

Bigmouth Shiner - *Notropis dorsalis*

Abundance: Common

Status: NSS4 (Cb)

NatureServe: G5 S5

Population Status: Stable. Appear to be widespread and abundant with no apparent population declines over last decade.

Limiting Factor: Habitat: severe due to extensive fragmentation.

Comment:

Introduction

Bigmouth shiner core distribution extends from northern Minnesota to eastern Illinois, and west to central Wyoming. Disjunct populations are in western New York and Pennsylvania, northern West Virginia, northern Ohio, western Michigan, and Manitoba. In Wyoming they are found in the North and South Platte River drainages.

Bigmouth shiners search stream bottoms during night for aquatic insects, apparently using taste to locate food (Pflieger 1997). Little is known about their reproductive behavior although they are thought to spawn in July and August (Baxter and Stone 1995). Bigmouth shiner may exhibit similar reproductive behavior as other species in their genus, which spawn in open water over fine sand, with fertilized eggs sent drifting in the water column (Baxter and Stone 1995). Eggs will develop and hatch out in one or two days (Weitzel 2002).

Habitat

Bigmouth shiners prefer low gradient streams with perennial flows and sand substrates and open waters free of vegetation or other cover (Weitzel 2002). In Wyoming they were found in perennial streams throughout much of their historic range at sites with sand and gravel substrates present and light to heavy aquatic vegetation (Moan et al. 2010).

Problems

- h Altered flow regimes, habitat fragmentation, and impacts to aquatic and riparian habitat associated with agricultural practices.
- h The absence of basic reproductive information specific to bigmouth shiner.

Conservation Actions

- h None

Monitoring/Research

None

Recent Developments

Detailed fish and habitat surveys were conducted in tributaries to the North Platte River between 2005 and 2009 to establish a baseline for future trend analysis in the North Platte drainage (Gerrity 2009, Moan et al. 2010). In 2005 and 2007, the Casper Region Fish Management crew conducted non-game fish surveys in the lower sections of the mainstem North Platte River (WGFD 2006, WGFD 2008).

References

Gerrity, P.. 2009. Survey of northern tributary streams to the North Platte River in the lower North Platte River (1LP) Basin.. Wyoming Game and Fish Department Administrative Report, Cheyenne..

WGFD (Wyoming Game and Fish Department). 2006. Annual fisheries progress report on the 2005 work schedule. Wyoming Game and Fish Department, Cheyenne.

WGFD. 2008. Annual fisheries progress report on the 2007 work schedule.. Wyoming Game and Fish Department, Cheyenne..

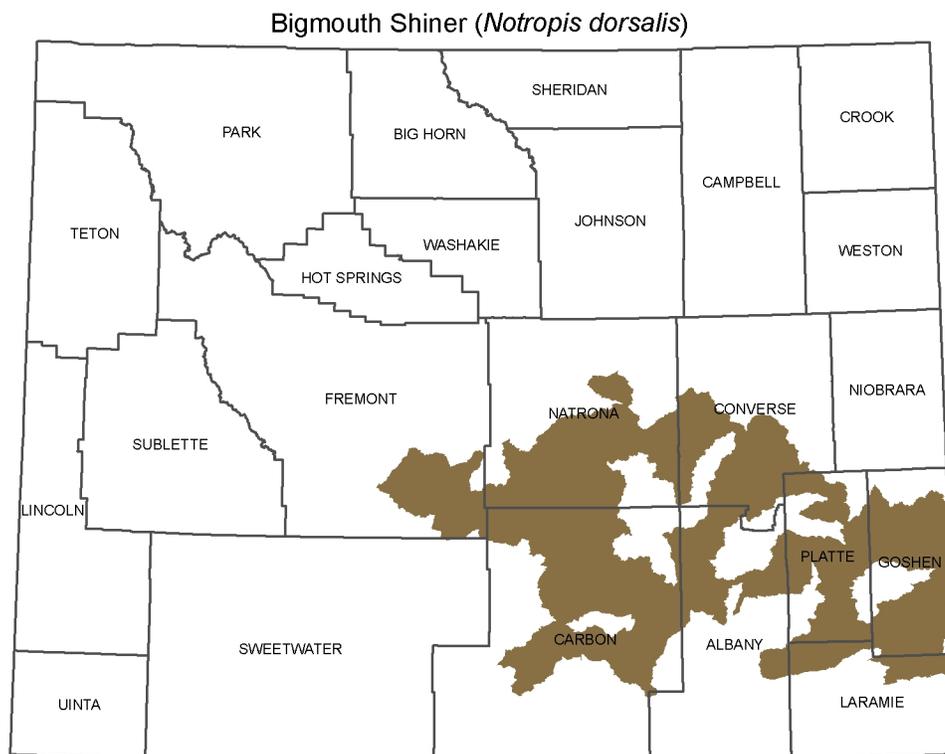
Baxter, G.T., and M.D. Stone. 1995. Fishes of Wyoming. Wyoming Game and Fish Department, Cheyenne.

Weitzel, D. L. 2002. Conservation and Status Assessment for the Common Shiner (*Luxilus cornutus*), Bigmouth Shiner (*Notropis dorsalis*), Central Stoneroller (*Camptostoma anomalum*) and Red Shiner (*Cyprinella lutrensis*): Common native minnows of the Platte and Niobrara River drainages, Wyoming. .

Bear, B., and C. Barrineau. 2007. Status of habitat and native fish in southeast Wyoming prairie streams. Wyoming Game and Fish Department Administrative Report, Cheyenne.

Moan, C. A., M. M. McGree, and G. P. Edwards, Jr. 2010. Prairie stream conservation in southeast Wyoming. Wyoming Game and Fish Department Administrative Report, Cheyenne, WY.

Pflieger, W. L. 1997. The Fishes of Missouri, revised edition. Missouri Department of Conservation, Jefferson City.



SOURCE: Digital maps of ranges for Wyoming Species of Greatest Conservation Need: April 2010. Wyoming Game and Fish Department. Note that brown indicates the current known range of the species.