make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, sell or offer for sale in interstate or foreign commerce any listed species. It also is 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 other 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, for incidental take in connection with otherwise lawful activities, and/or for prevention of undue economic hardship.

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).

References Cited


Author

The primary author of this rule is Dr. Michael M. Bentzen (see ADDRESSES section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

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:


2. Amend § 17.11(h) by adding the following, in alphabetical order under MAMMALS, to the List of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

(h) * * * * *

Pascagoula River system in southeast Mississippi. It is threatened by habitat modification, wanton shooting, collecting, water quality degradation, and nest predation. This rule implements the full protection of the Act for the yellow-blotched map turtle.


ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Jackson Field Office, U.S. Fish and Wildlife Service, 6578 Dogwood View Parkway, Suite A, Jackson, Mississippi 39213.

FOR FURTHER INFORMATION CONTACT: Ren Lohofener at the above address (601/985-4900 or FTS 490-4900).

SUPPLEMENTARY INFORMATION:

Background

The yellow-blotched map turtle (Graptomys flavimaculata) was described from the Pascagoula River in George County, Mississippi (Cagle 1954). It is restricted to the Pascagoula River system in Mississippi, including the Leaf, Chickasawhay, and Escatawpa Rivers and other tributaries (Cagle 1954, Cliburn 1971, and McCoy and Vogt 1980). A survey of herpetologists and museums by the Service did not find any records of this species outside the Pascagoula River system. The only other name applied to this species is the yellow-blotched sawback turtle.

The yellow-blotched map turtle is a member of the narrow-head complex of Graptomys. It is a medium-sized aquatic turtle with females attaining a carapace size of at least 8 centimeters (cm) (3 inches) and males occasionally exceeding 4.75 cm (1.9 inches). The carapace is olive to light brown. Each costal scute usually has an irregular bright yellow or orange blotch. Juveniles and adult males have a black spine on the first four vertebral scutes. These spines may be lost in adult females. The closely related ringed sawback, Graptomys ochlifera, and black-knobbed map turtle, Graptomys

Species

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<th>Scientific name</th>
<th>Historic range</th>
<th>Vertebrate population were endangered or threatened</th>
<th>Status</th>
<th>When listed</th>
<th>Critical habitat</th>
<th>Special rules</th>
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Dated: December 7, 1990
Bruce Blanshard,
Acting Director, Fish and Wildlife Service.

FR Doc. 91-796 Filed 1-11-91; 8:45 am
BILLING CODE 4310-46-18

50 CFR Part 17

RIN 1018-AB42

Endangered and Threatened Wildlife and Plants: Threatened Status for the Yellow-Blotched Map Turtle, Graptomys flavimaculata

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines the yellow-blotched map turtle, Graptomys flavimaculata, to be a threatened species under the Endangered Species Act (Act) of 1973, as amended. This basking turtle is only known from the

Pascagoula River system in southeast Mississippi. It is threatened by habitat modification, wanton shooting, collecting, water quality degradation, and nest predation. This rule implements the full protection of the Act for the yellow-blotched map turtle.


ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Jackson Field Office, U.S. Fish and Wildlife Service, 6578 Dogwood View Parkway, Suite A, Jackson, Mississippi 39213.

FOR FURTHER INFORMATION CONTACT: Ren Lohofener at the above address (601/985-4900 or FTS 490-4900).

SUPPLEMENTARY INFORMATION:

Background

The yellow-blotched map turtle (Graptomys flavimaculata) was described from the Pascagoula River in George County, Mississippi (Cagle 1954). It is restricted to the Pascagoula River system in Mississippi, including the Leaf, Chickasawhay, and Escatawpa Rivers and other tributaries (Cagle 1954, Cliburn 1971, and McCoy and Vogt 1980). A survey of herpetologists and museums by the Service did not find any records of this species outside the Pascagoula River system. The only other name applied to this species is the yellow-blotched sawback turtle.

The yellow-blotched map turtle is a member of the narrow-head complex of Graptomys. It is a medium-sized aquatic turtle with females attaining a carapace size of at least 8 centimeters (cm) (3 inches) and males occasionally exceeding 4.75 cm (1.9 inches). The carapace is olive to light brown. Each costal scute usually has an irregular bright yellow or orange blotch. Juveniles and adult males have a black spine on the first four vertebral scutes. These spines may be lost in adult females. The closely related ringed sawback, Graptomys ochlifera, and black-knobbed map turtle, Graptomys
nigrinoda, lack the solid blotches, have different patterns on the head, and usually have a light-colored ring on each coal.

