

50 CFR Part 17**Endangered and Threatened Wildlife and Plants; Proposed Threatened Status and Critical Habitat for the Niangua Darter (*Etheostoma nianguae*)**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Service proposes to determine the Niangua darter (*Etheostoma nianguae*) to be a threatened species and to designate its critical habitat under the authority contained in the Endangered Species Act of 1973, as amended. A special rule allowing take for certain purposes in accordance with State laws and regulations is also proposed. This fish is presently known only from the Osage River Basin of west central Missouri. It is rare, localized in occurrence, and vulnerable to extinction. Reservoir construction, stream channelization, accelerated erosion and sedimentation, nutrient enrichment, and introduction of potential predators are threats to the Niangua darter. The Service is requesting data and comments on the species. This proposal, if made final, would implement needed protection

provided by the Endangered Species Act of 1973, as amended.

DATES: Comments from all interested parties must be received by June 18, 1984. Public hearing requests must be received by June 1, 1984.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Endangered Species Office, U.S. Fish and Wildlife Service, Federal Building, Fort Snelling, Twin Cities, Minnesota 55111. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Mr. James M. Engel (see **ADDRESSES** section) (612/725-3276 or FTS 725-3276) or Mr. John L. Spinks, Jr., Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. (703/235-2771 or FTS 235-2771).

SUPPLEMENTARY INFORMATION:

Background

The Niangua darter, a percid fish, was first described by Gilbert and Meek in 1888 (Gilbert, 1888). Pflieger (1975) describes the fish as a slender darter with about eight dark cross-bars on the back, readily distinguished from other Missouri darters by the presence of two small jet-black spots at the base of the caudal fin. Adults are 3 to 4 inches long. Life colors and other characteristics are described by Pflieger (1975). The only near-relative of the Niangua darter is the arrow darter (*Etheostoma sagitta*) which occurs in eastern Kentucky and northern Tennessee. The Niangua darter is known only from a few tributaries of the Osage River in Missouri (Pflieger 1971). The species inhabits clear, medium-sized streams draining hilly areas underlain by cherty dolomitic bedrocks. It prefers the margins of shallow pools with silt-free gravelly or rocky bottoms. Spawning occurs on swift, gravel riffles. Nymphs of stoneflies and mayflies gleaned from crevices of the stream bottom comprise the diet of the Niangua darter.

The Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*) requires determination of whether species of wildlife and plants are endangered or threatened to be based on the best available scientific and commercial data. In 1979, the American Fisheries Society's Endangered Species Committee expressed its opinion that the Niangua darter was a threatened species (Deacon *et al.*, 1979). On December 10, 1980, the Service received a petition from the Ozark Endangered Species Task Force to list the Niangua darter as a threatened species. The

petition was based on the comprehensive report on the Niangua darter by Dr. William L. Pflieger of the Missouri Department of Conservation. The report by Pflieger was based on research carried out between 1974 and 1977. It included a thorough review of the literature and information on the distribution and life history of the Niangua darter. It also recommended threatened status for the darter throughout its range. The Service accepted the petition on April 9, 1981, and indicated its intent to prepare a proposed rule to list the Niangua darter as a threatened species (46 FR 21208). The Niangua darter was also included in the Service's Notice of Review of Vertebrate Wildlife published December 30, 1982 (47 FR 58454-60).

The Niangua darter is presently known from 8 populations along 128 miles of stream in the Osage River Basin, Missouri (Pflieger, 1978). Specifically, these populations are located in the Maries River and lower Maries Creek, Osage County; Big Tavern Creek and upper Little Tavern Creek, Barren Fork, and Brushy Fork, Miller County; Niangua River and Greasy Creek, Dallas County; Little Niangua River, Starks Creek, Thomas Creek, and Cahoochie Creek, Hickory and Dallas Counties; Little Pomme de Terre River, Benton County; Pomme de Terre River, Green and Webster Counties; Brush Creek, St. Clair County; and the North Dry Sac River, Polk County. The Niangua darter is part of a diverse fish fauna of 107 species in the Osage Basin. Although historical numbers are unknown, it is believed that the Niangua darter population has declined at most sites in recent years. Pflieger (1978) searched extensively for the species in the Osage River Basin where it was found at 64 of 168 stations sampled. Intensive analyses of habitat, abundance, and life history were made at 64 sites where the species was found. The species is rare, localized in occurrence, and vulnerable to extinction.

Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified at 50 CFR Part 424; under revision to accommodate 1982 Amendments) set forth the procedures for adding species to the Federal lists. A species shall be determined to be an endangered or threatened species due to one or more of the five factors described in Section 4(a)(1) of the Act. These factors and

their application to the Niangua darter (*Etheostoma nianguae*) are as follows:

A. The present or threatened destruction, modification, or curtailment of its habitat or range. Reservoir construction, siltation, and stream channelization are threats to the Niangua darter. One of the eight populations of Niangua darters reported by Pflieger (1978) has been extirpated. The Truman reservoir has inundated all of the known distribution of the species in Little Pomme de Terre River and repeated sampling has failed to collect any Niangua darters. The reservoir also presents a barrier to the movement of the species between habitable tributary streams. Such movements are important to the long-term survival of the species. Stream channelization projects, often associated with highway and bridge construction, straighten and widen stream channels and frequently cause increased erosion and siltation. landowners channelize streams to control local flooding. These practices, leading to sedimentation and pollution, are general and pervasive throughout the range of the Niangua darter and represent a major threat to the species. In addition to stream channelization, the practice of removing woody vegetation from stream channels causes increased erosion changes in the character of the stream substrate, elimination of pools, and the alteration of stream flow which seriously disrupts the stream ecosystem.

B. Overutilization for commercial, recreational, scientific, or educational purposes. There is no indication that the Niangua darter is overutilized for any of these purposes.

C. Disease or predation. Although disease is not known to be a factor affecting the species, the introduction of piscivorous fishes could be detrimental to the Niangua darter. The spotted bass (*Micropterus punctulatus*) and rock bass (*Ambloplites rupestris*) were introduced into the Osage Basin before 1940 and are now widely distributed. Reservoir habitat is ideal for these predators and serves as large population centers. The movement of these predatory fishes from reservoirs into tributary streams inhabited by the Niangua darter could further reduce the darter population.

D. The inadequacy of existing regulatory mechanisms. Current regulations protecting the Niangua darter are limited to the State of Missouri's collecting permit requirements for fishes. At present, there is no mechanism for habitat protection. The Endangered Species Act will provide protection for the species and its habitat through the requirements of Sections 7 and 9.

E. *Other natural or manmade factors affecting its continued existence.* None are known.

The Service has carefully assessed the best scientific information available, regarding the past, present, and future threats faced by this species in determining to propose this rule. Based on this evaluation, the proposed action is to list the Niangua darter as threatened. The range and numbers of this species have been reduced substantially and alteration of its habitat (e.g., stream channelization, siltation and pollution) continues. Proper and adequate management could prevent the species from becoming endangered. Recent status information has provided essential habitat data and indicates overcollecting is not a major threat. Hence, it appears prudent to propose critical habitat. A decision to take no action would exclude the Niangua darter from needed protection available under the Endangered Species Act.

Critical Habitat

Critical habitat, as defined by Section 3 of the Act and at 50 CFR part 424, means: (i) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection, and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

The Act in Section 4(a)(3) requires that critical habitat be designated to the maximum extent prudent and determinable concurrent with the determination that a species is endangered or threatened. The proposed critical habitat for the Niangua darter includes 90 of the 128 miles of streams inhabited by the species plus a 50 foot riparian zone along each side of the 90 miles of stream. The critical habitat is located in Camden, Dallas, Greene, Hickory, Miller, Osage, and St. Clair Counties, Missouri. The 50 foot riparian zone along each side of the stream is included in the critical habitat designation to protect the chemical and physical properties of the stream ecosystem. The riparian zone is helpful in preventing runoff pollutants from entering the stream and reduces siltation. The vegetation in the riparian zone provides shading to the stream which helps stabilize the water temperature and dissolve oxygen levels.

The proposed critical habitat is based primarily on the recommendation of the Missouri Department of Conservation.

