

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Reclassification of the American Alligator in Florida to Threatened Due to Similarity of Appearance

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service reclassifies the American alligator (*Alligator mississippiensis*) in Florida, where the species is presently classified as threatened, to a classification of threatened due to similarity of appearance, under provisions of the Endangered Species Act of 1973, as amended. This change is based on evidence that the species is not biologically threatened, a legal status defined for species believed likely to become endangered within the foreseeable future. Productive alligator populations are well distributed throughout the State wherever suitable habitat occurs, with over 6,700,000 acres of wetland habitat currently occupied by the species. Reclassification of Florida alligators reduces restrictions on the State for future management and research. Any harvests in Florida must be within constraints established by the Service's special rule on American alligators 50 CFR 17.42(a) and existing State statutes and regulations.

EFFECTIVE DATE: The effective date of this rule is July 22, 1985.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Endangered Species Field Station, Jackson Mall Office Center, Suite 316, 300 Woodrow Wilson Avenue, Jackson, Mississippi 39213.

FOR FURTHER INFORMATION CONTACT: Mr. Wendell Neal (See ADDRESSES above) (601/960-4900 or FTS 490-4900), or Mr. John L. Spinks, Jr., Chief, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240 (703/235-2771 or FTS 235-2771).

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 is a large wetland species of significant scientific and commercial value. Crocodylians such as the American alligator are the only extant representatives of the order Archosauria, and this species represents one of only two extant species of the genus *Alligator*. The crocodylians evolved as a group some 180-200 million years ago and show many advanced characteristics, such as a four-chambered heart, rudimentary diaphragm, and elaborate maternal care and behavior.

The alligator was first classified as endangered throughout its range in 1967 due to concern over poorly regulated or unregulated harvests. Subsequently, in response to 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 due to similarity of appearance in three coastal parishes of Louisiana, reflecting complete recovery (September 26, 1975—40 FR 44412); (2) Reclassification to threatened, reflecting partial recovery, in all of Florida and certain coastal areas of 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); (4) Reclassification to threatened by similarity of appearance in 52 parishes in Louisiana, reflecting complete recovery (August 10, 1981—46 FR 40664); (5) Reclassification to threatened by similarity of appearance in Texas, reflecting complete recovery (October 12, 1983—48 FR 46332).

In June 1982, the Service began a status assessment of the alligator in the State of Florida by a review of data and materials held by the Gainesville Wildlife Research Laboratory of the Florida Game and Fresh Water Fish Commission. The data with the most significant bearing on status of Florida alligators are found in results of night count surveys that have been conducted since 1971 in all major habitat types. These data are stored on computer at the Wildlife Research Laboratory. Dr. C.L. Abercrombie, a biologist stationed at the laboratory, provided summaries and analyses of these unpublished data based on computer printouts of about 3,000 miles of survey lines. The Wildlife Research Laboratory also holds large

quantities of data on population parameters for specific research areas, including Orange Lake, Lake Griffin, Newnans Lake, and Lochloosa Lake. In addition, in order to more fully understand Florida alligator data, a number of references were consulted, including Goodwin and Marion (1978, 1979), Hines (1979), Dietz and Hines (1980), and Wood and Humphrey (1983). The most important of these are listed in the "References" section of this proposed rule.

The evaluation of past, current, and likely future alligator habitat status is based primarily on data obtained from the Fish and Wildlife Service's National Wetlands Inventory Station, St. Petersburg, Florida. These data are the best available and provide estimates of past and present acreage in various wetland habitat types.

The Service believes these data indicate that the American alligator in Florida is not likely to become endangered within the foreseeable future, and thus its current designation as a threatened species should be changed. However, because of the alligator's similarity of appearance to other endangered crocodylians and the fact that hides or other parts may occur in the trade, it is necessary to maintain restrictions on commercial activities involving alligators taken in the State to insure the conservation of other alligator populations, as well as other crocodylians, that are threatened or endangered. This will be accomplished through restrictions in the Service's special rule on American alligators (50 CFR 17.42(a)). Section 4(e) of the Endangered Species Act authorizes the treatment of a species (or subspecies or distinct population) 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 already treats American alligators found in Louisiana and Texas as threatened because of their similarity of appearance to other American alligators, as well as other crocodylians, that are listed as threatened or endangered. Certain restrictions are

imposed on commercial activities involving specimens taken in Louisiana and Texas to insure the conservation of other endangered or threatened alligators and other crocodilians. The Service will now treat American alligators found in Florida as threatened due to similarity of appearance, and imposes similar restrictions on commercial activities involving specimens taken in Florida.

