RULES AND REGULATIONS

Title 58—RECREATION

FISH AND BOAT COMMISSION [58 PA. CODE CH. 65]

Fishing; Special Fishing Regulations; Correction

An error occurred in the final-form rulemaking which appeared at 46 Pa.B. 5539, 5540 (August 27, 2016). The fiscal note number was incorrect. The correct fiscal note is as follows.

Fiscal Note: Fiscal Note 48A-271 remains valid for the final adoption of the subject regulation.

[Pa.B. Doc. No. 16-1513. Filed for public inspection September 2, 2016, 9:00 a.m.]

[58 PA. CODE CH. 75] Fishing; Endangered Species

The Fish and Boat Commission (Commission) amends Chapter 75 (relating to endangered species). The Commission is publishing this final-form rulemaking under the authority of 30 Pa.C.S. (relating to Fish and Boat Code) (code). The amendments update the Commission's lists of endangered, threatened and candidate species.

A. Effective Date

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

B. Contact Person

For further information on the final-form rulemaking, contact Laurie E. Shepler, Esq., P.O. Box 67000, Harrisburg, PA 17106-7000, (717) 705-7810. This final-form rulemaking is available on the Commission's web site 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). The amendments to § 75.3 (relating to candidate species) are published under the statutory authority of 2102 of the code (relating to rules and regulations).

D. Purpose and Background

The specific purpose and background of the amendments is described in more detail under the summary of changes.

E. Summary of Changes

(1) Hornyhead Chub (*Nocomis biguttaus*). The Hornyhead Chub is a medium sized minnow with a robust body. Adult length is typically 4 to 6 inches. Breeding males have a distinct bright red spot behind the eye. It is a nest building minnow, constructing large pebble mounds by transporting gravel with its mouth. It inhabits clear, small to medium-sized streams with clean gravel, rubble and sandy substrates. In general, the Hornyhead Chub is highly intolerant of increased siltation and intermittent flows.

The Hornyhead Chub occurs in North America from the Mohawk River system in New York, west to the Red River system in Manitoba and North Dakota, and south to the Ohio River drainage. It also occurs in the Ozark drainages in Missouri and Arkansas and in an isolated section of West Virginia.

In this Commonwealth, it was historically reported from two locations in Cussewago Creek in Crawford County and a number of locations in the Shenango River drainage in Crawford, Lawrence and Mercer Counties. It was also reported in collections from the Shenango system as well as Conneaut Creek in Crawford and Erie Counties. Recent intensive field work that included surveys of historic sites as well as additional sites presenting suitable habitat in these historic drainages has demonstrated a precipitous decline in Hornyhead Chub populations in this Commonwealth. This species is now apparently confined to approximately 12 miles of Neshannock Creek in Lawrence and Mercer Counties and 2 miles of Conneaut Creek in Crawford County.

The Hornyhead Chub was initially listed as a candidate species in 1999. The current status of this species was reviewed using the Commission's documentation and objective listing/delisting process. Using the "Extent of Occupancy" criterion (B.3) within the Commission's listing process, the Hornyhead Chub's linear occupied stream distance exceeds the cutoff of 10 miles for endangered status by only 4 miles. However, significant threats to its continued existence remain, particularly in the Conneaut Creek. In addition, it was evaluated with NatureServe's Conservation Status Assessments Rank Calculator and received a State Conservation Rank of S1-meaning it is critically imperiled in this Commonwealth with a high to very high risk of extirpation due to its limited range and/or few populations or occurrences. The Fishes Technical Committee of the Pennsylvania Biological Survey (PABS) reviewed this documentation and rank assignment and recommended that the Hornyhead Chub be listed as endangered. Enough information is available to make the determination that it is endangered in this Commonwealth at present and to justify its addition to the Commonwealth's list of endangered fishes. Therefore, the Commission removed the Hornyhead Chub from the Pennsylvania list of candidate species under § 75.3 and added it to the list of endangered species under § 75.1.

(2) Mountain Brook Lamprey (*Ichthyomyzon greeleyi*). The Mountain Brook Lamprey is a small, nonparasitic lamprey. Adult sizes are small, generally 4 to 6 inches total length. Body color is dark olive on the back and sides, often mottled, transitioning abruptly to a white belly, giving a bicolored appearance. It is easily confused with the parasitic Ohio Lamprey (*Ichthyomyzon bdellium*), which is generally larger with a proportionally larger oral disc and has coloration that fades gradually toward the belly (not strongly bicolored).