In considering designation of critical habitat, 50 CFR 424.12(b) requires consideration of the biological or physical constituent elements within the define area that are essential to the conservation of the species involved. With respect to the Niangua darter, the stream reaches proposed as critical habitat satisfy all known criteria for the ecological, behavioral, and physiological requirements of the species. The streams are largely undisturbed and possess the habitat characteristics described for the Niangua darter by Pflieger (1978). Populations of the fish survive and reproduce within the areas proposed as critical habitat.

Section 4(b)(8) of the Act requires, for any proposal or final regulation which determines critical habitat, a brief description and evaluation of those activities (public or private) which may adversely modify such habitat if undertaken, or may be affected by such designation. In the case of the Niangua darter, such activities could include reservoir construction, stream channelization, removal of stream channel vegetation, erosion, sedimentation, and nutrient enrichment from adjoining land, sewage discharge, and introduction of nonnative fishes which are predators or competitors of the species.

Section 4(b)(2) of the Act requires the Service to consider economic and other impacts of specifying a particular area as critical habitat. The Service will reevaluate the geographical critical habitat designation at the time of the final rule after considering all additional information obtained. The Service is requesting Federal, State, and local government entities within the range of the species to submit information on economic or other impacts of the proposed measure. No activities involving Federal agencies are presently known that may have an impact on the habitat of the Niangua darter.

It should be emphasized that critical habitat designation does not necessarily affect all Federal activities. If appropriate, the impacts will be addressed during consultation with the Service as required by Section 7(a)(2) of the Endangered Species Act of 1973, as amended.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions

against certain practices. Recognition through listing encourages and results in conservation actions by other Federal, State, and private agencies, groups, and individuals. The Endangered Species Act requires that recovery actions be carried out for all listed species and these are initiated by the Service following listing. The Section 7 responsibilities of Federal agencies and the Act's general prohibitions are discussed in part below.

Subsections 7(a)(2) and (4) of the Act, as amended, require Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened. Section 7(a)(4) requires Federal agencies to informally confer with the Service on any action that is likely to jeopardize the continued existence of a proposed species. When a species is listed, Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If an effect is expected, the Federal agency must enter into consultation with the Service. The Service is notifying Federal agencies that may have jurisdiction over the land and water under consideration in this proposed action. These Federal agencies and other interested persons or organizations are requested to submit information on economic or other impacts of this proposed critical habitat.

The Act and its implementing regulations found at 50 CFR 17.21 and 17.31 set forth a series of prohibitions and exceptions that generally apply to all endangered or threatened wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale listed species in interstate or foreign commerce. It also would be illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that was illegally taken. Certain exceptions would apply to agents of the Service and State conservation agencies. General regulations governing the issuance of permits for carrying out otherwise prohibited activities involving threatened species under certain circumstances are set out at 50 CFR 17.32.

The above discussion generally applies to threatened species of fish or wildlife. However, the Secretary has discretion under Section 4(d) of the Act to issue such special regulations as are necessary and advisable for the

conservation of a threatened species. The Niangua darter is threatened primarily by habitat disturbance or alteration, not by intentional, direct taking of the species or by commercialization. Given this fact and the fact that the State regulates direct taking of the species through the requirement of State collecting permits, the Service has concluded that the State's collection permit system is more than adequate to protect the species from excessive taking, so long as such takes are limited to: educational purposes, scientific purposes, the enhancement of propagation or survival of the species, zoological exhibition, and other conservation purposes consistent with the Endangered Species Act. A separate Federal permit system is not required to address the current threats to the species. Therefore, the special rule allows takes to occur for the above-stated purposes without the need for a Federal permit if a State collection permit is obtained and all other State wildlife conservation laws and regulations are satisfied. It should be recognized that any activities involving the taking of this species not otherwise enumerated in the special rule are prohibited. Without this special rule, all of the prohibitions under 50 CFR 17.31 would apply. The Service believes that this special rule will allow for more efficient management of the species, thereby facilitating its conservation. For these reasons, the Service has concluded that this regulatory proposal is necessary and advisable for the conservation of the Niangua darter.

