

Orangethroat Darter - *Etheostoma spectabile*

Abundance: Unknown

Status: NSSU

NatureServe: G5 S1

Population Status: Greatly restricted distribution. Found in lower Lodgepole Creek in South Platte River drainage and North Platte River (Goshen County). The species may also occur in the lower North Platte River and in the Laramie River below Grayrocks Reservoir. Species can be difficult to tell from Iowa darter.

Limiting Factor: Habitat: severe due to very limited habitat in Wyoming.

Comment: The species is so rare that distribution has not been well defined.

Introduction

Orangethroat darter distribution extends from central Texas to southern Wisconsin and Michigan. Wyoming is at the western extreme of their distribution. Historically, orangethroat darters in Wyoming were only found in Lodgepole Creek, in the South Platte River drainage. Recent surveys have discovered new populations in the lower sections of the North Platte River and in the Lower Laramie River (Moan et al. 2010).

Orangethroat darters primarily reside on stream bottoms, actively feeding on aquatic macroinvertebrates. They generally spawn over fine gravel in early spring depending on water temperature. Females bury themselves in the gravel during spawning, depositing eggs into the gravel. No parental care is given (Pflieger 1997). Maturity is generally reached during their second spring after hatching and few live for more than four years.

During the 2008-2009 surveys, orangethroat darter were found in association with 14 other species, but were most commonly found with longnose sucker, central stoneroller, Johnny darter, and exotic smallmouth bass and common carp. Exotic green sunfish were also found at one site in the Laramie River drainage that was occupied by orangethroat darter (Moan et al. 2010).

Habitat

Orangethroat darters prefer clear to moderately turbid water with gravel substrates. They are said to subsist in slow riffles or pools with enough flow to keep substrates free of silt. In the Lower Laramie River, they were collected at sites dominated by gravel substrates, with riffle habitat present, and minimal aquatic vegetation. Only one orangethroat darter was collected during 2009 Lodgepole Creek surveys at a site dominated by silt substrate, no riffle habitat present, and moderate to heavy aquatic vegetation (Moan et al. 2010).

Problems

- h Drastic declines in numbers collected in Lodgepole Creek from 1993 to 2009.
- h Scarcity of preferred habitat in Lodgepole Creek, including riffle habitat and gravel substrates.

Conservation Actions

- h Determine limiting factors for Lodgepole Creek fish populations.

Monitoring/Research

Design a plan to monitor new populations in the North Platte and Lower Laramie River systems.

Initiate routine monitoring in the Lodgepole Creek drainage to determine the status of the orangethroat darter population in the drainage.

Recent Developments

Detailed fish and habitat surveys were conducted in 2004-2005 (Bear and Barrineau 2007) and 2008-2009 (Moan et al. 2010) in the lower Laramie River to establish a baseline for future analyses of trends in the fish community. Sites in the Lodgepole Creek drainage were included in the 2008-2009 surveys.

Additional 2008 sampling in the North Platte River targeting orangethroat darter by Laramie AHAB. Additional specimens were found in the mainstem North Platte River.

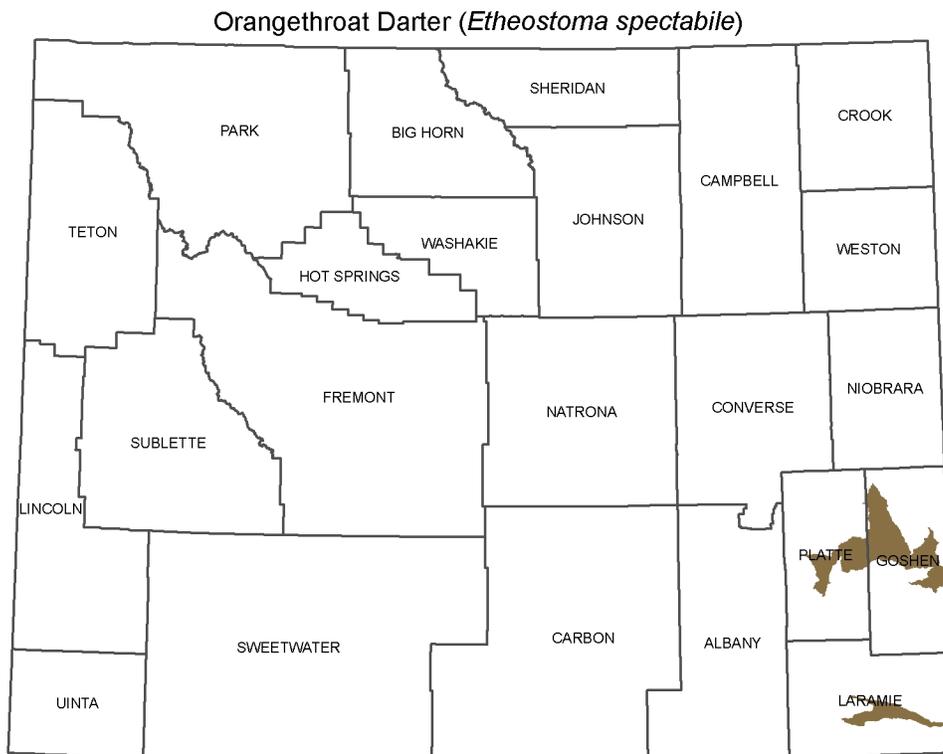
References

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.

Patton, T. M. 1997. Distribution and status of fishes in the Missouri River drainage in Wyoming: implications for identifying conservation areas. Doctoral Dissertation. University of Wyoming, Laramie.

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.