The Mountain Brook Lamprey prefers clear, small-medium sized creeks but can be occasionally found in larger waters. In this Commonwealth, it frequently occurs in stocked trout streams and is seldom found in colder streams containing wild Brook Trout (Salvelinus fontinalis). Larvae, known as ammocoetes, generally prefer sluggish areas with deposits of mud, muck, silt, sand, detritus and coarse woody debris.

This species occurs in North America from the Ohio River drainage in southwestern New York to northern Alabama and Georgia, where it is highly localized. In this Commonwealth, it occurs throughout the Allegheny River drainage, including the Loyalhanna Creek, French Creek and Clarion River drainages, and the upper Allegheny River. A small portion of Neshannock Creek in the Beaver River drainage is also occupied.

In 1999, the Mountain Brook Lamprey was listed as a threatened species. Since then, nearly all of this species' historic range in this Commonwealth has been resurveyed and retraction of its range was not noted. In fact, extensions of its known range have been documented, which now includes the Clarion River, Loyalhanna Creek and North Fork Redbank Creek.

The current status of this species was reviewed using the Commission's documentation and objective listing/ delisting process. It exceeds Criterion A.1 (Population Reduction) in that there has not been a reduction in historic distribution. Since the Mountain Brook Lamprey occupies more than 150 river miles of waterway, it significantly exceeds Criterion B.3 (Extent of Occupancy). In addition, it was evaluated with NatureServe's Conservation Status Assessments Rank Calculator and received a State Conservation Rank of S4-meaning it is secure in this Commonwealth with a very low risk of extirpation due to its extensive range and/or many populations or occurrences. The Fishes Technical Committee of the PABS reviewed this documentation and rank assignment and recommended that the Mountain Brook Lamprey be delisted. Enough information is available to make the determination that it is secure in this Commonwealth at present and to justify its removal from the Commonwealth's list of threatened fishes. Therefore, the Commission removed the Mountain Brook Lamprey from the Pennsylvania list of threatened species under § 75.2.

(3) Ohio Lamprey (*Ichthyomyzon bdellium*). The Ohio Lamprey is a medium sized parasitic lamprey with a single dorsal fin and well developed teeth. Adult size is generally 5 to 10 inches total length. Body color is slate-gray to yellowish-gray, fading to a lighter belly.

The Ohio Lamprey occurs in large streams to large rivers during parasitic phase but enters smaller streams to spawn. Adults are generally found in riffles and runs over gravel, cobble and rubble. Ammocoetes generally prefer sluggish sections of small-medium sized streams with significant deposits of mud, muck, silt, sand, detritus and coarse woody debris. Ammocoetes generally burrow in substrate and filter feed on bacteria, protozoa, and decaying phytoplankton and plant material. Host fishes include Paddlefish, Common Carp, carpsuckers, redhorses, black basses, larger catfishes, madtoms, Walleye and darters. There is no evidence to support the belief of some that Ohio Lampreys negatively impact game fish populations.

This species occurs in North America from the Ohio River basin from New York to Illinois, and south to northern Georgia. In this Commonwealth, it occurs in the Ohio River, Conewango Creek, Mahoning Creek, Potato Creek, Oswayo Creek and the Allegheny River and the following streams and their tributaries: French Creek, Oil Creek, Sandy Creek and Brokenstraw Creek.

In 1999, the Ohio Lamprey status was changed from threatened to candidate. Current data indicate little if any range reduction has occurred when historic and recent records are compared. It is evident that the Ohio Lamprey remains well-distributed in the Ohio River drainage and may have expanded somewhat, with its known range including Allegheny, Armstrong, Crawford,

Erie, Forest, McKean, Potter, Venango and Warren Counties. Of the 150 records reviewed, 52 are post-1999. The Ohio Lamprey likely maintains a continuous distribution throughout the Allegheny River.

The current status of this species was reviewed using the Commission's documentation and objective listing/ delisting process. It exceeds Criterion A.1 (Population Reduction) in that there has not been a reduction in historic distribution. Since the Ohio Lamprey occupies more than 150 river miles of waterway, it also significantly exceeds Criterion B.3 (Extent of Occupancy). In addition, it was evaluated with NatureServe's Conservation Status Assessments Rank Calculator and received a State Conservation Rank of S4-meaning it is secure in this Commonwealth with a very low risk of extirpation due to its extensive range and/or many populations or occurrences. The Fishes Technical Committee of PABS reviewed this documentation and rank assignment and recommended that the Ohio Lamprey be delisted. Enough information is available to make the determination that it is secure in this Commonwealth at present and to justify its removal from the Commonwealth's list of candidate fishes. Therefore, the Commission removed the Ohio Lamprey from the Pennsylvania list of candidate species under § 75.3.

