

SHORTER CONTRIBUTIONS

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NEW RECORDS OF *ESOX NIGER* AND *LEPISOSTEUS OSSEUS* IN THE NEW RIVER, VIRGINIA -- Chain pickerel, *Esox niger* Lesueur, 1818, and longnose gar, *Lepisosteus osseus* (Linnaeus, 1758), are two primarily piscivorous species distributed throughout the Atlantic slope drainages of Virginia (Jenkins & Burkhead, 1994). Although longnose gar have been collected in the Tennessee drainage of southwest Virginia, their presence in the Virginia and West Virginia portions of the New River has not been documented despite fairly intensive sampling (Lobb & Orth, 1991; Easton & Orth, 1994). Chain pickerel have not been described in the Tennessee or New River drainages, except by Ross (1959), whose description of this species having a general distribution in the New River was discounted by Jenkins & Burkhead (1994). Herein, we report the first known records of both species from the New River, Virginia. Specimens were collected while boat electrofishing for muskellunge, *Esox masquinongy*.

A single chain pickerel was collected in early April 2000 at the confluence of Tom's Creek with the New River near the Whitethorne boat landing in Montgomery County, Virginia. This area is pool habitat with a high density of aquatic macrophytes in the summer and large woody debris complexes located on the riverbank. The specimen was not preserved, rather photographs were taken and the specimen released. Identification was based on the subocular bar and the olivaceous chainlike markings (Eddy & Underhill, 1978). Since this initial observation, we have sampled two other specimens in the area, one 8 km upstream and the other 3 km downstream from the initial collection site. Both specimens were collected in areas of still water behind fallen trees or tree root wads. The most recent collection was on 25 April 2001. Slight pressure on the fish's abdomen resulted in the release of eggs indicating the fish was female and in near-ready spawning condition.

The longnose gar was collected on 22 June 2000 approximately 0.9 km upstream from the Rich Creek boat landing in Giles County, Virginia. Habitat at the site consists of a series of bedrock ledges with fast-flowing water. The specimen was collected mid-channel while traversing from the left to right bank (facing downstream) to continue shoreline electrofishing. The specimen was not preserved. Identification was based on presence of spots on the body and fins and shape of the snout (Eddy & Underhill, 1978).

Whether these range expansions are natural or result from intentional or accidental introductions is unknown. Chain pickerel were illegally introduced to Pandapas Pond (J. A. Williams, VDGIF, unpubl. data), an impoundment of Poverty Creek in the Jefferson National Forest. Poverty Creek is a tributary to Tom's Creek, so chain pickerel may have reached the New River following escape from Pandapas Pond. Local anglers have expressed a desire for stocking of chain pickerel in the New River to provide an additional angling opportunity, so it is possible that anglers intentionally introduced both species. It also is unknown what effect established populations of these species would have on the fish community of the New River. Given our observation of several chain pickerel, including one gravid female, this species at least may become established. Other piscivores already present include muskellunge, largemouth bass, *Micropterus salmoides*, smallmouth bass, *Micropterus dolomieu*, white bass, *Morone chrysops*, flathead catfish, *Pylodictis olivaris*, and walleye, *Stizostedion vitreum*. Extensive smallmouth bass, walleye, and muskellunge fisheries exist in particular stretches of the New River. Both chain pickerel and longnose gar have the potential to compete with and predate on these species. Further study of their potential impact on the fish community of the New River is warranted.

Literature Cited

- Easton, R. S., & D. J. Orth. 1994. Fishes of the main channel New River, West Virginia. *Virginia Journal of Science* 45: 265-277.
- Eddy, S., & J. C. Underhill. 1978. *How To Know the Freshwater Fishes*, 3rd Edition. William C. Brown Company, Dubuque, IA. 215 pp.
- Jenkins, R. E., & N. M. Burkhead. 1994. *Freshwater Fishes of Virginia*. American Fisheries Society, Bethesda, MD. 1079 pp.
- Lobb, M. D., III, & D. J. Orth. 1991. Habitat use by an assemblage of fish in a large warmwater stream. *Transactions of the American Fisheries Society* 119: 65-78.
- Ross, R. D. 1959. Drainage evolution and distribution problems of the fishes of the New (upper Kanawha) River system in Virginia, part 4 – key to the identification of fishes. Report to the Virginia Commission of Game and Inland Fisheries, Report F-008-R, Richmond. 27 pp.

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