Threatened under the Similarity of Appearance by actions which took place in 1975 and 1979. This proposed change is based on evidence that the species is no longer Endangered or Threatened in the subject area, having recovered from former levels of harvest in response to curtailment of excessive harvest as a result of effective enforcement of laws and regulations by the State of Louisiana and the Service. The proposed action, if made final would be a formal recognition by the Service of biological recovery of the alligator in Louisiana.

An option would be made available to the State to institute harvest of alligators on a statewide basis in accordance with the Service's special rule on Threatened alligators and existing State laws. Minor clarifications of the boundary between Endangered and threatened alligators in South Carolina and Georgia are also being proposed.

DATES: Comments from the public must be received by June 30, 1981. Comments from the Governor of Louisiana must be received by July 30, 1981. Two public meetings will be held May 28, 1981, at 1:00 p.m. and 7:00 p.m.

ADDRESSES: Submit comments to the Area Manager, Jackson Area Office, U.S. Fish and Wildlife Service, 200 East Pascagoula Street, Suite 300, Jackson, Mississippi 39201. Comments and materials relating to this rule will be available for public inspection during normal business hours at the above address. Meeting location: Louisiana State University Union, Collonade Room, Baton Rouge, Louisiana.

FOR FURTHER INFORMATION CONTACT: Mr. Dennis B. Jordan, Assistant Area Manager-Endangered Species, Jackson Area Office, U.S. Fish and Wildlife Service, Jackson, Mississippi 39201, telephone FTS 490-4900 or commercial 601/960-4900.

SUPPLEMENTARY INFORMATION:

Background

The American alligator (Alligator mississippiensis) occurs in varying densities in wetland habitats throughout the Southeast including all or parts of the following States: Alabama, Arkansas, Georgia, Florida, Louisiana, Mississippi, Oklahoma, North Carolina, South Carolina, and Texas.

The alligator was first classified as Endangered throughout its range in 1967 due to a reduction in its numbers from hunting and poaching. Subsequently, in response to strict Federal and State protection, the alligator recovered rapidly in many parts of its range, enabling the Service to undertake the following reclassification actions:

1. Reclassification to Threatened by Similarity of Appearance in three coastal parishes of Louisiana reflecting complete recovery, (September 28, 1975—40 FR 44412); (2) Reclassification to Threatened, reflecting partial recovery, in all of Florida and certain coastal areas in South Carolina, Georgia, Louisiana, and Texas (January 10, 1977—42 FR 2071); (3) Reclassification to Threatened by Similarity of Appearance, again reflecting complete recovery, in nine additional parishes of Louisiana (June 25, 1979—44 FR 37130).

The latter reclassification was based on a July 30, 1976, petition from Governor Edwin Edwards of Louisiana and subsequent supporting data submitted by the State on April 12, 1977, December 7, 1977, and June 14, 1978. The details of these data may be obtained by consulting the proposed rule of October 2, 1978 (43 FR 45513) and the June 25, 1979, final rule cited above.

The parishes now under the Threatened by Similarity of Appearance status include: Cameron, Calcasieu, and Vermilion, reclassified in 1975, and St. Mary, Terrebonne, Iberia, Lafourche, St. Charles, Jefferson, Plaquemines, St. Bernard, and St. Tammany, reclassified in 1979. In a notice of October 2, 1978 (43 FR 45512), and in the June 25, 1979, final rule cited above, the Service stated that it would continue to review the status of the alligator in the remaining parishes of Louisiana. Alligators in these remaining parishes are now classified as either Endangered or Threatened, the Endangered and Threatened populations being separated by a dividing line prescribed in the Service's special rule on Threatened alligators, 50 CFR 17.42(a)(1), as follows:

From the Mississippi-Louisiana border at the Gulf of Mexico north along this border to its junction with U.S. Interstate Highway 10; thence west on U.S. Interstate Highway 10 to junction with U.S. Interstate Highway 12; thence west on U.S. Highway 12 to Baton Rouge, Louisiana; thence north and west along corporate limits of Baton Rouge to U.S. Highway 190; thence west on U.S. Highway 190 to junction with Louisiana State Highway 12 at Ragley, Louisiana; thence west on Louisiana State Highway 12 to the Beauregard-Calcasieu Parish border; thence north and west along this border to the Texas-Louisiana State border.

In June 1979, the Service's Jackson, Mississippi Area Office contracted with Dr. R. H. Chabreck of Louisiana State University to compile a status review of existing scientific and commercial data on the species in Louisiana. Chabreck's report recommends reclassification of the alligator throughout the State of Louisiana in view of current protection, numbers of alligators, and an abundance of alligator habitat. Chabreck's report...
also states that his original 1965 estimate of 35,000-40,000 animals within the State was extremely conservative, and that "a more realistic estimate of the 1966 statewide population would be about 100,000 animals."