(4) Bowfin (Amia calva). The Bowfin is a large, stoutbodied fish, with an extended ribbon-like dorsal fin and rounded, caudal fin. The Bowfin is noted for its voracious feeding habits usually consuming other fishes. It is capable of breathing atmospheric oxygen, an important adaptation to life in swamps and marshes, where low dissolved oxygen levels, high water temperatures and low water conditions occur frequently. The Bowfin inhabits swamps, marshes, ditches, ponds and lakes, and sluggish sections of rivers and creeks, where it prefers areas with submerged vegetation, undercut banks and coarse woody debris.

This species occurs in North America from Quebec to northern Minnesota in the St. Lawrence River-Great Lakes and Mississippi River basins south to the Gulf of Mexico and on the Atlantic and Gulf Coastal Plain from Susquehanna River drainage in Pennsylvania to the Colorado River, Texas. It has been introduced elsewhere. In this Commonwealth, it is native to the Lake Erie and Ohio River drainages and introduced in the Susquehanna and Delaware River systems.

The Bowfin was listed as a Pennsylvania candidate species in 1991. It has persisted throughout the collection record in the Lake Erie drainage. It was reported from the Pittsburgh area prior to 1882 but was probably extirpated from the Ohio River drainage in this Commonwealth by 1900. There are no historic records from the Pymatuning Lake region or the French Creek drainage in Crawford and Erie Counties, but it was apparently introduced into these systems in the 1980s or 1990s. Those populations have significantly expanded since 2000, and it is now well established in suitable habitat there. The Bowfin is currently common to abundant in Presque Isle Bay, Erie County, and may now be_taken regularly in Pymatuning Lake. It also occurs in French Creek and several tributaries, including Conneauttee Creek, Muddy Creek and Cussewago Creek. It is common to abundant in Conneaut Lake and Conneaut Marsh. In addition, it is now widely distributed in the Allegheny River below Kinzua Dam, and it has recently been found in the Ohio and Monongahela Rivers. Populations were known to have been stocked by the Commission in Buhl Lake, Mercer County; Lake Somerset, Somerset County; Glendale Lake, Cambria County; and Black Moshannon Lake, Centre County. As a result of this expansion, Commission staff consider the Bowfin to be recovered in the Ohio River system. This recovery, along with the stable population in the Lake Erie drainage, justifies removing the Bowfin from the Commission's list of candidate species.

The current status of this species was reviewed using the Commission's documentation and objective listing/ delisting process. It exceeds Criterion A.1 (Population Reduction) in that there has not been a reduction in historic distribution and Criterion B.3 (Extent of Occupancy) because it occupies more than 150 river miles of waterway. In addition, it was evaluated with NatureServe's Conservation Status Assessments Rank Calculator and received a State Conservation Rank of S4-meaning it is secure in this Commonwealth with a very low risk of extirpation due to its extensive range and/or many populations or occurrences. The Fishes Technical Committee of the PABS reviewed this documentation and rank assignment and recommended that the Bowfin be delisted. Enough information is available to make the determination that it is secure in this Commonwealth at present and to justify its removal from the Commonwealth's list of candidate fishes. Therefore, the Commission removed the Bowfin from the Pennsylvania list of candidate species under § 75.3.

(5) Timber Rattlesnake (*Crotalus horridus*). The Timber Rattlesnake is a large, heavy bodied, venomous snake of the pit viper family (*Viperidae*). They typically have tranverse "V" shaped dark bands on black or brown body color. The tail is black with a rattle and the head color distinguishes the color phase of the snake—black or yellow. Timber Rattlesnakes inhabit the forested, mountainous regions of this Commonwealth. They prefer upland forested areas where they forage for small mammals. Talus and/or scree slopes, rocky ledges, outcrops and boulder fields generally with southerly exposures contain the entrances to over-wintering dens.

The current National range of the Timber Rattlesnake encompasses 31 states from Vermont and New Hampshire south to northern Florida, west to eastern Texas and then north through eastern Oklahoma, Kansas and Nebraska, through Iowa into southeastern Minnesota. From southwestern Wisconsin the range retreats south, away from the Great Lakes, through western and southern Illinois and southern Indiana and Ohio.