Public Comments Solicited

The Service intends that the rules finally adopted will be as accurate and as effective as possible in the conservation of any endangered or threatened species. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, private interest, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

1. Biological, commercial, or other relevant data concerning any threat (or lack thereof) to the species included in this proposal;
2. The location of and the reason why any habitat of this species should or should not be determined to be critical habitat as provided for by Section 4 of the Act;
3. Additional information concerning the range and distribution of this species; and

4. Current or planned activities in the subject area and their possible impacts on the Niangua darter and its proposed critical habitat.

Final promulgation of regulations on the Niangua darter will take into consideration the comments and any additional information received by the Service, and such communications may lead to adoption of a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of the proposal. Such requests must be made in writing and addressed to James M. Engel (see ADDRESSES section).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined by the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to Section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the Federal Register on October 25, 1983 (48 FR 49244).

References

Deacon, J. E., G. Kobetich, J. D. Williams, and S. Contreras. 1979. Fishes of North America—endangered, threatened, or of special concern: 1979. *Fisheries* 4(2):29-44.
 Gilbert, C. H. 1888. Descriptions of new and little known etheostomids. *Proc. U.S. Nat. Mus.* 10:47-64.
 Missouri Department of Conservation. 1974. Rare and endangered species of Missouri. 80 pp.

Pflieger, W. L. 1971. A distributional study of Missouri fishes. *Mus. Nat. Hist., Univ. Kansas, Publ.* 20(3):229-570.
 Pflieger, W. L. 1975. The fishes of Missouri. Missouri Dept. of Conservation. 342 pp.
 Pflieger, W. L. 1978. Distribution, status, and life history of the Niangua darter, *Etheostoma nianguae*. *Aquatic, Ser. No. 18.* Missouri Dept. of Conservation. 24 pp.

Author

The primary author of this proposed rule is Mr. John G. Sidle, Endangered Species Office, U.S. Fish and Wildlife Service, Federal Building, Ft. Snelling, Twin Cities, Minnesota 55111.

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Proposed Regulations Promulgation

PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the U.S. Code of Federal Regulations, as set forth below:

1. The authority citation for Part 17 reads as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1531 et seq.).

2. It is proposed to amend § 17.11(h) by adding, in alphabetical order, the following to the List of Endangered and Threatened Wildlife under "Fishes."

§ 17.11 Endangered and threatened wildlife.

* * * * *
 (h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Fishes							
Darter, Niangua	<i>Etheostoma nianguae</i>	U.S.A. (MO)	Entire	T	17.95(e)	17.44	()

3. It is further proposed that 50 CFR 17.44 (special rules) be amended by adding a new paragraph as follows:

§ 17.44 Special rules—fishes.

() Niangua Darter, *Etheostoma nianguae*.

(1) No person shall take the species, except in accordance with applicable State fish and wildlife conservation laws and regulations in the following instances: education purposes, scientific purposes, the enhancement of propagation or survival of the species,

zoological exhibition, and other conservation purposes consistent with the Act.

(2) Any violation of applicable State fish and wildlife conservation laws or regulations with respect to the taking of this species will also be a violation of the Endangered Species Act.

(3) No person shall possess, sell, deliver, carry transport, ship, import, or export, by any means whatsoever, any such species taken in violation of these regulations or in violation of applicable State fish and wildlife conservation laws of regulations.

(4) It is unlawful for any person to attempt to commit, solicit another to commit, or cause to be committed, any offense defined in paragraphs (1) through (3) above.

4. It is further proposed to amend § 17.95(e) for "Fishes," by adding critical habitat for the Niangua darter as follows:

§ 17.95 Critical habitat—fish and wildlife.

