

Mountain Madtom

Noturus eleutherus

Guidelines for Landowners Using Conservation Practices

Missouri Department of
Conservation

Common name ▪ Mountain Madtom
Scientific name ▪ *Noturus eleutherus*
State status ▪ Endangered
Federal status ▪ None

Ecology

The mountain madtom is a member of a group of small catfishes called madtoms, of which 9 species are found in Missouri. Mountain madtoms occur in larger streams of the Mississippi and Ohio River drainages from western Pennsylvania southwestward to Oklahoma. In Missouri, this fish inhabits only a few large, clear rivers in the transition zone between the Ozark and Lowland faunal regions in the southeastern part of the state. Mountain madtoms prefer gravelly riffles with thick growths of aquatic vegetation. They feed primarily at night on aquatic insects. Spawning likely occurs in May and June, and males guard the eggs and larvae for a few days post-hatching. Adults typically reach a length of 2.2 to 3.5 inches.

Reasons for Decline

Mountain madtoms have historically been uncommon in rivers west of the Mississippi River. However, altering land along streams where madtoms occur may increase siltation, sedimentation and non-point source pollution. These may degrade water quality and reduce available habitat.

Recommendations

Even though records do not suggest that the abundance and distribution of mountain madtoms in Missouri have been altered, it is important that current and potential habitat be protected. To do this, project activities in the mountain madtom's

range should minimize impacts to streams and riparian corridors.



Photo Credit: Rob Criswell

Efforts should be made to ensure our waterways are healthy through protection and/or restoration of habitat for this and other aquatic species.

Avoid constructing stream crossings. If unavoidable, culverts and stream crossings should be constructed with the same bottom elevation as the existing streambed to avoid restricting stream flow and obstructing fish passage. Bank stabilization materials should consist only of rock, clean broken concrete or similar materials free of pollutants, silt and extraneous debris including exposed rebar. Erosion and sediment controls should be implemented, maintained and monitored for the duration of a project.

Follow proper sand and gravel removal procedures outlined in the Missouri Instream Sand and Gravel Removal Guidelines prepared by the Missouri Departments of Conservation and Natural Resources. Guidelines include the following: leave a minimum 20-foot buffer zone between the water line and the excavation area, do not mine within 20 feet of streamside vegetation, and do not alter stream channels. In addition, do not remove gravel during the mountain madtom spawning season (May 15 to July 15).

Limit clearing of vegetation, including standing and downed timber, to that which is absolutely necessary for construction purposes. Re-establish and maintain forested riparian corridors at least 100-foot wide along streams used by mountain madtoms to reduce erosion and capture nutrient rich runoff. Exclude livestock with fences to allow the area to naturally re-vegetate. Discourage cattle from using

streams and move watering areas into pastures and away from streams.

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

Consider the balance between adverse and beneficial practices when determining the overall effect of a conservation practice.

Beneficial Practices

- Limit livestock access to streams.
- Protection and restoration of riparian corridors along streams.
- Nutrient and pest management on adjacent agricultural fields that results in reduced opportunities for contamination of runoff.
- Practices that control erosion and prevent the delivery of sediment to the aquatic system will prove beneficial to this species.

Adverse Practices

- Sand and gravel removal beyond the excess material on adjacent unconsolidated bars.
- Project activities occurring below the high water level of the stream between May 15 and July 15, the spawning period of the mountain madtom.
- Altering water levels in streams where mountain madtoms occur.
- Gravel dredging in streams.
- Constructing dams and other impoundment structures on streams that host the fish.
- Improper erosion and sediment control.
- Culverts, fords, and stream crossings that create a barrier to fish passage or restrict stream flow.
- Unnecessary vehicle and equipment stream crossing.
- Removing or degrading the riparian corridor near springs and along streams.
- Unmanaged application of pesticides, animal waste or fertilizers.

Information Contacts

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Policy Coordination Section
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2901 W. Truman Blvd

Jefferson City, MO 65102-0180
Telephone: 573-751-4115
<http://www.mdc.mo.gov/nathis/endangered/>

Missouri Department of Natural Resources
Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 800-361-4827 / 573-751-1300
<http://www.dnr.mo.gov/env/index.html>

U.S. Army Corps of Engineers
Regulatory Branch
700 Federal Building
601 E. 12th Street
Kansas City, MO 64106-2896
Telephone: 816-389-3990
<http://www.nwk.usace.army.mil/>

U.S. Environmental Protection Agency
Water, Wetlands, and Pesticides Division
901 North 5th Street
Kansas City, KS 66101
Telephone: 913-551-7003 / 800-223-0425
<http://www.epa.gov/region7/>

U.S. Fish and Wildlife Service
Ecological Services Field Office
101 Park DeVille Dr., Suite A
Columbia, MO 65203
Telephone: 573-234-2132
<http://www.fws.gov/midwest/partners/missouri.html>

Legal

The Missouri Department of Conservation prepared these guidelines for conservation practices with assistance from other state agencies, contractors, and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat.

Compliance with these management guidelines is not required by the Missouri wildlife and forestry law or by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.

“State Endangered Status” is determined by the Missouri Conservation Commission under constitutional authority, and specific requirements for impacts to such species are expressed in the Missouri Wildlife Code, rule 3 CSR 10-4.111.

