Brian Seasholes The Endangered Species Act at 40: Species Profiles

AMERICAN ALLIGATOR





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AMERICAN ALLIGATOR (ALLIGATOR MISSISSIPPIENSIS)

Range:

Historic: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina,

Oklahoma, South Carolina, and Texas.

When listed: same states as historic, but reduced in size.

When downlisted and delisted prior to 1987: same as historic but reduced in size.

When fully delisted in 1987: same as when listed, but reduced in size.

Listed status: Endangered [32 FR 4001] 3/11/67, and then carried over to the ESA of 1973.

<u>Current status</u>: Recovered, [52 FR 21059-21064] 6/4/87, but still listed as Threatened under "similarity of appearance," the meaning of which is explained below in the section titled "Introduction."

<u>Status change prior to delisting</u>: There were a number of changes in the alligator's status over twelve years, as it was delisted and downlisted seven times starting in 1975.

Official reason for listing: Over-hunting.

Recovery criteria: None, no recovery plan ever written.

Population:

<u>Historic</u>: roughly 3-7 million. When listed: roughly 734,000.

When delisted: approximately 1-1.5 million.

Current: approximately 2-3 million.

What follows is a listing, and in some instances brief discussion, of the various rules to reclassify the alligator as well as change rules governing trade.

1) **Delisted**, but as a technicality retained as Threatened by Similarity of Appearance, (U.S. Fish and Wildlife Service 1975g), in Cameron, Vermillion and Calcasieu Parishes in LA due to sufficient population sizes. Petition for delisting in these three Parishes submitted by then Governor of LA, Edwin Edwards. In addition, all captive alligators were reclassified to threatened due to Similarity of Appearance. This rule permitted harvest in these three Parishes, subject to state and federal control. Delisting in only three Louisiana Parishes was a significant

reduction from the proposed rule (U.S. Fish and Wildilfe Service, 1975e) in which threatened status was proposed for Alabama, Georgia, all of Louisiana except the three Parishes, Mississippi, and Texas. It is not clear why the FWS did not go through with this downlisting, but opposition from environmental pressure groups, such as the National Audubon Society was likely a major factor.

- 2) Downlisted- (U.S. Fish and Wildlife Service 1977a) in FL and certain coastal areas of GA, LA, SC, TX, from endangered to the less imperiled status of threatened, due to population increases. Endorsing the reclassification were the U.S. Forest Service, the states of South Carolina, North Carolina, Florida, Louisiana, Arkansas and Oklahoma, the New York Zoological Society, and the American Association of Zoological Parks and Aquariums. Opposed to any downlisting, and advocates of critical habitat designation, were Monitor, Inc.—which represented the Audubon Naturalist Societies of the Central Atlantic States—Fund for Animals, Defenders of Wildlife, the National Parks and Conservation Association, the Wilderness Society, and Friends of the Earth. The rule also authorized taking of alligators, without federal permits, that posed a threat to human safety or for scientific research or in furtherance of conservation goals. This was becoming increasingly necessary as alligators more frequently came into proximity to humans because alligator populations, already healthy in many areas, continued to expand and because land development increasingly put people near alligators. The organizations opposed to reclassification, as well as the Florida Audubon Society—which included letters of support from Drs. Archie Carr of the University of Florida, James N. Layne of the Archibold Biological Station and Roy McDiarmid of the Univ. of Florida and the Florida Committee on Rare and Endangered Plants and Animals—were also opposed to the three criteria under which alligators could be taken because they would "perpetuate and legalize the vogue for alligator hide products which conservationists are convinced need to be eliminated if most species of crocodilian are to survive" (quote from submitted comments contained in; U.S. Fish and Wildlife Service 1977a, p.2074).
- 3) Delisted (U.S. Fish and Wildlife Service 1979g) but as a technicality retained as Threatened by Similarity of Appearance, in 9 Louisiana Parishes; Iberia, St. Mary, Terrebonne, Lafourche, St. Charles, Jefferson, Plaquemines, St. Bernard and St. Tammany. Petition submitted by Louisiana Governor, Edwin Edwards. Supporting the reclassification were: Richard Yancey, Assistant Secretary, Louisiana Department of Wildlife and Fisheries; State Senator Jesse Knowles, Chairman, Louisiana Wildlife and Fisheries Commission; Don Willie, Vice Chairman, Louisiana Wildlife and Fisheries Commission; St. Mary's Parish Policy Jury; Terrebonne Parish Policy Jury; Tangipahoa Parish Policy Jury; St. Landry Parish Policy Jury; St. John the Baptist Parish Policy Jury; Livingston Parish Policy Jury; Williams Inc.; Louisiana Land and Exploration Corp; and Continental Land and Fur Co. Opposed to the reclassification were Defenders of Wildlife and the Fund for Animals on the grounds that trade in alligator hides would be detrimental to crocodilian conservation both in the U.S. and worldwide.

- 4) Changes to Special Rule (U.S. Fish and Wildlife Service 1979l) to allow sale of meat or other alligator parts taken in the 12 Louisiana Parishes, in which the alligator is listed as Threatened by Similarity of Appearance, only within the state of Louisiana. Hides were unaffected, as they were still able to enter the stream of commerce. Despite the urging of state authorities and experts in Louisiana and Florida, FWS refused to allow interstate sale of meat and other parts because it was deemed that sufficient permitting and record keeping regulations were not in place. The state of Louisiana (Governor Edwin Edwards) and the Florida Game and Freshwater Fish Commission endorsed the rule but would have preferred that FWS allow interstate commerce because meat likely could not fetch as high a price if it were only sold intrastate, there was the possibility that meat could be wasted because supply could exceed demand, and that the intrastate sale of parts would be detrimental to the biological supply business that sold parts to education institutions, many of which were out of state. Also supporting the rule was Little Pelican Wildlife Management Area. In addition, Richard Yancey (Assistant Secretary, Louisiana Department of Wildlife and Fisheries, State Senator Jesse Knowles (Vice Chairman, Louisiana Senate Resources Committee), Doyle C. Berry (Chairman, Louisiana Wildlife and Fisheries Commission) supported the rule and also urged that interstate commerce in meat be allowed. In Florida, the Florida Game and Freshwater Fish Commission and the Southeastern Alligator Association also supported the rule.
- 5) Changes to Special Rule (U.S. Fish and Wildlife Service 1979n). This purpose of this rule was primarily to allow international trade to resume after nearly a ten-year halt. To accomplish this the rule did two things. First, was to bring the alligator's status under the ESA into accordance with its status under the Convention on International Trade in Endangered Species of wild Fauna and Flora (CITES), the international agreement to regulate trade in imperiled wildlife and to which the U.S. was a signatory. The alligator's status under CITES had changed from Appendix I, under which virtually no international movement of listed species is permitted, to Appendix II, a less restrictive status under which regulated trade is permitted. The American alligator had moved to Appendix II in March of 1979, but it took the FWS some seven months to make the ESA consistent with CITES by implementing regulations that permitted international commerce to occur. This provides another indication of the FWS's aversion to trade, the very slow pace of federal bureaucracy, as well as the lack of expertise and knowledge on the part of FWS personnel about international trade. If an international organization, headquartered in Switzerland, can clearly determine that the American alligator's population is sufficiently large to allow trade before the FWS—which is purportedly the expert on American wildlife—is able to reach such a determination then it indicates the FWS had poor knowledge of the alligator or that they were dragging their feet because of opposition to trade, or both. Second, "[t]he primary purpose of this rule...is to expand worldwide the domestic 'closed system' of trade in lawfully taken American alligator hides and products from those hides created by the special rule" (U.S. Fish and Wildlife Service 1979n, p.59082). In order to accomplish this, FWS required buyers,

tanners and fabricators, which were often three separate businesses, to obtain permits and document the use of any alligator hide. Fabricators were required to attach a FWS issued engraved label to each item for which alligator hide was used and to be able to account, through paper work, for the entire hide. Given that a single hide could be made into scores of products such as wrist watch bands, wallets, key fobs, etc.—and that stringent permitting and identification tagging was already required at the first two steps of the supply chain (buyers and tanners), the absurdity of FWS's requirement was clearly apparent to those who were familiar with alligator conservation and commerce. A given fabricator would have to attach tens of tags, and fill out pages of paper work, for each product made from just one hide. In the course of a years, a single fabricator might well make thousands of individual items, each one of which would require extensive paper work to comply with FWS's tagging system. Clearly, these were unreasonable and unworkable requirements because a fabricator could well spend much of their time filling out paper work, something they could scarcely afford to do. FWS's rule was, however, a clear demonstration of the agency's ignorance of how the alligator hide market and fabrication businesses functioned, which is not surprising given FWS's general ignorance of alligator populations and conservation. Also included in the rule was a provision to allow captive alligators to enter the stream of commerce. This was primarily to allow farmed alligator hides and meat to be sold. This rule also did two other things; the self-defense provision was changed to be more liberal and in accordance with the language in the ESA; and the rule also allowed the sale of lawfully taken meat or other parts, except hides, but only within the state in which it was taken. Unfortunately, this last provision still fell short of what was needed, interstate and international commerce, for the best prices to be obtained. Of course, with higher prices, landowners would have an increased incentive to conserve alligators and their habitat. This fundamental logic of how markets work was apparently lost on FWS. But FWS could, in a very real sense, afford to take this stance, as reflected in all of the unreasonable requirements in this rule, because the agency's budget was not in any way tied to how quickly or competently they consented to commerce in American alligators and their parts. On the other hand, state wildlife agencies, were under more localized political pressure, from the citizens and politicians of their own states, to allow commerce. As a result, the states had much stronger incentives to engage in commerce by insuring that alligator populations were healthy and by formulating effective management regimes.

6) Revision of Special Rule (U.S. Fish and Wildlife Service 1980b). In response to the absurd rules governing trade, especially requirements for fabricators, FWS revised the rule so that fabricators no longer required permits issued under the special rule. This was how the special rule should have been structured in the first place but was not because of FWS's ignorance of the crocodilian market. The revised rule also permitted interstate commerce in alligator meat and parts—except for hides—subject to state laws, which meant that interstate commerce could only take place if the state of origin and the state of sale permitted it.

7) Delisted (U.S. Fish and Wildlife Service 1981a), but as a technicality retained as Threatened by Similarity of Appearance, in the rest of Louisiana, 52 Parishes, where the alligator was still classified as Endangered or Threatened. "This action is a formal recognition by the [U.S. Fish and Wildlife] Service of the biological recovery of the alligator in Louisiana" (U.S. Fish and Wildlife Service 1981a, p.40664). Objecting to the reclassification was the Fund for Animals which held that it was, "unbelievable that the...Fish and Wildlife Service is going to take action on such an important issue, based upon data, unchecked by it, which is furnished by the applicant," meaning the state of Louisiana. The Fund added, "it is the Fund's position that this proposition is not based on sound data" (U.S. Fish and Wildlife Service 1981a, p.40666). The FWS also concluded that habitat loss through human activities—one of the two factors the FWS used to justify listing the alligator in 1973 as well as continued protection under the ESA—was simply not a factor in Louisiana. According to the FWS, a minimum of 803,840 acres of permanently flooded cypress tupelo habitat—what can be considered prime habitat-existed and the amount of this habitat was likely to remain unchanged due to the expense of draining it. In addition, roughly 3 million acres of marshland habitat existed which was only decreasing at an estimated 0.7% per year (U.S. Fish and Wildlife Service 1981a, p.40667). Dr. Howard W. Campbell, Chairman of the IUCN/SSC Crocodile Specialist Group had this to say about the reclassification: "My only reservation is with regard to the relative abundance of the alligator in the areas proposed (for delisting) as compared to areas not included in the proposal. There are many areas in Florida and some in Georgia and Texas which have full as many 'gators and many of these areas have quite a few more 'gators than do these Louisiana areas. It strikes me as quite inconsistent and not at all to the Service's credit to see the alligator with such a hodge-podge of status areas which bear so little resemblance to the actual abundance of the species in the various areas. I would recommend that the Service cease dealing with the 'gator in this crazy-quilt fashion and prepare a range-wide reclassification that recognizes the actual data available" (U.S. Fish and Wildlife Service 1981a, p.40665). Supporting the classification were; the Governor of Louisiana, the Governor of Arkansas, the Florida Game and Freshwater Fish Commission, the Georgia Department of Natural Resources, St. James Parish Council and the St. Mary Parish Policy Jury in Louisiana, Dr. Robert A. Thomas representing the American Society of Ichthyologists and Herpetologists, the Louisiana Department of Wildlife and Fisheries, and the National Alligator Association.

8) Delisted (U.S. Fish and Wildlife Service 1983d), but as a technicality retained as Threatened due to Similarity of Appearance, in Texas. Supporting the reclassification were; the Governor of Texas, the Wildlife Legislative Fund of America Opposed to the reclassification were Defenders of Wildlife, the New York Zoological Society and the American Society of Ichthyologists and Herpetologists due to doubt about whether the population was sufficiently large and that the FWS should approve a management plan for Texas. These three organizations that opposed delisting wanted the FWS to require the state of Texas to develop and management plan as a condition of delisting. This desire for a management plan, however, seems to have been more a

stalling tactic—as these organizations were, to varying degrees, philosophically opposed to commerce—rather than valid, biologically based concerns.

- **9) Delisted** (U.S. Fish and Wildlife Service 1985a), but as a technicality retained as Threatened due to Similarity of Appearance, in Florida. FWS estimated 6.7 million acres of habitat were occupied by the alligator, and much of this habitat was deemed secure or at low risk of destruction.
- **10) Delisted** (U.S. Fish and Wildlife Service 1987b) but as a technicality retained as Threatened due to Similarity of Appearance throughout the remainder of its range (AL, AR, GA, MS, NC, SC, OK). Supporting the reclassification were the states of North Carolina, Arkansas, Georgia, Louisiana and Oklahoma.

CLAIMS THAT THE AMERICAN ALLIGATOR IS AN ESA SUCCESS STORY

- 1) "The Endangered Species Act is the most innovative, wide-ranging and successful environmental law that has been passed in the past quarter century. I can cite case after case: the resurgence of the American alligator...The opponents of the Act know these facts."—Bruce Babbitt, then Secretary of Interior¹
- 2) "The story of the American alligator is...truly one of the prominent success stories of the Nation's endangered species program."—U.S. Fish and Wildlife Service²
- 3) "[T]he Endangered Species Act has made an enormous impact...The American alligator...[is] rebounding in the wild due to conservation efforts under the act."—World Wildlife Fund³
- 4) "The Act has improved the status of some species, such as the...American alligator."—the Ecological Society of America's ad hoc committee on the ESA⁴
- 5) "There is little question the Endangered Species Act was paramount in the alligator's recovery."—
 most of the ESA's prominent supporters, including the Center for Biological Diversity, Defenders of
 Wildlife, Earthjustice, Endangered Species Coalition, Natural Resources Defense Council, National
 Wildlife Federation, and U.S. PIRG⁵
- 6) "The American alligator's recovery is one of the Act's major success stories."—Michael Bean Environmental Defense Fund⁶
- 7) "When their [species'] recovery is verified by sound science and its continuation assured by thoughtful policy, their management—like that of the American alligator, another of the law's successes—will revert to state and tribal authorities."—Mark Van Putten, then President and CEO of the National Wildlife Federation⁷

¹ Babbitt 1994, p.54.

² U.S. Fish and Wildlife Service 1991c.

³ World Wildlife Fund 2004.

⁴ Carroll et al., 1996, p.3.

⁵ American Rivers et al., 2003b.

⁶ Bean 1993a.

⁷ Van Putten 1999.

- 8) "Alligators have rebounded because listing stopped the hunting of the reptiles."—Defenders of Wildlife⁸
- 9) "For some species, such as the American alligator, listing and protection provided, including strong enforcement, were enough to expedite their recovery."—General Accounting Office⁹
- 10) "I think the strength of the Act lies in its successful application on a day-to-day basis by our people in the field. We want these people to be committed to the spirit and the intent of this law. Their day-to-day efforts have prevented the extinction of some species, or at least reversed downward trends for species like the American alligator."—John McGuire, then-Chief of the U.S. Forest Service¹⁰
- 11) "We...are delighted that the protection afforded by the Endangered Species Act has allowed populations of the alligator in Florida and Louisiana to recover from the brink of extinction."—John Grandy, then with Defenders of Wildlife, currently with the Humane Society of the U.S.¹¹
- 12) As early as 1977 the Department of Interior claimed the alligator as a success story. 12
- 13) There are other such claims by the U.S. Fish and Wildlife Service and environmental pressure groups.¹³

And with the delisting of the alligator in 1987, FWS had this to say: "'This alligator success story is the culmination of a 20 year effort by Federal and State wildlife professionals to bring the animal back,' said Frank Dunkle, Director of the Fish and Wildlife Service. 'When the alligator was first protected under the Endangered Species Act in 1967, poaching had reduced its numbers so severely that many believed the species would never recover. But with sound management and a vigorous crackdown by State and Federal wildlife law enforcement agents, we've reversed the situation. Today, the American alligator is biologically secure throughout its range." (U.S. Department of the Interior 1987). "[T]he alligator was pronounced fully recovered in 1987, making it one of the first endangered species success stories" (U.S. Fish and Wildlife Service 1995b).

⁸ Stout and Painter 1985, p.15.

⁹ General Accounting Office 1979, p.68.

¹⁰ McGuire 1977, pp.373-374.

¹¹ Grandy 1979, p.57.

¹² In 1977, the Department of Interior made the following statement: "One of the most significant accomplishments of America's conservation movement was announced today when most of this nation's alligators were removed from the endangered species list and placed on the less restrictive threatened list, Nathaniel P. Reed, Assistant Secretary of the Interior for Fish and Wildlife and Parks, said. 'This shows we can do it,' Reed said. 'We can reverse the trend toward extinction and save a species...if we want to. Only 20 years ago these magnificent reptiles were headed toward extinction as hide hunters indiscriminately slaughtered them and their habitat was steadily being destroyed by development. But it was the conservation community and a number of officials in southern States who insisted that Federal and local legislation be passed to protect the alligator. They withstood the disinterest and ridicule from a largely uninformed public long before the word 'conservation' became fashionable. And in about 20 years, it was the conservation community that succeeded in rescuing a species that had already existed for 50 million years. That's quite a feat.'" (U.S. Department of the Interior 1977).

CONSERVATION OF THE AMERICAN <u>ALLIGATOR</u>

INTRODUCTION

The American alligator is first and foremost a case of data error, meaning it never should have been listed under the ESA because by the time Congress passed the Act in 1973 the species was not imperiled due to its large and increasing population of roughly 735,000. Unfortunately, the FWS listed the alligator in 1973 due to the agency's view that illegal hunting posed such a threat that the species was faced with extinction. The reality, however, is that an amendment to the 1969 federal Lacey Act, not the passage of the ESA in 1973, was essentially responsible for halting the large-scale illegal hunting. Furthermore, the ESA did more harm than good because the Act stymied conservation programs that were vital to the alligator's conservation. In this regard, the alligator's tenure under the ESA is similar to that of the American peregrine falcon and the three species of Australian kangaroo because, overall, the Act harmed the conservation of these species.

¹³ FWS labeled the alligator as "Recovered" and stated, "Although recovered, the species remains on the list because of its similarity in appearance to the listed American crocodile and other crocodilians subject to import" (U.S. Fish and Wildlife Service 1991e) "The ESA also has contributed to the dramatic rebound of populations of American alligators" (Defenders of Wildlife et al., 2002, p.4); "The American alligator is an example of a success story. Unregulated killing for the exotic leather trade threatened this reptile with extinction. In 1987, it was taken off the endangered species list, due to the efforts of many agencies working together to save it from over exploitation" (U.S. Fish and Wildlife Service ND, Endangered Means). "The Endangered Species Act is important not merely because it has broadened our conservation focus to include the great majority of species that had previously been neglected. It is important too because it has shown that the road to extinction can be reversed...The American alligator, once imperiled by heavy poaching, is now sufficiently abundant and well managed that controlled commercial exploitations for its meat and leather is again allowed." (Bean 1990a, p.viii). "[T]he act has achieved remarkable success recovering...the American alligator" (Endangered Species Coalition, ND, The Endangered Species Act Protects US). "Another false claim of some ESA opponents is that the act just doesn't work. Just look at the results in Texas. Before the ESA, the alligator was almost extirpated from Texas. Today it is fully recovered, to the point where we now have an alligator hunting season."—Tom Maddux, chair, National Forest Protection Campaign of the Sierra Club's Lone Star Chapter (Maddux, 1993). "Notable successes have been achieved in many recovery programs. For example, the American alligator (Alligator mississipiensis) recovered rapidly in many parts of its range as a result of federal and state protections under the Endangered Species Act" (Clark and Harvey 1988).

As the first species to be declared recovered, initially only over a portion of its range in 1975, and then the first species native to the U.S. to be declared recovered over its entire range in 1987, the alligator represents an important milestone in the history of the ESA. Unfortunately, this milestone is the length to which the Act's proponents will go to claim falsely a species as an ESA success story. The alligator's delisting was a foreshadowing of a number of the arguments and issues that would be put forth by the FWS and environmental pressure groups in subsequent years when other species were delisted or proposed to be delisted. These arguments are:

- 1) Claim ESA success when data error is quite clearly the reason, or a major reason, for species' improvement.
- 2) Use high-profile species as public relations vehicles to promote the ESA even if the species owe little, if any, of their improvement to the ESA.
- 3) Ignore factors other than the ESA that contributed to species' improvement.
- 4) Ignore factors that were detrimental to species' conservation.
- 5) Oppose conservation through commerce even when it is beneficial to species' conservation.

There are several ways in which these arguments and issues were manifested in the case of the alligator.

First and foremost, and unlike most of the other delisted species, there is a narrative thread that runs through the various issues and topics that comprise the story of the alligator's tenure under the ESA. The thread is commerce. Unlike any other of the delisted species, the alligator, specifically its valuable hide, is a source for large-scale international trade. It was this value, and the perception of the threat posed by hunting to satisfy demand for hides, that drove the FWS to list the alligator under the ESA. Wildlife trade was and still is an issue that ESA advocates agree with near unanimity is likely to be detrimental, if not inimical, to wildlife conservation.

This hostility towards wildlife commerce manifested itself in the decision to list the alligator under the ESA, resistance to allowing trade to occur for those portions of the population that had been delisted, and retention of the alligator on the list of endangered and threatened species until 1987 even though it did not merit listing in to begin with. The FWS, environmental pressure groups and their allies were suspicious or even opposed to efforts by states, especially

Louisiana, to use the alligator's valuable hide as a means of providing incentives to conserve the alligator.¹⁴

Opposition to trade ended up harming alligator conservation because it deprived states and owners of alligator habitat of money earned from trade. In turn, this money provided, and continues to provide, landowners with incentives to conserve alligator habitat, jobs for state residents, and funds earned from things such as licenses, which are plowed back into state-based research initiatives and private habitat conservation. While the FWS gradually allowed trade in alligator hides, meat and parts in the late 1970s, this only occurred at a very slow pace and after much prodding from the states, especially Louisiana. States had very strong incentives to keep alligator populations healthy so that the species could be used as a self-perpetuating source of income. Such conservation was capital and labor intensive, often had to be conducted under difficult conditions in hot and humid swamps, and took countless hours of working patiently with skeptical landowners. By contrast, the FWS environmental pressure groups had a very different set of incentives. They could easily let their ideological opposition to trade dominate their thinking because they were free from the difficult and time consuming realities of trying to make alligator conservation sustainable.

Second, FWS bureaucrats believed they knew better than state wildlife authorities, especially those in Louisiana and Florida, how to manage alligators. The reality is that wildlife biologists and managers, most particularly in Louisiana, had almost all the expertise about alligators as a result of extensive, long-term research programs. By contrast, when the FWS listed the alligator under the ESA, and for years afterwards, the agency had undertaken very, very little research or management. As a result, the FWS had poor knowledge of alligator biology, ecology and conservation. Yet bureaucrats with the FWS and Interior Department who had, at best, rudimentary knowledge of alligator biology, ecology and management made key decisions about the alligator's status under the ESA.

