

Scioto Madtom
(Noturus trautmani)

5-Year Review:
Summary and Evaluation

U.S. Fish and Wildlife Service
Midwest Region
Ohio Ecological Services Field Office
Columbus, Ohio

5-YEAR REVIEW
Scioto Madtom/*Noturus trautmani*

1.0 GENERAL INFORMATION

1.1 Reviewers

Lead Regional Office: Carlita Payne, Midwest Regional Office, Fort Snelling, MN, (612) 713-5339

Lead Field Office: Angela Boyer, Ohio Ecological Services Field Office, Columbus, OH (614) 416-8993, ext. 22

Cooperating Field Office(s): none

Cooperating Regional Office(s): none

1.2 Methodology used to complete the review:

Public notice was given in the *Federal Register* (74 FR 11600) requesting new scientific or commercial data and information that may have a bearing on the Scioto madtom (*Noturus trautmani*) classification of endangered status. Pertinent data was obtained from the Recovery Plan, survey reports and public comments. This 5-year review was completed by Angela Boyer, Fish and Wildlife Biologist with the Ohio Ecological Services Field Office. The focus of this 5-year review is to summarize the current status of the Scioto madtom. Peer review will be conducted when the proposed rule to remove the species from the List of Endangered Species (50 CFR 17.11) is issued.

1.3 Background:

1.3.1 FR Notice citation announcing initiation of this review:

74 FR 11600-11602, March 18, 2009

1.3.2 Listing history

Original Listing

FR notice: 40 FR 44149-44151

Date listed: September 25, 1975

Entity listed: Scioto madtom (*Noturus trautmani*)

Classification: Endangered

1.3.3 Associated rulemakings: none

1.3.4 Review History: Scioto madtom was included in cursory reviews initiated February 27, 1981 (46 FR 14652) for wildlife classified as endangered or threatened in 1975 and 1976; July 22, 1985 (50 FR 29901) for species listed

before 1976, and in 1979 and 1980; and November 6, 1991 (56 FR 56882) for all endangered and threatened species listed before 1991. These reviews resulted in no change in the listing classification of endangered.

1.3.5 Species' Recovery Priority Number at start of 5-year review: 5, indicating a high degree of threat and low recovery potential.

1.3.6 Recovery Plan or Outline

Name of plan or outline: Neither a recovery plan nor outline has been developed for this species. The Service determined that preparation of a recovery plan would not promote the conservation of the species.

2.0 REVIEW ANALYSIS

2.1 Application of the 1996 Distinct Population Segment (DPS) policy

2.1.1 Is the species under review a vertebrate? *Yes.*

2.1.2 Is the species under review listed as a DPS? *No.*

2.1.3 Was the DPS listed prior to 1996? *NA*

2.1.4 Is there relevant new information for this species regarding the application of the DPS policy? *No.*

2.2 Recovery Criteria

2.2.1 Does the species have a final, approved recovery plan containing objective, measurable criteria? *No.*

2.2.2 Adequacy of recovery criteria. *NA*

2.3 Updated Information and Current Species Status

2.3.1 Biology and Habitat

2.3.1.1 New information on the species' biology and life history:

No new information has become available since this species was listed in 1975 or the 1991 5-year review.

2.3.1.2 Abundance, population trends (e.g. increasing, decreasing, stable), demographic features (e.g., age structure, sex ratio, family size, birth rate, age at mortality, mortality rate, etc.), or demographic trends:

Only 18 individuals of the Scioto madtom were ever collected. All were found along one stretch of Big Darby Creek in Ohio, and all but one was found within the same riffle. No Scioto madtoms have been observed since 1957, despite intensive surveys. Based on the rarity of species collections, the only known population of Scioto madtom appears to be extinct.

2.3.1.3 Genetics, genetic variation, or trends in genetic variation (e.g., loss of genetic variation, genetic drift, inbreeding, etc.):

There is no information on the species' genetics due to the lack of individuals available for genetic research.

2.3.1.4 Taxonomic classification or changes in nomenclature:

There have been no changes in the taxonomic classification or nomenclature of this species since it was originally listed on September 25, 1975.

2.3.1.5 Spatial distribution, trends in spatial distribution (e.g. increasingly fragmented, increased numbers of corridors, etc.), or historic range (e.g. corrections to the historical range, change in distribution of the species' within its historic range, etc.):

There have been no changes in the spatial distribution or historic range corrections since this species was listed on September 25, 1975.

2.3.1.6 Habitat or ecosystem conditions (e.g., amount, distribution, and suitability of the habitat or ecosystem):

There have been no noted changes in the habitat or ecosystem conditions since this species was listed on September 25, 1975.

2.3.1.7 Other:

NA

2.3.2 Five-Factor Analysis (threats, conservation measures, and regulatory mechanisms)

2.3.2.1 Present or threatened destruction, modification or curtailment of its habitat or range:

We have no new information on the present or threatened destruction,

modification or curtailment of the species' habitat or range.

2.3.2.2 Overutilization for commercial, recreational, scientific, or educational purposes:

We have no new information on overutilization of this species for commercial, recreational, scientific, or educational purposes.