Prior to European settlement, the range of the Timber Rattlesnake is thought to have spanned most of this Commonwealth. Today, Timber Rattlesnakes occur in 50 of 67 counties in this Commonwealth within forested, mountainous regions with strongholds mainly within the southwest, central and northeast region of this Commonwealth (for example, Ridge and Valley Province, Laurel Highlands, Allegheny Plateau and the Pocono Plateau).

Historically, overhunting and habitat loss have been major threats to Timber Rattlesnake populations. The conversion of forest to agricultural land during the settlement of this Commonwealth by Europeans was likely responsible for the early extirpation of Timber Rattlesnakes from many portions of this Commonwealth (Surface, 1906). Significant declines in Timber Rattlesnake populations were noted in the 1960s to 1970s, primarily due to overhunting. Many counties maintained bounties on Timber Rattlesnakes and held round ups, harvesting hundreds of these animals.

In 1978, the Commission listed the Timber Rattlesnake as a candidate species due to reported population declines from overhunting and habitat loss. Protective measures and regulations by the Commission gradually increased, including permitting of organized hunts (1982), bag limits (1982, then reduced further in 1993), hunting season shortened to protect gravid females (1993), and minimum size limit and prohibiting take of females (2007). These regulations were designed to discourage harvest of Timber Rattlesnakes, especially gravid females and immature snakes. Also, oversight of organized hunts by Commission personnel and law enforcement has increased, and education and protection measures by the Commission, the Department of Conservation and Natural Resources and the Game Commission, the other land-holding agencies, have also improved.

For the past 20 years, the Commission has reviewed development projects throughout this Commonwealth for their potential to impact Timber Rattlesnake habitat. Recommendations to adjust alignments or modify project areas to avoid dens and gestation areas, seasonal work restrictions or having Timber Rattlesnake monitors onsite during construction to move snakes out of harm's way have avoided and minimized direct and indirect impacts to Timber Rattlesnakes and their sensitive habitats.

In the past decade, encroachment by oil and gas development into Timber Rattlesnake strongholds has increased significantly with the relatively new shale gas industry in this Commonwealth. The northcentral portions of the range, once considered the core undisturbed populations, have been subject to high volume of exploration, well pad construction, pipeline construction, associated roads and infrastructure. However, anecdotal evidence thus far shows that while there are increasing threats to Timber Rattlesnakes through exposure to human disturbance, some of the habitat alteration (for example, pipeline development) can provide important additional basking habitat in areas where canopy closure has posed problems for available basking and gestating habitat. Additionally, most of the well pads thus far are on the top of slopes and plateaus and do not interfere directly with den habitat (Commission observations).

In the last 25 years, Commission biologists began compiling more refined locational information from amateur and professional herpetologists concerned with the conservation of Timber Rattlesnake. Over 600 historic rattlesnake dens (without field checking, many were suspected to be basking areas) were mapped in this Commonwealth. In 2003, the Commission allocated State Wildlife Grant funding to begin a Statewide assessment of these historic Timber Rattlesnake sites, including determining habitat type, ranking the site quality and assessing threats for each site. Phase 1 of the project (2003—2006) resulted in visits to 467 historic sites with 39% (182) confirmed to harbor Timber Rattlesnake. More than 80% of these confirmed sites were ranked as moderate to good quality in terms of viability and habitat.

During Phase 2 of the project (2005—2011), 1,087 sites (both historic and previously unassessed) were assessed and 71% (770) was found to be occupied by Timber Rattlesnakes. An occupied site averaged 6 snakes observed during the assessment, with a range of 1 to 75 per site. The status of the assessed sites was as follows: 39.2% of the sites were ranked as above high to medium quality; 35.2% of the sites were ranked as lower quality sites; 25.3% of the sites were considered historic sites; and 0.3% of the sites were classified as extirpated. Additionally, 65% of the occupied sites surveyed during the site assessment project documented the presence of gravid females, neonates or juvenile timber rattlesnakes,

and an additional 20% of occupied sites had snakes that were not examined for their reproductive status. Site assessments have continued annually as part of Phase 3 of the project (2011—present). To date, 1,742 sites have been assessed for the project (2003—2014), resulting in 35.8% of the sites considered high to medium quality sites, 35.5% of the sites represent lower quality sites and 28.4% of the sites were rated as historic or unoccupied at the time of the surveys (1,241 (71%) of assessed sites were occupied). Large portions (estimated 50%) of the Timber Rattlesnake range remain unassessed due to lack of landowner permissions or access difficulty.