Third, each time the FWS reclassified the alligator's status under the ESA, the agency found the species had recovered sufficiently not to merit the Act's protection. Reclassification

¹⁴ Dr. Archie Carr, professor, University of Florida, had this to say about alligator farming: "Superficially it sounds good, but there is fuzzy thinking in it. I have yet to see or hear of a workable plan for any reptile ranch that shows in realistic detail how it expects to achieve a volume of production so great that it sill do anything other than increase both demand and prices. If the enterprise is a commercial one, it will obviously do everything possible to create new markets. Just as obviously, it will not be able to satisfy these, and so will exacerbate, rather than relieve, the predicament of the natural populations" (Harrison 1973, pp.20,22).

typically means either "downlisting" from endangered the less-imperiled status of threatened or delisting entirely. Prior to being completely delisted in 1987, FWS delisted and downlisted the alligator seven times over various portions of its range. In almost all these instances, instead of delisting the alligator completely the FWS decided the ESA should continue to have authority over the alligator because of concern that trade in alligator products—for the most part hides but also meat and other parts—remained a threat. So while the alligator was biologically secure, in the eyes of the FWS and environmental pressure groups it was not regulatorily secure.

Fourth, and as a result of the view the alligator was not regulatorily secure, when the FWS delisted the alligator over portions of its range, the agency retained the alligator on the list of Endangered and Threatened species as Threatened due to Similarity of Appearance. The Similarity of Appearance provision of the ESA was crafted specifically for species like the alligator in which certain species protected under the Act are morphologically identical or so similar to other protected or unprotected species that quick identification is extremely difficult. For example, one or more population(s) or sub-species of a given species could be listed as Endangered while one or more was listed as Threatened, or perhaps not even listed under the ESA at all. The FWS was concerned that the protected species would be killed, knowingly or not, due to its similarity to unprotected or less protected species, sub-species or even populations. In the case of the alligator, the FWS worried that if it delisted alligators in a certain region or state, and trade was allowed to occur, then illegally killed alligators—or other crocodilians, the group of species that includes alligators and crocodiles, from around the world, or more likely their hides—could be "laundered" with the legal alligator hides. The result, so the reasoning goes, is that protected alligator and crocodilian populations would likely suffer declines. The solution arrived upon by the FWS was to keep the biologically recovered species like the American alligator under the ESA's authority by listing them as Threatened by Similarity of Appearance.

Fifth, states and even municipalities in which alligators lived overwhelmingly supported the various reclassifications that occurred over twelve years. This was because states were undertaking and paying for the vast majority of research and conservation efforts, and they were most knowledgeable about the alligator's status. The fact that states overwhelmingly supported reclassification is further indication the alligator's original listing under the ESA was unwarranted.

Sixth, in addition to the Interior Department, opposition to reclassification tended to be from two main sources, the animal rights lobby and the more mainstream environmental pressure groups. Both opposed commerce on philosophical grounds, although opposition from animal rights groups sprang from a more deep seated opposition to killing any animal. Another driving factor behind this opposition was fundraising. Opposing commerce lends itself to the type of simplistic slogans (e.g., "skins belong on alligators") that lend themselves easily to public relations and fundraising campaigns. By contrast, making the case for conservation through commerce is more difficult because it involves a two-step argument; commerce provides money, and money, not emotion, ultimately saves alligators and their habitat. This is a more difficult to make and is not easily formulated into a sound bite or slogan.

Environmental pressure groups knew this, as well as that many of their members were opposed to conservation through commerce because they were also supporters of the animal rights lobby or they were unaware of the benefits of conservation through commerce. So the decision by many mainstream pressure groups to oppose commerce was also based on public relations and, ultimately, financial concerns because these groups did not want to alienate or lose members even if these groups knew that alligator commerce was beneficial to the species' conservation. The foremost example of this opposition to commerce, even in the face of clearly demonstrated conservation benefits, is the 1989 ban on elephant ivory, which, like the alligator ban, has done more harm than good.

These issues can be found in much of the following discussion of the alligator's conservation, which, along with the American peregrine falcon and bald eagle, is the most complex, and therefore lengthy, for any species profiled in this book. The discussion of the alligator is broken down into ten topics. First, the alligator is clearly a case of data error. Second, the Lacey Act amendment of 1969, not the ESA of 1973, was the tool that effectively shut down illegal hunting and trade. Third, the FWS listed the alligator as a political ploy to facilitate passage of the ESA, as well as predecessor legislation. Fourth, the alligator's listing under the ESA hindered states' conservation efforts, especially by Louisiana and Florida, the two states that contained and continue to contain the vast majority of the alligator's total population. Fifth, conservation through commerce played a key role in the alligator's conservation. Sixth, the ESA harmed conservation efforts by stymieing research and commerce. Seventh, the FWS needlessly listed the alligator on the periphery of its range. Eighth, despite that the FWS

appointed a recovery team, no recovery plan was ever finalized because the alligator did not merit one. Ninth, the FWS unnecessarily delayed delisting the alligator. Tenth, on balance the ESA caused more harm than good to the alligator.

DATA ERROR

The American alligator is clearly case of data error because its population was roughly 734,000 and increasing at the time of the ESA's passage in 1973. The American alligator is one of the seventy-eight species the FWS listed in 1967 under the Endangered Species Preservation Act, the first of the two predecessors to the ESA.¹⁵ When Congress passed the ESA in 1973, the FWS carried over the alligator onto the list of endangered and threatened species even though the species did not merit the Act's protection. Even the National Wildlife Federation (NWF), one of the ESA's staunchest supporters, agrees on this point. In 1987 NWF observed:

"[I]n 1967 the...[alligator] was placed under the protection of the Endangered Species Preservation Act. The turnaround was satisfyingly rapid. Soon the reptile was so plentiful again that the states where it was found were permitting limited hunting of the animal. Ecological responsibility triumphed. The story is familiar, gratifying—and mostly wrong. It now appears that the animal never should have been placed on the Endangered Species List; recent evidence suggests that the 'gator was thriving in some parts of its range throughout the 1960s, albeit at somewhat lower population levels than now exist." ¹⁶

Note that NWF pegs the alligator's turnaround to the 1966 Endangered Species Preservation Act, not the ESA of 1973. Yet NWF did not get the story entirely correct because in the mid-1980s "recent evidence" did not come to light indicating the alligator was thriving in the 1960s. In fact,

¹⁵ U.S. Department of the Interior 1967.

¹⁶ Lewis 1987, p.14.

the best available evidence to the FWS at the time of the ESA's passage showed the alligator's population was so large and healthy it did not merit being listed under the Act.

Even though NWF essentially got it right in 1987, five years later the Federation took a different line. "Where would they be without the law?" NWF asked. "[A] range of rare creatures are better off today thanks to the Endangered Species Act." As an example NWF offered this; "Alligator recovery has been so successful the creature was removed from the Endangered Species List in 1987." Changing political winds likely explains NWF's about face. In the early 1990s, the ESA was increasingly controversial, and as a result advocates like NWF sought to portray the Act in a flattering light, even if doing so meant making false and misleading claims.

Others admit that the alligator was never imperiled, including Charles Cadieux, part of the cadre of environmental writers who authored books in the 1960s, 70s and even into the early 1980s on endangered species that made dire predictions about the future of many species including the alligator. Even so, Cadieux improbably called it correctly in the case of the alligator. "Clearly, the American alligator is not endangered as a species. It never was endangered as a species across its range," he observed in 1981. Another indication that the alligator was never endangered is that as early as 1971 the IUCN (World Conservation Union) Crocodile Specialist Group (CSG), regarded as the world's foremost authority on the status of crocodilians, considered the alligator to be recovered. This is an indication of how the FWS was totally out of step with the reality of the alligator's status and conservation.

¹⁷ Milius and Johnson, 1992, p. 50-51.

¹⁸ Milius and Johnson 1992, p.52.

¹⁹ (Cadieux 1981, p.88).

He also stated, "It would be nice to attribute the resurgence in alligator numbers to the passage of the Endangered Species Act in 1973, an assuredly that landmark legislation did help. However, there were plenty of gators in 1973," he states. (Cadieux 1981 p.86). Yet in his profile of the alligator, Cadieux failed to specify how the ESA purportedly helped the species. Even so, his conclusion that the alligator was never imperiled provides an indication that there were a few, and a very few at that, writers who were willing to engage in more objective and truthful examinations of the alligator's conservation.

²⁰ At the CSG's inaugural meeting in 1971, the group was unanimous in its decision to transfer the alligator from category 1, critically endangered, to category 5, recovered (IUCN 1971, p.27) When the CSG gathered two years later, a debate ensued about the contradiction between alligator's Appendix I, or most imperiled, status under the recently passed Convention on International Trade in Endangered Species (CITES) and alligator's category 5 status according to the CSG. The result was that the CSG, but for one dissenter, decided to retain the category 5 status for the alligator (IUCN 1973, p.80).

DATA ERROR WHEN ESA PASSED

By the time of the ESA's passage in 1973, the best available evidence indicated the alligator had a population approaching three quarters of a million and population in most states were stable or increasing. This is because the majority of alligators lived in Louisiana and Florida, and available data indicates populations in these states were in the hundreds of thousands and either stable or increasing. While alligator populations were low in some states—notably Oklahoma, Arkansas and North Carolina—this was to be expected, because these states were at the very periphery of the species' range. Alligators have never been, nor ever will be, numerous in these states.

In 1973, in order to obtain an estimate of the overall population, the Louisiana Wildlife and Fisheries Commission distributed a questionnaire about alligator populations to the sixteen members of the Southeastern Association of Game and Fish Commissioners. Responses to the questionnaire, which the Commission presented at a professional workshop on endangered species in the Southeast, resulted in a total population estimate of 734,384 alligators. In addition, with the exception of Florida's 64 counties, which did not have population trend data, 168 counties in the alligator's range reported having *increasing* populations, 152 counties stable populations, and only 25 counties decreasing populations.²¹ At the time of the ESA's passage in 1973, the Florida Game and Freshwater Fish Commission (FGFFC) estimated there were a minimum of 100,000 alligators in the state.²²

While both these estimates are quite rough, due to the imprecision of early survey methods, they were the best estimates at the time. More importantly, they indicate the alligator had such a large and increasing population that it certainly did not merit being listed under the ESA. Increasingly strong evidence in subsequent years substantiated this. Furthermore, these data were the best estimates available at the time. "Populations were being reduced during the early to mid-1960s, but there are no data available which would substantiate that alligators

²¹ Joanen 1974, p.5.

²² Lewis 1987, p.14.

should have been classified as endangered," concluded Tommy Hines of the FGFFC.²³ To which he added; "So it was well on its way to recovery in 1973, and I think it is a prime example of emotion probably dictating the species to be listed rather than the biological facts."²⁴ Around the time of the ESA's passage, "the general consensus was that the alligator population was increasing," according to Hines.²⁵ Hines is one of a handful of biologists in Florida and Louisiana who were at the forefront of alligator research in the 1960s and 1970s, in contrast to FWS personnel who had very little knowledge of the alligator.

There are two other pieces of evidence that the alligator did not merit being listed under the ESA, one of which is annual surveys that began in the early-to-mid-1970s. Louisiana began conducting population surveys in the 1960s, but starting in 1970 and continuing annually the state conducted systematic annual surveys, which consisted of flying transects, or fixed routes, in a helicopter to count the number of nests in the open marshes located in the southern part of the state. The results of these surveys showed there was a large and growing population of at least 200,000 alligators. Field observations added an estimated 100,000 alligators in the arboreal swamps and northern part of the state, for a total of at least 300,000 alligators in Louisiana in 1970. Similarly, Florida's sporadic surveys in the late 1960s and early 1970s became more formalized beginning in 1974 with annual surveys that provided an abundance index that indicated the state had an increasing alligator population. The second piece of evidence that the alligator did not merit listing under the ESA is from analysis in the mid-1980s of historic sizes of alligator skins in Louisiana and Florida going back to the early 1900s. The analysis showed that the sizes of skins from the early 1900s were essentially the same as from the 1980s.

²³. Hines 1979.

²⁴ Hines 1977, p.346.

²⁵ Hines 1979, p.224.

²⁶ See: Hoffpauer 1973; Palmisano et al., 1973.

²⁷ Woodward and Moore 1995.

²⁸ This is possible because records were kept of alligator skins sold back as far as the early 1900s. In 1987 Louisiana compared skins harvested in the 1980s with those harvested in the early 1900s, and the analysis showed that the total populations during each time period were roughly similar (Joanen and McNease 1987, p.36). In Florida a different analysis was carried out. Also in 1987, a study of historical sizes of alligator hides in Florida revealed that the species was in all likelihood never imperiled in that state either. Tommy Hines and H. Franklin Percival, a FWS biologist and one of the agency's few people with knowledge about the alligator, concluded that of

In the mid-to-late 1970s the FWS substantiated these population data from states, especially those from Louisiana and Florida when the agency began delisting and downlisting the alligator over portions of its range. The FWS's substantiations, however, almost invariably appeared in obscure documents, most notably the Federal Register, that the media and general public would almost never read. By contrast, when the FWS produced information for more general consumption, such as press releases, the agency typically portrayed that the alligator's listing under the ESA as warranted. In addition, there was a temporal dimension to the FWS statements. The agency tended to be more frank and honest in the early years of the ESA, the 1970s and into the 80s. But from the mid-to-late 1980s onward, as the Act became an increasingly hot-button issue, the FWS became progressively less honest and forthcoming about the alligator's status.

FWS ADMITS DATA ERROR

The first of the many actions to get the alligator off the list of endangered and threatened species got under way in June of 1974 when, in response to a petition by the Governor of Louisiana to delist the alligator in the state, the FWS announced; "The status of the American alligator throughout its range in the United States will be the subject of an intensive study." By making such an announcement the FWS implicitly acknowledged the alligator the agency listed the alligator the basis of, at best, thin data. Such a study would not have been necessary if the FWS did what it was supposed to have done prior to listing the alligator; conduct a thorough population survey.

The first results from this study appeared in 1975, when the FWS delisted the alligator, but retained as Threatened due to Similarity of Appearance, in three Louisiana Parishes. The FWS estimated the three parishes had a population of 98,551 alligators.³⁰ If this was the

the 72,378 known alligators illegally killed in Florida from 1965-71, out of a probable total of 140,000, "[a]nalysis of the size structure of the...hides strongly suggests that the alligator population was probably stable during that period even though some populations were probably below carrying capacity" (Hines and Percival 1987, p.170).

²⁹ U.S. Fish and Wildlife Service 1974c.

³⁰ U.S. Fish and Wildlife Service 1975g, p.44413.

population in only a small portion of the alligator's range then the range wide population must have been much larger and did not merit being listed under the ESA.

Yet the amazing thing about the FWS's "intensive study" that the agency was passing off as its own was that it was simply data culled from the 1973 range wide questionnaire conducted by Louisiana Wildlife and Fisheries Commission and published in 1974. The questionnaire came to be known as the Joanen Report, after its principle author Ted Joanen, a biologist with the Louisiana Department of Wildlife and Fisheries.³¹ Ted Joanen, like Tommy Hines in Florida, was one of the "old hands" of alligator conservation who had far more expertise than those at the FWS. Hines and Joanen were, and still remain, highly regarded crocodilian biologists. Both have been long time members of the IUCN's Crocodile Specialist Group. Joanen has long been one of the leaders of the Specialist Group, and he is regarded as one of the foremost authorities on crocodilians in the world (see section below titled "State-based Research and Conservation Programs").

Apparently based on the Joanen Report, and according to the FWS, the agency's "review [of the alligator's population status] obtained evidence that the American alligator is making encouraging gains in population over much of its known historical range and that significant losses of populations have occurred only in geographically peripheral and possibly ecologically marginal areas. Population levels in parts of South Carolina, Georgia, Florida, Louisiana, and Texas are high, and, in many areas over these regions considered to be ecologically secure."³² This characterization by the FWS in 1975 sure does not sound like the agency thought the alligator was threatened with extinction.

The proposed and final Federal Register rules on delisting the alligator in 1975 contains three implicit admissions the alligator was a case of data error. First, the proposed rule recommended the alligator be delisted in three Louisiana parishes and downlisted over the remainder of its range where it had significant populations (Florida, Texas, Georgia, Alabama, Mississippi, and Louisiana but for the three "delisting" parishes).³³ If the FWS could propose reclassify virtually the alligator's entire population—those states not included in the proposal had

³¹ Joanen 1974.

³² U.S. Fish and Wildlife Service 1975e, p.28712.

³³ U.S. Fish and Wildlife Service 1975e, pp.28712-28720.

small populations—after being listed under the ESA for only year-and-a-half, then the alligator could not merited the Act's protection in the first place. The alligator takes ten years to reach sexual maturity so it is impossible the species could have made such a dramatic recovery in such a short period of time.

Second, the time period between the proposed and final rules was two months, eighteen days.³⁴ The ESA requires the FWS to make a decision on proposed rules within one year, and in the case of the alligator, as well as for the other species profiled in this book, the agency almost invariably took this much time. The two month, eighteen days is unprecedented for the species profiled in this book in all likelihood unprecedented in the history of the ESA. If the FWS could make a decision to delist a species in so short a period of time it is an indication the proposed rule was a formality because the agency knew the alligator was not imperiled over virtually all of its range.

Third, the FWS states in the proposed rule the alligator was not imperiled. "Available data indicate that the primary threats to alligator populations in the areas named above [parts of South Carolina, Georgia, Florida, Louisiana, and Texas] are not biotic, but rather the absence of adequate regulatory and enforcement mechanisms (1) to prevent malicious and illicit commercially-oriented killing, and (2) to control illegal commerce in products." In other words, the FWS conceded in 1975 what those knowledgeable about the alligator had been telling the agency all along; the alligator was not biologically imperiled. Also, contrary to what the FWS claimed, the alligator was not regulatorily imperiled, and this will be discussed below in the section on the Lacey Act. One other aspect of the FWS's statement that bears noting is that the states not named, those in which the threats to the alligator were still "biotic," were North Carolina, Alabama, Mississippi and Oklahoma, the four states with the least amount of alligator habitat and as a result the fewest number of alligators. By making this statement in 1975, the FWS seemed to be paving the way for acknowledging the alligator's entire population did not merit protection under the ESA.

Despite that the FWS proposed to delist the alligator in three Louisiana parishes and downlist over the vast majority of the species' range, all of this did not occur. The FWS opted

³⁴ July 8, 1975 (U.S. Fish and Wildlife Service 1975e) to September 26, 1975 (U.S. Fish and Wildlife Service 1975g).

³⁵ U.S. Fish and Wildlife Service 1975e, p.28712.

not to go through with downlisting. Pressure from environmental and animal rights groups, and the Interior Department's fear of being sued by these groups, resulted in the FWS only delisting in the three Louisiana parishes.³⁶

The National Audubon Society likely had the most significant impact on the FWS's final decision due to the organization's power and determination to oppose commerce. But at the same time that Audubon was leading opposition to changing the alligator's status, and especially to allowing trade in alligator hides, the Society was only too happy to use the alligator as a public relations device to sell film to television. In 1977, Audubon touted "[a] new kind of public service television film is being distributed by the National Audubon Society's Broadcast Services Department—a five-minute color movie of the society's alligator transplant project. The film shows NAS staffers, working with Louisiana wildlife officers, capturing 1,500 surplus alligators from remote Louisiana bayous and transplanting them to parts of their former range in Mississippi and Arkansas." For there to have been surplus alligators means the species could not have been imperiled in Louisiana. While Audubon was perfectly happy to use the alligator as tool for public relations and fund raising, the Society was unable to be more forthcoming about the alligator's actual, un-endangered status.

Even though thought the FWS tacitly admitted in 1975 that the alligator was a case of data error, the agency maintained listing under the ESA was necessary in order to curtail illegal trade. "Reorientation of enforcement efforts toward effective control of commerce in parts and products of legally taken alligators would permit the initiation of practicable management programs and a realistic reappraisal of the population status of the species." The last part of this sentence is remarkable because by calling for a "realistic reappraisal" the FWS once again implicitly conceded it listed the alligator based on shoddy data and an unrealistic appraisal of the species' status. But by conditioning this reappraisal on the "reorientation of enforcement efforts" the FWS was putting up a smokescreen. Prior to the ESA's passage, states, especially Louisiana, provided the FWS with ample evidence that the alligator was not biologically imperiled and that state law enforcement efforts had essentially shut-down large scale trade.

³⁶ Ricciuti 1976. P.7.

³⁷ Sayre 1977, p.166.

³⁸ U.S. Fish and Wildlife Service 1975g, p.44412.

Yet in the 1970s the FWS and especially environmental pressure groups claimed that the alligator was not regulatorily secure because illegal hunting was a threat, and without better law enforcement mechanisms to combat this, the alligator remained imperiled. The reality was far different, as detailed below in the section on the Lacey Act. A 1969 amendment to the Lacey Act essentially stopped illegal hunting. In addition, Louisiana developed an effective system to monitor and control commerce, and the state field tested it successfully during two experimental harvests in 1972 and 1973. All the FWS had to do was to adopt this system, which is precisely what the agency did when the agency delisted the alligator in the three Louisiana parishes in 1975.³⁹

After delisting occurred in the three Louisiana Parishes in 1975, the next notable result of the FWS's "study" of the alligator's status occurred in 1976 when the agency proposed to downlist the alligator from endangered to the less imperiled status of threatened in Florida and much of the coastal areas of Georgia, Louisiana (excluding of course the three parishes from which it had been delisted in 1975), South Carolina, and Texas. This was essentially a rehash of the 1975 proposed downlisting, but this time the FWS provided a population estimate. Just two years and four months after listing the alligator under the ESA, the FWS claimed that the regions proposed for downlisting contained a total of 570,009 alligators with an increasing population trend, while the population over the entire range was 734,384.⁴⁰ This estimate was identical to that contained in the Joanen Report, which indicates this is the source form which the FWS obtained population estimates.

The FWS's citation of the Joanen Report's population estimate was a tacit admission of data error because the agency proposed to downlist 78% of the alligator's entire population after the species had "benefitted" from only fifteen months under the ESA's protection (the time between the ESA's passage and the Joanen Report's publication). According to the ESA, "the term 'endangered species' means any species which is in danger of extinction throughout all or a

³⁹ Over subsequent years this system was modified, but it remained basically the same and the centerpiece of it was the use of a non-corrodible, non-reusable, locking tag affixed to each alligator hide that was to remain on through the tanning process and was only to be removed by fabricators.

⁴⁰ U.S. Fish and Wildlife Service 1976b.

significant portion of its range."⁴¹ The alligator went from the brink of extinction to over three-quarters of a million in only fifteen months—quite a remarkable "recovery."

So the FWS's "review" of the alligator's status consisted of little more than using data already gathered by states, most notably the Joanen Report. "This review produced evidence that the American alligator is making encouraging gains in population over much of its known historical range and that significant losses of populations have occurred only in geographically peripheral and possibly ecologically marginal areas," stated the FWS in 1976. "Population levels in parts of South Carolina, Georgia, Florida, Louisiana, and Texas are high, and, in many areas over these regions are considered to be ecologically secure." As with the delisting that had taken place a year earlier in three Louisiana parishes, in 1976 the FWS stated that the "primary threats to alligator populations" in the regions proposed to be downlisted "are not biotic, but rather the absence of adequate regulatory and enforcement mechanisms." But, as already noted, the alligator was not regulatorily imperiled, and management mechanisms, developed by Louisiana, already existed.

At the time all of this was transpiring, the FWS knew full well that it and the ESA had nothing to do with the alligator's conservation.⁴⁴ "The Federal Government was only the transmission mechanism for this successful recovery of an endangered species," stated Keith Schreiner, the head of the FWS's endangered species program, in 1976. "It was the citizens and conservation officials of some Southeastern States, insisting that local legislation be passed to

⁴¹ Endangered Species Act, 1973, sec. 1532 (3)(6)).

⁴² U.S. Fish and Wildlife Service 1976b, p.14886.

⁴³ U.S. Fish and Wildlife Service 1976b, p.14886.

