protections.

The private sector and regulated community have asserted that designation of certain mussels as endangered or threatened may have indirect fiscal impacts on them and the Commonwealth because of impacts on permitting decisions by the Department of Environmental Protection and other

agencies. If an endangered or threatened species is found in an area slated for development, applicants for permits may be required to conduct additional studies or adjust the project to avoid adverse impacts on these mussels and their habitat. These are fiscal impacts resulting from regulatory and statutory authorities other than those under the aegis of the Commission. Many of the additions to the list are found in the same watersheds as species already listed so there would be little additional burden placed on projects in those areas.

H. *Public Comments*

A notice of proposed rulemaking, containing the amendments and seeking public comments, was published at 38 Pa. B. 6617 (December 6, 2008). The original public comment period was December 6, 2008 through January 6, 2009. On January 30, 2009, the Commission extended the comment period until March 15 and directed staff to hold a public meeting on the listings in the greater Pittsburgh area prior to the April meeting. A notice extending the public comment period until March 15 and advising the public of the meeting on March 2, 2009 in Kittanning was published at 39 Pa. B. 1074 (February 21, 2009).

The Commission received a total of 174 public comments, including oral and written comments provided at the March 2nd meeting. During the formal comment period of December 6, 2008 through January 6, 2009 and the extended comment period of January 31 through March 15, 2009, the Commission received 169 comments: 106 comments favor the proposal, 62 comments oppose it and one is undetermined. The Commission received five comments between January 7 and January 30, of which four support the proposal and one opposes it. The opposing comments were submitted by employees of the sand and gravel dredging industry (including a form letter signed by 30 employees of Glacial Sand and Gravel Company) and road building and extraction industries, including the Associated Pennsylvania Constructors, PA Aggregates and Concrete Association, PA Coal Association, The Marcellus Shale Committee representing the Independent Oil and Gas

Association of PA and the PA Oil and Gas Association, and the three active Allegheny and Ohio River commercial sand and gravel dredging companies. The Commission also received opposing comments from the Pennsylvania Department of Transportation (which was later clarified), the Port of Pittsburgh Authority, Freeport Terminals, Campbell Transportation, the National Waterways Foundation and Laborers Local 1058. The supporting comments were submitted by individuals, biologists, the PABS Mollusk Technical Advisory Committee, the Little Juniata River Association, The Nature Conservancy, Pennsylvania Environmental Council, Juniata Valley Audubon, The Moshannon Group of the Sierra Club, American Rivers, Freshwater Mollusk Conservation Society, the U.S. Department of the Interior, Fish and Wildlife Service, the U.S. Environmental Protection Agency, Mountain Watershed Association, Penn State University Sea Grant Program, Sustainable Environmental and Economic Partnership, French Creek Valley Conservancy, North Branch Land Trust, Wildlands Conservancy, Allegheny County Sportsmen's League, Center for Healthy Environments and Communities, the Carnegie Museum of Natural History and the Delaware River Network . Copies of all public comments and the transcript from the March 2 meeting were provided to the Commissioners. The Commissioners also were provided with copies of a comment/response document, which is available on the Commission's website at www.fishandboat.com under "Featured Topics."

In response to the comments and the interest in the proposed listings by members of industry, the environmental community and the general public, the Commission, through its staff, conducted further analysis, clarified the A.2 criterion after consultation with PABS and reevaluated each of the proposed species as it relates to the objective criteria.

FINDINGS

The Commission finds that:

(1) Public notice of intention to adopt the amendments adopted by this order has been given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§1201, 1202) and the regulations promulgated thereunder, 1 Pa. Code §§7.1 and 7.2.

(2) A public comment period was provided, and all public comments received were considered.

(3) The adoption of the amendments of the Commission in the manner provided in this order is necessary and appropriate for administration and enforcement of the authorizing statutes.

ORDER

The Commission, acting under the authorizing statutes, orders that:

(A) The regulations of the Commission, 58 Pa. Code Chapters 75, are amended by amending §§75.1 and 75.2 to read as set forth in Annex A.

(B) The Executive Director will submit this order and Annex A to the Office of Attorney General for approval as to legality and form as required by law.

(C) The Executive Director shall certify this order and Annex A and deposit them with the Legislative Reference Bureau as required by law.

(D) This order shall take effect on immediately upon publication in the *Pennsylvania Bulletin*.

For the Pennsylvania Fish and Boat Commission

Douglas J. Austen, Ph.D
Executive Director

Annex A

Regulation No. 48A-208

Title 58. Recreation

Part II. Fish and Boat Commission

Subpart B. Fishing

CHAPTER 75. ENDANGERED SPECIES

§ 75.1. Endangered species.

* * *

(b) *Fish*. The following species are endangered:

* * *

[(29) Northern riffleshell mussel, *Epioblasma torulosa rangiana*.

(30) Clubshell mussel, *Pleurobema clava*.

(31) Dwarf wedgemussel, *Alasmidonta heterodon*.

(32) Eastern pearlshell mussel, *Margaritifera margaritifera*.]

* * *

(d) *Invertebrates*. The following species are endangered:

(1) Northern riffleshell mussel, *Epioblasma torulosa rangiana*.

(2) Clubshell mussel, *Pleurobema clava*.

(3) Dwarf wedgemussel, *Alasmidonta heterodon*.

(4) Eastern pearlshell mussel, *Margaritifera margaritifera*.

(5) Rabbitsfoot mussel, *Quadrula cylindrica cylindrical*.

(6) Snuffbox mussel, *Epioblasma triquetra*.

§ 75.2. Threatened species.

* * *

(d) Invertebrates. The following species are threatened:

(1) Sheepnose mussel, *Plethobasus cyphus*.