2.3.2.3 Disease or predation:

We have no new information on disease or predation of this species.

2.3.2.4 Inadequacy of existing regulatory mechanisms:

We have no new information regarding inadequacy of existing regulatory mechanisms for protecting this species.

2.3.2.5 Other natural or manmade factors affecting its continued existence:

NA

2.4 Synthesis

The Scioto madtom is a small species of catfish in the family Ictaluridae, which has been found only in a small section of Big Darby Creek, a major tributary to the Scioto River, Ohio (40 FR 44149; USFWS 1985, 1988). It was listed as endangered on September 25, 1975 (40 FR 44149).

The Scioto madtom prefers stream riffles of moderate current over gravel bottoms with high quality water that is free of suspended sediments. It is an omnivorous bottom feeder that eats a wide variety of plant and animal life, which it finds with its sensory barbels hanging down in front of its mouth. Little is known of its reproductive habits, though it likely spawns in summer and migrates downstream in the fall (USFWS 1985, 1997).

It is believed to be endemic to the Scioto River basin in central Ohio. Only 18 individuals of the Scioto madtom were ever collected. All were found along one stretch of Big Darby Creek, and all but one was found within the same riffle known as Trautman's riffle. The riffle habitat was comprised of glacial cobble, gravel, sand, and silt substrate, with some large boulders (USFWS 1988). No Scioto madtoms have been observed since 1957, despite intensive surveys throughout Big Darby Creek (USFWS 1977, 1982, 1985, 1997; M. Kibbey, OSU Museum of Biological Diversity, *in litt.* 2009).

Dr. Cavender (T.M. Cavender, OSU Museum of Biological Diversity, pers. comm. 1999) has conducted annual fish surveys in Big Darby Creek since 1970, but these efforts have failed to collect any Scioto madtoms. The exact cause of the Scioto madtom's decline is unknown, but was likely due to modification of its habitat from siltation, suspended industrial effluents and

agricultural runoff. In addition, competition from the northern madtom (*Noturus stigmosus*), first observed the same year the last Scioto madtom was collected, may have also contributed to this fish's decline (USFWS 1988; M. Kibbey, OSU Museum of Biological Diversity, in litt. 2009).

Based on this 5-year review, Scioto madtom does not meet the definition of an endangered or threatened species, and therefore delisting the species due to extinction is recommended.

3.0 RESULTS

3.1 Recommended Classification: Delist (due to extinction)

3.2 New Recovery Priority Number: NA

3.3 Delisting Priority Number: 6

Brief Rationale: The Delisting Priority Number is “6,” indicating that the management impact from delisting this species is low, and that this is not a petitioned action.

4.0 RECOMMENDATIONS FOR FUTURE ACTIONS:

Initiation of the delisting process during Fiscal Year 2013, which will include development of a proposed rule.

5.0 REFERENCES

- Cavender, T.M. 1999. Ohio State University, Museum of Biological Diversity, Columbus, Ohio. Phone conversation with Angela Boyer, U.S. Fish and Wildlife Service (September 14, 1999).
- Kibbey, M. 2009. Email communication with M. Kibbey, Ohio State University, Museum of Biological Diversity, Columbus, Ohio (May 19, 2009).
- U.S. Fish and Wildlife Service (USFWS). 1975. Part 17-Endangered and Threatened Wildlife; Listing of Endangered and Threatened Fauna. Federal Register Vol. 40, No. 187; 44149. September 1975.
- U.S. Fish and Wildlife Service (USFWS). 1977. Final project report, an investigation of the Scioto madtom in Big Darby Creek, Ohio. 23 pp.
- U.S. Fish and Wildlife Service (USFWS). 1982. Scioto madtom survey 1981-1982. Report on the status of the endangered species, *Noturus trautmani*. USFWS No. 30181-126T, FY81. 53 pp.
- U.S. Fish and Wildlife Service (USFWS). 1985. Scioto madtom survey 1984–1985. Report on the status of the endangered species *Noturus trautmani*. USFWS No. 30181–1274, FY84. July 1985.
- U.S. Fish and Wildlife Service (USFWS). 1988. Scioto madtom (*Noturus trautmani*) life history account. http://ecos.fws.gov/docs/life_histories/E01T.html
- U.S. Fish and Wildlife Service (USFWS). 1997. Scioto madtom (*Noturus trautmani*) Region 3 endangered species facts. http://www.fws.gov/midwest/endangered/fishes/sciot_fc.html.

**U.S. FISH AND WILDLIFE SERVICE
5-YEAR REVIEW of *Scioto madtom***

Current Classification: Endangered

Recommendation resulting from the 5-Year Review: Delist

Appropriate Delisting Priority Number: 6

Review Conducted By: Angela Boyer, Fish and Wildlife Biologist

FIELD OFFICE APPROVAL:

Lead Field Supervisor, Fish and Wildlife Service

Approve Mary M. Krapp Date 11/17/09
Mary M. Krapp, Ph.D., Field Supervisor

REGIONAL OFFICE APPROVAL:

Lead Assistant Regional Director, Ecological Services, Fish and Wildlife Service

Approve Sean Han Date 12/23/09
Acting ARD