



# Best Management Practices for Construction and Development Projects

## Redfin Darter

*Etheostoma whipplei*

**Common name** • Redfin Darter  
**Scientific name** • *Etheostoma whipplei*  
**Federal status** • None  
**State status** • Endangered

### Purpose and Use

The information in this document is to be used to help avoid and minimize species impacts due to construction practices. It is not intended to be used as a guide to manage habitat for a given species. If that is the goal, please contact the Department of Conservation for habitat management information. Because every project and location differs, following the recommendations within this document does not ensure that impacts will not occur to the species and additional information might be required in certain instances. Following the recommendations within this document does not complete Endangered Species Act consultation that may be necessary for species listed under the federal Endangered Species Act; please contact the U.S. Fish and Wildlife Service for more information.

### Ecology

Redfin Darters inhabit streams in of the Arkansas and White river systems in southwestern Missouri, southeastern Kansas, eastern Oklahoma, and northern Arkansas. In Missouri, the distribution is restricted to the Spring River watershed where the species inhabits gravel and shale riffles. Very little is known about the life history of the Redfin Darter, but they likely forage on aquatic insects and spawn during April. Adults typically reach a length of 1.8-2.8 inches.

### Reasons for Decline

Redfin Darters have apparently been lost from two watersheds in southwestern Missouri and are part of a distinctive fish fauna that includes several other rare species. Activities that significantly alter stream flow, improper sand and gravel removal, and sedimentation associated with erosion due to removal of riparian vegetation and poor land use practices threatens habitats required by this species.

### Specific Recommendations

Project activities in the Redfin Darter range should minimize impacts to streams and riparian corridors.

- Project activities should not occur between March 15 and June 15 below the high water level of streams within the range of the Redfin Darter.

- Removal of gravel should take place at least 20 feet from the water line only on unconsolidated gravel bars.
- Creation of impoundments should be avoided in Redfin Darter habitat.
- For culvert installation, the top elevation of the floor should be approximately the same as the existing streambed to avoid upstream headcutting and to provide fish passage at low flows.
- Erosion and sediment controls should be implemented, maintained and monitored for the duration of the project.

### General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

If your project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or [www.modot.mo.gov/ehp/index.htm](http://www.modot.mo.gov/ehp/index.htm) for additional information on recommendations.

### Information Contacts

For further information regarding regulations for development in rivers and streams, contact:

For species information:

#### [Missouri Department of Conservation](#)

Resource Science Division  
P.O. Box 180  
2901 W. Truman Blvd  
Jefferson City, MO 65102-0180  
Telephone: 573/751-4115

For species information and Endangered Species Act Coordination:

#### [U.S. Fish and Wildlife Service](#)

Ecological Services  
101 Park Deville Drive, Suite A  
Columbia, MO 65203-0007  
Telephone: 573/234-2132

For Clean Water Act Coordination:

#### [Missouri Department of Natural Resources](#)

Water Protection Program  
P.O. Box 176

Jefferson City, MO 65102-0176  
Telephone: 573/751-1300, 800/361-4827

[U.S. Army Corps of Engineers](#)

Regulatory Branch  
700 Federal Building  
Kansas City, MO 64106-2896  
Telephone: 816/983-3990

[U.S. Environmental Protection Agency](#)

Water, Wetlands, and Pesticides Division  
901 North 5th Street  
Kansas City, KS 66101  
Telephone: 913/551-7307

**Disclaimer**

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from state and federal agencies, contractors and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with these Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal laws such as the Clean Water Act and the Endangered Species Act, and state or local laws need to be considered for construction and development projects, and require permits and/or consultation with the appropriate agency. Following the recommendations provided in this document will help reduce and avoid project impacts to the species, but impacts may still occur. Please contact the appropriate agency for further coordination and to complete compliance requirements.