The yellow-blotched map turtle requires rivers that are large enough to have an open canopy allowing for several hours of sunshine daily. The preferred habitat is a moderate current, a sand or clay substrate, sand bars or beaches for nesting, and snags or other structure for basking. This species feeds largely on snails and insects (Ernst and Barbour 1972). Growth is rapid and males may mature in the second growing season.

Cagle (1954) was unable to determine the age of maturity in females. Lahanas (1982) inferred that female G. nigrinoda are at 6 or 9 years of age. Webb (1961) found that female G. oculifera, another closely related species in Lake Texoma, Oklahoma, matured at 6 or 7 years of age. Little is known about the reproduction of the yellow-blotched map turtle. The most definitive work on a related species was by Lahanas (1982) on G. nigrinoda. He found that this species produced 3 or 4 clutches annually with an average clutch size of 5-6 eggs. Cagle (1953) collected a G. oculifera female that had 3 eggs in the oviduct and 4 enlarged follicles. This turtle probably had produced 7 eggs during the breeding season. Jones and Hartfield (1989) found a complete clutch laid by G. oculifera that contained 6 eggs. It is likely that G. flavimaculata is similar to these closely related turtles in reproductive parameters.

The Pascagoula River Basin includes 9,700 square miles (U.S. Army Corps of Engineers (USACE) 1987) with a wide variety of land uses. Much of the area is in private ownership and agricultural production. The U.S. Forest Service (USFS) manages significant acreage in DeSoto National Forest. The Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) owns or manages several wildlife management areas in the basin.

Historic population status for this species is primarily limited to the work of Cliburn (1971), McCoy and Vogt (1980), and a 1989 survey conducted by biologists from the Service and the Mississippi Department of Wildlife, Fisheries, and Parks. Cliburn (1971) reported this species from Red, Black, and Tallahah Creek of the Pascagoula River drainage. McCoy and Vogt (1980) did not find any yellow-blotched map turtles in their survey of these streams and reported the habitat to be marginal. McCoy and Vogt reported decreasing numbers of two stations on the Chickasawhay River over a three year period. In two basking surveys on the Chickasawhay River, Service biologists in 1989, observed 43 and 60 yellow-blotched map turtles in approximately 20 river miles. This survey area included one of the sites where this species was reported in decline by McCoy and Vogt (1980). The Service survey was more extensive than that of McCoy and Vogt and, as a result, observed more yellow-blotched map turtles over the survey area. However, the number of yellow-blotched map turtles per river mile in the Chickasawhay River was three or less, a figure comparable to that observed by McCoy and Vogt.

In the basking survey conducted by Service biologists along 54 river miles of the Leaf and Pascagoula Rivers and 20 river miles of the Chickasawhay River, there were less than four yellow-blotched map turtles observed per river mile. In the lower Pascagoula River, a mark and recapture study by Service and Mississippi Department of Wildlife, Fisheries, and Parks biologists observed up to 70 yellow-blotched map turtles per river mile. The estimate for total numbers of this species, based upon the mark-recapture study, was as high as 336 per mile in the lower Pascagoula River. This figure is low when compared with estimates of 549 G. oculifera (listed as threatened) per mile in good habitat and 230 per mile in poor habitat.

The increase in population of the yellow-blotched map turtle seems to occur in the vicinity of Wade and proceeds downstream for a distance of about 18 river miles. In this stretch, there are several short tributaries where this species occurs. However, these populations are likely dependent upon the main river population for viability. Turtles less than four years old were seldom observed or trapped in the lower Pascagoula River. This could indicate a problem with reproduction and recruitment. If this problem exists, it may be due to limited nesting habitat or to high nest predation. The most abundant population of this species, based upon observations by Service biologists, occurs in the Pascagoula River between Wade and Vancleave, Mississippi.

The yellow-blotched map turtle was listed as a category 1 candidate in the notice of review published in the Federal Register on December 30, 1982 (47 FR 50454) and as a category 2 candidate in the notice of review published in the Federal Register on September 18, 1985 (50 FR 37958) and on January 6, 1989 (54 FR 554). A category 1 candidate is a taxon for which the Service currently has substantial information on hand to support the biological appropriateness of proposing to list. A category 2 candidate is a taxon for which information now in possession of the Service indicates that proposing to list the species is not supported, but for which substantial data are not currently available. Based on additional status information, a proposed rule to classify Graptemys flavimaculata as threatened was published on July 11, 1990, in the Federal Register (55 FR 28570).