To further enhance understanding of alligator population biology, in June of 1980 the Service began working with Dave Taylor, Wildlife Biologist with the Louisiana Department of Wildlife and Fisheries, who prepared an additional report which outlines a new alligator population analysis concentrating on the central and northern portions of the State. This report and a previous one prepared in 1976 provide a scientifically based analysis of alligator populations in non-marsh habitats (Taylor, 1978 and Taylor, 1980). Most importantly, Taylor's 1980 report provides evidence that alligator population structure is stable, being limited by the support capability of the habitat, and that no further significant increases in alligator numbers can be expected. Furthermore, as discussed later in this proposal, alligator habitat within the State is abundant and relatively secure. The Service believes that these data support the conclusion that alligators throughout the State of Louisiana are no longer Endangered or Threatened, and that their status should be changed.

However, because of similarity of appearance, it is still necessary to impose some restrictions on commercial activities involving specimens taken in this State to insure the conservation of other alligator populations as well as other crocodilians that are Threatened or Endangered.

Section 4(e) of the Act authorizes the treatment of a species (or subspecies or group of wildlife in common spatial arrangement) as an Endangered or Threatened species even though it is not otherwise listed as Endangered or Threatened, if it is found: (a) That the species so closely resembles in appearance an Endangered or Threatened species that enforcement personnel would have substantial difficulty in differentiating between listed and unlisted species; (b) that the effect of this substantial difficulty is an additional threat to the Endangered or Threatened species; and (c) that such treatment of an unlisted species will substantially facilitate the enforcement and further the policy of the Act.

The Service currently treats the group of American alligators found in the 12 parishes cited above as Threatened because of their similarity of appearance to other groups of American alligators, as well as other crocodilians, that are listed as Threatened or Endangered. Certain restrictions are imposed on commercial activities involving specimens taken from these parishes, as is discussed below, to insure the conservation of these Endangered or Threatened alligators and other crocodilians. The Service now proposes to treat the group of American alligators found in the remaining parishes as Threatened because of similarity of appearance, and to impose similar restrictions on commercial activities involving specimens taken from those parishes.

Review of the boundary between Endangered and Threatened alligators in South Carolina contained in 50 CFR 17.42(a), the American alligator special rule, has revealed a minor 2 mile gap near Walterboro, South Carolina. The Service is proposing to close this gap by insertion of a 2 mile stretch of State Highway 63 into the boundary, and to add phrases indicating where the boundary crosses from South Carolina into Georgia on U.S. Interstate Highway 95.

Factors Affecting the Species

The Service's listing regulations (§ 424.11(b), Title 50, Code of Federal Regulations) state:

A species shall be listed if the Director determines on the basis of the best scientific and commercial data available to him after conducting a review of the species' status that the species is Endangered or Threatened because of any one or a combination of the following factors:

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

(2) Utilization for commercial, sporting, scientific, or educational purposes at levels that detrimentally affect it;

(3) Disease or predation;

(4) Absence of regulatory mechanisms adequate to prevent the decline of a species or degradation of its habitat; and

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

The regulations go on to state, in § 424.11(d), that:

The factors for removing a species from the list are those in paragraph (b) of this section. The data to support such removal must be the best scientific and commercial data available to the Director to substantiate that the species is neither Endangered nor Threatened for one or more of the following reasons:

(1) Extinction. Unless each individual of the listed species was previously identified and located, a sufficient period of time must be allowed before delisting to clearly insure that the species is in fact extinct.

(2) Recovery of the species. The principal goal of the Service is to return listed species to a point at which protection under the Act is no longer required. A species may be delisted if evidence shows that it is no longer Endangered or Threatened.

(3) Original data for classification in error. Subsequent investigations may produce data that show that the best scientific or commercial data available at the time that the species was listed were in error.

These findings are summarized herein under each of the five criteria of 50 CFR 424.11. These factors, and their application to the American alligator in Louisiana, are as follows:

1. The present or threatened destruction, modification, or curtailment of its habitat or range. The total size of alligator populations in the areas which are the subject of this proposal is greatly influenced by the amount of aquatic or wetland habitat available. Examples of these habitats are rivers, bayous, canals, lakes, ponds, marshes, and swamps. The total amount of wetlands in Louisiana, estimated by Chabreck (1980) to be 6,397,272 acres (2,589,988 ha), does not in total constitute viable alligator habitat. McNease and Joanen (1978) report that the portion of marshland habitat suitable for alligators is approximately 3.2 million acres (1,295,022 ha) and is made up of fresh, intermediate, and brackish marsh types. Although alligators occur in salinities above 10 parts per thousand, nesting apparently does not occur above this isohaline line (Joanen and MacMease, 1972): therefore, the remaining marshlands are not considered as alligator habitat.