Summary of Comments and Recommendations

In the June 20, 1984, proposed rule (50 CFR 25342) and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to 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 *Orlando Sentinel* on July 8, 1984; in the *Miami Herald* on July 16, 1984; and in the *Tallahassee Democrat* on July 7, 1984. The notices invited general public comment. A public hearing was neither requested nor held. Twenty-four comments were received and are discussed below.

The Service received comments from the following individuals and organizations: The New York Zoological Society; the Safari Club International; the Florida State Museum; the U.S. Department of the Interior, National Park Service (Washington office and Everglades National Park office); the Florida Audubon Society; the National Audubon Society; the Florida Game and Fresh Water Fish Commission; the Georgia Department of Natural Resources, Game and Fish Division; the Alabama Department of Conservation and Natural Resources, Division of Game and Fish; the Florida Department of Natural Resources; the Mississippi Department of Wildlife Conservation; the North Carolina Wildlife Resources Commission; the Louisiana Department of Wildlife and Fisheries; the County of Sarasota, Florida, Natural Resources Management Department; the St. Lucie County, Florida, Board of Commissioners; the U.S. Environmental Protection Agency, Region IV; the U.S. Department of Agriculture, Florida National Forests; the Florida Wildlife Society; Mr. James H. Powell, Jr.; and Mr. Manuel Lopez.

Twenty-two of the comments supported the proposal, voiced no objection to the proposal, or provided comments that were not substantive in nature. Two comments expressed concern regarding the proposal.

The Department of the Interior, National Park Service (Washington Office and Everglades National Park Office) requested that the proposal be ameliorated with a possible alternative of deleting Broward, Collier, Dade, and Monroe counties from the proposal. The basis for the request was possible illegal poaching resulting from reopening a legal market for alligator hides in Florida and the possible effects on the American crocodile both on and adjacent to the Everglades National Park. This concern presupposes that reclassification will result in a State-wide open season with an open commercial market for hides. In actuality, taking and commerce will continue to be tightly controlled through the Endangered Species Act by means of the special rule on threatened due to similarity of appearance alligators. Sustained yield harvesting will not be an open ended affair but a carefully controlled procedure on a limited area basis. The Service consulted with the Florida Game and Fresh Water Fish Commission during development of the proposed rule as it may relate to American crocodiles. It was determined that in areas where alligators and crocodiles occurred together, taking would be limited to removal of specific nuisance alligators on a carefully controlled and monitored basis.

Mr. James H. Powell, Jr. expressed a concern about the possible effect of increased alligator hides in international trade and the possible effect on other endangered or threatened crocodilians. The Service is aware of this possible impact and will continue to monitor the situation and take appropriate action if evidence indicates that restrictions are warranted.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that the American alligator in Florida should be reclassified from threatened to threatened due to similarity of appearance. Procedures found at section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (50 CFR Part 424), set forth five factors to be used in determining whether to add, reclassify, or remove a species from the list of endangered and threatened species. These factors and their application to the American alligator (*Alligator mississippiensis*) in Florida are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* American alligator populations, in terms of both density and total numbers, are limited by the productivity and amount of available habitat. Florida has more alligator habitat than any other State within the alligator's range. The best available data on wetland habitat in Florida comes from the National Wetlands Inventory group of the Service, which is located in St. Petersburg, Florida. Although there are many publications on Florida wetlands, they lack the specificity found in these draft data. Table 1, below, depicts these estimates by habitat type according to Circular 39 (Shaw and Fredine, 1956), a Service publication which classifies wetland types.