Summary of Comments and Recommendations

In the July 11, 1990, proposed rule and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. Newspaper notices were published in the "Mobile Press Register," Mobile, Alabama, on July 21, 1990 and in the "Clanton-Ledger," Jackson, Mississippi, on July 23, 1990. Two comments were received and neither provided additional biological data. A conservation organization endorsed the proposed rule. A Federal agency felt that the listing action could have a severe impact on Federal flood control projects and requested advice on effects of the listing action. The Service recognizes these concerns and notes that the Act requires a listing decision be made only on the best available biological information. The Service's project-specific advice to Federal agencies will be through the normal section 7 process.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that the yellow-blotched map turtle should be classified as a threatened species. Procedures found at 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 yellow-blotched map turtle, Graptemys flavimaculata, are as follows:

A. The present or threatened destruction, modification, or curtailment of its habitat or range. The yellow-blotched map turtle must have
structures on which it can bask and be safe from predation, and have suitable nesting habitat. Basking structures are logs, snags, and other debris commonly occurring in streams. These structures also serve as habitat for food organisms. Nesting is believed to occur on sand beaches well above the water level and near the vegetation line. Navigation and flood control measures often require the removal of basking structures and nesting beaches to deepen the channel and to remove restrictions to water flow. Gravel dredging removes sand and affects potential nesting sites. Increased turbidity and sedimentation impact the snails and insects upon which this species feeds. There are several channel modification projects on or planned for tributary streams that have the potential to impact the habitat of this species (USACE 1987). A clearing and snagging project has impacted 2.3 miles of the Leaf River channel at Hattiesburg. Selective snagging of 2.25 miles of Tallahala Creek to provide flood control for Laurel was approved in 1987. Flood control projects have been conducted or planned for Sowashee Creek at Meridian, Gordon’s Creek and Upper Gordon’s Creek at Hattiesburg, and Green’s Creek at Petal. Studies for flood control projects on Mixon’s Creek, Lamar County, and Mill Creek at Sumrall are ongoing. Four existing reservoirs have modified portions of the drainage and affect water flows. There are authorized reservoirs on Tallahala Creek and Bowriver that have been determined not economically feasible, but have been de-authorised. An active gravel mining operation in the Bowriver near its confluence with the Leaf River undoubtedly contributes to sedimentation in downstream reaches of the Leaf River. Turbidity and sedimentation may occur from clear cutting timber and agricultural activities.

B. Overutilization for commercial, recreational, scientific or educational purposes. Wanton shooting (use of basking turtles for target practice) and collecting pose a threat to the yellow-blotched map turtle. This threat becomes more serious as the population declines. An increasing public awareness of the species’ plight on the part of many scientists seems to be reducing the threat from scientific and educational collecting. Collecting for commercial purposes is a more serious threat. This very attractive turtle has been advertised for retail sale at $65 each. It is very vulnerable to knowledgeable commercial collectors, who can seriously damage a local population in a short period.

C. Disease or predation. There is no known threat from disease. This species is subject to natural predation. Lahanas (1982) found 82 percent mortality of eggs of C. nigrodata from predation, primarily by fish. Cochrane and Cochrane have found predation of turtle eggs ranging from 90 to 100 percent (Cagle 1950, Moll and Legler 1971, Shealy 1976, Vogt 1980). Lahanas attributed the lower predation rate he observed to his frequent presence on the nesting beaches. While conducting a mark and recapture study of the ringed sawback, Service biologists estimated, from casual observation, that 65 percent of nests were destroyed by predators. A serious threat is wanton shooting as discussed in Factor B. The alteration and degradation of habitat as discussed in Factors “A” and “E” make predation, wanton shooting, and collecting more significant threats to the yellow-blotched map turtle then they would be otherwise.

D. The inadequacy of existing regulatory mechanisms. The yellow-blotched map turtle is listed as endangered under Mississippi Department of Wildlife, Fisheries, and Parks. Recovery efforts are underway. Because of this State protection, the Lacey Act (16 U.S.C. 3301) applies to the taking and transportation of this species from Mississippi. A State collecting permit is required for taking this species. Compliance with these regulations is extremely difficult to enforce due to other law enforcement priorities and the difficulty of proving a violation if the species has been removed from the river. The inadequacy of habitat is the more serious threat to the yellow-blotched map turtle. No regulations requiring consideration of this species during project planning yet exist. Listing under the Endangered Species Act would provide much needed protection through sections 7 and 9 and the recovery process.