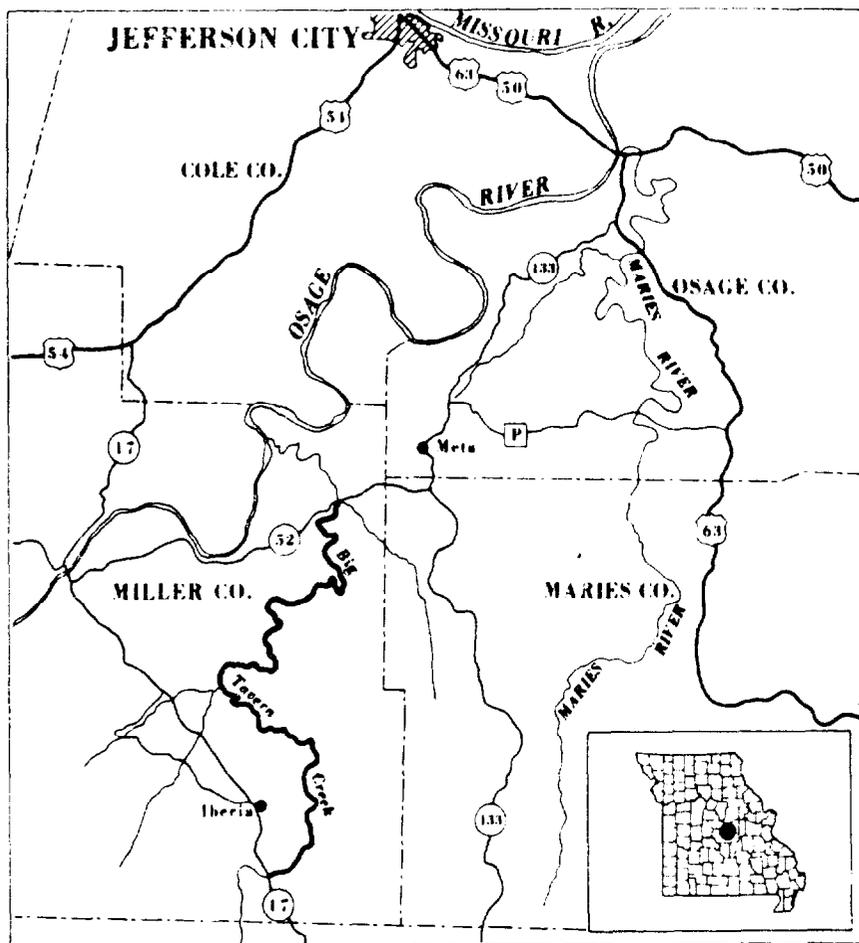
Niangua darter, *Etheostoma nianguae*.

Big Tavern Creek, Miller County, Missouri. Big Tavern Creek and 50 feet along each side of the creek from highway 52 upstream to Highway 17.

Constituent elements consist of medium sized creeks with silt free pools and riffles and moderately clear water draining hilly areas underlain by chert and dolomite. Water ranges from 8 to 46 inches in depth over gravel with scattered rubble.

NIANGUA DARTER

Miller County, MISSOURI



Niangua River, Dallas County, Missouri. Niangua River and 50 feet on each side of the river from county road K upstream to 1 mile beyond county road M to the Webster County line.