⁴⁴ During this time period, 1956-1961 to 1976, the meaningful regulations were when Louisiana and Florida closed hunting seasons and prohibited commerce in 1962, followed by Texas in 1969, and the amendment of the federal Lacey Act in 1969, which essentially halted illegal commerce and which was passed as a result of lobbying by the states, especially Louisiana. In addition, a number of states, most notably New York and California, passed legislation between 1970 and 1972 prohibiting commerce in all alligator products, even if legally taken from the wild. These state prohibitions arguably did more harm than good because they hampered efforts to conserve the alligator through the use of its valuable hide. In fact, the California ban is still on the books, an example of not only how that state is woefully behind the times but also how once a trade ban is implemented it can be difficult to repeal (California Penal Code 650o. (a)). In terms of the ESA, the Act had nothing to do with any of these state laws, or, in the case of the Lacey Act, federal law.

protect the alligator, who accomplished this."⁴⁵ It is astounding the head of the endangered species program would admit this and that the FWS would have permitted this statement to be made in a press release. In 1976 the FWS also stated, "[t]he dramatic comeback of the alligator can be primarily attributed to strong enforcement of the existing regulatory mechanisms in effect these last 15 to 20 years."⁴⁶ The FWS conveniently failed to mention that it was the states, most notably Louisiana, which led the way in establishing, implementing and enforcing these regulatory mechanisms.

In 1977 when the FWS finalized the proposed downlisting, the agency changed its tune and claimed the event was an ESA success story. This is "one of the most significant events of America's conservation movement," the FWS proclaimed.⁴⁷ Assistant Interior Secretary Nathaniel Reed positively gloated:

"This shows we can do it. We can reverse the trend toward extinction and save a species...if we want to. Only 20 years ago these magnificent reptiles were headed toward extinction as hide hunters indiscriminately slaughtered them and their habitat was steadily being destroyed. But it was the conservation community and a number of officials in southern States who insisted that Federal and local legislation be passed to protect the alligator. They withstood the disinterest and ridicule from a largely uninformed public long before the word 'conservation' became fashionable. And in about 20 years, it was the conservation community that succeeded in rescuing a species that had already existed for 50 million years. That's quite a feat."

By mentioning the "conservation movement" and the "conservation community" so prominently Reed was making a not so subtle reference to the Interior Department's friends in environmental pressure groups in an effort to give them primary, if utterly undeserved, credit for the alligator's resurgence.

⁴⁵ U.S. Fish and Wildlife Service 1976c.

⁴⁶ U.S. Fish and Wildlife Service 1976c.

⁴⁷ U.S. Fish and Wildlife Service 1977b.

⁴⁸ U.S. Fish and Wildlife Service 1977b.

Reed's attempt to rewrite the history of the alligator's conservation is not only incorrect and dishonest but a slap in the face to the people who truly deserved credit; state wildlife officials, especially those in Louisiana. It was, after all, Louisiana and Florida that outlawed alligator hunting in 1962, followed by Texas in 1969. And it was the states, led by Louisiana, which, beginning in 1964, urged Congress to amend the federal Lacey Act so that illegal commerce could be halted. Environmental pressure groups played a destructive role in all of this, especially because they worked so assiduously to undermine state conservation programs based on harvesting alligators. The thanks Louisiana got from pressure groups for its hard work and dedication was ridicule and opposition to the state's efforts to use the alligator's valuable hide as a means to fund conservation efforts and provide incentives for private landowners to conserve alligator habitat.

There is a likely reason why the FWS changed its tune in 1977. Officials at the Interior Department superior to Keith Schreiner were unhappy with his 1976 admission that the federal government had nothing to do with the alligator's conservation. The Interior Department held the ESA in high esteem, but Schreiner's frank and honest statement deprived the Act of credit. So Interior took the dishonest route of claiming the alligator was an ESA success story. When the FWS downlisted the alligator in 1977, the agency reached the same conclusions it did a year earlier when it proposed to downlist, including that the threats to the alligator were not "biotic." But for the first time, the FWS explicitly referred to the "Joanen report," and admitted that it contained what was then the best range wide estimate of 734,348 alligators. ⁵⁰ In mentioning the Joanen Report, the FWS stated that:

"It remains, however, the only comprehensive, state-by-state analysis of alligator population levels and trends. Since its publication in 1974, additional data accumulated by National Wildlife Refuges, National Forests, government and private research institutions, and various states have been accumulating. While these data pertain only to local areas, they have almost without exception produced population estimates even

⁴⁹ U.S. Fish and Wildlife Service 1977a, p.2075.

⁵⁰ U.S. Fish and Wildlife Service 1977a, p.2073.

higher than those used in the Joanen report. With these high and expanding population levels, retention of endangered status cannot be justified."51

To which the FWS added, "All of these sources indicate that the population estimates contained in the original Joanen report are conservative, and that current population levels are significantly higher." Yet again the FWS essentially admitted the alligator was a case of data error. In May 1979, the FWS would again refer to the Joanen report as the authoritative source for population data by citing 734,384 as the total number of alligators extant at the time of the ESA's passage in 1973.

In 1979, after tacitly admitting the alligator was a case of date error by citing the Joanen Report—first in 1975, then in 1976, 1977 and 1979—the FWS's population estimates began to skyrocket. "The U.S. alligator population is now estimated to total close to 1 million," stated the FWS in June 1979. A month earlier the FWS claimed, "the alligator population is now estimated to total about 800,000." While it is biologically impossible for the population to have increased 25% in just over thirty days, the only explanation is sloppiness on the part of the FWS, which is not surprising given the Service's general ignorance about the alligator and penchant for making false and misleading claims about the species' conservation. By 1983, to mark the ESA's tenth anniversary, the FWS claimed; "Perhaps the most remarkable comeback has been made alligator. Under strict Federal and State protection, alligators are no longer endangered in Texas and Louisiana. Most estimates place the U.S. alligator population at more than 2 million." A doubling of the population in four-and-a-half years is remarkable, to say nothing of impossible, for a species that takes ten years to reach sexual maturity. And in 1987 when the FWS delisted the alligator over the remainder of its range, FWS biologist Wendell Neal stated, "I

⁵¹ U.S. Fish and Wildlife Service 1977a, p.2073.

⁵² U.S. Fish and Wildlife Service 1977a, p.2073.

⁵³ U.S. Fish and Wildlife Service 1979e, p.31585.

⁵⁴ U.S. Fish and Wildlife Service 1979h.

⁵⁵ U.S. Fish and Wildlife Service 1979d.

⁵⁶ U.S. Fish and Wildlife Service 1983g.

can guarantee you that, overall, there are millions of alligators."⁵⁷ The mid-1980s also saw the FWS all but concede in the Federal Register that the alligator was a case of data error.⁵⁸

ALLIGATOR BIOLOGY REVEALS DATA ERROR

Another piece of evidence that the alligator did not merit listing under the ESA has to do with the species' biology. If claims by the FWS and environmental pressure groups that the alligator was threatened with extinction due to over-hunting are to be believed, then the recovery of the alligator in less than ten years occurred in spite of realities of the species' reproductive biology. The assertion that the alligator recovered from near extinction, "is quite phenomenal when one considers the age of sexual maturity is 10 years," according to Ted Joanen and Larry McNease of the LDWF. "The original estimate used to justify the alligator being on the endangered species list must have been grossly underestimated." Therefore, data error is the only possible explanation for why the alligator "recovered" over most of its range in less than ten years after being listed under the ESA.

Despite this inescapable conclusion, since the mid-1970s the federal government has been trying to put a different spin on this.⁶⁰ Notwithstanding the limits imposed by its

⁵⁷ Laycock 1987, p.40.

was responsible for overharvests which caused population declines in accessible habitats during the 1950's and 1960's" (U.S. Fish and Wildlife Service 1984d, p.25344). This was followed by an admission the Lacey Act amendment of 1969, not the ESA of 1973, was "primarily" responsible for halting illegal hunting (U.S. Fish and Wildlife Service 1984d, p.25344). The key, however, is the use of the term "accessible" because in reference to it the FWS stated; "Discussions with State [of Florida] 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" (U.S. Fish and Wildlife Service 1984d, p.25345). While the FWS fails to define accessible, the larger point is that agency admitted that the alligator was not imperiled in the entire state of Florida, as it had maintained ever since 1967 when the species was first listed under predecessor legislation to the ESA. In addition, this admission could just as easily have applied to Louisiana, as significant portions of the alligator's habitat in the state were relatively inaccessible to hunters which is why the alligator was never merited protection under the ESA in the first place and why the species "recovered" so quickly.

^{59.} Joanen and McNease 1979a, p.9.

⁶⁰ In 1976, Interior Secretary Thomas Kleppe tried to garner credit for his department; "The American alligator is so numerous now because of State and Federal controls. We may have done too good a job. I hear of alligators invading golf courses and suburban housing developments in the Southeast. We are in the final phase of removing

reproductive biology, somehow the American alligator is an exception to these immutable strictures and the species miraculously rebounded—truly an example of "divine recovery."

An additional tactic employed by the FWS to justify the alligator's listing under the ESA is to claim that the population data at the time of the alligator's listing was so rudimentary that it was difficult, if not impossible, to determine whether the population was imperiled or not. Therefore, just to err on the side of caution the agency listed the alligator. "The original listing of the American alligator as an endangered species occurred in 1967," stated the FWS in 1984. "The best available data with a bearing on status at that time were limited and highly subjective, providing little information on actual distribution and abundance." This statement is as disingenuous as it is misleading. It is true that population data in 1967 were limited, but by the time of the alligator's listing under the ESA of 1973, as opposed to under predecessor legislation in 1967, the best available data—the Joanen Report—clearly indicated the alligator was not imperiled. As mentioned above, Louisiana began annual surveys, based on aerial transects, in 1970. Furthermore, the FWS itself repeatedly vouched for the validity of these data, most notably the Joanen Report.

One thing to keep in mind is that population estimates for alligators in the late 1960s and early 1970s, as well as estimates for most wildlife species then that were numerous and widespread, were crude by more current standards. In the mid-1970s, however, with the advent of hand-held calculators, and in subsequent years increasingly powerful and cheap calculators and computers, the quantitative study of wildlife populations, including population estimates, underwent marked improvements. As a result, the accuracy of alligator population estimates improved. The salient point is that at the time of the alligator's listing under the ESA those with

this animal from the endangered species list over as much of its habitat as we can. It took nine years to reverse this trend" (U.S. Department of the Interior 1976).

More recently, Charlie Scott, then Chief of the Branch of Recovery and Delisting, in the FWS Office of Endangered Species noted: "However, some critics of the ESA disagree with this assessment and claim that the law has failed because we have not delisted many species due to recovery. Although we have delisted only 11 species so far due to recovery, this number alone is neither an accurate nor fair measure of our success. The recovery of critically imperiled plants and animals is one our nation's most difficult natural resource challenges. In many cases, restoration activities must reverse declines that have occurred over centuries. Years of scientific research, restoration, protection, and active management are generally needed to achieve successful recovery. For many listed species, it will take a minimum of 50 to 100 years before their survival is secure. This is especially true for species that need a decade or more to reach sexual maturity and have high juvenile mortality" (Scott 2000, p.7).

⁶¹ U.S. Fish and Wildlife Service 1984d, p.25345.

the most knowledge about the species estimated it had a large and increasing population and therefore did not merit the Act's protection. At any given point in time decisions have to be made based on the best data available at that time, and the best data on the alligator at time the FWS listed it under the ESA was that it did not merit the Act's protection.

CRUDE REASONING

Supporters of the ESA have made a number of crude attempts to explain when and why the FWS listed the alligator under the ESA. One such effort is to peg the alligator's conservation to the two pieces of imperiled wildlife laws preceding the ESA, which were passed in 1966 and 1969. This is specious because these two predecessor laws did essentially nothing to conserve the alligator. The one thing the 1969 Act did do was to amend the Lacey Act, which essentially halted illegal commerce. But the 1969 Act was not necessary for this to occur because it could have happened as stand-alone legislation. Furthermore, if the alligator's "recovery" is pegged to 1967 then the importance of the ESA of 1973 is diminished because by the time the Act rolled around the alligator had already been on the road to recovery for six years. Of course this is species, because both pieces of legislation had virtually nothing to do with conserving the alligator, but this is the logic, or lack thereof, employed by the ESA's proponents.

Another tack taken by ESA proponents is to claim that even though the alligator had a large population in the early 1970s, the population was decreasing. One of the foremost exponents of this view was Wayne King, then curator of herpetology at the New York Zoological Society, and currently a curator of herpetology at the Florida Museum of Natural History. Although he often cloaked his arguments in biology, King was fundamentally opposed to commerce in alligator skins, as will become clear in the section below on conservation and commerce.⁶²

^{62 &}quot;Taken all together there may be as many as one million wild alligators in the southeastern states today," King stated. "This estimate has led some game biologists to the conclusion that the American alligator is not an endangered species. They reason that no species with an extant population of a million individuals can be in danger of extinction. However, an estimate of the number of alligators existing at any one moment does not include whether wild populations are increasing, decreasing, or remaining stable" (King 1972, p.17.) The reference to game biologists who believe the alligator is not endangered is a swipe at Ted Joanen, Larry McNease and the other alligator biologists in Louisiana who were of the opinion, backed by data, that the alligator was not only numerous but was increasing. King, however, was not convinced, and after raising the possibility that the alligator's

Proponents of the ESA have also used the "divine recovery" ruse mentioned previously to explain the alligator's so-called recovery. This ruse consists of simply stating that listing the alligator under the ESA resulted in a wondrous recovery. No specific conservation measures are identified. Following this line of argument, simply listing a species under the ESA results in miracles.

Despite all of these false and misleading claims, one of the ESA's most ardent supporters, Michael Bean of the Environmental Defense Fund, concedes that the alligator likely should not have been listed, even though he equivocates by stating this was true for only one state. "It was probably never in danger of imminent extinction in Florida," he admits.⁶⁴ Right around the time Bean made this admission in December 1998, Environmental Defense Fund released a report to mark the Act's twenty-fifth anniversary. The report contains a state-by-state "sampling of plants"

population was decreasing in a magazine article he authored, he rambled on for several paragraphs, first mentioning the extinction of the passenger pigeon as an analogy to the alligator and then citing historic data on the number of alligator hides taken. He then asserted that the amendment of the federal Lacey Act, coupled with state laws prohibiting the sale of products made from any crocodilian hide, did the trick. "Before the New York and federal laws came into being, the alligator clearly was being killed faster than it could reproduce," King asserted in 1972 (King 1972, p.18). "With this blanket protective legislation the American alligator is on the road to recovery" (King 1972, p.18). As will be explained below in greater detail in the subsequent section, these legislative initiatives were passed prior the ESA, and the most important was the Lacey Act amendment of 1969. By King's own standards the alligator did not merit listing under the ESA because by the time the Act was passed, the alligator's population was not only very large but increasing. So after raising doubts about Louisiana's view that the alligator did not merit listing, King then confirmed the state's contention by pegging the alligator's turnaround to 1972, one year before the ESA's passage. Such duplicity is unfortunately the norm for those defending the alligator's listing.

⁶³ By 1979 the FWS started utilizing this argument, perhaps sensing the tenuousness of its claim that the ESA was responsible for actual conservation measures that led to the alligator's resurgence.

"When a species is listed, it becomes fully protected by Federal law. This alone may be enough to save it from extinction—and even to start it on the road to recovery. The most striking example is the comeback of the American alligator. During the 1950's and 1960's, market hunting nearly wiped out the alligator population throughout its range in the Southeastern States. Many states recognized what was happening and halted the hunting of alligators. Meanwhile, the federal government listed the species as endangered in 1966, making the killing illegal. This total protection produced striking results. The reptile's depleted numbers soon began to increase and by 1978 the total alligator population was nearing a healthy million" (U.S. Fish and Wildlife Service 1979h).

And by 1981, the FWS made essentially the same claim but backpedaled slightly by pushing back by one year, from 1978 to 1979, the date by which the population was approximately one million; "With better State and Federal protection, depleted populations rapidly increased and, by 1979, there were nearly a million of the large reptiles in existence" (U.S. Fish and Wildlife Service 1981c, pp.2-3). Then in 1991, the FWS again made essentially the same claim (U.S. Fish and Wildlife Service 1991e, p.15).

⁶⁴ Thomson 1998, p.1A.

and animals once headed towards extinction, whose future has been improved by the ESA."65 Under the state of Florida, the report asserted, "The once endangered American alligator has fully recovered and was removed from the endangered species list June 4, 1987."66 Environmental pressure groups know that such contradictory statements are unlikely to be exposed for a variety of reasons, one of which is that most environmental writers and journalists are too lazy to uncover such inconsistencies. In addition, most in the media are also supporters of these groups and the causes they promote, such as the ESA. Another factor that abets this unaccountability is much of the public tends to see environmental pressure groups as above reproach and so seldom questions the information produced by these groups. The net result of all of this is that environmental pressure groups have been granted license by their sympathizers in the media to be the unquestioned authorities on the ESA and as a result the veracity of the groups' claims are rarely examined.

FALSE CREDIT TO ESA

Despite the overwhelming evidence that FWS never should have listed the alligator under the ESA, there are those who claim otherwise. After admitting in 1987 that the alligator was a case of data error, the National Wildlife Federation changed its tune in 1992. "A few [species] have genuinely thrived under protection of the law, notably the American alligator, which subsequently was promoted from its classification as 'endangered' to 'threatened' in a portion of its range." In December 2003, to mark the thirtieth anniversary of the ESA, Earthjustice and the Endangered Species Coalition (the lobbying organization for the ESA whose members consist of virtually all the major pressure groups, including the National Wildlife Federation) claimed; "Alligators have made a dramatic comeback since the 1960s when they were on the brink of extinction."

⁶⁵ McMillan 1998.

⁶⁶ McMillan 1998, p.7.

⁶⁷ Adler and Hager 1992, pp.4,7.

⁶⁸ Matsumoto et al., 2003, p.25.

There have been a number of other similarly unsubstantiated efforts to attribute the alligator's conservation to the ESA and even its predecessors. The FWS has tried to credit the 1966 Endangered Species Preservation Act with the alligator's rebound, as the above passage illustrates. ⁶⁹ Yet the 1966 Act was powerless to prohibit species to be taken (killed, captured, etc.) except on federal land. Since the vast majority of the alligator's habitat was, and still is, on non-federal land, this assertion by the FWS is baseless. As for those who attribute the alligator's resurgence to the 1966 Act, they are tacitly admitting that the ESA of 1973—which differs most notably from its predecessors, the 1966 and 1969 acts, by its ability restrict land and resource use through punitive regulations—was not required for the alligator to recover. Groundless assertions about the ESA's purported role in alligator's conservation have also been made by the General Accounting Office⁷⁰ as well as pressure groups and fellow travelers. ⁷¹ For more than four decades the FWS has misleadingly portrayed the alligator's status in efforts to justify the species' listing under federal endangered species laws. ⁷²

⁶⁹ U.S. Fish and Wildlife Service 1979p.

⁷⁰ "For some species, such as the American alligator, listing and the protection provided, including strong enforcement, were enough to expedite their recovery" (General Accounting Office 1979, p.68). "[T]he American alligator owes its recovery primarily to recovery efforts, specifically, the vigorous state and federal crackdown on poaching" (General Accounting Office 1988, p.19).

⁷¹ "Even what now appear to be successful species recoveries may over the long run prove ephemeral. For example, in the last few years, FWS delisted the alligators of Louisiana and Texas because their populations had under the protection of the [Endangered Species] Act rebounded dramatically...However, FWS ignored the fact that alligators remain vulnerable to habitat loss and other problems, still undiminished, that could put the species into a precipitous decline if populations are not carefully monitored. Alligators have rebounded because listing stopped the hunting of the reptiles. Louisiana and Texas have reopened the hunt. This in itself may not hurt the alligator's status if the hunts are properly managed. However, listing of the alligators also protected them from land development, and alligators are especially vulnerable to habitat loss because the females use the same nesting sites each year. Delisting means that Endangered Species Act strictures no longer apply to developers who want to drain or in some way alter alligator habitat. As wetland development in Louisiana and Florida speeds ahead, the alligator could eventually be in trouble again and require re-listing" (Stout and Painter 1985, p.15). "Occasionally merely listing a species—with all the consequences listing entails—is enough to reverse the trend to ward extinction. This happened in the case of the American alligator, which became endangered due to overhunting in the 1950s. When FWS listed the species in 1966, thereby outlawing alligator hunting, several states followed suit. The elimination of hunting was all that the alligator needed. There are now [in 1984] about a million alligators in the United States," claimed Nathaniel Reed, Assistant Interior Secretary for Fish, Wildlife and Parks from 1971-1977 (Reed and Drabelle 1984, p.107).

⁷² In 1968, the agency stated that alligators, "exist in two major concentrations in the United States—Everglades National Park in Florida and Okefenokee National Wildlife Refuge in southeastern Georgia, both under Federal protection" (U.S. Fish and Wildlife Service 1968). This claim is so bald-faced and misleading that it does not warrant comment but for the fact that it signaled the lengths to which the FWS was willing to go to spread false information in order to promote the agency's efforts to conserve one of the poster-child species used to pass endangered species legislation.

None of these false and misleading efforts to credit the ESA with the alligator's conservation can evade one simple fact; the American alligator is a case of data error because its large and increasing population at the time of the ESA's passage in 1973 never merited the Act's protection. Data supporting this was available to the FWS prior to the ESA's passage. The FWS, however, chose to ignore these data in order to facilitate passage of the ESA because the alligator was one of the "poster species" used to sell the Act to Congress, the President and the public. These same data, as well as mountains of supporting data compiled subsequent to 1973, continue to be available to the FWS and environmental pressure groups, but they persist in ignoring them and maintaining the alligator's listing under the ESA was justified.

LACEY ACT AND STATE PROHIBITIONS ON <u>COMMERCE</u>

Experts involved in alligator management in the late 1960s and early 1970s almost all agree that the 1969 amendment to the federal Lacey Act, not the ESA of 1973, was the crucial factor that essentially shut down illegal trade. Congress initially passed the Lacey Act in 1900 as a means to control illegal hunting of game species, such as deer and waterfowl, by prohibiting interstate commerce of wildlife taken in violation of state law. The 1969 amendment added reptiles and amphibians to the types of species that fell under the Act. In addition to the Lacey Act, a number of states prohibited commerce in alligator hides, even if lawfully taken. The Lacey Act, however, was more significant because it preceded these state laws and because it is mentioned by experts much more prominently and frequently than the state laws. Also, the state laws may have done more harm than good by denying markets to lawfully taken alligator hides, by legitimizing to the notion that trade is inimical to conservation, and by lending credence to the idea that the alligator was threatened with extinction.

⁷³ As Ted Joanen and Larry McNease of the Louisiana Department of Wildlife and Fisheries stated about the Lacey Act amendment: "This is probably the most important piece of wildlife legislation implemented in modern times. It opened up new areas of law enforcement and in general, bridged the gap between state and federal alligator protection efforts. The State of Louisiana supported, and was the catalyst for amending the Lacey Act to cover alligators as a means of providing protection for these reptiles" (Joanen and McNease 1979a, p.4).

Even the National Wildlife Federation agrees that the Lacey Act basically halted illegal trade: "In 1970 and 1971, Florida game commission officials used the Lacey Act to convict a few big-time poachers, and alligator hunting was stopped, as it were, dead in its tracks." ⁷⁴ Tommy Hines of the Florida Game and Freshwater Fish Commission said the Lacey Act was, "the tool that enabled us to control interstate shipment of alligator skins and effectively shut down the illegal trade." ⁷⁵ Ted Joanen of the LDWF reiterated this point by asserting that the Lacey Act, not the ESA, was the statute with which FWS and Louisiana wildlife agents, as well as the courts, were familiar. Hence, from the time of the passage of the amendment in 1969 through the early-to-mid 1970s, when the few remaining large-scale illegal alligator hide dealers were shut down, almost all enforcement actions, even those that occurred after the ESA's passage in 1973, were filed under the Lacey Act, not the ESA.

