

[4310-55]

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[50 CFR Part 17]

ENDANGERED AND THREATENED WILDLIFE
AND PLANTSProposed Endangered and Threatened Status
and Critical Habitat for Three Texas FishesAGENCY: Fish and Wildlife Service,
Interior.

ACTION: Proposed rule.

SUMMARY: The Service proposed to determine the Leon Springs pupfish (*Cyprinodon bovinus*) and the Goodenough gambusia (*Gambusia amista-densis*) to be endangered species and to determine the Devil's River minnow (*Dionda diaboli*) to be a threatened species; it also proposes critical habitat for the Leon Springs pupfish and the Devil's River minnow. This action is being taken because the habitat of these species has been and is presently subject to alteration. Habitat of one species, the Goodenough gambusia, was totally destroyed by a Corps of Engineers impoundment. This species presently survives only in captivity. The proposed action, if completed, would protect populations of the Leon Springs pupfish and the Devil's River minnow and their habitats. This action could lead to the reestablishment of the Goodenough gambusia in the wild.

DATES: Comments from the public must be received by October 13, 1978. Comments from the Governor of Texas must be received by November 12, 1978.

ADDRESSES: Submit comments to Director (OES), U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240. Comments and materials received will be available for public inspection during normal business hours at the Service's Office of Endangered Species, Suite 1100, 1612 K Street NW., Washington, D.C.

FOR FURTHER INFORMATION CONTACT:

Mr. Keith M. Schreiner, Associate Director—Federal Assistance, Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C. 20240, 202-343-4646.

SUPPLEMENTARY INFORMATION:

BACKGROUND

Section 4(a) of the Act (16 U.S.C. 1531 et sec.) states:

General.—(1) The Secretary shall by regulation determine whether any species is an endangered species or a threatened species because of any of the following factors:

(1) The present or threatened destruction, modification, or curtailment of its habitat or range;

(2) Overutilization for commercial, sporting, scientific, or education purposes;

(3) Disease or predation;

(4) The inadequacy of existing regulatory mechanisms; or

(5) Other natural or manmade factors affecting its continued existence.

This authority has been delegated to the Director.

SUMMARY OF FACTORS AFFECTING THE SPECIES

These findings are summarized herein under each of the five criteria of section 4(a) of the Act. These factors, and their application to (a) Devil's River minnow, (b) Leon Springs pupfish, and (c) Goodenough gambusia, are as follows:

1. *The present or threatened destruction, modification, or curtailment of its habitat or range.*—(a) Historically, the Devil's River minnow (*Dionda diaboli*) was known from the Devil's River, San Felipe Creek, and Las Moras Creek, Val Verde County, Tex. In recent years this species has been eliminated from a portion of its range as a result of habitat alteration. The population of the Devil's River minnow and its habitat in the lower portion of the Devil's River was destroyed by the backwaters of Amistad Reservoir. The population in the headwaters of the Devil's River was extirpated by decreased spring and stream flow as a result of excessive removal of ground water. The remaining population in the Devil's River is threatened by the lowering of the water table resulting in decreased spring flows. Pecan Springs, which originally consisted of at least six springs, were reduced to one flowing spring by 1971.

The population of the Devil's River minnow in San Felipe Creek is threatened by the encroachment of urbanization from the city of Del Rio. The current status of the population in Las Moras Creek is now known. However, this habitat is also threatened by modifications resulting from urbanization.

(b) The Leon Springs pupfish was originally found in Leon Springs, Leon Creek, and Diamond Y Spring, located west and north of Fort Stockton, Pecos County, Tex. Alteration of Leon Springs, which dried up in 1962, eliminated that population. The excessive removal of ground water, which dried up Leon Springs and the upper portion of Leon Creek, also threatens the Diamond Y Spring population.

(c) The Goodenough gambusia was known to occur only in Goodenough Spring, tributary to the Rio Grande River in Val Verde County, Tex. In July of 1968, backwaters of the Corps of Engineers Amistad Reservoir began permanent flooding of the area. Subsequent visits to the area after the reservoir had reached full pool level found the spring under more than 70 feet of silt laden water. A scuba diver examined the Goodenough Spring area but did not detect any clear water issuing from the spring. This species is presently surviving only in captivity at the University of Texas and Dexter National Fish Hatchery.