TABLE 1.—DRAFT DATA ON WETLAND INVENTORY IN FLORIDA—FROM NATIONAL WETLAND INVENTORY, U.S. FISH AND WILDLIFE SERVICE, ST. PETERSBURG, FLORIDA, EXCEPT AS OTHERWISE NOTED

Type	1950 inventory (acres)	Late 1970's inventory (acres)	Change (acres)	Estimated occupancy habitat by alligators (percent and acres)
<i>Palustrine Forested</i> Cir. 39 types 1, 7, 8; bottomland hardwood forests: seasonally flooded basins or flats; cypress-gum swamps, bay-heads, bogs, pocosins.....	4,820,196 ± 367,306	4,743,409 ± 357,608	-76,787 ± 76,538	15% 712,000
<i>Palustrine Scrub-Shrub</i> Cir. 39 type 6; buttonbush type.....	1,093,603 ± 196,261	886,899 ± 144,546	-206,704 ± 168,886	50% 445,000
<i>Palustrine Emergent</i> Cir. 39, types 2, 3, 4; inland fresh, shallow marshes.....	4,891,257 ± 459,299	3,635,037 ± 397,494	-1,256,220 ± 253,794	100% 3,800,000
<i>Estuarine Intertidal</i> Cir. 39 type 20; mangrove swamps.....	442,689 ± 68,072	427,149 ± 69,921	-15,539 ± 18,030	5% 21,000
<i>Palustrine Open Water</i> Cir. 39 type 5; water adjacent to marshes, cypress domes, small water bodies less than 20 acres.....	73,102 ± 11,343	116,052 ± 13,376	+40,950 ± 9,862	100% 116,000
<i>Lacustrine</i> Lakes larger than 20 acres in size.....	1,785,027	1,835,780	+50,753	85%

TABLE 1.—DRAFT DATA ON WETLAND INVENTORY IN FLORIDA—FROM NATIONAL WETLAND INVENTORY, U.S. FISH AND WILDLIFE SERVICE, ST. PETERSBURG, FLORIDA, EXCEPT AS OTHERWISE NOTED—Continued

Type	1950 inventory (acres)	Late 1970's inventory (acres)	Change (acres)	Estimated occupancy habitat by alligators (percent and acres)
<i>Estuarine Intertidal Emergent</i>	±381,517	±383,605	±54,556	1,560,000
Cir. 39 types 16, 17, 18; coastal saltmeadows; saltmarsh—regularly and irregularly flooded.....	283,202 ±57,808	244,507 ±53,484	-38,695 ±17,300	10% 24,000
<i>Palustrine (other)</i>				
Cir. 39 type 5 and to some degree 4; all aquatic beds (fly pads, hydrilla).....	8,026 ±2,438	34,983 ±25,056	+26,957 ±24,926	100% 35,000
<i>Rivers and Streams</i>				
Stream body only; taken from data provided by Division of Water Resources and Conservation; Florida Board of Conservation, Tallahassee, FL.....	200,000			100% 200,000
Totals	13,599,103 ±1,544,044	11,810,680 ±1,455,090		8,713,000

Trends are depicted as comparisons between the 1950 inventory and the late 1970's inventory. Because the data are derived through a sampling scheme, all figures are estimates with each carrying a confidence interval. The table also shows an estimated occupancy rate by alligators. These estimates were made by Tommy Hines and Allen Woodward, biologists employed by the Florida Game and Fresh Water Fish Commission. The estimates were based upon night count survey data (Abercrombie, 1982), nuisance complaint records, and personal observation and knowledge by these biologists of the distribution and abundance of alligators in Florida.

Table 1 indicates that more than 8,700,000 acres of Florida wetlands are occupied by alligators; this probably represents more than one-third of the total habitat occupied by the species throughout its range. A general summary of occupied habitats in Florida is as follows: Fresh marsh—approximately 3,600,000 acres; wooded permanent water areas—1,200,000 acres; lakes—estimated to number 30,000 and comprising 1,700,000 acres; and rivers and streams—200,000 acres.

One habitat type, the palustrine emergent, which includes the Everglades and other freshwater marshes, has undergone loss of approximately 25 percent in the last 30 years due to drainage and conversion to agricultural use. Also, this habitat type has been rendered less productive as alligator habitat due to the construction of levee systems for flood control. However, the total amount of fresh marsh habitat still substantially exceeds 3 million acres and is likely to remain an abundant habitat type for the foreseeable future.

The data also show losses occurring in saltmarsh and brackish areas, but these have never been important components of alligator habitat.

