

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Alabama Red-Bellied Turtle

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines the Alabama red-bellied turtle (*Pseudemys alabamensis*) to be an endangered

species. This herbivorous freshwater turtle is restricted to the lower part of the floodplain of the Mobile River drainage system in Baldwin and Mobile Counties, Alabama. There is only one known nesting area receiving repeated annual use, and turtles nesting at this location are threatened by high incidence of egg predation and human disturbance. These factors combined with an apparent small population size, low recruitment, and this turtle's

Alabama red-bellied turtle was assigned the status of "Threatened and Declining" by a committee on reptiles and amphibians at the Alabama Non-game Conference (Mount 1984). The Service published the proposed rule to list this species as threatened on July 8, 1986 (51 FR 24727). After reviewing the comments received on the proposal and reevaluating existing data, the Service now believes that endangered status is appropriate.

Summary of Comments and Recommendations

In the July 8, 1986, proposed rule (51 FR 24727) and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the Service's effort in evaluating the turtle's status and determining if Endangered Species Act protection is justified. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. A newspaper notice inviting general public comments was published in *The Mobile Register* on July 29, 1986. Eight comments were received and are discussed below. Two comments were from State agencies, four from private conservation groups, one from a university, and one from a museum. No public hearing was requested or held. The eight comments expressed support for the listing although two commented that critical habitat should be designated and one that the species should be listed as endangered rather than threatened. The Service's justification for not determining critical habitat is discussed below in the 'Critical Habitat' section. In response to the comment that the turtle should be listed as endangered rather than threatened, the Service has reconsidered the turtle's status and has determined that endangered status is most appropriate for this species. The Service has changed the status to endangered in this final rule.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that the Alabama red-bellied turtle should be classified as an endangered species. Procedures found in section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR Part 424) promulgated to implement the listing provisions of the Act were followed. A species may be determined to be an endangered or threatened species due to one or more of

the five factors described in section 4(a)(1). These factors and their application to the Alabama red-bellied turtle (*Pseudemys alabamensis*) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The Alabama red-bellied turtle is threatened primarily by human activities on this species' only known nesting site. Dobie (1985a) reported heavy use of the sand beach nesting habitat by campers on summer holidays during times when turtles were nesting. Camp lights, people, and noise associated with high recreational use likely reduce nesting by the Alabama red-bellied turtle on the island. The tires of three-wheeled vehicles which are driven over sand beaches were observed uncovering turtle nests, resulting in dehydration, predation, and breakage of eggs during the summer of 1985 (B. Weisberger, personal communication). These disturbances to nesting habitat, and predation (see factor "C" in this section), have apparently reduced reproductive success and recruitment since 1970 (see the "Background" section).

The remainder of the turtle's habitat, the marshes and bays of the lower part of the Mobile River System, are not as disturbed as the nesting island. However, Dobie (1985a) observed what appeared to be areas with reduced amounts of aquatic vegetation south of Clover Leaf Landing. He suggested that these areas had been chemically treated. Mike Eubanks of the Mobile Office of the Corps of Engineers (Corps) (personal communication) indicated that the Corps and State of Alabama had treated a limited amount of aquatic habitat with 2,4-D (an herbicide) within the Lower Mobile Bay area. These treatments started in the 1950's and were limited to only a few small areas. The Corps discontinued its program in 1978, although the State of Alabama has continued small treatments since 1981. Chemical treatments were initiated primarily to control introduced aquatic vegetation such as water hyacinths. The Service believes that these treatments have not significantly reduced the quality of Alabama red-bellied turtle habitat in the area. Rather, natural phenomena, such as movement of salt wedges up into bays during hurricanes, more likely account for major reductions in aquatic vegetation along the Lower Mobile Bay area.

More information is needed to determine how turtles use certain microhabitats to perform ecological functions, such as nesting, feeding, wintering, and thermoregulation.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* Dobie (1985a) reported that residents in the vicinity of the known nesting habitat of this turtle spent several days a year gathering and eating turtle eggs. This practice has apparently declined in response to decreases in the number of nesting females and eggs.

Some Alabama red-bellied turtles have been trapped and sold as pets and food (Dobie 1985a). Headlights and dip nets have been used to collect turtles in weed beds during warm months, especially for obtaining turtles for the pet trade (Dobie 1985a). Pet dealers have advertised this species for up to twenty-five dollars per turtle (Dobie 1985a). Trawling has been used to obtain winter aestivating turtles for sale as food (Dobie 1985a). In addition, Alabama red-bellied turtles are incidentally harvested by commercial fishermen and shrimpers in gill, hoop, and trammel nets, and crab traps (McCoy and Vogt 1979). When combined with predation and physical disturbance to the nesting area, taking of this species increases the overall precarious nature of this turtle's future.