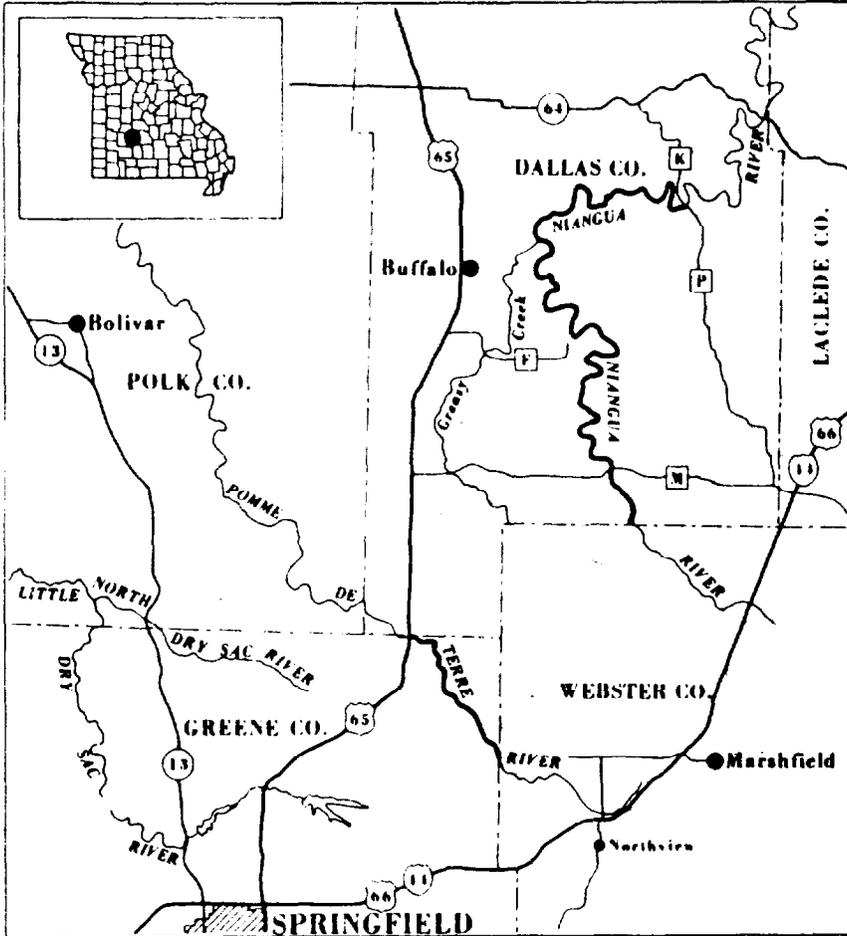
Pomme de Terre River, Greene County, Missouri. Pomme de Terre River and 50 feet on each side of the river

from Highway 65 upstream to boundary of Greene and Webster County.

Constituent elements consist of medium sized creeks with silt free pools and riffles and moderately clear water draining hilly areas underlain by chert and dolomite. Water ranges from 8 to 46 inches in depth over gravel with scattered rubble.

NIANGUA DARTER

Dallas and Greene Counties, MISSOURI



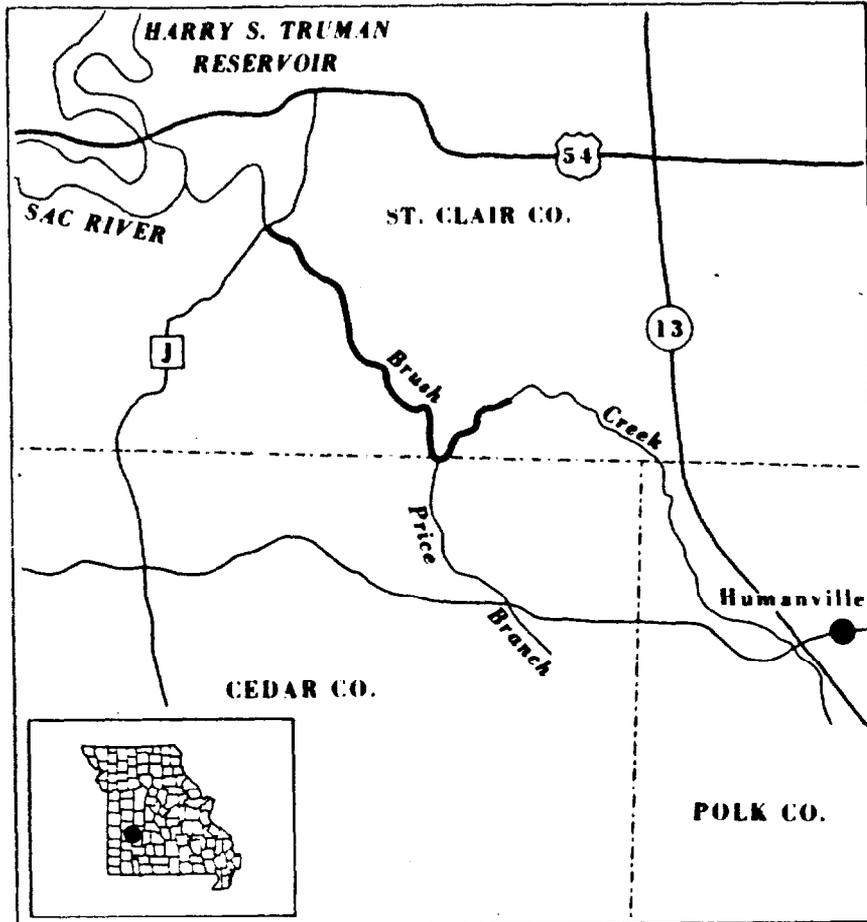
* * * * *

Brush Creek in Cedar and St. Clair Counties, Missouri. Brush Creek and 50 feet on each side of the creek from county road J upstream to the boundary of Sections 34 and 35, Township 36 N, Range 25 W.