Florida's lake habitats, although smaller in total size than the fresh marshes, are highly productive, often having alligator densities well in excess of the marsh areas. In terms of available habitat, lakes are not being lost to human activities, although residential buildup on some lakes causes an increase in potential human/alligator conflicts and some marshes associated with lakes are being drained. The streams of northern Florida contribute the least to the total Florida alligator population, due to the relative scarcity of suitable habitat.

Overall, Table 1 indicates that Florida currently has large amounts of alligator habitat, and this is likely to continue for the foreseeable future. Furthermore, State and Federal land holdings currently total 2,949,947 acres, much of which is occupied alligator habitat (Hines, 1979). Additional State acquisition of key wetland areas in south Florida has been authorized and new Federal acquisition is being considered. In summary, it is concluded that habitat loss does not pose a serious threat to the overall status of the American alligator in Florida within the foreseeable future.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* The commercial demand for alligator products was responsible for overharvests that caused population declines in accessible habitats during the 1950's and 1960's. This problem was reversed primarily through a more effective protective mechanism brought about by the Lacey Act Amendment of

1969, which prohibits interstate commerce in illegally taken reptiles and their parts and products. This law provides Federal authority for dealing effectively with illegal activities in the market system. The Endangered Species Act of 1973 added heavy penalties, which further enhances the control of illegal taking. Vigorous enforcement by State and Federal authorities has been effective in controlling illegal activity.

The State of Florida contemplates expansion of existing programs, which at this time are nuisance control and limited experimental harvests, to some form of sustained yield harvesting. Since uncontrolled harvesting was the reason for past over-exploitation in some areas, and sustainable yields from harvested populations are biologically limited, Florida is committed to harvests only to the extent permitted by available data. Such harvests will be strictly limited to insure against excessive harvests, as indicated by the State's approved Alligator Management Plan (Florida Game and Fresh Water Fish Commission, 1981). The only exception to this policy would be in extremely localized areas where potentially serious human/alligator conflicts exist; intentional overharvests might occasionally be authorized for such situations to remove the threat to human safety and promote overall public tolerance of the species.

In developing these policies, the Florida Game and Fresh Water Fish Commission has conducted population surveys and instituted population modeling research aimed at testing the sustained yield concept and the changes in population dynamics which may result from harvests. Data from this research are intended to fashion any future harvest to meet the Alligator Management Plan goal.

The results of the night counts conducted by the State in all major habitat types since the late 1960's illustrate the success in control of overharvest. These counts, along with personal observations by many biologists and State nuisance complaints records, confirm that alligator populations are abundant and productive on a State-wide basis. For example, Orange Lake near Gainesville is considered by Florida alligator biologists to contain a healthy population of alligators. The lake serves as an alligator research area for the State. Alligators on this lake have been monitored for several years through repeated night counts and nest counts. Using the size-class frequency model developed by Taylor and Neal (1984), the average 90-100 nest count on Orange

Lake can be shown to be associated with an after-hatching alligator density of approximately one alligator per acre, or 8,000-10,000 total animals. Similar densities in many of Florida's lakes are not uncommon, according to State alligator biologists.

Table 2 depicts amounts of effort expended (miles/year) on night count

TABLE 2.—NUMBER OF MILES RUN PER YEAR FOR SEVEN HABITAT TYPES

Habitat type	1974	1975	1976	1977	1978	1979	1980	1981
1. Open Lake	46.5	55.2	89.3	190.8	79.4	111.3	144.8	87.0
2. Riverine	27.4	59.8	106.0	128.2	129.7	134.9	134.5	58.6
3. Marsh	0	36.5	11.0	37.2	11.0	39.0	40.0	6.0
4. Canal, rural	15.8	42.9	62.2	77.7	107.0	121.0	121.0	48.3
5. Canal, urban	30.0	20.0	20.0	40.0	20.0	0	20.0	10.0
6. Phosphate pit	0	14.5	14.5	0	8.5	14.5	13.5	0
7. River marsh	0	0	10.5	0	60.3	50.3	80.3	70.4

Based on these counts, Abercrombie (1982) compared selected past and present densities (alligators/mile) of

three size groups—small, medium, and large alligators—using 1977 as a break point for the comparisons (Tables 3-5).