E. Other natural or manmade factors affecting its continued existence. Water quality degradation poses a serious threat to the yellow-blotched map turtle. This impact includes bioaccumulation of toxic materials and the loss of food organisms. The total effects of pollution and siltation upon map turtles have not been fully documented. However, the effects on insect larvae and snails are well documented, and this group of organisms is the primary food source of all the narrow-headed map turtles (Cagle 1953, Ernst and Barbour 1972, Lahanas 1982). The reduced population of yellow-blotched map turtles in areas that have otherwise suitable habitat, but are polluted from some source, indicates impacts to the food source. Water quality problems exist on the Leaf River from municipal runoff at Hattiesburg and dioxin contamination at New Augusta; on the Tallahala River from municipal runoff at Laurel; and on the Chickasawhay River from brine water releases from oil fields (R. Ball, Mississippi Bureau of Pollution Control, pers. comm. 1989). Permitted effluent to the Pascagoula River Basin include ammonia, chlorine, sodium sulfate, toluene, cyclohexane, and acetone (EPA 1989).

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 yellow-blotched map turtle as threatened. The threatened status is chosen due to the restricted range, sparse populations above the Pascagoula River, and water quality problems. Endangered status is not chosen because the species exists over many river miles in the Pascagoula River system and the known threats do not place it in imminent danger of extinction. Critical habitat is not being determined as discussed below.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires to the maximum extent prudent and determinable, that 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 necessary at this time for this species. All Federal and State agencies are aware of the existence of this species and the importance of protecting its habitat. Protection of this species’ habitat will be addressed through the recovery process and through the section 7 jeopardy standard. Commercial collecting is a potentially significant threat (see Factor E) and specific identification of its habitat through designation of critical habitat could increase the threat to this species. Therefore, it would not now be prudent to determine critical habitat for the yellow-blotched map turtle.

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 acquisitions and cooperation with the States and requires that recovery actions be carried out for all listed species. 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 is expected to include the U.S. Army Corps of Engineers through its flood control projects and permits for water related activities, and the Environmental Protection Agency through the Clean Water Act provisions for pesticide registration, wastewater treatment, and permitted effluent discharge.

The Act and implementing regulations found at 50 CFR 17.21 and 17.31 set forth a series of general prohibitions and exceptions that apply to all threatened wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes haras, harm, pursue, hunt, shoot, wound, kill, trap, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It also is 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 threatened wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22, 17.23, and 17.32. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, for incidental take in connection with otherwise lawful activities, and/or for prevention of undue economic hardship. For threatened species, there are also permits for zoological exhibition, educational purposes, or special purposes consistent with the purposes of the Act.

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, 1993 (48 FR 49244).

References Cited


Author

The primary author of this rule is Ren Lohofender (see ADDRESSES section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

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:


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.

(h) * * * * *

Dated: December 17, 1990.

Richard N. Smith,
Acting Director, Fish and Wildlife Service.

50 CFR Part 17

RIN 1018-AB

Endangered and Threatened Wildlife and Plants; Listing of the Indus River Dolphin as an Endangered Species

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service is adding the Indus River dolphin (Platanista minor) to the List of Endangered and Threatened Wildlife. This measure, required by section 4(a)(2) of the Endangered Species Act of 1973 corresponds with the final determination of endangered status published in the Federal Register of December 11, 1990, by the National Marine Fisheries Service, which has jurisdiction for the Indus River dolphin.


FOR FURTHER INFORMATION CONTACT:
Dr. Larry Shannon, Chief, Division of Endangered Species, U.S. Fish and Wildlife Service (452 ARLSQ), Washington, DC 20240; telephone (703) 358-2171.

SUPPLEMENTARY INFORMATION: Under the Endangered Species Act, the National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration, Department of Commerce, is responsible for the Indus River dolphin (Platanista minor). Under section 4(a)(2) of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) (Act), NMFS must determine whether a species under its jurisdiction should be classified as endangered or threatened. The Fish and Wildlife Service (FWS) is responsible for the actual addition of a species to the List of Endangered and Threatened Wildlife in 50 CFR 17.11(h).

On December 11, 1990, NMFS published (55 FR 50835–36) its determination of endangered status for the Indus River dolphin. Accordingly, the FWS is now adding the Indus River dolphin to the List of Endangered and Threatened Wildlife. Because this FWS action is nondiscretionary, the FWS finds that good cause exists to omit the notice and public comment procedures of 5 U.S.C. 553(b). The FWS also has determined that an Environmental Assessment, as defined by the National Environmental Policy Act of 1969, need not be prepared in regard to regulations adopted under section 4(a) of the Act. A notice outlining the reasons for this determination was published in the Federal Register on October 25, 1985 (48 FR 49244).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Export, import, reporting and recordkeeping requirements, and Transportation.

Regulation Promulgation

PART 17—[AMENDED]

Accordingly, part 17, subchapter B of chapter 1, 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:


2. Section 17.11(h) is amended by adding the following, in alphabetical order under Mammals, to the list of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

(h) * * *


Bruce Blanchard,
Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. 91-768 Filed 1-11-91; 6:45 am]

BILLING CODE 4310-55-M