C. *Disease or predation.* There is no known threat from disease. The alligator is probably a frequent predator of red-bellied turtles as evidenced by the high frequency of tooth scars found on the shells of young turtles (Dobie 1985a).

Domestic pigs were released on the nesting island during the late 1960's. These pigs follow turtles from the water to nest sites where they eat eggs during and subsequent to laying (Dobie 1985a). Domestic pigs are still on the island, although their predation on turtle eggs has not been verified in recent years.

Fish crow (*Corvus ossifragus*) predation appears to be one of the main factors limiting nest success of Alabama red-bellied turtles on the only known nesting site (Dobie 1985a). Of nine red-bellied turtle nests (containing 3-6 eggs each) found between May 27 and July 15, 1978, 100 percent of the eggs had been destroyed by crows (Meany 1979). Similar rates of predation were noted during the summer of 1985 (B. Weisberger, personal communication). Fish crows also prey upon black-knobbed sawback turtle (*Graptemys nigrinoda*) nests on this island; 95 percent of the nests were destroyed by crows during a study by Lahanas (1982). Heavy predation on Alabama red-bellied turtles is facilitated by concentration of nests on the sand banks of the island; these natural dry sand beaches are relatively rare within the vicinity of the island. Fire ants may also prey upon turtle eggs, as they have

been found in the nest chambers of the Alabama red-bellied turtle (See Mount 1981, and Mount *et al.* 1981, for possible significance of predation of fire ants on eggs).

D. *The inadequacy of existing regulatory mechanisms.* Although recognized as a threatened species on the Alabama Department of Conservation's list, this species currently receives no statutory protection within the State of Alabama. The Endangered Species Act will provide much needed recovery provisions, prohibitions against taking, and protection under section 7.

E. *Other natural or manmade factors affecting its continued existence.* Hurricanes may periodically reduce aquatic vegetation by forcing salt water wedges up into bays (see discussion in factor "A" of this section). Historically, these losses of aquatic vegetation probably had no permanent impact on the species; turtle numbers were reduced in years immediately following hurricanes, but increased as aquatic vegetation became reestablished. However, a reduction in recruitment of young turtles since 1970, primarily due to predation (see factor "C" of this section), may decrease the ability of the Alabama red-bellied turtle to recover from catastrophic events such as hurricanes.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to make this rule final. Based on this evaluation, the preferred action is to list the Alabama red-bellied turtle as an endangered species. Endangered status, rather than threatened as was originally proposed, is appropriate because of the species' restricted range, scarcity, low population recruitment, take for trade, lack of statutory protection, and severe threats from predation. Critical habitat is not being determined for reasons discussed in the following section.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for the Alabama red-bellied turtle at this time. As discussed under factor "B" in "Summary of Factors Affecting the Species," collecting contributes to the threat of this turtle's continued survival. The publication of critical habitat maps and other publicity accompanying critical habitat

designation could increase collecting pressure and enforcement problems. Only one nesting site is known for this species, and identification of this area, which is privately owned, could increase the taking of nesting individuals, hatchlings, or eggs.

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 Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402. 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 a listed species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. Federal involvement related to this species is expected to include the U.S. Army Corps of Engineers' permit activities (e.g., Clean Water Act, section 404 permits). The Service is in contact with the Corps of Engineers since coordination may be necessary to develop a vegetation control program that will enhance habitat of the Alabama red-bellied turtle in the Mobile River Basin. No major conflicts with Federal projects are foreseen at this time.

The Act and implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take any listed species, import or export it,

ship it in interstate commerce in the course of commercial activity, or sell or offer it for sale in interstate or foreign commerce. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in connection with otherwise lawful activities. In some instances, permits may be issued during a specified period of time to relieve undue economic hardship that would be suffered if such relief were not available. The Service will review this species to determine whether it should be considered for placement on the appendices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora and on the Annex of the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere.

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of 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).

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Author

The primary author of this proposed rule is Fred M. Bagley of the Service's Jackson Endangered Species Field Station (see Address section).

List of Subjects in 50 CFR Part 17

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

Regulation Promulgation

PART 17—[AMENDED]

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, is amended as set forth below:

1. The authority citation for Part 17 continues to read 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. Amend § 17.11(h) by adding the following, in alphabetical order under "REPTILES", to the List of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

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Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Turtle, Alabama red-bellied.....	<i>Pseudemys alabamensis</i>	U.S.A. (AL).....	Entire.....	E	278	NA	NA

Dated: May 29, 1987.
Susan Recce,
 Acting Assistant Secretary for Fish and Wildlife and Parks.
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