TABLE 3.—A COMPARISON OF SMALL (2-4 FT) ALLIGATORS/MILE, BEFORE 1977 AND 1977-1981, BY HABITAT TYPES LISTED IN TABLE 2

Period	Average density by habitat type						
	1	2	3	4	5	6	7
Before 1977	2.80	0.48	3.78	0.99	0.10	0.14	1.39
1977-81	5.00	0.85	4.10	1.41	0.10	0.51	2.10
Percent change	+78	+77	+8	+42	0	+280	+58

TABLE 4.—A COMPARISON OF MEDIUM (4-7 FT) ALLIGATORS/MILE, BEFORE 1977 AND 1977-1981, BY HABITAT TYPE

Period	Average density by habitat type						
	1	2	3	4	5	6	7
Before 1977	1.70	0.48	2.90	0.88	0.12	0.32	0.19
1977-81	2.10	0.80	3.30	1.38	0.19	0.63	1.14
Percent change	+24	+26	+14	+55	+58	+97	+500

TABLE 5.—A COMPARISON OF LARGE (7 FT+) ALLIGATORS/MILE, BEFORE 1977 AND 1977-1981, BY HABITAT TYPE

Period	Average density by habitat type						
	1	2	3	4	5	6	7
Before 1977	0.41	0.21	0.45	0.13	0.02	0.11	0.19
1977-81	0.88	0.19	1.06	0.34	0.07	0.21	0.41
Percent change	+114	-.02	+126	+161	+250	+91	+118

These comparisons show increasing counts for virtually all size classes and habitat types. Table 6 compares pre- and post-1977 size composition found in these counts for 6 habitat types.

surveys in seven Florida habitat types for the period 1974-81. The data base that contains the results of these surveys is on computer at the State Wildlife Research Laboratory in Gainesville. These survey routes are widely distributed throughout the State and represent the major habitat types occupied by alligators.

TABLE 6.—A COMPARISON OF ALLIGATOR SIZE COMPOSITION FROM NIGHT COUNTS MADE BEFORE 1977 AND 1977-81, BY HABITAT TYPE—Continued

Habitat type		Small (2-4) (per-cent)	Medium (4-7) (per-cent)	Large (7+) (per-cent)
4	Pre-77	49.7	43.9	8.3
	1977-81	45.3	43.7	11.0
5	Pre-77	41.7	50.0	8.3
	1977-81	28.1	53.1	18.8
6	Pre-77	24.3	56.8	18.9
	1977-81	37.9	46.7	15.4

Although certain differences are noted in size composition, none are major and no trends are apparent.

Average counts of alligators/mile from Florida lakes and marshes can be compared to counts made in the same habitat types in Louisiana. These averages include data from Tables 3, 4, and 5 as well as alligators that could not be estimated as to size-class, which are omitted from the tables. Florida lakes averaged 11.9 alligators/mile prior to 1977 and 13.8/mile from 1977-81. Florida marshes averaged 11.3/mile prior to 1977 and 13.3/mile from 1977 to 1981. In comparison, Louisiana lakes averaged 1.4/mile during 1971-78 and marshes averaged 5.09/mile in 1977 and 1978. These comparisons of average counts are influenced by a variety of factors and are open to various interpretations. Thus, these numbers do not necessarily indicate that Florida alligator densities are much greater than Louisiana densities. However, they do indicate that Florida night counts show extremely high densities of alligators.

Abercrombie (1982) provides some evidence of increase in larger animals which might suggest recovery. Discussions with State biologists indicate that an actual recovery in numbers is likely limited to those accessible areas which were at one time subject to heavy poaching. This is the result of successful control of all but insignificant levels of illegal activity in Florida. The resilience of alligators that are protected following a period of overexploitation is referred to by Craighead (1969), who studied alligators in the Everglades, and by McIlhenny (1935), in describing three newly established wildlife refuges in southern Louisiana that had been previously subjected to excessive harvests.