Taylor (1980) indicates that in the non-marsh portions of the State, permanently flooded areas with woody and herbaceous cover dominated by bald cypress and tupelo gum apparently produce even higher densities of alligators in many instances than marshland habitats. This cypress-tupelo habitat type is well represented in southeastern Louisiana and in the Atchafalaya Basin, but also includes portions of many natural lakes and manmade reservoirs in the central and northern parts of the State. The estimated 1,500 miles of streams, particularly in middle and northern section of the State, support alligators only to the extent permitted by the presence of cypress-tupelo oxbows and marshlands associated with the streams. Streams without adjacent permanently inundated cypress-tupelo or marshland habitat areas constitute poor quality habitat and support insignificant alligator numbers. A gross minimum
estimation for non-marsh alligator habitat in Louisiana is provided by Taylor (1980) and consists of 803,640 acres (325,309 ha) of cypress-tupelo associations with permanent water levels, and 1500 linear miles (932 kilometers) of upland streams.

Frugé (1980) cites recent data gathered by the Service's National Coastal Ecosystems Team that indicate a current loss of marshes of approximately 22,000 acres (8,984 ha) per year due to land loss and deterioration caused by salt water intrusion. The land loss is caused by reduction of sediment and overflow deposition due to levee construction and navigation channel excavation, and salt water intrusion is caused by channel excavation. Chabreck (1980) and MacDonald et al. (1979) projected bottomland hardwood habitat losses through the years 2000 and 1995, at 13.1 percent and 24 percent, respectively, but these are not losses of productive alligator habitat. As discussed above, seasonally flooded and unflooded bottomlands do not contain all the necessary features of productive alligator habitat. The cypress-tupelo habitat in permanently flooded areas is not projected to change through the year 1995. The high water table in such areas make drainage and clearing for agricultural and other uses not feasible in these prime alligator habitat areas.

In summary, marshland alligator habitat is currently being reduced at an estimated rate of only 0.7 percent per year, and the permanently flooded cypress-tupelo association and open water acerages are not projected to change. The overall picture on statewide habitat is quite good, there being approximately 4 million acres of high quality marshland and cypress-tupelo habitat. It is concluded, therefore, that habitat alteration and loss poses no threat to alligator populations in Louisiana within the foreseeable future.

2. Utilization for commercial, sporting, scientific, or educational purposes at levels that detrimentally affect it. The commercial demand for products from alligators, including hides, teeth, and meat for consumption, is high. This demand and the harvest generated by the demand were responsible for a decline in alligator populations throughout their range in the early 1900's (with some exceptions such as on sanctuaries and wildlife refuges). This decline was reversed by the following actions: (1) The State of Louisiana closed alligator seasons in 1964; (2) The Lacey Act was amended in 1969 to include control of interstate commerce in reptiles; (3) The Endangered Species Act was passed in 1973. State and Federal authorities vigorously enforced these protective mechanisms. Taylor (1980) provides evidence that under strict protection, reproductive capability of the species provides for a constant size-class frequencies found in night counts and harvests are not statistically different, suggestive of a stable population. A comparison between size-class frequencies found in non-marsh night counts and hide measurements from harvested areas also shows no statistical difference in population structure. Furthermore, a comparison of population structure from each of the years 1973–80, a series of time specific views, shows no trend towards shrinkage of adult size-class ratios or increasing adult size-class ratios, either of which would be indicative of populations moving away from stability. These data indicate alligators in the State are not being detrimentally affected by legal harvests in marshland parishes or illegal taking in marsh or non-marsh areas. Some illegal taking undoubtedly continues to occur, but the Service's law enforcement efforts have reduced this to insignificant levels relative to the total population. The inaccessibility of many non-marsh habitats further helps to protect the species in these areas.

In very restricted areas of high recreational and/or residential use, when human-alligator conflicts continue to be a problem, over-utilization for management purposes may be undertaken to achieve reduction in numbers of larger, more dangerous animals, if there is no other viable alternative. Such areas represent an insignificant part of statewide alligator habitat.

3. Disease of predation. Alligators suffer various types of disease and predation, as do all wildlife species, but these factors are not excessive and are not known to have hindered alligator recovery.

