

Bluebreast Darter (*Etheostoma camurum*)

Pennsylvania Threatened Fish Species

State Rank: S2 (imperiled) Global Rank: G4 (apparently secure)

Identification

This snub-nose species reaches three inches in length. The gill cover has a central patch of often-embedded scales, and up to a third of the tail fin is covered with very small scales. The breast is typically dark blue to blue-green, the body pale dusky blue to blue-green with diffuse dark vertical bars and horizontal dark stripes on the hind portion, with crimson (males) to brownish (females) spots scattered over the sides. The largely dusky (males) to clear or spotted (females) fins are edged with light color, and in breeding season males become tinged with orange-red. The belly of breeding males is also orange-red.

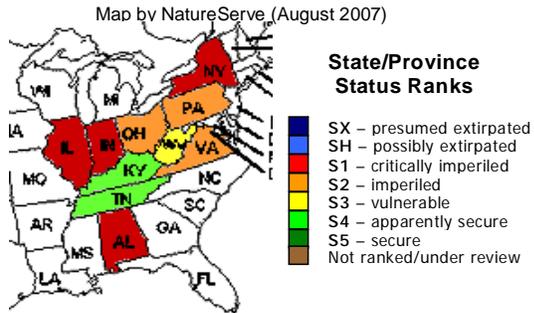


Photo Credit: Rob Criswell

Biology-Natural History

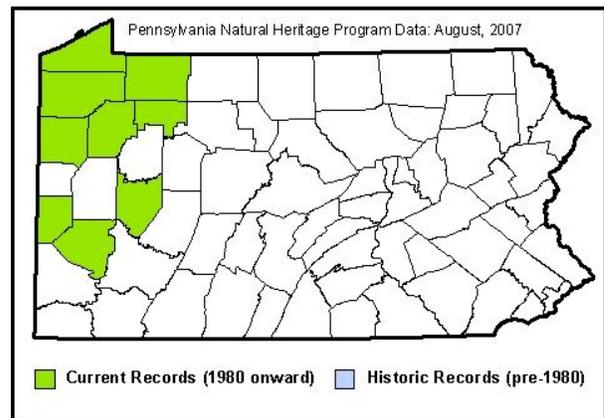
During its spring to early summer spawning period, the bluebreast darter apparently migrates long distances from the lower reaches of its stream habitat to the upstream reaches. Males select sites around large stones in swift riffles where they establish small, vaguely defined territories. Females approach these sites from downstream. After attracting the attention of a male by swimming in short, quick movements, each female apparently leads a male in a chase. She then returns to his nest-stone and burrows into the fine gravel there, where the pair spawns. The female may deposit up to 100 eggs during each of several similar episodes with the same male, but may also repeat the procedure with other males. Eggs deposited by females held in a tank hatched within seven to 10 days. Food items for this species consist mostly of the very small larvae of aquatic insects inhabiting the riffles. Most females are ready to breed at the end of their first year.

North American State/Province Conservation Status



Habitat

This species requires clean, medium to large size rivers with swift flow and high bottom velocities, and a bottom of large rocks, rubble and coarse to fine gravel.



Reasons for Being Threatened

The bluebreast darter is locally and discontinuously distributed in Pennsylvania, Illinois, Ohio, West Virginia, Virginia, Tennessee and North Carolina. It's known in Pennsylvania only from the upper Allegheny River and two tributaries, Little Brokenstraw Creek and French Creek. There is an historical record from the Beaver River headwaters. While maintaining its known populations, the species is, nonetheless, vulnerable to detrimental habitat changes.

Management Practices

Strict watershed management is required to safeguard against the physical and chemical deterioration of the upper Allegheny River system. As the quality of this habitat goes, so go the species dependent upon it. This darter and other animals associated with it in this habitat are excellent barometers of the health of this stream system.



References:

- NatureServe. 2007. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: August 20, 2007).

Fact Sheet adapted from: Felbaum, Mitchell, et al. Endangered and Threatened Species of Pennsylvania. Harrisburg, PA: Wild Resource Conservation Fund, 1995.

