BLOOD RIVER BOTTOMS WILDLIFE MANAGEMENT AREA PROVIDES HABITAT FOR RARE AQUATIC SPECIES

Matthew Thomas and Stephanie Brandt

Kentucky Department of Fish and Wildlife Resources, Frankfort, KY

In addition to providing hunting, angling, and other outdoor recreation opportunities, many of Kentucky's Wildlife Management Areas (WMAs) are important refuges to a large array of nongame species. One of these areas is the Blood River Bottoms WMA, a section within the larger Kentucky Lake WMA in Calloway County. It includes wetlands scattered throughout bottomland hardwood forest with numerous spring-fed streams and seasonal pools that drain into the Blood River. The Blood River drainage, which is located near the intersection of



the Coastal Plain (Jackson Purchase) and the Highland Rim physiographic provinces, has a unique mixture of upland and lowland habitats that support a distinctive assemblage of aquatic organisms.

While conducting fish surveys during early May 2014, we captured numerous individuals of Goldstripe Darter (Etheostoma parvipinne), Cypress Darter (E. proeliare), and Central Mudminnow (Umbra limi). All three species are listed as Species of Greatest Conservation Need under the State Wildlife Grant (SWG) program because they are rare and have highly restricted distributions in western Kentucky. The Goldstripe Darter was known to exist in only four streams in Graves and Calloway counties; this year it was observed for the first time in Blood River Bottoms WMA. The Cypress Darter has a sporadic existence in small creeks and sloughs of western Kentucky. Prior to this year's survey, it was last reported in the Blood River 30 years ago at only two locations. The Central Mudminnow only occurs in Coastal Plain spring-fed wetlands in the Jackson Purchase, including a few locations in the Blood River floodplain south of the WMA. Individuals captured in the Blood River Bottoms represent a new locality record.

Goldstripe and Cypress darters (maximum size 2 inches) have southern distributions and are at the northern periphery of their geographic ranges in western Kentucky. The Central Mudminnow (maximum size 6 inches) is a northern species reaching the southern extent of its range in western Kentucky. All three species require small, densely vegetated streams and wetlands that are often spring-fed. These habitats are also utilized by the Blood River Crayfish, which is endemic (found nowhere else) to the Blood River drainage. This unique crayfish was frequently encountered during fish sampling. Generally, these sensitive aquatic species exist only in the least-disturbed natural areas remaining in the Blood River drainage.

This survey is part of a long-term monitoring effort focused on distributional status and population trend assessments for multiple SWG fish species of greatest conservation need in western Kentucky.

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Matt Thomas is the state ichthyologist for Kentucky and works on non-game fishes in the Environmental Section of the Kentucky Department of Fish and Wildlife Resources. Stephanie Brandt is the assistant ichthyologist for KDFWR.



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