4. Absence of existing regulatory mechanisms adequate to prevent the decline of a species or degradation of its habitat. The adequacy of existing government regulations for protection and management of the alligator can primarily be attributed to the following State and Federal laws and regulations: (A) Louisiana statutes; (B) The 1969 Amendment to the Lacey Act which extended Federal law enforcement authority to include interstate movement of reptiles; (C) The Endangered Species Act of 1973, which provides mandatory protection for Endangered alligators; (D) Special Rules promulgated by the Service for Threatened (including Similarity of Appearance) alligators, which govern taking and commerce in alligator products; (E) The annual findings of the Scientific and Management Authorities of the Service, which govern the export of species, including the alligator, listed on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

The success of efforts by State and Federal agencies to stop illegal activity involving alligators is evidenced by the recovery of alligator populations throughout the State of Louisiana. This example of response to protection is not without precedent. Chabreck's report described this process as being reported by McIlhenny (1935) on three newly established wildlife refuges that had been previously subjected to excessive harvests.

Controlled harvests have been carried out annually in southwestern Louisiana since 1972, with the exception of 1974 and 1978. Close supervision by the Louisiana Department of Wildlife and Fisheries includes numerous safeguards to keep the alligator harvest within predetermined limits and areas. Within the constraints required by the Service's Special Rules and CITES authorities, the State program is operated along the following guidelines: (1) An annual inventory is conducted to determine population abundance by habitat type within each parish; (2) Annual harvest quotas are established based on population abundance by habitat type and parish; (3) Harvests are allowed only on lands owned or leased by the hunter; (4) Tags are issued upon application by a hunter on a basis of the acreage involved and the predetermined harvest rate for that particular area; (5) All tags are serially numbered, self-locking, and must be accounted for at the end of the season, with one tag issued for each alligator to be harvested; (6) The harvest is conducted in September after incubation is completed; (7) "Pole hunting" is prohibited in order to reduce the taking of breeding females in interior marsh habitats; (8) Special skinning instructions are issued shortly before the season opens to prohibit previously indiscriminate skinning; (9) Shooting is limited to daytime to facilitate enforcement efforts; (10) At the close of the season all unused tags are collected by State agents, all harvested alligators are inspected, and the tag number and skin size recorded; (11) All hunters, buyers, and dealers must obtain a State license which is subject to annual renewal; (12) All containers used
for packaging must be tagged and the contents identified; (13) State enforcement personnel are assigned the task of monitoring the alligator harvest program.

The State would be committed under the above mentioned guidelines and regulations to a similarly regulated program in other areas of the State if this proposal is made final and it elects to implement further harvests in other portions of the State.

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

Although other factors may occasionally have an affect on some alligators—for example freezes and nest flooding—none of these are known to have limited recovery of the alligator in Louisiana nor are they expected to become threatening factors in the future.

Effects of This Proposal if Published as a Final Rule

This proposal, if made final, would change the status of the alligator in Louisiana from its current status, which is Endangered or Threatened in all but 12 parishes of the State, to a statewide status of Threatened by Similarity of Appearance. It would be a formal recognition by the Service of biological recovery of the American alligator in a part of its range. A final rule would result in a removal of Federal agency responsibilities under Section 7 of the Endangered Species Act. No adverse effects to the status of this species are expected to occur from this removal.

A final rule resulting from this proposal would make available to the State of Louisiana the option for expanding alligator harvests from the present 12 parishes to additional areas. If the State elects to expand its alligator program, harvests would increase at a level commensurate with development and implementation of an expanded management program (and may represent 4 percent of the statewide alligator population estimate). The economic value of the alligator resource under a sustained yield scheme would result in significant economic benefits to Louisiana trappers and others participating in the commercial process. It has been suggested that the value of alligators may also help to reduce indiscriminate, illegal killing by those who believe they may be adversely affected by high alligator populations. Expanded harvests would be expected to increase the workloads of the State Department of Wildlife and Fisheries, the Louisiana Department of Health, and the Service's Division of Law Enforcement. Conversely, expanded harvests would be expected to reduce the number of nuisance alligators complaints, resulting in a corresponding reduction in manpower commitments devoted to handling nuisance alligators. Local governments involved in catching and removing nuisance alligators would receive some relief if the number of larger, more dangerous alligators were to be reduced in areas with human-alligator conflicts.