2. *Overutilization for commercial, sporting, scientific, or educational purposes.*—Not applicable.

3. *Disease or predation.*—Not applicable.

4. *The inadequacy of existing regulatory mechanisms.*—Not applicable.

5. *Other natural or manmade factors affecting its continued existence.*—(b) The Leon Springs pupfish is threatened by hybridization with a closely related introduced pupfish, *Cyprinodon variegatus*. The introduced pupfish and hybrids between *Cyprinodon bovinus* and *Cyprinodon variegatus* were first discovered in the lower portion of Leon Creek at Highway 18, approximately 10 miles north of Fort Stockton, in 1974. Efforts to eliminate the hybrid population in this area were partially successful. However, recently, March 1978, hybrid pupfishes were found at the upper end of pupfish habitat, Diamond Y Spring. Efforts are presently underway to remove the introduced and hybrid pupfishes. Pure stock of *Cyprinodon bovinus* is being held in Dexter National Fish Hatchery.

CRITICAL HABITAT

Section 7 of the Act, entitled "Inter-agency Cooperation," states:

The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal departments and agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act and by taking such action necessary to insure that actions authorized, funded, or carried out by them do not jeop-

ardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected States, to be critical.

A definition of the term "critical habitat" was published jointly by the Fish and Wildlife Service and the National Marine Fisheries Service in the FEDERAL REGISTER of January 4, 1978 (43 FR 870-876) and is reprinted below:

"Critical habitat" means any air, land, or water area (exclusive of those existing man-made structures or settlements which are not necessary to the survival and recovery of a listed species) and constituent elements thereof, the loss of which would appreciably decrease the likelihood of the survival and recovery of a listed species or a distinct segment of its population. The constituent elements of critical habitat include, but are not limited to: Physical structures and topography, biota, climate, human activity, and the quality and chemical content of land, water, and air. Critical habitat may represent any portion of the present habitat of a listed species and may include additional areas for reasonable population expansion.

As specified in the regulations for Interagency Cooperation as published in the January 4, 1978, FEDERAL REGISTER (43 FR 870), the Director will consider the physiological, behavioral, ecological, and evolutionary requirements for survival and recovery of listed species in determining what areas or parts of habitat are critical. These requirements include, but are not limited to:

(1) Space for individual and population growth and for normal behavior;

(2) Food, water, air, light, minerals, or other nutritional or physiological requirements;

(3) Cover or shelter;

(4) Sites for breeding, reproduction, or rearing of offspring; and generally,

(5) Habitats that are protected from disturbances or are representative of the geographical distribution of listed species.

With respect to the Devil's River minnow and the Leon Spring pupfish, the areas proposed as critical habitat satisfy all known criteria for the evolutionary, ecological, behavioral, and physiological requirements of the species.

The proposed critical habitat, Devil's River, Pecon Springs, San Felipe Creek and San Felipe Springs, for the Devil's River minnow includes sufficient area for normal population growth and individual movements. The spring and main stream channel riffle and pool areas provide habitat for a variety of aquatic invertebrates which are important food items for this species. Associated aquatic vegetation and cobbles provide cover for this species. Spawning has not been observed for this species, but is presumed to occur in the proposed critical habi-

tat area since it is not known to occur outside the proposed area. The spring and stream habitat proposed are representative of the geographical distribution of listed species.

The proposed critical habitat, Diamond Y Spring and Leon Creek, for the Leon Springs pupfish, includes adequate space for normal behavior, individual and population growth. This species appears to be a generalist in its feeding habits, but the most frequent food organisms include diatoms, algae, amphipods, and gastropods. The proposed area provides sufficient habitat for these food organisms. The substrate of the proposed area contains stones, submerged ledges, roots of *Surpus*, an aquatic plant, and algae, which provide cover for the Leon Springs pupfish. Spawning has been observed in several areas within the proposed critical habitat. Leon Creek and Diamond Y Spring are the only known habitat of the Leon Springs pupfish.