A Species Action (recovery) Plan was developed for the Timber Rattlesnake in June 2011 (http://fishandboat.com/ water/amprep/species-plan-timber-rattlesnake.pdf). Commission staff have been working with its conservation partners to implement actions towards the recovery of the species. Protection of the Timber Rattlesnake will continue, warranting no changes to the take regulations or venomous snake hunt program. Additionally, an external workgroup comprised of representatives from State and Federal landholding agencies and experts in Timber Rattlesnake natural history was convened to review current conservation practices for the Timber Rattlesnake as well as develop and enhance best management practices for the Timber Rattlesnake on State lands, public education programs promoting protection of Timber Rattlesnakes and cooperative agreements with industry likely to encounter critical Timber Rattlesnake habitat. Finally, the Commission is working with East Stroudsburg University to develop a robust long-term population monitoring program of the Statewide population to track changes in the population and continue the understanding of the conservation status of the Timber Rattlesnake in this Commonwealth.

The Amphibian and Reptile Committee of PABS reviewed the Heritage rank of the Timber Rattlesnake and found it be "vulnerable-apparently secure" (S3S4) status—uncommon but not rare and usually widespread in this Commonwealth. On June 22, 2015, the PABS Committee recommended "delisting" status based on the aforementioned data and apparent commonality of the species in this Commonwealth.

The Timber Rattlesnake was listed in 1978 as a Pennsylvania candidate species based on limited knowledge of populations and reported declines due to overhunting and habitat alteration. After a 12-year Statewide assessment project was conducted, current data indicate the rattlesnake retains an extensive distribution across this Commonwealth, with large populations remaining in many areas, thus eliminating it from listing consideration based on Criteria B (Extent of Occurrence), Criteria C (Population Estimates and Decline), Criteria D (Small Population Size) or Criteria E (Probability of Extinction). The threat of overhunting has been significantly reduced through regulations and permit programs. Threats to habitat are ever-changing but may be managed through education and management of the species on public lands. Threats are not quantifiable enough to meet Criteria A2 (Projected Population Reduction). The Timber Rattlesnake exceeds minimum requirements needed for listing as candidate, threatened or endangered status. The Timber Rattlesnake currently appears secure within this Commonwealth, which justifies removal from Pennsylvania's list of candidate species. Therefore, the Commission removed the Timber Rattlesnake from the Pennsylvania list of candidate species under § 75.3.

F. Paperwork

The final-form rulemaking will not increase paperwork and will not create new paperwork requirements.

G. Fiscal Impact

The final-form rulemaking will not have adverse fiscal impact on the Commonwealth or its political subdivisions. The final-form rulemaking will not impose new costs on the private sector or the general public.

H. Public Involvement

Notice of proposed rulemaking was published at 45 Pa.B. 6691 (November 21, 2015). The Commission received public comments relating to the Timber Rattlesnake delisting proposal. The Commission received a total of 73 comments during the formal comment period—2 supported and 71 opposed. Common themes were as follows: after the proposed status change, the Timber Rattlesnake will not receive adequate protection; there is no monitoring plan in place for the Timber Rattlesnake; population data was not used in the assessment; a large portion of the Pennsylvania range of the Timber Rattlesnake was unassessed; impacts from the energy industry were not given adequate consideration; and there were concerns about the status of the Timber Rattlesnake in specific regions.

The Commission also received over 2,200 comments after the formal comment period opposing the proposal. Most of the public comments received after the comment period were e-mail form letters generated by a posting on the Center for Biological Diversity's web site. These comments did not raise any issues that were not raised during the formal comment period.

Commissioners were provided with copies of the public comments. Commissioners also were provided with a comment and response document that summarized and addressed the issues raised in the comments.

Findings

The Commission finds that:

- (1) Public notice of intention to adopt the amendment 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 and 1202) and the regulations promulgated thereunder, 1 Pa. Code §§ 7.1 and 7.2.
- (2) A public comment period was provided, and the public comments that were 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 Chapter 75, are amended by amending §§ 75.1—75.3 to read as set forth at 45 Pa.B. 6691.
- (b) The Executive Director will submit this order and 45 Pa.B. 6691 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 45 Pa.B. 6691 and deposit them with the Legislative Reference Bureau as required by law.
- (d) This order shall take effect upon publication in the $Pennsylvania\ Bulletin$.

JOHN A. ARWAY, Executive Director

Fiscal Note: Fiscal Note 48A-267 remains valid for the final adoption of the subject regulations.

[Pa.B. Doc. No. 16-1514. Filed for public inspection September 2, 2016, 9:00 a.m.]