Based on the preceding data, some generalizations may be made: (a) Density (alligators counted/mile) shows increases when the pre-1977 and post-1977 periods are compared; (b) small, medium, and large size classes are all well represented, indicating that the populations being surveyed are

TABLE 6.—A COMPARISON OF ALLIGATOR SIZE COMPOSITION FROM NIGHT COUNTS MADE BEFORE 1977 AND 1977-81, BY HABITAT TYPE

Habitat type		Small (2-4) (per-cent)	Medium (4-7) (per-cent)	Large (7+) (per-cent)
1	Pre-77	51.1	34.1	8.6
	1977-81	63.0	25.9	11.1
2	Pre-77	40.8	41.2	18.0
	1977-81	48.5	38.9	12.5
3	Pre-77	53.2	40.4	8.3
	1977-81	45.3	43.7	11.3

successfully reproducing and that survivorship is adequate; (c) the survey routes confirm that the species is well distributed throughout Florida's major habitat types; and (d) there are no significant trends or major shifts in composition of the population by size class, which could otherwise indicate the effects of illegal exploitation (Cott, 1961).

C. Disease or predation. Alligators suffer various types of disease and predation, as do most wildlife species, but these factors are a natural part of the alligator's existence and do not threaten the continued welfare of the species.

D. The inadequacy of existing regulatory mechanisms. The adequacy of existing Federal and State regulations for protection and management of the alligator is reflected by the healthy status of the alligator in Florida as described above. The following laws and regulations are germane: (1) The 1969 Amendment to the Lacey Act, which extended Federal law enforcement authority to interstate movement of reptiles and their products; (2) The Endangered Species Act of 1973, which provided mandatory protections for alligators in Florida while they were listed as endangered from 1973-78, and which authorizes the current special rules for threatened (including due to similarity of appearance) alligators, governing taking and commerce in alligator products; (3) The annual findings of the Scientific and Management authorities of the Service, which govern the export of species, including the American alligator, listed on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); (4) State of Florida statutes that govern taking and commerce in alligators; (5) Regulations of the Florida Game and Fresh Water Fish Commission establishing and governing nuisance control programs, alligator farms, and harvests; and (6) The Florida Alligator Management Plan. Florida statutes and regulations provide for complete adherence to the Service's special rule on American alligators.

As discussed above, the State has adopted an Alligator Management Plan and is conducting an extensive research program designed to insure against overharvest of the species. Harvest rates or quotas that would result from the sustained yield program would be based on preharvest surveys and tag allotments, or drawings for public areas designed to achieve harvests within estimated sustainable yields. The research program cited above should

insure that management programs are effected using the best scientific data and techniques available. Also, the State fills the role of recordkeeper, dealer, and marketer for hides taken during nuisance control and experimental harvest programs. The State will continue this role as seasons are expanded. The only self-marketing done by hunters at this time is the sale of meat. Florida statutes and regulations and the Service's special rule on American alligators regulate commerce in meat through a permitting system designed to preclude unmanaged and therefore illegal marketing of alligator meat.

E. Other natural or manmade factors affecting its continued existence. Although factors such as nest flooding or drought may affect alligators, none of these are known to have limited populations on a State-wide basis, nor are they expected to become threatening to State-wide populations in the future.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species. Based on this evaluation, the preferred action is to reclassify the American alligator to threatened due to similarity of appearance. Criteria for removing species from the List of Endangered and Threatened Wildlife are found at 50 CFR 424.11(d). They include extinction, recovery of the species, and original data for classification in error. This rule is based upon evidence that the species is not biologically threatened in Florida. Past reclassification actions for the American alligator have been based upon partial or complete recovery. This rule recognizes that some populations have shown increases (Wood and Humphrey, 1983). However, it also recognizes that on a State-wide basis little direct evidence of abundance exists that conclusively demonstrates an overall increase in alligator populations. The original listing of the American alligator as an endangered species occurred in 1967. The best available data with a bearing on status at that time were limited and highly subjective, shedding little light upon actual distribution and abundance. Current data on the alligator in Florida, though still somewhat subjective, provide sufficient evidence that the species does not warrant retention on the Federal list as biologically threatened, a classification intended for species that are considered likely to become endangered within the foreseeable future.

Night count data on Florida alligators evidence high densities compared to

similar Louisiana data from populations that are considered recovered. Also, available night count data confirm that the species is well distributed, has good reproduction, and shows no evidence of trends in size-class ratios that could indicate that populations were experiencing major changes.

Florida alligators occupy an estimated 6.7 million acres of habitat; although some habitat loss is occurring, particularly in southern Florida, given the extensive amounts of habitat in Florida, this loss will not threaten the species' existence within the foreseeable future. The Service considers that sufficient regulatory controls and mechanisms are in place to insure against substantial losses of Florida alligators to illegal activity. Further, it is thought that the comprehensive commitment of the Florida Game and Fresh Water Fish Commission to research and management involving this species will insure continued healthy alligator populations in the State.