LOUISIANA TAKES THE LEAD

As with most issues pertaining to alligator conservation, Louisiana was the driving force behind amending the Lacey Act to include reptiles.⁷⁷ Starting in 1964, Louisiana made repeated efforts to amend the Lacey Act.⁷⁸ It bears noting that it took over four years to amend the Lacey

⁷⁴ Lewis 1987, p.17.

^{75.} (Hines 1994a). Hines also stated: "The Lacey Act was amended in 1969 and in force by January 1970. This amendment provided conservation agencies with a law to control interstate movement of alligator hides for the first time. During 1970 movement of alligator hides out of Florida was reduced and by 1971 virtually stopped." (Hines, 1979, p.226).

⁷⁶ (Joanen 1997). Joanen's assertion is supported by the following excerpt: "[T]here's rigid law enforcement, with good court backing. There's a mandatory jail sentence for poaching here in Cameron Parish—six months to a year, depending on the judge," noted Joanen. A recently-caught poacher, who was a repeat offender, was serving a sentence of 5 years, 165 days (Allen, 1974, p.42).

⁷⁷ Joanen and McNease 1981a.

⁷⁸ In 1964 the Louisiana Wildlife and Fisheries Commission prevailed upon the other fourteen states of the Southeastern Association of Game and Fish Commissioners (SAGFC), the professional organization of the southeastern state wildlife management agencies, to pass a resolution at their annual meeting calling on Congress to amend the Lacey Act (Tunison 1973). Louisiana then followed-up on this by having then U.S. Representative from Louisiana, T.A. Thompson, introduce a bill to Congress in May of 1965 to amend the Lacey Act to encompass reptiles and amphibians (H.R. 8038, 1965.). Over the next four years, the SAGFC, with Louisiana taking the lead, tried unsuccessfully to get the Lacey Act amended. As part of this effort, in at least 1967 and 1968 the SAGFC passed resolutions calling for the Lacey Act to be amended (Glasgow 1969a). Finally, in December of 1969, as part of the passage of the Endangered Species Conservation Act, one of the predecessors to the ESA of 1973, the Lacey Act was amended.

Act and that this only occurred when the amendments were attached to endangered species legislation. This time period was also when, according to the FWS and environmental pressure groups, the alligator was on the brink of extinction. If the alligator's very existence was truly threatened by illegal commerce, then the FWS and pressure groups surely would have joined with Louisiana and other states to address this issue prior to this by amending just the Lacey Act and not dragging their feet.

The Southeastern Association of Game and Fish Commissioners, the body through which Louisiana worked to get the Lacey Act amended, was unable wield enough political influence to push for the Act's amendment. The same was not true for the two other main advocates of amending the Lacey Act, environmental pressure groups and the Interior Department. In the mid-to-late 1960s environmental pressure groups were growing increasingly powerful and as a result were able to lobby successfully for passage of major pieces of legislation, such as the Wilderness Act in 1964, the Wild and Scenic Rivers Act in 1968, and the National Environmental Policy Act in 1969. The Interior Department also benefited from the growing public popularity of the environment and the increasing influence of pressure groups. The Department's power and prestige also grew enormously, which was due in no small part to the raft of new federal environmental legislation. So during this time period, when the power of environmental pressure groups and Interior Department increased rapidly, it would have been relatively easy for them to ram through Louisiana's proposed amendment to the Lacey Act. Yet they chose not to do so. The Lacey Act remained unchanged from 1965 until the end of 1969, a time period in which environmental pressure groups and Interior Department energetically promoted the idea that the alligator was imperiled with extinction due to commerce.

It seems that pressure groups and Interior may have been biding their time in order to use the alligator to facilitate passage of endangered species legislation, an explanation that comports with the timing of the passage of the 1969 Endangered Species Conservation Act. An indication this may have been the case comes from Assistant Interior Secretary Nathaniel Reed's admission in 1972 that the alligator was one of the "charter" members of the endangered species program. For important pressure groups, led by the National Audubon Society, also realized that portraying the alligator as imperiled by commerce provided a good vehicle for public relations

⁷⁹ Reed 1973, p.208.

and legislative advocacy, specifically endangered species legislation. If Congress amended the Lacey Act as a stand-alone bill then the issue of illegal commerce of alligator hides would be solved by a relatively obscure piece of federal legislation with which the general public and most members of Congress were unfamiliar. But if illegal commerce could be harnessed to the larger issue of endangered species legislation then this would substantially raise the profile of illegal commerce. Environmental pressure groups appear to have been aware of this, and an indication of this can be found in magazine articles during this time period by writer-advocate George Laycock.⁸⁰

Part of Louisiana's motivation for amending the Lacey Act was the alligator's status in Texas. Up until 1969, when Texas prohibited commerce in alligator hides, meat and parts, alligator commerce was legal in all but two of the state's 254 counties. Furthermore, prior to 1969 alligators had no legal protection in forty counties, although it is unclear how many of these counties actually contained alligators. Prior to 1969 alligators taken illegally in other states that had bans—most notably Florida and Louisiana—could be laundered through Texas.⁸¹ So Louisiana wanted to address this issue by amending the Lacey Act.

After the Lacey Act's amendment in 1969, Louisiana in 1970 passed legislation to give the Act some teeth. In Louisiana, those people who should have known they were violating the Lacey Act could be assessed a maximum of a \$5,000 fine for each violation (i.e., alligator taken), and those who willingly or knowingly violated the act could be fined \$10,000 and/or one year in jail for each violation. In each instance, equipment used to violate the act was subject to forfeiture.⁸² For the typical alligator hunter, who was working class or even lived a more or less

In the mid-1960s he wrote two articles for the magazine *Field & Stream* that raised the alarm about illegal alligator commerce (Laycock 1965; Laycock 1967). However, with his appointment in January 1969 to Field Editor of *Audubon*, the magazine of the National Audubon Society Laycock wrote a series of articles that were much more shrill than his previous work for *Field & Stream*, and served as indicators of his and the Audubon Society's increasing orientation towards advocacy and away from dispassionate analysis (Laycock 1968; Laycock 1972; Laycock 1973). In short, it seems that environmental pressure groups and Interior Department could easily have prevailed upon Congress to pass legislation amending the Lacey Act years prior to when this actually occurred in 1969, but pressure groups and Interior chose not to so as to use the alligator as a vehicle to press for passage of endangered species legislation.

⁸¹ Glasgow 1969b, p.54.

⁸² Palmisano et al., 1973, p.187.

at the subsistence existence, these fines were a massive deterrence. As a result, Louisiana quickly stopped almost all illegal commerce.

HONEST ANOMALIES AT INTERIOR

At the time of the Lacey Act's amendment, the some at the Interior Department admitted that this essentially brought illegal hunting to a halt. In 1970 Leslie Glasgow, Assistant Interior Secretary for Fish Wildlife and Parks, said the of the 1969 Lacey Act amendment, "We now have the legal means to control the interstate movement of illegally taken alligators." He added, "We have all the authority needed to curtail poaching of animals such as the alligator by stopping the illegal shipment of hides." Glasgow, however, was an anomaly at Interior because he had detailed knowledge of alligator biology and conservation. He came from Louisiana, where, as a professor of wildlife biology at Louisiana State University, he conducted alligator research in the 1950s. Also, as a former Director of the Louisiana Wildlife and Fisheries Commission, he was well aware of state's alligator management program. Unfortunately, Glasgow's tenure at Interior, which began in early 1969, lasted little more than a year. He had to leave when Interior Secretary Hickel, who appointed him, was forced to resign due to criticism of President Nixon's belligerent attitude toward Vietnam War protestors.

The FWS also admitted, but not until 1984 and even then indirectly, that the Lacey Act was the key to shutting down illegal commerce. "The commercial demand for alligator products was responsible for over harvests which caused population declines in accessible habitats during the 1950's and 1960's." Note how the FWS made no mention of the 1970s. As with the Joanen Report, this admission was made in an obscure source, the Federal Register, which the general public, media and members of Congress would likely never read. The same conclusion about the Lacey Act was reached by Frank Percival, FWS biologist, and Tommy Hines of FGFFC; "The Lacey Act provided the first real tool for controlling illegal movement of skins." They add; "After illegal hunting stopped in the early 1970s, the recovery of the alligator

⁸³ U.S. Department of the Interior 1970, p.7.

⁸⁴ U.S. Department of the Interior 1970, p.7.

⁸⁵ U.S. Fish and Wildlife Service 1984d, p.25344.

population was rapid, providing clear evidence that alligators were never biologically endangered statewide [in Florida] but probably considerably reduced in local areas."⁸⁶ And when the alligator was fully delisted in 1987, FWS employee, David Klinger admitted, "all we had to do was stop the poachers, and the gators did the rest."⁸⁷

The FWS made perhaps its most remarkable admissions about the Lacey Act in 1984 when the agency proposed to delist the alligator in Florida and in 1986 when it proposed to delist the alligator over those portions of its range from which it had not previously been delisted. In 1984 the FWS admitted; "This problem [over hunting] was reversed primarily through a more effective protective mechanism brought about by the Lacey Act Amendment of 1969 which prohibited interstate commerce in illegally taken reptiles and their parts and products. This law provided Federal authority for dealing effectively with illegal activities in the market system." In 1986, the agency made almost the same statement verbatim. The FWS repeated this statement almost verbatim in 1987 when the proposed delisting became final. The FWS repeated this

Yet by making such admissions the FWS apparently realized that it was depriving the ESA of credit. So the agency frequently tried to give ESA credit. For example, following the 1984 statement about the primary importance of the Lacey Act the FWS claimed, "The Endangered Species Act of 1973 added heavy penalties which further enhanced the control of illegal taking." This claim is misleading because the available evidence points to the Lacey Act amendment of 1969 as essentially bringing illegal trade to a halt. While the ESA did add heavy penalties, these were largely superfluous because the Lacey Act had already done the job.

Even Wayne King of the New York Zoological Society, environmental pressure groups' foremost alligator expert, admitted the ESA essentially had nothing to do with halting illegal commerce. King cites both the 1969 Lacey Act amendment and the passage of a number of state laws that prohibited the sale of any crocodilian products as the keys to turning around the

⁸⁶ Hines and Percival 1987, p.164.

⁸⁷ Lemonick 1987, p.70.

⁸⁸ U.S. Fish and Wildlife Service 1984d, p.25344.

⁸⁹ U.S. Fish and Wildlife Service 1986c, p.19761.

⁹⁰ U.S. Fish and Wildlife Service 1987b, p.21061.

⁹¹ U.S. Fish and Wildlife Service 1984d, p.25344.

alligator's plight. New York's Mason Act, passed in 1970, was the most prominent among these state laws. Following its passage other states enacted similar bans; California and Massachusetts passed bans in 1971, and Illinois in 1972. During this time period, Connecticut and Pennsylvania also passed laws prohibiting crocodilian commerce. "With this blanket of protective legislation the American alligator is on the road to recovery," King stated in 1972. Even though King gives too much weight to the state laws, the overall point remains, which is that legislation preceding the ESA halted illegal hunting and commerce.

Despite widespread agreement that the Lacey Act amendment of 1969 was the key to effectively shutting down illegal trade, since the 1990s ESA proponents have claimed otherwise in attempts to give the ESA undue credit. The FWS has made numerous such statements.⁹³

As for the FWS's claim about the ESA or its predecessors prohibiting commercial harvests through law enforcement actions, this seems to ignore the fact that Louisiana and Florida had closed their commercial hunts since 1962. Despite this, and the sea change that occurred with the passage of the 1969 Lacey Act amendment, the FWS appears to be using relatively insubstantial evidence to bolster its assertion that the ESA and its predecessors shut down illegal trade. The FWS seems to be referring to two arrests the agency made in 1974, one in July and one in September, of a total of nine people for illegal possession of 769 alligator hides (U.S. Fish and Wildlife Service 1974d; U.S. Fish and Wildlife Service 1976a). The larger of the two cases eventually grew to involve six people and some 2,500 hides (U.S. Fish and Wildlife Service 1978e). According to the FWS it was "the largest capture ever of contraband alligator hides" (U.S. Fish and Wildlife Service 1976a). If the illegal commerce in hides after the passage of the ESA was so massive and such a threat to the alligator, the FWS should have been able to net significantly more than some 2,500 hides. That the agency was not able to do so is yet another indication that the Lacey Act had already effectively shut down illegal trade.

⁹² King 1972, p.18.

⁹³ "When it was listed as endangered in 1967 under the first endangered species legislation, strict enforcement of commercial harvest prohibitions went into effect," stated the FWS. "As a result, the species rebounded to such an extent that it no longer requires protection under the Endangered Species Act" (U.S. Fish and Wildlife Service 1993d). This assertion is baseless, as the 1966 Endangered Species Conservation Act under which the alligator was subsequently listed in 1967 did not have the power to prohibit commercial harvest except on federal lands. It was not until the passage of the 1969 Endangered Species Conservation Act, specifically the amendment of the Lacey Act, that protection from commercial harvest was extended to the alligator occurred and provided what is widely acknowledged by those with expertise in alligator conservation as the crucial legal tool for halting illegal trade.

Environmental pressure groups have also made claims that are just as baseless as those made by the federal government.⁹⁴

CONCLUSIONS ON LACEY ACT

The upshot about the Lacey Act's role conserving the alligator is twofold. First, the Lacey Act amendment of 1969, not the ESA of 1973, effectively halted illegal trade. Second, the Lacey Act helped prove that the alligator was a case of data error because after the amended Act essentially brought commerce to a halt, the alligator could not have made the remarkable resurgence claimed by the FWS and environmental pressure groups if there was not a large and increasing population in the first place.

⁹⁴ "With Endangered Species Act protections, alligator hunting was banned, and their numbers began to rise," claims U.S. Public Interest Research Group (PIRG) (U.S. Public Interest Research Group, ND, *Recovering Endangered Species*). Apparently, U.S. PIRG is unaware of the role played by the Lacey Act. One of the most specious claims was made by most of the ESA's most prominent advocates—including the Center for Biological Diversity, Defenders of Wildlife, Earthjustice, Endangered Species Coalition, Natural Resources Defense Council, National Wildlife Federation, and U.S. PIRG—on the occasion of the Act's 30th anniversary:

"So many of the reptiles were killed to fuel the skins market that they were listed as endangered in 1967 under the Endangered Species Preservation Act. The Endangered Species Preservation Act was not strong enough. In fact, it did not prohibit the hunting or killing of listed species, so alligator poaching continued into the 1970s. With the passage of the Endangered Species Act of 1973, American alligator hunting became illegal, and the species finally began to recover. It was delisted in 1987, 20 years after receiving protection" (American Rivers et al., 2003b).

This statement exemplifies either these groups' ignorance or their willingness to make false claims about the alligator. It is extremely hard to believe that these groups—with their hundreds of highly competent biologists, ecologists and lawyers, a great deal of knowledge about the ESA, a combined yearly budget running into the hundreds of millions of dollars, and the commitment of tremendous amounts of time, effort and funds to promote the Act—would be ignorant of such basic facts about the conservation of one of the species they claim as proof of ESA's effectiveness.

These environmental pressure groups groups claim the "Outlook for the Future" is positive because "American alligator populations continue to rise thanks to Endangered Species Act protections" (American Rivers et al., 2003b). The only problem with this assertion is the alligator has essentially not had the "benefit" of the ESA's punitive regulations (i.e., habitat"protections")—and even when it was listed it does not appear to have so benefited—since 1987, when it was fully delisted.

Not to be outdone in the effort to credit the ESA, Environmental Defense has set-up a point/counterpoint to prove that the Act helped the alligator.

"MYTH: The ESA doesn't work: Species are not recovering, despite all the money being spent.

FACT: Citizens in all 50 states can see species which have recovered or are improving in status...More...American alligators...are living in the United States today than at any time in the past quarter-century" (Envronmental Defense Fund 1999).

While there may well have been more alligators when this claim was made in 1999 than when the ESA was passed in 1973, this claim is highly misleading because of the link drawn to the ESA. Given that these statements by environmental pressure groups groups are without merit, it is remarkable that these groups consider themselves expert in matters pertaining to the alligator and the ESA.

POLITICS OF LISTING

As a large and easily identifiable animal, the American alligator was one of the most prominent species used by the ESA's proponents in their efforts to pass the Act, according to Ted Joanen of LDWF. The animal never was endangered," Joanen asserts, but the erroneous listing under the ESA was due to, "ivory tower people in Washington [D.C.] and New York," who were determined to use the alligator as a high profile public relations vehicle for passage of the Act. 66

Joanen also contends that at the time of the ESA's passage in 1973, the FWS was well aware that there very large numbers of alligators existed in Louisiana, Florida and Texas and that the agency knew the alligator was not endangered. In 1971 the FWS reviewed the status of the alligator and requested information from range states. Louisiana supplied data showing the species was not imperiled and recommended that the alligator be removed from the federal list of endangered species compiled under legislation preceding the ESA. Furthermore, Louisiana, in an effort to demonstrate to the FWS that continued listing under federal law was unnecessary, provided the FWS with information on state legislation to conserve the alligator that had been passed or was planned.⁹⁷ Despite all this, as well as knowledge that the Lacey Act amendment of 1969 essentially shut down illegal trade, the FWS went ahead and listed the alligator under the ESA because the agency was, "in a period of empire building at that time," stated Joanen.⁹⁸

As early as 1966, the Interior Department made it clear the alligator was one of the species it singled out as a mascot for the endangered species program. According to press release from the Department, then Secretary, "Udall said that if he could choose a 'picture of the

A copy of the letter from the FWS requesting information on the status of the alligator in Louisiana and the state's response can be found at: Hearings before the Subcommittee on Fisheries and Wildlife Conservation and Environment of the Committee on Merchant Marine and Fisheries, U.S. House of Representatives, Ninety-third Congress, First Session, March 15, 27, 27 1973, Serial No. 93-5. U.S. Government Printing Office: Washington, D.C.

^{95.} Joanen 1997.

⁹⁶ Laycock 1987, p.43.

⁹⁷ Joanen and McNease 1981a.

^{98.} Joanen 1994a.

year' to illustrate the [species extinction] crisis it would be the widely circulated photograph of Everglades alligators—their marshy habitat drained off by a combination of human action and drought—being carried bodily by naturalists to waterholes which still offer a chance for temporary survival." Then in 1973, prior to the ESA's passage, Nathaniel Reed, Assistant Interior Secretary for Fish, Wildlife and Parks, said, "As you know, the alligator is one of the 'charter members' of our endangered species list as provided under the existing law. It also provides an excellent example of one of the shortcomings we have found in the existing law." In Reed's mind one such shortcoming was that it was not possible under legislation preceding the ESA to list the alligator in just those portions of its range where Interior deemed it to be imperiled. Reed's views on the alligator's listing carried significant weight because, as essentially the third most powerful person at the Interior Department, he was a key advocate for the passage of the ESA. Reed went on to state, "the alligator...in Florida and Louisiana are numerous and coming back [and] may be able to stand a harvest. But, the alligator is in real trouble throughout the rest of its range."

If this was the case then why was the alligator listed in Louisiana and Florida when the ESA was passed? Reed himself provides an indirect answer: the alligator was a "charter member" of the endangered species program. The alligator was listed over its entire range because to do otherwise would call into question not only its status but perhaps the status of other species that had been sold to Congress, the media, and the public as in desperate need of the ESA in order to stave off extinction. Reed's statement about the need for the ESA, so that the listing of species could be more closely tailored to their actual status through the Act's provision that allowed species to be listed over portions of their range, was irrelevant and perhaps disingenuous. When Congress passed the ESA the Interior Department made no apparent effort to utilize this provision in the case of the alligator. Ironically, the end result was detrimental to the alligator, especially in Louisiana. By the FWS listing the alligator as endangered throughout its range, as opposed to threatened or not listing it at all in some regions

⁹⁹ U.S. Department of the Interior 1966.

¹⁰⁰ Reed 1973, p.208.

¹⁰¹ Reed 1973, p.207.

where populations were healthy such as Louisiana, conservation programs were halted and stymied.

In their eagerness to list the alligator under the ESA, the FWS and environmental pressure groups subscribed to a version of events that was roughly ten years out of date. The alligator's population appears to have reached its low point somewhere in the mid-to-late 1950s to the early 1960s. The rapid demise of the alligator during [this period]...created an air of apprehension and genuine concern over the welfare of the alligator in Louisiana as well as the southeast United States," notes Ted Joanen and his colleague Larry McNease. This concern had a positive impact on states, most notably Louisiana and Florida, because it spurred them to engage in successful efforts to conserve the alligator. But this concern also had a negative impact; listing under the ESA. But by the mid-to-late 1960s, the alligator's overall population began to increase. 104

HISTORICAL CONTEXT OF LISTING

In order to understand the context in which the alligator's listing under the ESA occurred and how the alligator became one of the ESA's "charter" species, it is necessary to go back to the passage of the first precursor to the ESA, the 1966 Endangered Species Preservation Act (ESPA). When the ESPA was proposed, the FWS compiled a list of species the agency deemed in need of the Act's protection, and the alligator was one of them. However, a close examination of the data on which the FWS based its listing of the alligator under the ESPA reveals the data were highly flawed, out of date, perfunctory at best, and did not take into account accumulating evidence from Louisiana that the alligator was likely not imperiled in that state. But once the

¹⁰² Joanen and McNease 1972.

¹⁰³ Joanen McNease 1974, p.1.

¹⁰⁴. Joanen 1974.

¹⁰⁵ As part of the 1966 Act, the FWS, then known as the Bureau of Sport Fisheries and Wildlife, compiled a list titled "Rare and Endangered Fish and Wildlife of the United States" (Bureau of Sport Fisheries and Wildlife 1966). For each species, the list contained of one or two pages in a standardized format. The information on the alligator consisted of a single page with very little information, some 185 words in total, and only two cited sources, both of which were general reference books on reptiles and amphibians, one for Florida and one for North America. Furthermore, both sources were published nearly a decade or more before the list's publication, one in 1955 and the other in 1958 (Bureau of Sport Fisheries and Wildlife 1966, p.RA-2). In short, the alligator was listed on very

FWS listed the alligator under the ESPA, the species became firmly ensconced as one of the "charter" endangered species. The FWS and environmental pressure groups appear not to have bothered to take a close look at whether the alligator merited being carried over to successor legislation, the 1969 Endangered Species Conservation Act and the 1973 Endangered Species Act.

1969 PREDECESSOR TO THE ESA

The incident that truly fixed the alligator as a species on the brink of extinction in the minds of the Interior Department, Congress, and environmental pressure groups was the 1969 Endangered Species Conservation Act (ESCA), which superseded the 1966 Endangered Species Preservation Act. There are three main reasons for this. First, and obviously, the alligator was listed under the ESCA, which meant its imperiled status was axiomatic to proponents of the Act. Second, the ESCA was the mechanism through which Congress amended the Lacey Act in 1969. So in the minds of some, endangered species legislation was responsible for halting illegal commerce because they were ignorant of the role played by the Lacey Act. Third, the ESCA called for a convention of nations to be convened to adopt an international wildlife conservation treaty. In March of 1973, twenty-one countries, including the U.S., signed the Convention on International Trade in Endangered Species (CITES).

States, especially Louisiana, played an especially important role in the passage of the ESCA. Louisiana was the undisputed leader in alligator research, much of which the state undertook with the goal of utilizing the alligator as a renewable natural resource. In the eyes of Louisiana officials, alligator hides, meat and part would be a source of income and jobs, both of which were powerful incentives to conserve alligators and their habitat. As such, states with

flimsy evidence that was out of date. However, by 1966 there was growing evidence that the alligator, at least in Louisiana, was by no means imperiled. By 1966 the early results of Louisiana's research program were beginning to yield results, the most relevant of which were two papers titled, "The Movement of Alligators in Louisiana," and, "Methods of Determining the Size and Composition of Alligator Population in Louisiana" (Chabreck 1965; Chabreck 1966). In addition, the person carrying out and writing up the research, Robert Chabreck, was a highly respected biologist who had a distinguished career as a professor at Louisiana State University. The FWS, however, chose essentially to ignore this research, as well as the knowledge of experts in Louisiana who were engaged in studying the alligator, and listed the alligator. But with the alligator on the first list of endangered species, its actual status soon became of secondary importance to the perception by those in the Interior Department and environmental pressure groups that the alligator was on the fast track to extinction.

alligator populations thought that by advocating the passage of the 1969 Endangered Species Conservation Act, in their attempt to amend the Lacey Act, they would be conferring legitimacy to their efforts to conserve the alligator in general and more particularly to their plans to harvest the alligator.