The areas delineated do not necessarily include the entire habitat of the Devil's River minnow and the Leon Springs pupfish, and modifications to the proposed critical habitat descriptions may also be proposed as a result of further studies. In accordance with section 7 of the Act, all Federal departments and agencies would be required to insure that actions authorized, funded, or carried out by them do not result in the destruction or adverse modification of the critical habitat of the Devil's River minnow and the Leon Springs pupfish.

All Federal departments and agencies shall, in accordance with section 7 of the Act, consult with the Secretary of the Interior with respect to any action which is considered likely to affect critical habitat. Consultation pursuant to section 7 should be carried out using the procedures contained in the January 4, 1978, FEDERAL REGISTER (43 FR 870-876).

EFFECT OF THE RULEMAKING

In addition to the effects discussed above, the effects of these determinations and this rulemaking include, but are not necessarily limited to, those discussed below.

Endangered species regulations already published in title 50 of the Code of Federal Regulations set forth a series of general prohibitions and exceptions which apply to all endangered species. All of those prohibitions

and exceptions also apply to any threatened species pursuant to 50 CFR 17.31, unless a special rule pertaining to that threatened species has been published and indicates otherwise. The Devil's River minnow, proposed as a threatened species, has a special rule proposed which would allow for the take of this species in accordance with State laws. A violation of State law would also be a violation of the endangered Species Act of 1973. The other prohibition of § 17.31 will be applicable to the Devil's River minnow. The regulations referred to above, which pertain to endangered species, are found at § 17.21 of title 50, and are summarized below.

With respect to the Leon Springs pupfish and the Goodenough gambusia in the United States, all prohibitions of section 9(a)(1) of the Act, as implemented by 50 CFR 17.21, would apply. These prohibitions, in part, would 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 a commercial activity, or sell or offer for sale these species in interstate or foreign commerce. It also would be illegal to possess, sell, deliver, carry, transport, or ship any such wildlife which was illegally taken. Certain exceptions would apply to agents of the Service and State conservation agencies.

Regulations published in the FEDERAL REGISTER of September 26, 1975 (40 FR 44412 codified at 50 CFR 17.22 and 17.32) provided for the issuance of permits to carry out otherwise prohibited activities involving endangered or threatened species under certain circumstances. Such permits involving endangered species are available for scientific purposes or to enhance the propagation or survival of the species. In some instances, permits may be issued during a specified period of time to relieve undue economic hardship which would be suffered if such relief were not available. Pursuant to section 4(b) of the Act, the Director will notify the Governor of Texas with respect to this proposal and request his comments and recommendations before making final determinations.

PUBLIC COMMENTS SOLICITED

The Director intends that the rules finally adopted will be as accurate and effective as possible in the conserva-

tion of any endangered or threatened species. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, private interests, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

- (1) Biological or other relevant data concerning any threat (or lack thereof) to the species included in this proposal;
- (2) The reasons why any habitat of these species should or should not be determined to be critical habitat as provided for by section 7 of the Act;
- (3) Additional information concerning the range and distribution of these species.

Final promulgation of regulations on the Leon Springs pupfish, Goodenough gambusia, and Devil's River minnow will take into consideration the comments and any additional information received by the Director, and such communications may lead him to adopt final regulations that differ from this proposal.

An environmental assessment has been prepared in conjunction with this proposal. It is on file in the Service's Office of Endangered Species, 1612 K Street NW., Washington, D.C., and may be examined during regular business hours. A determination will be made at the time of final rulemaking as to whether this is a major Federal action which would significantly affect the quality of the human environment within the meaning of section 102(2)(C) of the National Environmental Policy Act of 1969.

The primary author of this proposed rulemaking is Dr. James D. Williams, Office of Endangered Species, 202-343-7814.

REGULATIONS PROMULGATION

Accordingly, it is hereby proposed to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

- 1. It is proposed to amend § 17.11(i) by adding, in alphabetical order under "FISHES", the following to the list of animals:

§ 17.11 Endangered and threatened wildlife.

* * * * *

Species		Range			Status	When listed	Special rules
Common name	Scientific name	Population	Known distribution	Portion endangered			
Fishes:							
Gambusia, Goodenough	<i>Gambusia amistadenensis</i>	NA	U.S.A. (Texas)	Entire	E		NA
Minnow, Devil's River	<i>Dionda diaboli</i>	NAdo.....do.....	T		17.44(h)
Pupfish, Leon Springs	<i>Cyprinodon bovinus</i>	NAdo.....do.....	E		NA

PROPOSED RULES

2. Amend § 17.44 by adding a new paragraph (h) as follows:

§ 17.44 Special rules—fishes.