Similarity of Appearance

Section 4(e) of the Endangered Species Act authorizes the treatment of a species 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.

With regard to the American alligator in Florida, the Service finds that each of these factors apply. There is little morphological geographic differentiation within the American alligator, which results in Florida specimens being virtually indistinguishable from live animals, or parts or products of alligators, in other parts of the range where the species is listed as endangered or threatened. In addition, while live alligators are readily distinguished from other crocodylians that are listed under the Act, at least by specialists, untrained enforcement personnel could have considerable difficulty in making correct species identification, which could hamper enforcement efforts.

In addition, small parts and products of processed crocodylian leather are nearly impossible to distinguish when

made into goods, thus hampering the identification of legal alligator products from those of endangered or threatened crocodilians. Such identification difficulties could result in allowing illegal trade in endangered crocodilian products to enter markets and thus further jeopardize these species.

By listing the American alligator under the similarity of appearance provisions of the Act, coupled with the special rules specified in § 17.42, the Service considers that enforcement problems can be minimized while at the same time the conservation of listed populations of the American alligator and other crocodilians can be ensured. The similarity of appearance provisions of the Act have proven effective in the State of Louisiana where various populations of the species have been listed as threatened by similarity of appearance since 1975.

Critical Habitat

Critical habitat for the American alligator was not designated at the time of listing and has not been designated since. Therefore, this rule has no effect on critical habitat for this species.

Effects of Rule

This rule changes the status of the alligator in Florida from threatened to threatened due to similarity of appearance. It is a formal recognition by the Service of a biologically secure status of the American alligator in a part of its range. This rule results in removal of Federal agency responsibilities under section 7 of the Endangered Species Act. No significant adverse effects on the status of the species are expected to occur from this removal.

This final rule makes available to the State of Florida the option of expanding harvests of alligators to additional areas. If the State elects to expand its harvests, these harvests could be expected to increase at a level commensurate with development and implementation of the State research and management program. All taking and commerce in alligators and their parts and products are to be regulated by the Service's special rule on American alligators, 50 CFR 17.42(a), as well as other applicable controls such as the Lacey Act (16 U.S.C. 3371 *et seq.*), which prohibits interstate commerce in illegally taken wildlife or their products.

Increased harvest of alligators is expected to result in an increased volume of alligator exports, although the magnitude of this increase cannot be predicted at this time. The Service has previously expressed its concern about the effects of increased exports on other endangered crocodilians found in

international trade. International trade in alligator products is presently subject to the restrictions of CITES, the Service's implementing regulations (50 CFR Part 23), and general wildlife exportation requirements (50 CFR Part 14). Previous determinations by the Service's Scientific and Management Authorities have concluded that export of alligators taken in Louisiana and Florida 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 rule is not an irreversible commitment on the part of the Service. The action is reversible and relisting is possible if the status of the species changes or if the State materially changes its plans or actions in a way that may threaten the species. The Service will continue to monitor and review the State's management program.

National Environmental Policy Act

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

References

The following documents were used in the preparation of this rule. These and other documents supplying background information including all unpublished data are on file at the Service's Jackson Endangered Species Field Station (see ADDRESSES section).

- Abercrombie, C.L. 1982a. Summaries of selected night count data and computer printouts of Florida night count surveys. Unpublished data from Wildlife Research Lab., Florida Game and Fresh Water Fish Commission, Gainesville.
- Abercrombie, C.L. 1982b. Survivorship curves and computer model designed to read out effects of various harvest strategies. Unpublished data from Wildlife Research Lab., Florida Game and Fresh Water Fish Commission, Gainesville.
- Cott, H.B. 1961. Scientific results of an inquiry into the ecology and economic status of the Nile crocodile (*Crocodylus niloticus*) in Uganda and Northern Rhodesia. *Trans. Zool. Soc. London* 29(4):211-337.
- Craighead, F.C. 1969. The role of the alligator in shaping plant communities and maintaining wildlife in the southern Everglades. *The Florida Naturalist* 41(1):2-7, 89-74, 94.