Constituent elements consist of medium sized creeks with silt free pools and riffles and moderately clear water draining hilly areas underlain by chert and dolomite. Water ranges from 8 to 46 inches in depth over gravel with scattered rubble.

NIANGUA DARTER

Cedar and St. Clair Counties, MISSOURI

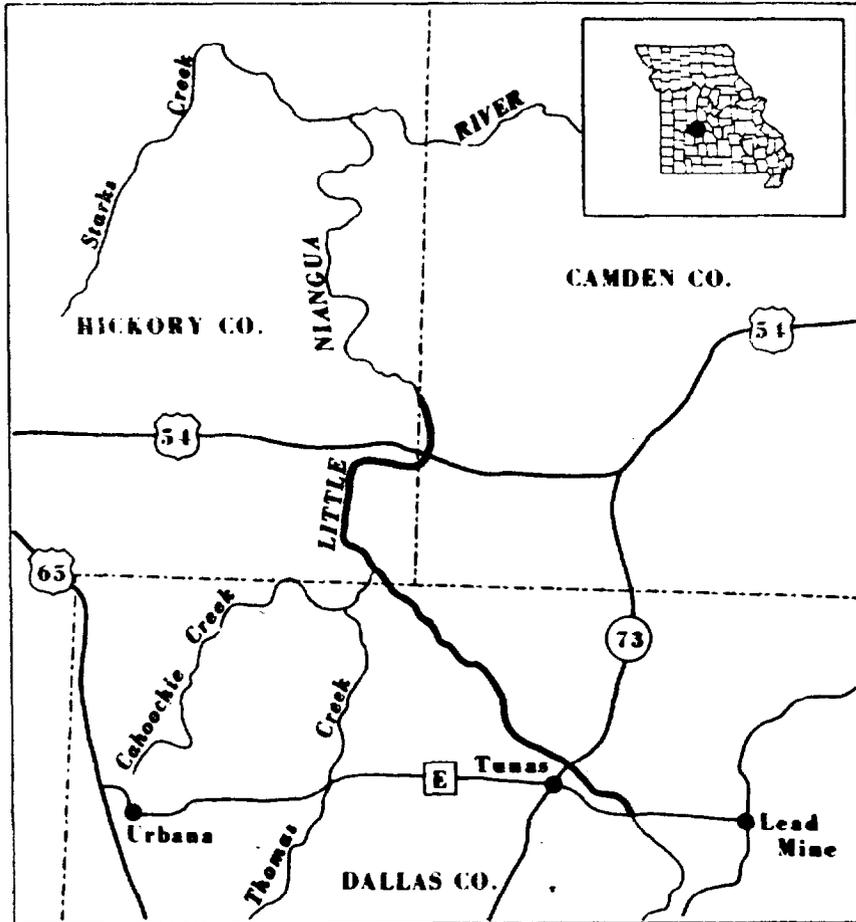


Little Niangua River, Camden, Dallas, and Hickory Counties, Missouri. Little Niangua River and 50 feet on each side of the river from 1 mile below (downstream of) Highway 54, Camden County, upstream to county road E, Dallas County.

Constituent elements consist of medium sized creeks with silt free pools and riffles and moderately clear water draining hilly areas underlain by chert and dolomite. Water ranges from 8 to 46 inches in depth over gravel with scattered rubble.

NIANGUA DARTER

Camden, Dallas and Hickory Counties, MISSOURI



Dated: April 9, 1984.

G. Ray Arnett,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 84-10239 Filed 4-16-84; 8:45 am]

BILLING CODE 4310-55-M