Unfortunately, this logic failed to appease states' critics; the Interior Department, some in Congress, and especially environmental pressure groups. The 1969 Endangered Species Conservation Act only emboldened them to press their anti-commerce agenda more aggressively. They saw they could more effectively garner positive public relations the more they portrayed species as on the brink of extinction and imperiled by commerce. To facilitate passage of the ESA in 1973, environmental pressure groups and Interior Department simply recycled the arguments they used four years earlier to help pass the ESCA. So the 1969 Act had a boomerang effect that ended up doing more damage to the cause of alligator conservation than it solved. The simple reason is that it would have been possible to amend the Lacey Act as a stand-alone bill without attaching it to endangered species legislation.

In terms of the alligator, arguments in favor the 1969 Endangered Species Conservation Act's passage made by the federal government and pressure groups were almost identical to those made in favor of the 1973 ESA. These arguments were variations on one central theme; commerce was driving the alligator towards extinction, therefore commerce had to be curtailed and hopefully eliminated. To make this point, proponents of the ESCA harkened back to the founding days of the environmental movement in the early 1900s for which opposition to commerce was a driving force. "The National Audubon Society was founded more than half a century ago, when a fashion for plumes for ladies' hats threatened to wipe out the egret," stated Charles Callison, Audubon's Executive Vice President, and point man in Washington, D.C. "Laws were passed then to protect wild birds, and egrets and other herons are plentiful in America today. In the same way, we believe that the alligator and other species threatened by today's fashions can be saved. To this end we urge prompt passage of this legislation." S. Dillon Ripley, then Secretary of the Smithsonian Institution, also got into the fray.

¹⁰⁶ Callison 1969. p.55.

Callison also stated; "Yes, the egret is safe today, but the whims of fashion are endangering other species. When a pair of alligator shoes may fetch \$75 or more...then there is great pressure to hunt out and kill the alligators... that remain. It's a vicious cycle: The rarer the animals become, the higher the prices, and, therefore, the more the incentive to hunt them to extinction. Also, the higher the prices, the more temptation there is for poachers to break

MARKET FAILURE?

All of these arguments in favor of the ESCA and against trade in alligator hides, meat and parts were based on the theory of market failure. In short, this view holds that markets fail, in this case to conserve wildlife, by creating a so-called "race to the bottom," or the "vicious cycle" referred to by Callison and Ripley, with the inevitable result that almost everybody, or everything, will be worse off. According to this view, the solution is quite simple—the beneficent hand of government is needed to stop the vicious and rapacious nature of capitalism. Richard Cowen, Director of the National Museum of Natural History, outlined this quite succinctly. "The history of unregulated exploitation of common property resource, whether of commercial fishing operations, the American bison, the American alligator...is a consistent history of destruction," he stated. "Rational management can serve many purposes, of conserving fish and wildlife and, when properly applied, of increasing the numbers available for sustained supply." 108

This reference to "rational management" as the solution to alleged market failure is a page out of the playbook of the first environmental movement, which was a part of the larger Progressive Movement, an effort, among other things, to supplant democratic processes with supposedly dispassionate bureaucrats who were experts in various fields. Then, as now, one of the bedrock beliefs of the environmental pressure groups is that markets cannot be trusted to conserve wildlife, and therefore the wise and strong guiding hand of government regulation, implemented by expert and objective bureaucrats, is necessary to insure that wildlife is not exterminated by rapacious markets that have no regard for anything but extracting the maximum value from resources.

the laws that are already on the books to protect these species, and the more difficult it becomes for local authorities to control poachers" (Callison 1969, $p.\,142$).

¹⁰⁷ "When the trade is unregulated, it leads to a vicious cycle, with ever-increasing prices and consequent pressure on an ever-dwindling population; and the predictable result is that the population becomes extinct, or so rare that it no longer pays to hunt them." (Ripley 1969, p.129).

¹⁰⁸ Cowan 1969, p.77.

This view is fundamentally flawed, as can be seen from a simple analysis of Cowan's statement. ¹⁰⁹ The anti-commerce sentiments held by Cowan and others stem from a narrow-minded mentality in which the possibility that commerce can be a powerful tool for conservation is either not considered, or when it is considered it is usually dismissed out of hand as being antithetical to wildlife conservation.

MARKET SUCCESS

In the late 1960s and early 1970s in the midst of all of these voices calling for banning alligator commerce there was the lone voice of the state of Louisiana pointing out that commerce was essential for successful alligator conservation. Ironically, one of the state's foremost proponents at the time was Leslie Glasgow, then Assistant Interior Secretary for Fish, Wildlife and Parks, who worked with the people who were trying so assiduously to undermine Louisiana. "There are many landowners at this time interested in the alligator as a commercial species, not only because of the value of its hide, but because this marshland owner needs all of the income he can get to keep his land in marsh, and by protection of the gator, it gives him an incentive to keep this marshland, and in turn it is very, very valuable for other species of wildlife," Glasgow observed. Unfortunately, the logic that conservation of the alligator could be achieved through commerce was drowned out by the chorus of anti-commerce in the late 1960s and early 1970s. "

¹⁰⁹ First, is his use of terminology. The wildlife cited was not a common property, meaning that it was under some form of collective ownership, it was an open-access resource, meaning that nobody owned it. Predictably, when something valuable is unowned it is subject to abuse, specifically a free-for-all with the result that the wildlife species are drastically reduced or even driven to extinction. Cowan's choice of wildlife to illustrate this problem is similarly flawed. To understand why, one need look no further than the bison, and an explanation of this is in Section three under "Historical Context." As the example of the bison alludes to, the failure is not necessarily of markets but of the failure to have markets in the first place. But, of course, if markets are to function efficiently and sustainably then they must also exist in a system in which private property is well defined and defendable by formal or informal law. In addition, markets are mechanisms by which people can express their values, be it extracting pecuniary value or, as in the case of the bison or people supporting a place of religious worship, other, more intangible but no less important philosophical and spiritual values.

¹¹⁰ Glasgow 1969b, p.66.

[&]quot;So long as there is profit to be made in exporting these endangered species or their products to the United States, local regulation will be largely ineffectual," stated Lloyd Tupling, Washington representative of the Sierra Club (Tupling 1969, p.73).

MISLEADING AND FALSE

Another characteristic of the arguments made in favor of listing the alligator under the 1969 ESCA was that they were shot through with misleading information, half-truths and outright falsehoods. "Whenever the mortality of an animal is greater than its recruitment, it is on its way to extinction," asserted Harry Goodwin, special assistant to John Gottschalk, then Director of the Interior Department's Bureau of Sport Fisheries and Wildlife, which was folded into the FWS in 1974. "There is every evidence that the annual mortality on alligators from drainage, drought, poaching, and all other factors that are impinging upon it—there is every evidence that the mortality is greater than recruitment at the present time."

The fact of the matter is that the Interior Department simply did not have strong enough evidence with which to make such a categorical statement. At the time nobody did, not even the states, especially Louisiana, which were far more knowledgeable about the status of alligator populations than people like Goodwin. But Goodwin had an excellent reason to use such language. He had been the chairman of the Committee on Rare and Endangered Wildlife Species that was responsible for compiling the 1966 report that served as the basis for the initial list of endangered species published in 1967, and the alligator was on both lists. As the person most responsible for listing the alligator in 1967, it is not surprising Goodwin portrayed the species as on the brink of extinction in 1974.

Another misleading argument in favor of the 1969 ESCA, the one made by the Interior Department and the National Wildlife Federation, was the Act was needed to stop alligator poaching in Everglades National Park.¹¹³ Interior even went so far as to issue a press release stating the Department was assigning more rangers to the park and that an amended Lacey Act was critical to efforts to stop poaching.¹¹⁴ This is misleading because the National Park Service's inability to protect its own borders was first and foremost the agency's fault, and blaming the lack of an amended Lacey Act was an attempt to divert attention away from this.

¹¹² Goodwin 1969, p.28.

¹¹³ Stanley A. Cain, Assistant Secretary of the Interior for Fish, Wildlife and Parks (Cain 1967, p.15; Louis S. Clapper, Chief, Division of Conservation Education, National Wildlife Federation (Clapper 1967, p.61).

¹¹⁴ U.S. Department of the Interior 1969.

With the passage of the 1969 Endangered Species Conservation Act, and the subsequent listing of the alligator, the species' status as an endangered species was further solidified. Despite good evidence that the alligator was increasing over much of its range by at least the late 1960s and early 1970s, the FWS and environmental pressure groups continued to portray the alligator as on the brink of extinction. While some of this misportrayal may have been due to ignorance, most of it was an unwillingness to acknowledge the alligator's resurgence driven by the need for high profile species to facilitate passage of the ESA.

FOREGONE CONCLUSION

When the next U.S. endangered species bill was passed into law, the ESA in December 1973, the alligator's status as an imperiled species was firmly established in people's minds, due to its listing under the previous two endangered species laws. Those who sought to use the alligator as a "charter species" for passage of the ESA, as well as those who wanted to list the alligator so as to preclude Louisiana's plans to engage in carefully regulated commercial harvest, had strong interests in portraying the alligator as on the brink of extinction.

The ESA was also the vehicle for the U.S. to implement CITES, the international endangered species convention, and this began when the Convention came into force in July, 1975 after the requisite ten nations ratified it. CITES prohibited international trade of the alligator until 1979, which not only harmed alligator conservation, but served to provide further legitimacy to those who claimed, around the time of the ESA's passage, that the alligator was faced with extinction due to commercial hunting.

Environmental pressure groups and the Interior Department were so successful at promoting the idea of the alligator as an endangered species that when Congress contemplated the ESA in 1972 and 1973 the alligator's endangered status was essentially immune from scrutiny. During this time many of the arguments used in support of the alligator's listing under the ESA were merely recycled from the arguments made in favor of listing under the two previous endangered species laws. But in the case of the ESA the stakes were much higher—a

long awaited prize was in sight—so the rhetoric of the Act's proponents grew shriller and the claims more outlandish.¹¹⁵

RENEGADE LOUISIANA

During the time period when Congress contemplated the ESA the incident that most threatened the portrayal of the alligator as on the brink of extinction occurred. In 1972 and 1973 Louisiana held two limited, experimental commercial hunting seasons for alligators after having banned such activity since 1962. This drove the Interior Department and environmental pressure groups wild.

There are two reasons why Interior and pressure groups reacted so virulently. First, if alligators were sufficiently abundant in Louisiana for commercial hunting to be possible then this would undermine the notion that the species was on the brink of extinction. Second, commercial hunting was in a very real sense blasphemous because it ran counter to the long-standing opposition of environmental pressure groups to wildlife commerce. "Louisiana is about to open up a season on the alligator," stated Lewis Regenstein, National Director of the Fund for Animals. "The effect will be to threaten the alligator because once you have legally taken skins you are going to encourage poaching in Georgia, Florida, and South Carolina where the alligator is in a precarious position." Predictably, the National Audubon Society's George Laycock

The American ivory-billed woodpecker, the American alligator, and the Florida panther are three examples of animals threatened with extinction because of excessive hunting," claimed Senator Alan Cranston in 1972 (Cranston 1972, p.118). Citing the ivory-billed woodpecker is absurd because, prior to its rediscovery in 2004, the last verified siting in the U.S. was in 1938. In addition, the overwhelming threat to the woodpecker was the destruction of its habitat, which consisted of extensive tracts of old growth deciduous trees in bottomlands and wetlands, not "hunting." Another argument in favor of the ESA, as mentioned, Assistant Interior Secretary, Nathaniel Reed, was that the alligator was one of the "charter" species of the endangered species program. "A commercial operation based on products taken from endangered species is obviously, and often deliberately, self-effacing," claimed Tom Garrett of Friends of the Earth. "The willingness of certain people to take short term profits through trafficking in such endangered and vanishing species is a major factor in their disappearance. Why is it necessary to defer to such irresponsible behavior?" (Garrett 1973, p.105). The more germane question is why are people such as Garrett willing to reap a short-term political gain, passage of the ESA, when those knowledgeable about the alligator were making the argument that listing the alligator would be detrimental the species' conservation?

¹¹⁶ Regenstein 1972, p.179.

jumped on board with a couple of articles in the Society's magazine about the purportedly grave threat posed to the alligator by Louisiana's hunting season.¹¹⁷

CRACKS IN THE FAÇADE

Surprisingly, some cracks appeared in the pro-ESA façade, as a few of the Act's advocates were willing to admit that by 1972 and 1973 the alligator was not imperiled in at least Louisiana and Florida. As is clear from his statement above, Lewis Regenstein implicitly acknowledged in 1972 the alligator was not imperiled in Louisiana. "We are very pleased with the comeback of this reptile in parts of its range—especially parts of Florida and a few parishes in Louisiana," admitted then Assistant Interior Secretary Nathaniel Reed in 1973. "We do not consider the alligator to be one of the more critically endangered species." Others admitted as much. "I am aware of the alligator situation in Louisiana, where the state has a surplus," stated Louis Clapper, Director of Conservation for the National Wildlife Federation.

There are two plausible explanations for these admissions about the alligator's non-endangered status from the very groups that had been insisting extinction was imminent. First, some people at the Interior Department and these advocacy organizations were aware by the early 1970s that the effects of state conservation efforts and the 1969 amendment of the Lacey Act had resulted in healthy alligator populations, especially in Louisiana and Florida. Second, before the ESA's passage very few people were fully aware of the Act's massive power, and as a result the Act had not yet achieved its present day iconic status as environmental activists' single most cherished law. So prior to the ESA's passage advocates were more likely to be honest about the law and the species it was likely going to protect than are their present day counterparts. 120

¹¹⁷ Laycock 1972; Laycock 1973.

¹¹⁸ Reed 1973, p.208.

¹¹⁹ Clapper 1973, p.297.

¹²⁰One of the most telling statements, given in Congressional testimony, came from the person who probably more than anyone else was responsible for the listing of the alligator under the two predecessor laws to the ESA, John Gottschalk, Executive Vice President of the International Association of Game, Fish and Conservation Commissioners, and the Director of the Bureau of Sport Fisheries and Wildlife, the predecessor to the FWS, from 1964-1970. "We find ourselves in the peculiar situation of the American alligator...is so abundant in the state of

The alligator's listing under the ESA is a good example of the problem created when issues become progressively more politicized, and this problem becomes most acute at the federal level. Narrowly focused special interest groups, like environmental and animals rights pressure groups, are able to exert enormous amounts of influence over federal decision making because power, and hence decision making authority, is very concentrated. By contrast, if such authority were more dispersed, for instance to the states, then this would lessen the power of pressure groups.

CONCLUSIONS ON POLITICS OF LISTING

When asked on what basis the alligator was listed under the ESA, Tommy Hines of the FGFFC replied that there was, "very little data used to make that decision." The alligator's true status was of little if any concern to the ESA's proponents because they had turned the alligator into a symbol—or as then Assistant Interior Secretary Reed admitted a "charter" species—to be manipulated for the perceived greater purpose of passing the Act. By treating the alligator as an abstraction, the ESA's proponents implicitly admitted they were not so much worried about the very real issues surrounding the alligator's conservation—issues that at the time were being addressed by the states, especially Louisiana and Florida, as is detailed below in the sections titled "State-based research and conservation" and "Conservation harmed"—as they were with using the alligator as a prop to promote their political agendas.

Louisiana that the State declared an open season last fall and feels that he carefully managed commercial utilization of alligators is something in the best interest of the total conservation of the State of Louisiana. It will have side effects that relate to the preservation of marshlands generally, which are extremely important for a wide range of different kinds of wildlife" (Gottschalk 1973, p.84). It is ironic that Gottschalk expressed so cogently this view that was essentially the position of Louisiana because by allowing the alligator to be listed under the 1966 and 1969 acts Gottschalk played a key role in creating the momentum that resulted in the species' erroneous listing under the 1973 ESA. Gottschalk's revelation about the alligator is perhaps best encapsulated by the lyrics of the song by satirist and mathematician Tom Lehrer about Nazi, later American, rocket scientist Werner von Braun who led the program that launched the V1 and V2 rockets at Britain and which were responsible for killing 7,250 people, while 12,000 forced laborers died producing the rockets:

Don't say that he's hypocritical Say rather that he's apolitical 'Once ze rockets go up, who cares where zey come down? That's not my department' says Werner von Braun.

¹²¹ Hines 1994b.

STATE-BASED RESEARCH AND CONSERVATION PROGRAMS

The American alligator is likely the most studied species of crocodilian in the world.¹²² This is largely due to research initiated and carried out by states, especially Louisiana, not the FWS under the auspices of the ESA or predecessor legislation and not environmental pressure groups.

The vast majority of alligator research has been carried out by state wildlife agencies and also a handful of people in academia, many of whom were also associated with state universities, especially those in Louisiana and Florida. It is important to note that the key motivating factor behind much of this research was to utilize the alligator as a renewable natural resource that could provide economic incentives for people to conserve the alligator's wetland habitat and much needed jobs and income for states. One of the first major steps taken by Louisiana and Florida, where the vast majority of alligators lived, as well as Texas, which had the third largest population, was to prohibit hunting and trade; Louisiana and Florida in 1962, and Texas in 1969. 123

LOUISIANA

Before and during the alligator's tenure under the ESA and its two predecessor laws, the state of Louisiana was the leader in alligator research and conservation. In 1958 the Louisiana Department of Wildlife and Fisheries (LDWF) began a long-term and well organized research program to obtain data on the alligator's growth rates and movements in their habitat.¹²⁴ From 1958-1965 this research involved capturing, marking and releasing some 2,000 alligators in order

¹²² Ross 1998.

¹²³ U.S. Fish and Wildlife Service 1983d, p.46334.

¹²⁴ Chabreck 1963.

to gain data on their life histories (size, sex, weight, approximate age, etc.). Such basic data is essential for understanding how to manage and conserve wildlife species.

In 1962 Louisiana banned hunting, and in 1964 the state began a more formal and extensive long-term research program in order to undertake a comprehensive investigation of the alligator. This research focused on two primary topics; the biology and ecology of wild alligators, and raising alligators in captivity with the purpose of providing data for the development of an industry based on captive-raised alligators. "The ultimate objectives of these research programs was to enhance existing populations while gaining insight as to the management requirements of the species, and to provide for the harvest of surplus animals on a sustained yield basis," stated Ted Joanen and Larry McNease, Louisiana's lead alligator biologists. ¹²⁷

Over the years, this research yielded vast amounts of data on alligator biology and ecology, much of which was published in peer reviewed journals. The most noteworthy of this research was the discovery by Ted Joanen of LDWF and Mark Ferguson of Queen's University in Belfast, Northern Ireland that the incubation temperature of eggs determines the sex of alligators, with 30° C or lower resulting in all females and 34° C or higher resulting in all males and temperatures between 30° and 34° resulting in a mixture of males and females. This finding was so significant that it was the article featured on the cover of the issue of the journal *Nature* in which it appeared. **Nature* is regarded as one of the world's two most prestigious scientific journals. Joanen and Ferguson's discovery had significant implications for alligator and crocodilian biology, ecology and conservation. **Proponents of the ESA and its predecessors tried to portray Louisiana and its approach to alligator management as out of control, and its

¹²⁵ Joanen and McNease 1975.

¹²⁶ Joanen et al., 1997, p.468.

¹²⁷ Joanen and McNease 1981a, pp.2-3.

¹²⁸ Gartside et al., 1977; Chabreck and Joanen 1979; Joanen and McNease 1979b; Elsey and Lance 1983; Lance et al., 1983; Taylor and Neal 1984; Valentine and Elsey 1986; Elsey and Wink 1986; Wink and Elsey 1986; Joanen and McNease 1989; Wink et al., 1989; Elsey et al., 1990a; Elsey et al., 1990b; Staton et al., 1990a; Staton et al., 1990b; Staton et al., 1991; Weldon and McNease 1991; Elsey et al., 1991; Staton et al., 1992; Elsey et al., 1992; Dessauer and Elsey 1993; Elsey et al., 1994.

¹²⁹ Ferguson and Joanen 1982.

¹³⁰ Ferguson and Joanen 1983.

alligator researchers as a bunch of good-old-boy rednecks obsessed with hunting and commerce. But as the research by Ted Joanen and others in Louisiana demonstrate, this portrayal was totally inaccurate and indicative of the depths to which ESA advocates sank to vilify Louisiana's approach to alligator conservation.

1970 marked the next significant step in Louisiana's alligator management program when the state began conducting systematic annual population surveys.¹³¹ In 1970 the state legislature passed law 550, which gave the Department of Wildlife and Fisheries complete authority over alligator management. As part of law 550, the alligator was classified as a game species and this permitted a regulated commercial harvest program to occur.¹³²

COMMERCIAL HUNTING

By 1972 Louisiana was ready to put the research carried out over the previous decade to the test by conducting a limited, experimental commercial harvest. As knowledge about the alligator's biology and ecology had been accumulating, so, too, had information about specific management strategies that would ensure a biologically and regulatorily sound harvest program. These measures revolved around a complex system of strict quotas that limited the total number and size of alligators harvested. To implement these quota restrictions, Louisiana devised specific management techniques: licenses; specific skinning instructions that were only revealed the day before the season opened to prevent the sale of skins taken the previous season or alligators taken illegally; paper shipping tags for interstate commerce; a hunter application form; and locking, non-corrodible, non-reusable metal tags, each one of which had a unique serial number, that had to be affixed to the alligator's tail.¹³³

The tags, which locked to the hide by a rivet-like device, were the key innovation because they remaining affixed to the hides throughout the stream of commerce—from the point at which alligators were skinned, to middlemen who might purchase the raw hides, and then to the tanners. These tags were the linchpin to insuring that only legally taken hides entered the

¹³¹ Palmisano et al., 1973.

¹³² Palmisano et al., 1973.

¹³³ Palmisano et al., 1973.

stream of commerce. The procedures for monitoring commerce developed by Louisiana, especially the locking tags, were so successful that they formed the cornerstone for worldwide legal trade in crocodilians, which today involves crocodilians from Asia, Africa and Australia, and is yet another example of the important and pioneering work carried out by the state.¹³⁴

The combination of all these management procedures and techniques made it extremely difficult for illegal hides to enter the stream of commerce. When the first of many delistings of the alligator occurred in 1975, in this instance in three Louisiana parishes, controlled hunting was allowed in these parishes. The FWS acknowledged the leadership role played by Louisiana; "The controls over the marketing of the hides in American alligators in these regulations are based on the implementation and enforcement of Louisiana's regulations."¹³⁵

As a further measure to conserve the alligator, Louisiana held its hunting season in September and limited hunting to lakes and deeper waterways in an effort to catch predominantly males. By the fall, larger females retreat to shallower waters deeper in swamps and wetlands while males inhabit the deeper waters. The reason for targeting males was that if large numbers of breeding age females were removed it could lead to significant population reductions. By contrast, proportionally more breeding age males can be removed because one large male tends to breed with several females.¹³⁶

In 1972 and 1973 Louisiana conducted two limited, experimental hunting seasons, and hunters took a total of 4,253 alligators.¹³⁷ The seasons were successful because they revealed Louisiana's management techniques were fundamentally sound and able to control commerce. Even though Louisiana was poised to expand hunting, the state was not able to hold a season in 1974 due to the alligator's listing under the ESA. In 1975 hunting resumed in the three parishes in which the FWS delisted the alligator. The state canceled the 1978 hunting season because the U.S. market had become so saturated with alligator skins that it would not have been able to absorb the addition hides produced by the 1978 season.¹³⁸ In June 1979 the FWS delisted another

¹³⁴ Joanen et al., 1997.

¹³⁵ U.S. Fish and Wildlife Service 1975g, p.44414.

¹³⁶ Palmisano et al., 1973.

¹³⁷ Joanen et al., 1997, p.470.