Increased harvests of alligators in Louisiana would create the potential for an increased volume of alligator exports. The Service has previously expressed its concern about the effects of increased exports on other Endangered crocodilians that occur in international trade. International trade in alligator products is presently subject to the restrictions of the Convention on International Trade of Endangered Species of Wild Fauna and Flora, and general wildlife exportation requirements. A recent determination by the Service (October 21, 1980, 45 FR 69844) on this subject concluded that the export of alligators taken during the 1980-81 season in Florida and the 1980 season in Louisiana would not be detrimental to the survival of the alligator or other Endangered crocodilians. The Service will continue to review this possible impact and will take appropriate action if evidence indicates that restrictions are warranted.

This proposed action, if completed, would not be an irreversible commitment on the part of the Service. The action is reversible and relating would be possible should the State materially change existing management programs or other changes occur which result in new threats to the species' recovery.

The minor boundary change proposed in South Carolina will have no significant effect, since it will only serve to formalize a 2 mile segment which the Service and the State are already informally using.

Public Comments Solicited

The Director intends that the rules finally adopted will be as accurate and 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 interests, or any other interested party concerning any aspect of these proposed rules are hereby solicited. A public meeting has been scheduled. 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) additional information concerning the range and distribution of this species; (3) information on environmental and economic impacts and effects on small entities (including small businesses, small organizations and small governmental jurisdictions) that would result from the rule and information on possible alternatives to the proposed action.

National Environmental Policy Act

A draft Environmental Assessment has been prepared in conjunction with this proposal. It is on file in the Service’s Office of Endangered Species, 1000 North Glebe Road, Arlington, Virginia 22201 and in the Jackson, Mississippi, Area Office located at 200 E. Pascagoula St. Room 17a. and may be examined by appointment during regular business hours. A determination will be made at the time of final rule 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 and 40 CFR Parts 1500-1506.

Note—The Department of Interior has determined that this is not a major rule as defined in Executive Order 12291 and that it does not have a significant effect upon the substantial number of small entities as defined in the Regulatory Flexibility Act (Pub. L. 96-354). There are some small businesses that may be impacted but not in a significant manner. In addition, this impact would be beneficial to the small businesses.

Primary Author

The primary author of this rule is Mr. Wendell Neal of the Jackson Area Office, U.S. Fish and Wildlife Service, 200 E. Pascagoula Street, Jackson, Mississippi 39201, FTS 490-4900, or commercial 601/960-4900.

Literature Cited


§ 17.11 [Amended]

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2. It is further proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below.

Paragraph (a)(1) of § 17.42 is revised to read as follows:

§ 17.42 [Amended]

(a) American alligator (Alligator mississippiensis).

(1) Definitions. For purposes of this paragraph (a): "American alligator" shall mean any member of the species Alligator mississippiensis, whether alive or dead, and any part, product, egg, or offspring thereof occurring: in captivity whenever found and in the wild wherever the species is listed under § 17.11 as Threatened by similarity of appearance and in the wild in Florida and in the coastal areas of Georgia, South Carolina, and Texas, contained within the following boundaries:

From Winyah Bay near Georgetown, South Carolina, west on U.S. Highway 17 to Georgetown; thence west and south on U.S. Alternate Highway 17 to junction with South Carolina State Highway 63 south of Walterboro, South Carolina; thence west on State Highway 63 to junction with U.S. Interstate Highway 95; thence south on U.S. Interstate Highway 95 (including incomplete portions) across the South Carolina-Georgia border to junction with U.S. Highway 82 in Liberty County, Georgia; thence southwest on U.S. Highway 82 to junction with U.S. Highway 84 at Waycross, Georgia; thence west on U.S. Highway 84 to the Alabama-Georgia border; thence south along this border to the Florida border and following the Florida border west and south to its termination at the Gulf of Mexico. From the Texas-Louisiana border at the Gulf of Mexico, north along this border to Texas State Highway 12; thence west on Texas State Highway 12 to Vidor, Texas; thence west on U.S. Highway 90 to the Houston, Texas, corporate limits; thence north, west and south along Houston corporate limits to junction on the west with U.S. Highway 59; thence south and west on U.S. Highway 59 to Victoria, Texas; thence south on U.S. Highway 77 to corporate limits of Corpus Christi, Texas; thence southeast along the southern Corpus Christi corporate limits to Laguna Madre; thence south along the west shore of Laguna Madre to the Nueces-Kleberg County line; thence east along the Nueces-Kleberg County line to the Gulf of Mexico.

"Buyer" shall mean a person engaged in buying a raw, green, salted, or otherwise untanned hide of an American alligator.

"Tanner" shall mean a person engaged in processing a raw, green, salted, or crusted hide of an American alligator into leather.

Dated: April 10, 1981.

C. F. Layton,
Acting Deputy Assistant Secretary for Fish and Wildlife and Parks.