- Dietz, D.C., and T.C. Hines. 1980. Alligator nesting in north-central Florida. *Copeia* 1980(2):249-258.
- Florida Game and Fresh Water Fish Commission. 1981. Alligator Management. Unpublished Document. 19 pp.
- Goodwin, T.M., and W.R. Marion. 1978. Aspects of the nesting ecology of American alligators (*Alligator mississippiensis*) in north-central Florida. *Herpetologica* 34:43-47.
- Goodwin, T.M., and W.R. Marion. 1979. Seasonal activity ranges and habitat preferences of adult alligators in north-central Florida lake. *Journal of Herpetology*. 13:157-164.
- Hines, T.C. 1969. Alligator research in Florida. A Progress Report. Proc. S.E. Assoc. Game and Fish Commissioners 22:166-180.
- Hines, T.C. 1979. The past and present status of the alligator in Florida. Proc. Ann. Conf. S.E. Assoc. Fish and Wildlife Agencies 33:224-232.
- Hines T.C., and R. Schaeffer. 1977. Public opinion about alligators in Florida. Proc. Ann. Conf. S.E. Assoc. Fish and Wildlife Agencies 31:84-89.
- Hines, T.C., and A. Woodward. 1980. Nuisance alligator control in Florida. *Wildl. Soc. Bull.* 8(3):234-241.
- McIlhenny, E.A. 1935. *The Alligator's Life History*. The Christopher Publishing House, Boston. 117 pp.
- Shaw, S.P., and C.G. Fredine. 1956. Wetlands of the United States. Circular 39. FWS, Dept. of the Interior. 67 pp.
- Taylor, D., and W. Neal. 1984. Management implications of size-class frequency distribution in Louisiana alligator populations. *Wildl. Soc. Bull.* 12:312-319.
- U.S. Fish and Wildlife Service. 1982. Draft trend analysis data from National Wetlands Inventory, St. Petersburg, Florida.
- Wood, J.M., and S.R. Humphrey. 1983. Analysis of Florida alligator transect data. Coop. Fish and Wildlife Research Unit, University of Florida, Gainesville. Tech. Report No. 5, 49 pp.
- Woodward, A.R., and W.B. Marion. 1978. An evaluation of factors affecting nightlight counts of alligators. Proc. Ann. Conf. S. E. Assoc. Fish and Wildlife Agencies 32:291-302.

Author

The primary author of this rule is Mr. Wendell Neal of the Service's Jackson Endangered Species Field Station (see ADDRESSES section).

List of Subjects in 50 CFR Part 17

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

Regulations 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. 984; 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 revising the listing of the American alligator under "Reptiles" in the List of Endangered and Threatened Wildlife to read as follows:

§ 17.11 Endangered and threatened wildlife.

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Reptiles							
Alligator, American	<i>Alligator mississippiensis</i>	Southeastern U.S.A.	Wherever found in wild except those areas where listed as threatened, as set forth below.	E	1, 11, 51, 60, 113, and 134.	NA	NA
Alligator, American	do	do	U.S.A. (Certain areas of GA and SC, as set forth in 17.42(a)(1)).	T	20, 47, 51 and 60, 134.	NA	17.42(a)
Alligator, American	do	do	U.S.A. (FL, LA, TX)	T(S/A)	11, 47, 51, 60, 113, and 134.	NA	17.42(a)
Alligator, American	do	do	In captivity wherever found.	T(S/A)	11, 47, and 51.	NA	17.42(a)

§ 17.42 [Amended]

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

* * * * *

(a) American alligator (*Alligator mississippiensis*). (1) *Definitions.* For purpose 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: (i) In captivity wherever found; (ii) in the wild wherever the species is listed under § 17.11 as Threatened due to similarity of Appearance [T(S/A)]; or (iii) in the wild in the coastal areas of Georgia and South Carolina, contained within the

following boundaries: From Winyah Bay near Georgetown, South Carolina, west on U.S. Highway 17 of 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

on this border to the Florida border and following the Georgia-Florida border eastward to the Atlantic Ocean.

"Buyer" shall mean a person engaged in buying a raw, green, salted, crusted 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: June 11, 1985.

J. Craig Potter,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 85-14827 Filed 6-19-85; 8:45 am]

BILLING CODE 4316-55-01