¹³⁸ Joanen and McNease 1981b.

nine additional parishes.¹³⁹ Hunting occurred in September of that year.¹⁴⁰ When the FWS finally allowed international trade to occur in October of 1979, Louisiana's alligator program received a much-needed boost because the domestic market could not absorb all the hides being produced.¹⁴¹ In 1981 when the FWS delisted alligators in the remainder of Louisiana, hunting expanded across much of the state.¹⁴²

As progressively more alligators were being harvested and the industry growing, the Louisiana legislature in 1977 passed a law that designated the LDWF as the state entity responsible for monitoring and regulating the sale of meat and parts (e.g., teeth and skulls). As with hides, Louisiana set up a management regime that included tags and licenses. However, as usual, Louisiana had to wait for the FWS to play catch-up. It was not until 1979 that the FWS permitted sale of meat and parts, but only for intrastate commerce. While welcome, this seriously hampered the ability of the Louisiana alligator industry to market and obtain top dollar for meat and parts. It took over a year for the FWS to allow interstate commerce. It was not, however, until 1985 that the FWS finally allowed international sale of meat and parts, even though the agency should have done this in 1979 when it allowed international trade in hides. This occurred on the same day as Halloween, October 31, which is ironic because pressure groups like Audubon were so frightened about alligator commerce.

Despite obstruction and foot dragging by the FWS, Louisiana plowed ahead with its conservation programs. Starting in 1979, the state initiated a nuisance alligator control program because growing alligator and human populations were coming into increasing contact.¹⁴⁷

¹³⁹ U.S. Fish and Wildlife Service 1979g.

¹⁴⁰ U.S. Fish and Wildlife Service 1979l.

¹⁴¹ U.S. Fish and Wildlife Service 1979m.

¹⁴² U.S. Fish and Wildlife Service 1981a.

¹⁴³ Joanen et al., 1981.

¹⁴⁴ U.S. Fish and Wildlife Service 1979m.

¹⁴⁵ U.S. Fish and Wildlife Service 1980b.

¹⁴⁶ U.S. Fish and Wildlife Service 1985c.

¹⁴⁷ Joanen et al., 1981.

Louisiana provided a further innovation when, between 1979 and 1983, it developed computer software that made it possible to track every skin taken in the state through the entire chain of commerce, from the hunter, through the various buyers and finally to the tanner. By the time the FWS delisted the alligator over its entire range in 1987, hunters in Louisiana harvested around 24,000 alligators annually. The total value of the skins was around \$7,000,000 and the meat was worth an additional \$3,000,000. This total is about \$20 million in 2011 dollars.

FARMING AND RANCHING

The other main focus of Louisiana's alligator research and management program dealt with farming and ranching. Farming is the practice of establishing self-perpetuating captive stocks through breeding while ranching is the annual harvest of eggs or hatchlings from the wild that are then raised in captivity. There are a number of purposes of farming and ranching: to supply skins, meat, and parts for the commercial market so as to take pressure off wild populations; to have a more constant source of hides, as hunting seasons for wild alligators typically take place a few weeks a year in the fall; and to have generally higher quality hides because hides from captive-raised alligators are less likely to have the blemishes and imperfections that can mar the quality, and hence lower the value, of hides from wild alligators, which are subject to more wear-and-tear.

When Louisiana banned alligator hunting in 1962 there was a great deal of interest in raising alligators in captivity, and as a result this became a key part of Louisiana's management program. Among other things, the program sought to determine optimal conditions for raising captive alligators, successful methods of propagation, and the various diseases and other health issues that could be problematic. ¹⁵⁰ In 1974, due to demand from residents of Louisiana, the state legislature passed a bill that established a legal framework for farming, which included specifications of how a farm should be constructed, as well as a monitoring program to be run by

¹⁴⁸ Joanen and McNease 1987, p.40.

¹⁴⁹ Joanen et al., 1997, pp.470-471.

¹⁵⁰ Joanen and McNease 1975.

state wildlife authorities.¹⁵¹ However, the nascent farming industry was hampered by a lack of alligators so beginning in 1977 LDWF began providing hatchlings from state lands to the industry. Between 1977 and 1991, the state supplied 67,139 hatchlings to private alligator farms.¹⁵² There was more demand than could be met by the supply of hatchlings so in 1986 LDWF allowed eggs to be collected on private lands. The only stipulation from the state was that the percentage of alligators that would be expected to survive to a given age in the wild would be returned to the areas from which the eggs were originally collected.¹⁵³ In 1989, egg collecting moved from the experimental stage to widespread application with the collection of 16,900 eggs.¹⁵⁴ The ranching program proved very successful, as the number of licensed alligator farms grew from eight in 1972, to fourteen in 1983 following delisting in Louisiana, to thirty by 1987 when range-wide delisting occurred.¹⁵⁵

OTHERS BENEFIT FROM LOUISIANA

Louisiana's alligator research and management program was not limited solely to within the state. Between 1959 and 1975, Louisiana provided 1,481 alligators to Arkansas and Mississippi because these states' populations were reduced. By 1984, Arkansas had received 2,800 juvenile alligators from Louisiana, which provided a much need boost to the state's population. Of course, Louisiana was able to do this because of its large, healthy, growing and un-endangered alligator population.

The Louisiana Department of Wildlife and Fisheries has also been a leader of worldwide efforts to conserve crocodilians. In this capacity the Department was actively involved in efforts to conserve the critically endangered Chinese alligator, the world's only other alligator species.

¹⁵¹ Joanen and McNease 1975.

¹⁵² Joanen and McNease 1991.

¹⁵³ Joanen et al., 1997, p.481.

¹⁵⁴ Wright 2002.

¹⁵⁵ Joanen et al., 1997, p.471.

¹⁵⁶ Joanen and McNease 1975.

¹⁵⁷ Arkansas Game and Fish Commission, ND.

Starting in mid-1960s, the Wildlife Conservation Society, the research and conservation arm of the New York Zoological Society, tried to get its pair of Chinese alligators to reproduce in captivity. After failing to do so, the Society proposed to the Louisiana Wildlife and Fisheries Commission that a captive propagation program be attempted on a state refuge in Louisiana because environmental conditions in Louisiana were similar to native habitat in China. The Wildlife Conservation Society also knew that researchers in Louisiana were the leading experts on alligator biology, ecology and captive propagation. The Smithsonian Institute's National Zoo contributed another pair of Chinese alligators, and in 1976 both pairs were transferred to Louisiana. Research by LDWF on the American alligator proved invaluable. Pens were constructed and diets determined for the Chinese alligator based on parameters established for American alligator. In 1977 and the following years eggs successfully hatched.¹⁵⁸ The successful initial propagation of the Chinese alligator proved to be critically important for the species' conservation. Extirpation from the wild has been very real possibility for the Chinese alligator because growing human populations were putting increasing pressures on the alligator's limited habitat. Louisiana's captive breeding efforts may well prevent the species' extinction.

Louisiana's commitment to alligator conservation has spanned decades and involved enormous investments of time and money. By the mid-1990s, Louisiana had spent over \$10 million on its various alligator conservation programs. Louisiana, not the federal government or pressure groups, initiated and carried out the long-term and extensive research and management programs that have served as the basis for much of what is known about the species' biology, ecology and management and for much of the management techniques for worldwide trade in crocodilian skins. This is quite an accomplishment, especially because the state was able to be so successful despite opposition, obstruction and foot dragging from pressure groups and the Interior Department.

¹⁵⁸ Behler et al., 1982.

¹⁵⁹ Joanen et al., 1997, p.494.

FLORIDA

The situation in Florida was similar to that in Louisiana. After banning hunting in 1962, Florida also became involved in alligator research, albeit not to the same extent as Louisiana. Florida began some research efforts in the mid-1960s. In 1975, the state initiated a more formal and extensive research program. Florida's program did produce a substantial amount of data, some of which was published in peer reviewed journals.

Florida's alligator management program initially dealt only with controlling nuisance alligators. From 1948-1975, there were sixteen documented attacks on people, with fourteen occurring between 1972 and 1975. One of these attacks was fatal, and the gruesome circumstances—a sixteen year old girl killed and then partially eaten, the first time this was documented to occur—garnered a great deal of media coverage and public demand for lethal control of large alligators living in the vicinity of people. In addition, by the mid-1970s the Florida Game and Freshwater Fish Commission (FGFFC) was getting around 5,000 complaints annually about nuisance alligators. In Florida had several concerns; alligators might be losing their fear of humans, the growing human and alligator populations were going to come into increasing contact, and the spate of negative publicity was going to engender a backlash against the alligator. So the state petitioned the FWS to reclassify the alligator, and the agency downlisted it in January 1977. In other words, the downlisting of the alligator in Florida was driven by concerns over public relations and politics, not the species' conservation status, which is emblematic of the FWS's implementation of the ESA.

Florida instituted an experimental harvest from 1981-1984 and took a total of 942 alligators from state lands. When the FWS finally delisted the alligator in Florida in 1985, the

¹⁶⁰ Fogarty 1966.

¹⁶¹ Hines and Percival 1987.

¹⁶² Deitz and Hines 1980; Hines and Woodward 1980; Woodward et al., 1984; Wood et al., 1985; Delany and Abercrombie 1987; Woodward et al., 1987; Woodward et al., 1989.

¹⁶³ Hines and Keenlyne 1976.

¹⁶⁴ Hines and Abercrombie 1987.

¹⁶⁵ U.S. Fish and Wildlife Service 1977a.

experimental harvest was expanded to two large private landholdings, and a total of 115 alligators were taken by 1987. From 1985-1987, when the alligator was delisted over remaining portions of its range in other states, an additional 3,189 alligators were taken from state lands. In 1986 FGFFC drafted a plan for the state that would initiate a more formal management program involving licenses and tags for hunting wild alligators and harvesting eggs and hatchlings for ranching much like what had occurred in Louisiana. In 1987, the Florida legislature passed enabling legislation for these initiatives. In 1987, the Florida

TEXAS AND OTHER STATES

Texas began state sanctioned hunting of alligators in 1984, following the 1983 delisting of alligators in the state. The numbers harvested slowing increased, from 952 in 1986, to 1,396 in 1987, to around 2,000 by 1990 and 1991. Farmed alligators were not a factor until 1989 when twenty were harvested. Most of the research in Texas was based on work done by Louisiana. As for other states with alligator populations, their research and management programs have been very minimal, especially as of 1987 when the FWS delisted the alligator over its entire range. Following delisting in 1987, South Carolina started a nuisance alligator control program. Between 1988 and 1991, approximately 250-350 alligators were killed each year. Mississippi and Georgia started their nuisance programs in 1989, with approximately 100 and 350, respectively, taken annually. And Alabama started its nuisance program in 1991 with the harvest of 125 alligators.

¹⁶⁶ See: Woodward et al., 1987; Florida Fish and Wildlife Conservation Commission 2002.

¹⁶⁷ Woodward et al., 1987.

¹⁶⁸ Texas Parks and Wildlife Department, ND.

¹⁶⁹ Masser 1993.

¹⁷⁰ Merendino et al., ND.

¹⁷¹ Merendino et al., ND.

FEDERAL RESEARCH

By comparison to the states, the federal government carried out very little research and virtually no management beyond implementing, and then refining, what Louisiana had already developed. Furthermore, what little federal research existed did not begin to be published until the late 1970s. This was after state-based researchers began to publish and is another indication that the states, not the federal government, led the way.¹⁷² Federal research drew heavily on prior research, especially research carried out by Louisiana. Also, a portion of the research in which federal personnel were involved was carried out in conjunction with state-based research programs. Even in these instances, researchers connected with state programs, usually Louisiana, were either the lead authors or constituted the majority of the authors of published articles. This provides yet another clear indication that state researchers were the leading experts.¹⁷³

PRESSURE GROUPS' "EXPERTISE"

Environmental pressure groups profess expertise in endangered species issues, but a number of them have made false and misleading assertions about the alligator's biology and ecology. "Within their wetland ecosystems, they control populations of prey species, including fish, turtles, and small mammals. The alligators thereby keep the ecosystem balance in check," assert most of the Act's most prominent supporters, including the Center for Biological Diversity, Defenders of Wildlife, Earthjustice, Endangered Species Coalition, Natural Resources Defense Council, National Wildlife Federation, and U.S. PIRG.¹⁷⁴ These groups also point out that male adult alligators make "gator holes," bank-side depressions that "hold water during dry

¹⁷² What follows are a few examples of research FWS did carry out (Kushlan 1979; Kushlan and Kushlan 1980a; Kushlan and Kushlan 1980b; Kushlan and Simon 1981).

¹⁷³ Hines and Percival 1987. (Hines was with the Florida Game and Fresh Water Fish Commission, Percival with the U.S. Fish and Wildlife Service); Taylor and Neal, 1984 (Taylor was with the Louisiana Department of Wildlife and Fisheries, Neal with FWS); Rootes et al., 1991 (Rootes, Chabrack, and Wright were with Louisiana State University, Hess was with the Louisiana Department of Wildlife and Fisheries, and Brown was with FWS).

¹⁷⁴ American Rivers et al., 2003b.

seasons and are a great benefit to other wildlife species."¹⁷⁵ There are, however, two problems with both these observations about the alligator's ecological role; they are either not true or are overstated. Available evidence indicates alligators do not control populations of prey species, and gator holes only are important in south Florida's wetlands, not, as implied, over the species' entire range.¹⁷⁶

These groups' ignorance of such fundamental facts about the alligator's biology and ecology points to these groups' ignorance or unwillingness to disseminate truthful information. Furthermore, if these groups cannot get this type of basic information correct then they certainly cannot be expected to evaluate accurately more complex issues, such as the interplay between the ESA, CITES, states (especially Louisiana), and the alligator industry.

CONCLUSIONS ABOUT RESEARCH AND CONSERVATION

As is clear, Louisiana, followed by Florida, led the way in alligator research and management, not the FWS under the auspices of the ESA or others in the federal government. Louisiana's decades of research on the alligator's biology, ecology and management, as well as the development of innovative management techniques, provided much of the foundation for alligator conservation not only in the U.S. but the rest of the world. One of the main reasons these states invested so heavily in research and management was because they and their citizens had very strong incentives to conserve the alligator as a valuable and renewable source of income and jobs.

¹⁷⁵ American Rivers et al., 2003b.

¹⁷⁶ In the case of prey regulation, "[b]ased on the extensive published record and experience of LDWF personnel, it is considered unlikely that alligators play a dominant role in the regulation of any of these [insect, amphibian, mollusk, crustacean, fish, bird, reptile and mammal] species," according to Ted Joanen, Larry McNease, Ruth M. Elsey, and Mark A. Staton of the LDWF, four of the most knowledgeable alligator biologists in the world who, in addition to their decades of experience, have authored numerous peer reviewed articles on alligator biology and ecology (Joanen et al., 1997, p.477). As for gator holes, Joanen and colleagues point out that these turn out only to "play an influential ecosystem role...in southern Florida wetlands" while in Louisiana manipulation of water levels by landowners has attenuated the effects of drought and thereby lessened the need for alligator holes (Joanen et al., 1997, p.478). Joanen and colleagues published these conclusions in 1997, some four years prior to the claims made by the aforementioned environmental pressure groups.

CONSERVATION THROUGH COMMERCE

Most of the controversy over the alligator's listing under the ESA stemmed from the use of the species, in particular its valuable hide, in commerce. States, especially Louisiana, based much of their alligator conservation programs on using the alligator's value to conserve it while the U.S. government and especially environmental pressure groups steadfastly opposed this. Opposition to commerce, or trade as it is also referred to, stemmed in large part from the Interior Department's and environmental pressure groups' long-standing philosophical stance in which their definition of wildlife—species free, or relatively free, from human intervention—was incompatible with killing them for commerce. Furthermore, many in government and pressure groups were, and remain, convinced that commerce and conservation are incompatible. Another contributing factor to this point of view is that some people, most notably those who believe in animal rights, are simply against the killing of any animal, be it wild or domestic.

On its face these may seem to be noble ideals but they were, and are, hopelessly out of step with the realities of wildlife conservation, most notably the need to provide economic incentives for people to conserve wildlife and habitat. After all, people cannot subsist on philosophy, they must be able to make a livelihood, and for people living in the rural areas where most wildlife lives this may mean using wildlife as a source of income. But if these people are unable to make money from wildlife, then the land they own or control is more likely to be put to uses that can make money, such as crop agriculture, livestock, or areas of human habitation. Loss of habitat is the single greatest threat to wildlife, something that proponents of conservation through commerce are aware of and which they seek to counteract. Yet opponents to commerce are willing to let their philosophical beliefs supersede effective wildlife conservation.

BENEFITS OF CONSERVATION THROUGH COMMERCE

Over the past forty years, the concept of using the economic incentives generated by trade has gained increasing acceptance worldwide as a means to conserve wildlife. As applied to the conservation of the American alligator, conservation through commerce was the most significant motivating factor behind Louisiana's management program and was an important factor for Florida as well. "Alligator managers in Louisiana and other states realized...that the

greatest potential problem in managing alligators was that of possible habitat loss to agricultural, commercial, or residential uses. Louisiana adopted the approach of cooperating with landowners to manage alligators as a renewable natural resource," according to Ted Joanen and colleagues. "If he [a wetland owner] can't make a buck out of alligators he'll turn his marsh into a site for condominiums. Then what'll happen to the gators?" asked Allan Ensminger of Louisiana Wildlife and Fisheries Commission. "In the condomination of the condomination of

Alligator researchers and managers in Florida also echoed these same sentiments. "We believe one of the most important aspects of any crocodilian exploitation program should be to use harvest-derived revenues to support the conservation of an exploited species and its habitat," stated Tommy Hines and C.L. Abercrombie of FGFFC. "The current management plan for alligators recognizes explicitly the value added concept; it specifies that the returns derived by the State from commercial alligator exploitation shall be used as a source of funding for the continued management of the wild resource...In addition, all users—whether commercial hunters, sport hunters, ranchers or even hide and meat dealers—have a vested interest in assuring that wetland systems are maintained and managed. This has immediate benefits for alligators, but ultimately will benefit all the wildlife that depends on wetlands." Or, as Allan Woodward of the FGFFC put it, "we need to conserve the alligator and its habitat. That takes money, as well as knowledge and regulation. But it's a valuable animal. Let it pay its own way." 180

Louisiana has been particularly focused on allowing the alligator to have economic value through trade because approximately 80% of the state's alligator habitat is privately owned, while the remaining 20% is split about equally between state and federal ownership.¹⁸¹ The simple reality of these statistics means that it has been incumbent on state wildlife officials, "to show that private landowner how he can keep the marshes wet and wild," according to Ted Joanen.¹⁸² By 1989, the annual sale of wild and farmed alligator skins and meat generated nearly

¹⁷⁷ Joanen et al., 1997, p.486.

¹⁷⁸ Ricciuti 1976, p.10.

¹⁷⁹ Hines and Abercrombie 1987.

¹⁸⁰. Lewis 1987,p.18.

¹⁸¹ Joanen 1994b.

¹⁸² Joanen 1994c.

\$22,000,000 and created 231 jobs for Louisiana. An additional \$13,000,000 and 172 jobs were the result of indirect economic activity, such as the sale of materials and supplies to the alligator industry. As for Florida, by 1995 the alligator industry created an estimated 220 jobs and generated \$9,200,000 from the sale of hides and meat and an additional \$4,500,000 from indirect activity. 184

Despite the clear benefits of conservation through commerce for the alligator, the FWS and environmental pressure groups have been steadfast in their aversion and outright opposition to commerce. Furthermore, this opposition is why the alligator the FWS listed the alligator under the ESA and its two predecessor laws, and why it took the agency almost fourteen years to delist the species completely. Opposition to trade is reflected in the glacial pace at which the FWS delisted the alligator over various portions of its range, the reticence of the FWS to allow trade once delisting occurred, the absurd and unreasonable restrictions on trade that were either proposed or implemented by federal wildlife authorities, and the stances taken by environmental pressure groups relative to these issues and events.

As a number of experts on trade have noted, commerce is key part of the alligator's conservation. "We tell people, buy alligator if you can," stated Ginette Hemley of the World Wildlife Fund. "There is little question in our minds that controlled hunting and ranching has helped provide incentives to protect both the species and habitat. This is a great model...a success story." Or as Ted Joanen put it, "The best thing people can do for the alligator is to buy alligator products. Buy a belt or bag or boots, and wear them with pride." In 1970 Assistant Interior Secretary Leslie Glasgow also made the case for conservation through commerce:

"We think sweeping local laws engendered by emotionalism and pushed partly by those who seek personal gain can destroy the orderly market for animals which are not endangered or which again become abundant through management as has the fur seal and the sea ofter. We expect the alligator to reach harvestable populations in two or three

¹⁸³ Brannan et al., 1991.

¹⁸⁴ Woodward 1998.

^{185.} Booth 1993.

¹⁸⁶. Greshem 1993.

years. Such laws may well serve to protect remanent [sic] populations on a few parks but can work against the maintenance of large wild populations both here and abroad. Management by emotion has no place in conservation."¹⁸⁷

Unfortunately, this sentiment was anomalous at Interior, all the more so because of Glasgow's short tenure at the Department.

While the ESA's proponents have made the vast majority of unsubstantiated assertions about the ESA, the Act's opponents have also done so, and one such instance was about the benefits of trade. "Alligator farming has greatly increased alligator numbers in the wild by reducing the incentives for poaching," claimed Randy Simmons of Utah State University. This is a very implausible claim for two reasons; the Lacey Act amendment of 1969 effectively shut down poaching, and farmed alligators are generally preferred by the industry because their hides are usually of superior quality (e.g., fewer blemishes and other flaws) to those from wild alligators. In addition, Simmons's assertion is not supported by any evidence or even a citation with which it can be verified.

LOUISIANA LEADING THE WAY

Two results of Louisiana's research program had important implications for the use of commerce as a conservation strategy for the alligator.

First, researchers found that alligators cannot be "stockpiled" in the wild. This means that if alligators are totally protected from hunting the population in a given area will be roughly the same as a population that is hunted at the rate of 3-5% per year, the rate Louisiana determined was sustainable. The reason for this is because if alligators are not hunted their populations will be limited by a number of factors such as predation, including cannibalism, as well as food and habitat availability. Louisiana was able to figure out all of this because the farsighted people involved in setting up the state's management program closed the 75,664-acre state-owned Marsh Island to hunting for twenty-four years, from 1962-1984. As a result,

¹⁸⁷ U.S. Department of the Interior 1970.

¹⁸⁸ Simmons 1999, p.311.

researchers discovered that alligator size-class structure (the percentage of alligators in various size categories) was almost the same on the island as it was for the 231,713 alligators hunted all over the state from 1972-1990.¹⁸⁹ This finding indicated that Louisiana's harvest, based on decades of painstaking research, was conservative and therefore posed no threat to the viability of the alligator. In addition, this finding had very important implications for management regimes because it meant that alligators could be sustainably harvested without imperiling the overall population.

Second, from 1970-1990 in Louisiana's coastal marsh region alligators increased faster on private land than on public land. Over this time period the average annual increase of the number of nests, which was used by Louisiana as an index for assessing the population size, on private land was 10.02% compared to 8.75% on public land. The key in terms of conservation through commerce is that hunting took place on 90% of the private property whereas "limited hunting occurred on *some* [emphasis added] areas," in public ownership, according to Ted Joanen and Larry McNease.¹⁹⁰ The larger population increase on private land was more evidence that alligators could not be stockpiled and that controlled hunting was a sustainable management strategy. There is "no doubt about it," according to Joanen, that private landowners are better stewards of alligator habitat than public land management agencies, which is a significant reason for the superior growth rates on private lands.¹⁹¹

Commercial use of the alligator is, however, part of the bigger picture of wetland conservation. Harvest of wild alligators generates an estimated \$4-\$6 per hectare (ha.) in Louisiana. When other wetland uses are added—waterfowl hunting, trapping muskrat and nutria, harvesting crabs and shrimp, and collecting alligator eggs—the potential increases to \$48/ha.¹⁹² So while harvesting alligators yields around 11% of potential wetland income, it is an important component. The success of conservation through commerce hinges on obtaining the maximum amount of income from wildlife on a sustained basis from a given piece of property in order to convince the property owner that wildlife is worthwhile. If not, then the property owner

¹⁸⁹ Joanen et al., 1997, p.483.