* * * * *

(h) Devil's River Minnow (*Dionda diaboli*).

(1) All provisions of § 17.31 apply to this species, except that it may be taken in accordance with applicable State law.

(2) Any violation of State law will also be a violation of the act.

3. The Service proposes to amend § 17.95(e) by adding critical habitat of the Leon Springs pupfish after that of the Alabama cavefish as follows:

§ 17.95 Critical habitat—fish and wildlife.

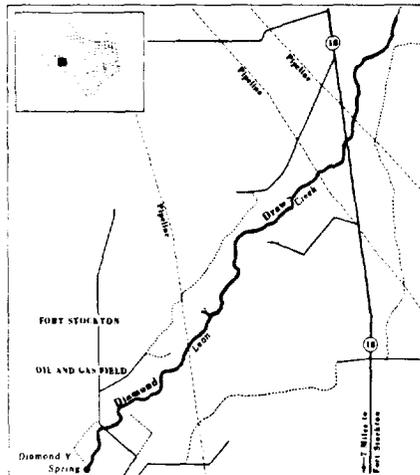
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(e) Fishes.

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LEON SPRINGS PUPFISH
(*Cyprinodon bovinus*)

Texas, Pecos County, Diamond Y Spring and its outflow stream, Leon Creek. From the head of Diamond Y Spring downstream in Leon Creek to a point 1 mile northeast of Texas highway 18, crossing approximately 10 miles north of Fort Stockton.



4. Also, the Service proposes to amend § 17.95(e) by adding critical habitat of the Devil's River minnow after that of the Slender chub as follows:

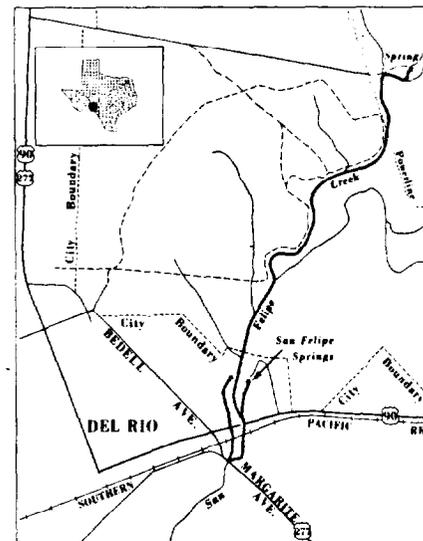
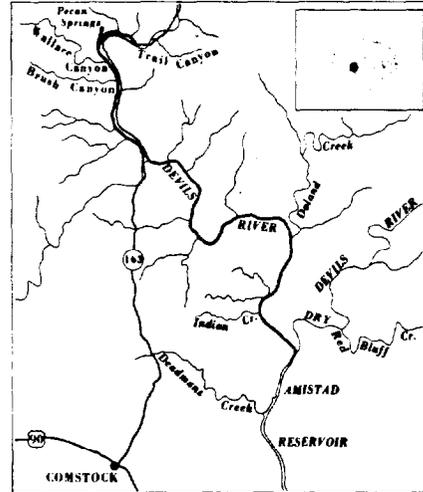
(e) Fishes.

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DEVIL'S RIVER MINNOW,
(*Dionda diaboli*)

Texas, Val Verde County, Devil's River from the backwaters of Amistad Reservoir

upstream to Texas highway 163, crossing approximately 1 mile east of Pecan Springs. Pecan Springs and its outflow downstream to its junction with the Devil's River. San Felipe Creek, San Felipe Springs and spring runs in Del Rio, Texas, from U.S. highway 277 upstream to the headwater spring of San Felipe Creek approximately 2.5 miles north northeast of U.S. highway 277 crossing.



NOTE.—The Service has determined that this document does not contain a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11949 and OMB Circular A-107.

Dated: July 24, 1978.

KEITH M. SCHREINER,
Director,
Fish and Wildlife Service.

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