¹⁹⁰ Joanen and McNease 1991, p.16.

¹⁹¹ Joanen 1994b.

¹⁹² Joanen et al., 1997, p.489.

will start to look to generate income from other forms of land use, almost all of which will be detrimental to wildlife.

The overarching goal for alligator conservation, or just about any other species of wildlife, is the conservation of its habitat. To the degree the alligator can contribute towards the conservation of its wetland habitat, it needs to do so. Not only are alligators and other game species, such as waterfowl, dependent on Louisiana's wetlands, but in the late 1980s twenty-two species protected under the ESA, and twenty-eight candidates for protection under the Act also utilized the coastal zone wetlands. Economically valuable species like the alligator help to form an umbrella under which a wide array of other species are protected. Or, as Ted Joanen put it, non-game species have been "riding on the coat tails" of game species. Income generated from species like the alligator is a vital part of maintaining the viability of the wetlands that comprise the habitat for the alligator and a wide array of other species.

OPPOSITION TO CONSERVATION THROUGH COMMERCE

This logic, and the practical benefits of conservation through commerce, is, for the most part, lost on pressure groups and the FWS. Louisiana's successful alligator management program, much of which was predicated on the use of trade, represented perhaps the most serious threat to the FWS's and environmental pressure groups' narrative in which commerce and wildlife conservation are utterly incompatible. If the alligator was truly near the brink of extinction, as the FWS and pressure groups claimed and continue to claim, then legal harvests, which could only logically occur if the species was sufficiently abundant, would fundamentally undermine the case for the alligator's listing under the ESA and its predecessors. In addition, given how heavily the FWS and pressure groups had invested in supporting this narrative, Louisiana's program was seen as blasphemous. "You've got to understand, we deal with 49 states and Louisiana," an unnamed federal official stated in the early 1970s. 194 The clear implication was the federal government viewed Louisiana as the insolent child, defiant of federal authority and in need of being brought to heel.

¹⁹³ Joanen 1994c.

¹⁹⁴ Allen 1974, p.40.

As far as the FWS and environmental pressure groups were concerned, this insubordination and Louisiana's management program had to be opposed, and, at least as far as pressure groups were concerned, hopefully destroyed. The FWS and pressure groups waged their campaign against Louisiana with great fervor and effect; first by listing the alligator under the ESA and its predecessors, then keeping the alligator listed for years, and finally trying to delay implementation of rules permitting international trade.

In the mid-1970s, when Louisiana was engaged in its ongoing battle with the FWS to have the alligator delisted throughout the state, Keith Schreiner, then the head of the FWS's endangered species program, took what appeared to be a more rational view. "If private landowners in Louisiana consider alligators a nuisance, killing muskrats and nutria, then they'll kill alligators," he said. "If what we have to do to save the alligator is to make alligators valuable to landowners, then we will." Despite this platitude, Schreiner and the FWS had very little actual commitment to conservation through commerce. This was probably due to pressure from the environmental and animal rights pressure groups as well as the deep-seated belief on the part of those running the FWS and the Interior Department that commerce was incompatible with conservation. The reality is that Schreiner and his colleagues in the federal government, as well as environmental pressure groups, were responsible for erroneously listing the alligator in the first place due to their largely philosophical opposition to commerce.

Environmental pressure groups also waged an intense, if not entirely coordinated, campaign to discredit Louisiana's management program and to oppose the larger idea that commerce could be beneficial to alligator conservation. Prominent among those against commerce was Wayne King, then curator of herpetology at the New York Zoological Society, and since 1979 with the Florida Museum of Natural History (initially as Director from 1979-1986 and then as a Curator of Reptiles from 1986 to present), and longtime officer of the IUCN's Crocodile Specialist Group.

MARKET FAILURE?

¹⁹⁵ Ricciuti 1976, p.10.

One of the guiding beliefs of opponents of commerce is the notion that commerce will exacerbate the hunting of wild populations of species. In 1972 Wayne King opined of alligator commerce; "this idea is a mental trap that biologists should not fall into." To bolster his belief, King applied environmental pressure groups' anti-commerce narrative to the alligator, specifically the extinction of the passenger pigeon at the hands of market hunters. "The same thing [the extinction of the pigeon] could happen to the American alligator, notwithstanding its estimated million wild specimens," he asserted. "197 King also stated that prior to the passage in 1969 of the federal Lacey Act amendment and New York's Mason-Smith Act, "the alligator was clearly being killed faster than it could reproduce." King cites data on the price of alligator hides per linear foot in Florida as evidence that scarcity-induced price increases were driving the alligator to extinction. The problem is the prices cited by King were not adjusted for inflation, which is necessary to compare prices across time periods because, of course, prices do not remain constant. Not adjusting prices for inflation is a fundamental error and leads to data that cannot be accurately compared.

When the prices cited by King are adjusted for inflation a very different picture emerges.

Prices per linear foot of Florida alligator hide	<u>1929</u>	<u>1945</u>	<u>1970</u>
King's prices per foot unadjusted for inflation	\$0.21	\$3.25	\$6.00
King's prices per foot adjusted for inflation (in constant, 1970 dollars)	\$0.45	\$6.78	\$6.00

Adapted from: King. 1972, p.16.

While adjusting for inflation makes practically no difference between 1929 and 1945, in terms of the percentage price increase between the unadjusted and adjusted prices, it reveals that between 1945 and 1970 prices for alligator hides actually *decreased* by 12.0%. If King's thesis was correct, then a declining supply of hides due to overhunting should have been reflected in higher, not lower, prices. While there are almost certainly a number of other variables that influenced

¹⁹⁶ King 1972, p.15.

¹⁹⁷ King 1972, p.18.

¹⁹⁸ King 1972, p.18.

¹⁹⁹ King 1972, p.16.

the price of alligator hides, these are irrelevant so far as King's thesis is concerned because he makes no mention of them.

Even though King conceded that as of 1972 the alligator was not biologically imperiled and the Lacey and Mason-Smith Acts had effectively shut-down trade, he resorted to the that stock-in-trade of the anti-commerce playbook—the precautionary principle—to justify his anti-commerce stance. In King's formulation the precautionary principle meant that the alligator was imperiled by worldwide commerce in other crocodilian species because alligator hides could be "laundered" by commingling them with hides of other species.

According to King's line of thinking, trade would be disastrous not only for the American alligator but for crocodilians that were truly imperiled or were not imperiled but were from countries with weak or nonexistent law enforcement mechanisms for crocodilians. "Today, because of the international traffic in crocodilian hides—with all its aspects of smuggling and transshipment—it is impossible to consider the plight of one species, like the American alligator, without considering what is happening to all the crocodilians," King asserted.²⁰⁰ "If hunting [of the alligator] were ever to be permitted again, it must be managed in such a way that no illegal hides can ever be sold. If this restriction is not accomplished, poaching will again become uncontrolled and the alligator will decline in numbers."²⁰¹

The specter of the co-mingling of alligator and other crocodilian hides was in many ways the Interior Department's and environmental pressure groups' ace-in-the-hole argument. The co-mingling argument was based on the notion that even if legal alligator hides were allowed to enter the stream of commerce, they would likely have a detrimental impact because they could be used to launder illegally taken hides of other crocodilian species. In addition, in the minds of opponents of commerce, alligator hides would only serve to stimulate demand for crocodilian hides, and this would be detrimental to crocodilian species around the world. Therefore, opponents concluded the prudent precaution was no trade in any crocodilians.

After Louisiana had its first experimental alligator harvest in 1972, King's reaction was predictably apocalyptic. "When Louisiana opened hunting, they opened the poaching season

²⁰⁰ King 1972, p.18.

²⁰¹ King 1972, p.18.

everywhere," he stated.²⁰² The fact that only 1,350 alligators, an insignificant portion of the population, were harvested was of little concern to King because, as he saw it, that initial harvest was the trickle that was going to turn into a torrent.²⁰³ To further his anti-commerce agenda, King was a driving force behind the passage of New York's Mason-Smith Act, which banned the sale of all crocodilian hides, American alligator included, in the state of New York.²⁰⁴

King cloaked his anti-commerce agenda in the view that trade in alligators, or other crocodilians for that matter, should not be allowed until there was a worldwide "closed" system, meaning that only legally taken hides could enter the stream of commerce. King reasoned that a closed system of trade was needed because otherwise trade would exacerbate illegal commerce and the exploitation of imperiled species of crocodilians. While this might seem a reasonable stipulation, it was based on a purposely unattainable goal; a leak-proof system of commerce for alligators as well as for all other species of crocodilians around the world used in commerce. A worldwide leak-proof system for crocodilians was, and is, an impossibility because there will always be some "leakage," meaning illegal commerce, just as there is for any goods, whether alligator hides, athletic footwear, or crude oil. In short, demanding a totally leak-proof, closed system of trade for all crocodilians is a recipe to halt trade because such a system is impossible; there will always be some illegal commerce in crocodilians just like there is for just about every other type of good and commodity.

Instead of holding markets up to unattainable and unreasonable criteria, the key is to construct legal, transparent and well-policed markets so that illegal commerce is minimized. One of the best examples this dynamic is federal prohibition of alcohol in the U.S. from 1920-1933, the primary beneficiaries of which were organized crime and those who based their support for prohibition on religious grounds. These unlikely allies gave rise to the phrase "bootleggers and Baptists," which has been applied to other instances in which criminals and prohibitionists have been the unintended beneficiaries of trade bans, such as the banning of commerce for various wildlife species. With Prohibition of alcohol in place from 1919-1933, the murder rate increased markedly. When Prohibition was repealed in 1933, the rug was pulled out

²⁰² Laycock 1973, p.118.

²⁰³ Joanen et al., 1997, p.470.

²⁰⁴ Joanen 1994c.

from under bootleggers and gangsters. The murder rate declined significantly, and the repeal was a major, if not the major, causal factor in this decline.²⁰⁵ As applied to wildlife, prohibition plays into the hands of those who are least scrupulous, those who are least likely to conserve wildlife, and it plays into the hands of the prohibitionists like environmental pressure groups and Wayne King.

The salient point, however, is to craft management regimes and markets that can work in the world as it exists, not as dictated by utopian visions of markets without any leakage or other malfeasance. In this vein, it is necessary to bring as many people as possible within the ambit of legal markets so that transactions can be monitored and so appropriate action can be taken if it becomes evident that a given species of wildlife is being overexploited or if malfeasance is occurring. Otherwise, prohibition relegates wildlife commerce to the shadows of the black market where monitoring is difficult and enforcement of restrictions on trade even more difficult.

Furthermore, when a new system for regulating commerce is implemented, whether for crocodilian hides or any other product for that matter, it is bound to have problems. But if the system is never implemented then it can never be subjected to the type of real-world testing necessary to improve it. Every proverbial thousand-mile journey begins with one step, just as a system for regulating crocodilian skins must be implemented in order for it to evaluated and improved. The alternative is waiting and waiting for the ideal conditions that likely will never occur or are impossible to attain.

The basic logic of how legal markets work and why they are preferable to prohibition has eluded many environmental pressure groups and their allies in large part because prohibition was one of the foundational beliefs on which the environmental movement was built at the turn of the twentieth century. Prohibition also exerted significant power over the second environmental movement that arose in the mid-to-late 1960s, and prohibition continues to have a powerful influence over these groups and the FWS to the present day.

PROHIBITIONISTS

²⁰⁵ Jensen 2000.

Prohibitionists like King and his fellow travelers found support for their anti-commerce crusade in high places. "We look upon the [1973] season announced by the State of Louisiana as a premature action and believe, in the long range, it is probably not in the best interest of the alligator," stated Curtis "Buff" Bohlen, then Deputy Assistant Secretary for Fish, Wildlife and Parks, the assistant to the third most powerful person at the Interior Department. As documented in Section 1 of this book, Bohlen, as one of the three principle authors of the ESA, was determined to make the law as powerful as possible. As this statement reveals, part of this effort was to curtail or possibly even eliminate wildlife trade. Bohlen's anti-commerce sentiment reached their apogee when he played a key role in orchestrating the 1989 worldwide ivory ban through his work for the World Wildlife Fund-U.S.

Another leading crusader against alligator commerce was George Laycock, then Field Editor for *Audubon*, the magazine of the National Audubon Society, and currently a freelance writer. He authored a series of articles, most of them for *Audubon*, from the mid-1960s to the early 1970s, each one becoming progressively more shrill in its opposition to trade as Louisiana moved closer to its planned experimental harvest.²⁰⁷ Laycock was one of a number of people who in the late 1960s and early-to-mid 1970s wrote books about the impending extinction of numerous species in the U.S. and worldwide, even if such books contained demonstrably false information about some species, such as the alligator. Environmental writers like Laycock

²⁰⁶ Laycock 1973, p.118.

²⁰⁷ Laycock 1965; Laycock 1967; Laycock 1968; Laycock 1972; Laycock 1973

[&]quot;There is widespread agreement that the real way to stop the poaching is cut off the market for the skins—to eliminate the processing of skins into items of commerce," stated Laycock in 1968 (Laycock 1968, p.93.). After Louisiana had its first experimental harvest in 1972. Lavcock was apoplectic. While conceding that the alligator might not be imperiled in Louisiana, he noted, "Elsewhere in the South, however, the alligator is still widely considered a threatened species. And there was fear that Louisiana's action would weaken the public trust in the entire endangered species program." (Laycock 1973, p.118). So there in a nutshell is the motivation behind Laycock's campaign against Louisiana; the state's successful harvest program could let the public in on a dirty little secret—that the alligator was never threatened with extinction after all and therefore its listing under the ESA was a fraud. If word got out, this could have serious consequences for public support of the ESA because the alligator was one of the poster children used to sell the Act. In the same article in which he admitted the alligator was a prop for the ESA, Laycock also stated that Louisiana banned hunting in 1965 and that the 1969 Endangered Species Conservation Act "made it a federal crime to ship across state borders any wildlife taken in violation of state laws." (Laycock 1973, p.117). In reality, Louisiana banned hunting in 1962 and it was the 1969 Lacey Act amendment that criminalized interstate commerce in reptiles taken in violation of state law. That Laycock could get such basic facts about the alligator's regulatory history incorrect indicates that he was either not very knowledgeable about the alligator or his anti-commerce crusade made such details largely irrelevant to him, or, as is more likely, some combination of both of these factors. After his 1973 article, Laycock dropped the issue of the alligator, probably because he realized his position was indefensible.

tended to author these poorly researched books that contained few, if any, citations and that were little more than thinly veiled works of advocacy promoting legislative initiatives like the ESA. In his 1969 book, titled *America's Endangered Wildlife*, Laycock claimed ominously of alligators, "their future is uncertain."

In 1987, when the FWS delisted the alligator over its entire range, Laycock wrote a retrospective article for *Audubon*.²⁰⁹ In marked contrast to his previous writings, he all but admitted that the alligator was a case of data error and that Louisiana's commerce-based conservation efforts were successful. Instead of his previously sneering attitude towards Louisiana, in this article Laycock quoted Ted Joanen at length and in a positive light. Absent were the anti-commerce quotes from the likes of Wayne King, Buff Bohlen, and Archie Carr that he sprinkled liberally in previous articles. Even so, Laycock still got his history wrong because he was unable to admit that the ESA had virtually nothing to do with the alligator's rebound. After the Act's passage, he claims, "the illegal kill of alligators slowed to a near halt."²¹⁰ Yet when he wrote this most recent magazine article some fourteen years after he was predicting the alligator's commerce-induced demise, Laycock made no mention of the fact that he erroneously predicted the alligator's possible extinction.

This sudden onset "amnesia" is typical of ESA advocates because they seem to perceive that their patently false claims about species will simply disappear down the memory hole. This perception is abetted by the media, most of whom are either too lazy to undertake the historical research that would expose these false claims, or are themselves advocates of the ESA and therefore disinclined to shed light on incorrect claims made by supporters of the Act, some of whom also happen to be their colleagues.

Another pillar of the anti-commerce crowd was Archie Carr, professor at the University of Florida, one of the leading herpetologists in the world, author of numerous books, and an icon of environmental pressure groups. "I think all traffic in the hides of all crocodilians should be stopped," he declared. Carr, along with others, opposed the FWS's 1977 downlisting of the alligator in Florida and certain coastal areas of Georgia, Louisiana, South Carolina, and Texas on

²⁰⁸ Laycock 1969, p.98.

²⁰⁹ Laycock 1987.

²¹⁰ Laycock 1987, p.40.

the grounds that legalized hunting would, "perpetuate and legalize the vogue for alligator hide products which conservationists are convinced need to be eliminated if most species of crocodilian are to survive."²¹¹ Carr was even opposed to raising alligators in captivity as a means to divert hunting pressure from wild populations.²¹²

The leader of much of the opposition to trade was the National Audubon Society. As can be seen in the section above on the politics of the alligator's listing under the ESA, Audubon attached special significance to the alligator. Audubon was founded at the turn of the twentieth century to fight the slaughter of plume bearing birds such as egrets, and the organization saw the alligator as a latter-day egret that served a potent symbol connecting the organization's past with its present. When Elvis Stahr became President of Audubon at the end of 1968, "the Society took an aggressive stand on banning the killing of alligators for the leather trade; the principles of opposing the use of endangered wildlife for human adornment in this case were the same as those which motivated the stand on plume birds," according to Frank Graham, Jr., then Field Editor of *Audubon* magazine.²¹³ And in January 1969 Stahr brought George Laycock onboard to help with the alligator crusade.

It is ironic that Carr levels the charge of "fuzzy thinking" at proponents of alligator farming and commerce because his critique, which contains not one shred of evidence, is a muddled argument that fails to delineate between issues surrounding ranching and those dealing with commerce. He seems to imply that ranching is not biologically sustainable. Then Carr segues into confused ramblings about market failure, specifically how markets and alligator conservation are necessarily incompatible because markets will lead to what is often termed "a race to the bottom," meaning that markets lead to resource depletion and lower standards, be they environmental, health or safety. Carr, however, was proven utterly wrong because markets were one of the key factors, likely the key long-term factor, that has insured the alligator's resurgence. Carr's charge of "fuzzy thinking" applies not only to himself but his other compatriots in the anti-trade camp. Their fundamental misunderstandings about how markets function was due in large part to philosophical opposition to trade.

²¹¹ U.S. Fish and Wildlife Service 1977a, p.2074.

²¹² "Superficially it sounds good, but there is fuzzy thinking in it. I have yet to see or hear of a workable plan for any reptile ranch that shows in realistic detail how it expects to achieve a volume of production so great that it sill do anything other than increase both demand and prices. If the enterprise is a commercial one, it will obviously do everything possible to create new markets. Just as obviously, it will not be able to satisfy these, and so will exacerbate, rather than relieve, the predicament of the natural populations" (Harrison 1973, pp. 20,22.). Carr also made the same claim, verbatim, in an article written for the National Audubon Society (Carr 1972, p.34.).

²¹³ Graham and Buchheister 1990, p.243.

In 1972 Audubon derided those who advocated trade, including former Interior Secretary Glasgow. "[S]ome...conscientious wildlife biologists have long argued that the only way in the long run to save the species is to harness the profit motive through legitimized 'alligator farming,'" Audubon stated. "The fallacy of this argument has been pointed out by Dr. Archie Carr, whose preeminent knowledge and understanding of the ecology of the world's exploited great reptiles is undisputed." In 1999 this "fallacy" had proved so successful that it contributed 52% of the 390,645 classic, or highest quality, crocodilian hides traded worldwide. In addition, Carr's expertise was in sea turtles, not crocodilians. An examination of his publications reveals that he published only once specifically on the American alligator, and that was in an article for *National Geographic*, which was, and is, a popular magazine, not a peer reviewed scientific journal. Not once did he publish a scholarly, peer reviewed article on the American alligator.

CROCODILIAN INDUSTRY

Prior to launching into the next sub-topic, the regulatory history of commerce and the ESA, it would be useful to understand the rudiments of the crocodilian industry and what role the alligator played in it.

The American alligator is one of four species of crocodilians—the other three being the Nile crocodile, Indopacific crocodile, and New Guinea crocodile—that produce the highest quality hides, which are categorized as "classic" because they tend to lack the bony plates in the belly, known as osteoderms, found in the hides of other species. Osteoderms can be removed, but this is time consuming, expensive and generally results in lower quality leather.²¹⁷

The crocodilian hide industry is hourglass shaped, meaning that there are many producers of hides at one end, very few processors, or tanners, in the middle, and many fabricators and

²¹⁴ National Audubon Society 1972.

²¹⁵ MacGregor 2002.

²¹⁶ Carr 1976. A list of Carr's scholarly publications can be found at,

http://www.flmnh.ufl.edu/natsci/herpetology/turtcroclist/carrpubs.htm accessed on February 3, 2005.

²¹⁷ Fuchs et al., 1989.

vendors of tanned products at the other end.²¹⁸ The main reason for this is that crocodilian hides, including the alligator's, are very difficult to tan. Tanners rely on closely guarded methods to transform them from raw hides into some of the world's most valuable leather for the use in such products as shoes, wallets, luggage and women's handbags.²¹⁹ Due to the difficulty tanning crocodilian hides to the highest standards, in the 1970s only a few companies possessed the expertise to tan crocodilian hides properly. In the late 1970s, the foremost tanners of crocodilian hides were in Europe, primarily France, but also Italy and Germany, and Asia, mainly Japan but increasingly Singapore.

International trade was, and is, crucially important for alligator conservation for two reasons. First is the demand side of the supply-and-demand equation. International commerce allows a wide pool of people to purchase alligator hides, and with more buyers bidding for hides, this leads to more competition, which usually leads to producers to obtaining higher prices. Second, international commerce was especially important in the case of the alligator because in the late 1970s only foreign tanners had the ability to tan to the highest standards, and hence fetch the highest prices, and to handle large volumes of hides. As the volume of hides increased, this need became more acute.

In the late 1970s, when the FWS was contemplating allowing alligator skins to go on the international market, U.S. tanners had neither the ability to tan the volume of alligator skins being produced annually nor the expertise to tan skins to the exacting standards demanded by the international market. U.S. tanners were, however, able to satisfy domestic demand, a major component of which was cowboy boots, which did not require hides to be tanned to as high a standard as wallets, shoes, handbags, etc.

²¹⁸ MacGregor 2002.

²¹⁹ Crocodilian hides are very difficult to tan properly because of the nature of the hide, especially when compared to mammalian hides such as cattle. Cowhide is relatively easy to tan because the hide is fairly uniform in its composition. By contrast, crocodilian hides are made up of plates that if not tanned properly can "peel" and become detached, thereby ruining the hide. A properly tanned hide will obviously not have this problem but tanning a crocodilian hide is extremely difficult, as the surface of the hide must be rendered durable enough to prevent the plates from becoming detached but the hide must also be sufficiently pliable so as to permit the type of manipulation, such as bending and stitching, that is necessary to fabricate products as diverse and hand bags and wallets. Also, for those products that are worn on the body—such as shoes, wrist watch bands and belts—the hide must also be sufficiently flexible so that it is comfortable. Due to these factors, the processes by which crocodilian hides are tanned are closely guarded secrets. Prior to the passage of the Mason-Smith Act and the ESA, there were a handful of tanners in the U.S. centered around New York City and adjacent areas of New Jersey. But with the passage of these two acts, the U.S. crocodilian tanning industry was put out of business.

An obscure but critically important issue was that it was apparently unnecessary to shave the underside of alligator hides that were used in the U.S. market. By contrast, alligator hides processed overseas were shaved. One of the steps in the tanning process that figured heavily in the American alligator's regulatory odyssey is the practice of shaving the underside of hides to make them thinner and of more uniform thickness so that hides can be more easily fabricated. A step in the fabrication process that also was important in the alligator's regulatory history is that fabricators frequently line products, such as wallets, shoes, purses and luggage, with fabric or another type of leather so as to make the products more esthetically attractive to consumers. As will become apparent, these obscure aspects of processing crocodilian hides came to play important roles in the regulatory history of efforts to make the sale of American alligator hides on the international market legal.

REGULATORY HISTORY OF TRADE AND THE ESA

The regulatory history of alligator trade, especially when the species was listed under the ESA, is very complex. The first steps in this history occurred when various states prohibited hunting alligators and implemented management regimes in the 1960s. This was followed by the passage of the Lacey Act amendment in 1969 that essentially brought illegal commerce to a halt.

After these actions, state and federal authorities took a number of steps, one of which was the passage of a number of state laws prohibiting commerce in any type of crocodilian product, including those from other countries. When compared with the ESA and CITES, these laws appear to have been less significant. The most influential of these laws was the Mason Act, a New York law passed in 1970. California and Massachusetts passed bans in 1971, followed by Illinois in 1972. The effect of these laws, especially the Mason Act, was to hinder the alligator industry. New York was the center of the U.S. fashion industry so the combination of the ESA and the Mason-Smith Act effectively shut down the U.S. alligator tanning industry and stymied other aspects of the industry, most notably the sale of raw hides to tanners from other countries. "At one time we had quality tanning and manufacturing facilities in this country, but with the classification of the alligator as endangered, most of them disappeared," stated Don Ashley, a

²²⁰ Fuchs 1989.

consultant for the Florida Alligator Farmers Association.²²¹ These state laws arguably did more harm than good by denying markets to lawfully taken alligators and by hindering efforts to use the financial incentives created by the valuable hide as a means to conserve the alligator. In fact, California will reinstate its prohibition in 2015, one of the most durable reminders of the strength of prohibitions and the damage that can be done to conservation.²²²

Following these state laws prohibiting the sale of crocodilian products, came various regulations under the auspices of the ESA. As detailed in the first footnote in this profile of the alligator, this regulatory history spanned some fifteen years, from the time the alligator was listed under the ESA in 1973 to when complete delisting occurred in 1987. The salient point about this history is that the role played by the FWS in commerce was similar to the role it played in research and management. The agency was extremely uninformed about the fundamentals of trade in the alligator the other species of crocodilians, and as a result of this the FWS did two things. First, the agency essentially adopted management techniques developed by Louisiana because these techniques were borne of years of experience and had proven to be sound. Second, this lack of knowledge, coupled with the agency's long standing bias against wildlife commerce, resulted in the FWS delisting the alligator on a piecemeal basis over fourteen years, during which time the agency, along with another federal regulatory body, promulgated overly restrictive regulations that stymied trade and unnecessarily delayed delisting.

The initial event in the saga of the tortuous path to legal alligator trade occurred in 1975 when the FWS delisted the alligator in three parishes in Louisiana. As a result, alligators legally killed in these parishes could enter interstate, but not international, commerce. Predictably, the Interior Department and environmental pressure groups responded negatively to the prospect of this occurring. "It is one thing to allow the killing in Louisiana and interstate shipment. It is quite another issue to allow international shipment," stated Buff Bohlen of the Interior Department.²²³ Bohlen also let on that part of his motivation for opposing international trade was job protection. "We frankly do not want to encourage French industry to process our hides as we have employment problems in this country. And I think it is in everybody's interest to have a

²²¹ Smothers 1991.

²²² California Penal Code § 653o(b)(1).

²²³ Bohlen 1975, p.27.

local industry to do the tanning."²²⁴ At the time, however, U.S. tanners were not capable of tanning alligator hides to the high standards demanded by international markets, or of tanning the small quantity of hides produced at the time. So Bohlen's point was irrelevant and, given his track record opposing wildlife commerce in general, possibly a diversionary tactic.

Perceived problems with international trade were also raised by Clark Bavin, Chief of the FWS's Division of Law Enforcement. Bavin was very same person who would preside over Operation Falcon, the "sting" operation that was a fiasco and which is described in the profile of the American Peregrine Falcon.²²⁵ In terms of the alligator, Bavin was concerned about problems differentiating finished products made of alligator hide from products made from other crocodilian species, such as the Nile and saltwater crocodiles, which were also listed under the ESA.

UNREASONABLE REGULATIONS

When the FWS delisted the alligator in 1975 in three Louisiana parishes the agency also adopted mechanisms to regulate commerce in alligators. "The controls over the marketing of the hides of American alligators in these regulations are based on the implementation and enforcement of Louisiana's regulations," stated the FWS. These control mechanisms included the use of locking, non-reusable, non-corrodible, numbered tags, licenses so that only authorized individuals could hunt, buy and sell alligators, and all the attendant paperwork to track the movement of hides through the stream of commerce. Even though allowing trade in alligators from these three Parishes was a welcome turn of events, there were a couple problems with the rules on commerce the FWS promulgated. First, alligator meat and parts, such as skulls and teeth, were not allowed for sale because the FWS was apparently overwhelmed with the issue of the sale of hides. There was, however, no logical reason why the FWS should not have permitted the sale of meat and parts, but for the agency's harmfully cautious approach to

²²⁴ Bohlen 1975, p.29.

²²⁵ Bavin 1975, pp.26-27.

²²⁶ U.S. Fish and Wildlife Service 1975g, p.44414.

alligator commerce. In addition, the FWS required buyers, tanners and fabricators to obtain permits federal permits, which added yet another layer of red tape.

Second, the FWS's permit application required buyers, tanners and fabricators to submit very detailed information about the organization of their businesses, operating practices, employment experience, systems for bookkeeping, and previous wildlife law violations of any employee or anyone associated in any way with the business. Fabricators were further required to document the relationship between a given hide and all finished product(s) for that hide, as well as to attach a tag supplied by the FWS to each finished product.²²⁷

These requirements, especially documentation of all uses of a given hide, were incredibly onerous for fabricators. The documentation requirement was no problem for buyers and tanners, because they dealt with whole hides and so would only be required to document the use of one hide per alligator. Fabricators, one the other hand, faced the very daunting prospect of being required to attach a FWS issued engraved label to each item for which each alligator hide was used and to be able to account, through paper work, for every single item created from a given hide. A single hide could potentially be made into scores of products, especially small items such as wrist bands for watches, wallets, and key fobs. The potential documentation associated with just one hide could be immense and overwhelming for fabricators.

A fabricator might have to use tens of tags and fill out pages of paper work for each individual product made from just one hide. In the course of a year, a fabricator might make hundreds, if not thousands, of individual items, each one of which would require extensive paper work to comply with the FWS's system. Clearly, these were unreasonable and unworkable requirements because fabricators could well spend most of their time filling out paper work, something they could not afford to do. The documentation requirement for fabricators was all the more absurd because stringent permitting, paper documentation and identification tagging was already required at the first two steps of the supply chain (buyer and tanners). This virtually ensured a strict and secure chain of custody by the time hides reached fabricators.

The FWS's rule was, however, a clear demonstration of the agency's ignorance of how the alligator hide market and fabrication businesses functioned, which was not surprising given the FWS's general ignorance of alligator biology, ecology and conservation. On the other hand, the FWS's requirements did not appear to have been very problematic for U.S. fabricators

 $^{^{227}}$ U.S. Fish and Wildlife Service 1975g , p.44428.

because they primarily made large items, especially cowboy boots. These requirements for fabricators would become very problematic a few years later when the FWS imposed them as a condition for allowing international commerce.

In 1978 the FWS floated the idea of lessening the regulatory burden on the hide industry by eliminating the requirements regarding applicants' business organization, operating practices, employment experience, systems for bookkeeping, and previous wildlife law violations. While this was welcome news for some in the industry, it was overshadowed by the FWS's proposed new regulation for tanners.²²⁸

The agency, apparently heeding criticisms of its unreasonable requirement for fabricators to attach an engraved tag to every finished product, instead proposed to shift the burden to tanners who had to deal with individual hides, not scores of fabricated products. While this was a move in the right direction, because of the hourglass shaped nature of the crocodilian hide industry, the FWS's proposal was totally impractical and yet again demonstrated the agency's ignorance of the crocodilian industry. The FWS proposed to require tanners to cover the entire underside of each hide (i.e., every couple of square inches) with indelible ink, applied with a stamp issued by the FWS, which would indicate the hide was legally taken.²²⁹ This proposal was simply another onerous and unworkable requirement that the FWS appeared to be oblivious of because of the agency's ignorance of the industry.²³⁰ As with the rule promulgated in 1975, this requirement does not appear to have had a significant impact on domestic tanners or fabricators because of the types of products fabricated. The combination of the low output and large items produced in the U.S. meant that applying such a stamp would not be terribly burdensome.

But this requirement would cause major problems in 1979 when international trade was being debated because foreign fabricators produced much higher volumes, and many of the smaller items, of alligator hide products than U.S. fabricators. Covering thousands or tens of thousands of hides with indelible ink stamps, and ensuring that such stamps were visible on every fabricated product, not matter how small the product, was untenable, especially because fabricators tended to line products with cloth or another type of leather that would obscure the ink stamps. Furthermore, the mechanics of alligator processing made this requirement

²²⁸ U.S. Fish and Wildlife Service 1978d, p.45514.

²²⁹ U.S. Fish and Wildlife Service 1978d, p.45514.

²³⁰ U.S. Fish and Wildlife Service 1978d.

impossible because the ink stamps had to be applied to hides prior to shaving. But shaving would remove the stamps, a catch-22 situation the FWS appears not to have been aware of but which demonstrated the agency's ignorance of the industry.

INTERFERENCE BY BOHLEN

The FWS did not act on these proposals until 1979 due in part to interference from Buff Bohlen of the Interior Department. In both the 1978 proposed rule and the 1979 final rule, he was identified as being the point person handling the evaluation of Louisiana's petition to delist the alligator in the state's southern parishes (Lafourche, St. Charles, Jefferson, Plaquemines, St. Bernard, and St. Tammany) but for the three parishes the FWS had already delisted in 1975. The mention of Bohlen by name is remarkable. In all of the delisting and downlisting actions for the alligator, and indeed for all of the species profiled in this book, as well as other species of which the author is aware, never has such a high ranking official from the Interior Department, much less any of the bureaucrats at the FWS who run the endangered species program, been named in the body Federal Register rule, other than as a contact person for further information, and never has anyone been explicitly cited in the body of the rule as being the point of contact for a petitioner.

This apparently unprecedented situation is an indication of two things. First, that people at the highest levels of the Interior Department were intensely interested in the alligator. Second, this interest seems to have had much to do with Bohlen, one of ESA's three primary authors who surreptitiously help make the Act such an onerous piece of legislation. After leaving Interior, Bohlen held a number of conservation related jobs, including a stint as Senior Vice President at the World Wildlife Fund where he orchestrated the organization's role promoting the 1989 international ban on elephant ivory sales despite that the parent organization's Southern African regional office strenuously objected because controlled commerce in ivory provided important incentives to conserve elephants and their habitat. This argument lost out to people like Bohlen who were driven by a combination of their desire for power and a philosophical viewpoint in which commerce and wildlife conservation were simply incompatible. Seen in this light, Bohlen's involvement in the regulations for trade in American alligator hides and products makes sense. As would occur more than a decade later in the case of the African elephant,

Bohlen was apparently immune to the argument that trade in alligator hides and products was crucially important to conservation efforts for the species, especially efforts in Louisiana. Even though he ultimately failed, Bohlen was successful in throwing up roadblocks that stymied Louisiana and trade in alligator hides.

By the late 1970s states other than Louisiana, most notably Florida, were growing increasingly exasperated with alligator's continued listing under the ESA. In addition, these states were frustrated over the FWS's apparent lack of concern for them, specifically that alligator conservation was labor and capital intensive, to say nothing of the difficulty convincing people to conserve a dangerous species of wildlife.²³¹

INTERNATIONAL TRADE

1979 was the watershed year for alligator commerce, as the FWS finally allowed international trade of hides. In addition, the FWS permitted sale of meat and parts, but only for intrastate commerce. ²³² While welcome, this provision seriously hampered the ability of the alligator industry, especially in Louisiana which at the time had the most well developed industry, to obtain top dollar for meat and parts because the market was restricted solely within the state. The FWS took over a year to revise the rule and allow interstate commerce. ²³³ In 1985 the FWS finally allowed international sale of meat and parts, six years after it should done so. ²³⁴ But the most significant event was that the FWS finally allowed hides to be exported.

²³¹ "It is now fairly well agreed by everyone concerned that he alligator population decline never reached a low enough level to merit placing it on the endangered list," observed James Keeler, Chief of Wildlife Research for the Game and Fish Division of the Alabama Department of Conservation and Natural Resources. "Hasty action and federal insistence allowed it be placed on the endangered list... Two letters from the Governor [of Alabama] requesting that it be listed as threatened finally received one reply. The answer implied that insufficient data were available to declassify it. To our knowledge, no attempt to collect information on the alligator population in Alabama by the federal government has ever been carried out. However, two years were spent by an Alabama Game and Fish biologist collecting population information on this species. In recent years two attacks by alligators on people on coastal parks and their taking of numerous pet dogs did not endear this animal in the hearts of Alabama residents" (Keeler 1977, pp.413-414).

²³² U.S. Fish and Wildlife Service 1979m.

²³³ U.S. Fish and Wildlife Service 1980b.

²³⁴ U.S. Fish and Wildlife Service 1985c.

While international trade in hides, meat and part did eventually occur, it was far from a foregone conclusion. The struggle to make international trade possible provides a revealing look at how the federal government and pressure groups operate. A combination of opposition to trade from the U.S. government and environmental pressure groups, coupled with a bureaucratic fight in the federal government over who had authority over trade, put the long-awaited goal of international commerce in jeopardy. Opponents of commerce knew the tide was turning against them; international trade was all but inevitable with the alligator's downlisting under CITES (Convention on International Trade in Endangered Species) in early 1979. Even so, opponents were determined to make a last gasp effort to halt or stymie international commerce. CITES was and is the mechanism by which international trade in rare species, or purportedly rare species as in the case of the alligator, can occur.

The prospect of international commerce got off the ground in February of 1979 when the FWS proposed to change the alligator's status under CITES from Appendix I, under which virtually no commercial trade is allowed, especially the large-scale type involving crocodilians, to Appendix II, a less restrictive classification that permits large-scale trade, including that of alligator hides.²³⁵ Following the biennial CITES conference in March 1979, at which the U.S. proposal was passed, the FWS formally changed the alligator's status in May of the same year.²³⁶ The next step, for the federal government to promulgate a rule to implement the change that had occurred under CITES, should have been little more than a formality. However, it was not. What unfolded next was a surreal series of events in which competing bodies of the U.S. government fought over whether international commerce should be allowed, and if it were allowed under what conditions.

BUREAUCRATIC ROADBLOCKS

One apparent source of opposition to commerce came from the Interior Department, and evidence of this was apparent from Buff Bohlen's meddling in the FWS's 1978 proposed rule and 1979 final rule to delist the alligator in nine Louisiana parishes and to amend the regulations

²³⁵ U.S. Fish and Wildlife Service 1979a.

²³⁶ U.S. Fish and Wildlife Service 1979b.

governing trade. When the FWS published the final rule in 1979, all the agency did was to delist the alligator in the nine Louisiana parishes that were included in the proposed rule, and no action was taken on the contentious issue of commerce.²³⁷ Defenders of Wildlife and the Fund for Animals opposed the delisting but offered no biological rationale for doing so.²³⁸ No decision was reached on the rules governing commerce because, "[c]omments received are still being carefully reviewed by our Division of Law Enforcement and Wildlife Permit Office."²³⁹

The involvement of the Division of Law Enforcement was a bad indication because, as detailed in the profile of the American peregrine falcon, the Division underwent a change in the early-to-mid 1970s and became increasingly aggressive and antagonistic in its approach. During this time period, the Division was hiring officers, called Special Agents in the Division's new argot, with backgrounds in law enforcement, the military and clandestine operations but with very little, if any, knowledge of wildlife and wildlife commerce. Also, recall that Clark Bavin, the person responsible for the sham sting operation against breeders of peregrine falcons, was the head of the Division of Law Enforcement at this time.

Another source of opposition to commerce came from the Endangered Species Scientific Authority. The Scientific Authority was created as a result of CITES because the treaty mandated signatory nations designate both a Scientific Authority and a Management Authority to serve as their regulatory bodies for the treaty. Executive Order Executive Order 11911, signed on April 13, 1976, created both of the two Authorities.²⁴⁰ In an effort to try to ensure both of the Authorities were free to work independently, the Interior Secretary was designated as the head of the Management Authority, while the Scientific Authority was an independent body consisting of representatives of six federal agencies and the Secretary of the Smithsonian Institution. Under CITES, in order for a signatory country to engage in trade of an Appendix II or III species the country's Scientific Authority had to conclude that commerce would not be detrimental to the species. If a finding of "no detriment" was reached then the Management Authority could issue regulations that would allow commerce to occur.

²³⁷ U.S. Fish and Wildlife Service 1979g.

²³⁸ U.S. Fish and Wildlife Service 1979g, p.37130.

²³⁹ U.S. Fish and Wildlife Service 1979g, p.37131.

²⁴⁰ 41 FR 15683, April 14, 1976.

In terms of the alligator this meant that the Scientific Authority had to take the first step. With the ball it its court, in April 1979 the Scientific Authority published an Advance Notice of the final rule it intended to publish in May.²⁴¹ Unfortunately, the Advance Notice was little more than a thinly veiled attempt to preclude trade by raising several baseless or irrelevant points, one of which, as will be discussed below, was that counterfeit tags attached to hides were in widespread use.

The driving force behind the proposal, and the unsubstantiated claim that counterfeit tags were in use—a clear but crude effort to undermine the credibility of legal trade—was not the members of the Scientific Authority, but William Y. Brown, the Authority's Executive Director. As is the case with many federal interagency bodies, the members tend to have other full time jobs that occupy most of their time. The result is that the professional staffs of these bodies have a great deal of power, and this proved to be the case with the Scientific Authority. The combination of this power vacuum and Brown's allegiance to environmental pressure groups proved to be nearly disastrous for international trade in alligator hides and parts.

A brief review of Brown's career following his tenure at the Scientific Authority reveals his leanings. After his stint at the Scientific Authority, Brown went to work for a number of pressure groups where he held senior positions; the Environmental Defense Fund, the World Wildlife Fund, the National Audubon Society, and he also held the influential position of science advisor to Interior Secretary Bruce Babbitt in the mid-1990s.²⁴² Brown was also a member of the National Academy of Sciences committee that wrote a 1995 report on the ESA that was

²⁴¹ U.S. Fish and Wildlife Service 1979b.

²⁴² Brown's career included the following stops: 1973-1974, Assistant Professor of biology, Mt. Holyoke College; 1974-1977 consultant and temporary employee with the Department of the Interior, Council on Environmental Quality, and Environmental Protection Agency; 1977-1980 Executive Secretary, U.S. Endangered Species Scientific Authority; 1980-1981 Executive Secretary, U.S. International Convention Advisory Committee, a body similar to the recently abolished ESSA and which was abolished on October 13, 1982; 1981-1985, senior scientist and attorney, Environmental Defense Fund in Washington, D.C.; 1985-1994 Waste Management, Inc. (1985-1991 as Director of Government Affairs, and 1992-1994 as Vice President of Environmental Planning and Programs); 1994-1996, principal with Hagler Bailly Consulting Inc. of Arlington, VA, for which he directed international environmental programs; 1996-1997, senior fellow, World Wildlife Fund; 1997-2001, Science advisor to U.S. Interior Secretary Bruce Babbitt; January-September 2001, Vice president for science and director of Living Ocean Program for the National Audubon Society in Washington, D.C.; October 2001-January 2007, Director of the Bishop Museum, Hawaii; February 2007-January 2010, President and CEO of the Academy of Natural Sciences, Philadelphia; February 2010-January 2011, President and CEO, Woods Hole Research Center, Massachusetts; 2011-present, Nonresident Senior Fellow, Brookings Institution, Washington, D.C.

essentially a whitewash. This was not surprising given that the committee was stacked so heavily with ESA advocates such as Brown, and the details of this are in Section 3 of this book.

In the case of the alligator, environmental pressure groups were determined to stymie or even stop commerce. Along with Buff Bohlen, one of their key people on the inside of the federal government was William Brown. The basis of opposition to trade in alligator skins stemmed not from the realities of commerce but from philosophical opposition. Or, as one critic of the Scientific Authority proposal put it, the Authority, "attempts to impose its notion of ideal conditions under the guise of no detriment."²⁴³ In other words, the Scientific Authority, and its supporters in environmental pressure groups, invoked the precautionary principle to justify their philosophical objection to commerce. This the same ploy used by Wayne King to oppose commerce (i.e., commerce had to totally leak proof for it to be allowed to occur). The provisions and circumstances of the Brown's proposal to implement the CITES reclassification reveal his efforts to preclude trade.²⁴⁴ The Scientific Authority's proposal essentially precluded commerce in several ways.²⁴⁵

Not surprisingly, when the ESSA published its proposed rule in May, one of the three conditions on which it predicated a finding of no detriment was that trade occur only with countries that were signatories to CITES or countries that had not taken out reservations to any of the crocodilians listed under CITES, meaning all species, as the entire order was listed. The other two conditions were foreign buyers, tanners and fabricators had to obtain essentially the same licenses, through the FWS, as their U.S. counterparts, and the reverse side of each alligator hide had to be covered over its entire surface with indelible marks. In addition, only hides from alligators taken after June 28, 1979, the date the alligator's downlisting to Appendix II was to become effective, were to be allowed into international commerce. Lastly, to combat the problem of illegal commerce in Florida and Louisiana, then the only two states in which commerce was legal, the ESSA claimed, "there have been unsupported allegations that counterfeit tags are available" (U.S. Fish and Wildlife Service 1979e, p.31588).

While these criteria were highly problematic, the allegation of counterfeit tags was clearly intended to impugn the integrity of Louisiana and Florida by implying that these states were not carefully and competently monitoring the use of such tags. By printing this allegation in the Federal Register, William Brown, the ESSA's Executive Director

²⁴³ Lenzini 1979, p.99.

²⁴⁴ Regarding the alligator, the ESSA signaled its intentions in April 1979, with an Advanced Notice of the proposed rule it planned to publish in May, just after the alligator was downlisted under CITES, but before downlisting had been implemented by the FWS. The ESSA stated that it would consider two general criteria on a finding of no detriment; distinguishing alligator hides from other crocodilian hides, and whether trade in alligators would "promote exploitation of other species" (U.S. Fish and Wildlife Service 1979b, p.25385). In order to implement the second criterion, the ESSA indicated that it would propose imposing certain conditions on trade, specifically limiting commerce to countries that were signatories to CITES (U.S. Fish and Wildlife Service 1979b, p.25385). This condition ran counter to the language of CITES, which was, and is, voluntary. As such, under CITES commerce could occur between signatory and non-signatory nations.

and author of the rule in which the allegation appeared, hoped to undermine the validity of the use of such tags, and, by extension, the entire system of trade since the tags were the cornerstone of the system. Citing hearsay evidence or rumors, as Brown did, is one of the oldest and dirtiest tricks in the book. Once the allegation is made, it can be difficult to refute, especially because the very act of refuting it lends it credence simply by keeping the issue alive. In fact, the issue of counterfeit tags had apparently been brought up by the FWS at a meeting in early 1978 between the agency, officials from Louisiana and Florida involved in alligator conservation, and a representative of the alligator industry. An acrimonious discussion ensued, with the states and industry challenging the FWS's unsupported allegation, and the issue was concluded with FWS admitting there was no evidence in support of its initial allegation (Ashley 1979, p.183). Either the ESSA was unaware that this had occurred or he chose to ignore it. If the former, it reflected his ignorance, if the latter, his perfidy.

These conditions, and the unsubstantiated, but very serious claim of counterfeit tags, were the last straw for Louisiana and the alligator industry. They had endured the alligator's listing under the ESA and, at the FWS's behest, under CITES as well. But now, with the goal of international commerce in sight, the federal government was proposing to snatch defeat from the jaws of victory.

The circumstances under which the ESSA's made its proposal were also troubling. Prior to the publication of the proposed rule, the ESSA published an advance notice of the rule in the Federal Register on April 30, 1979 in order let interested parties know the sort of information the ESSA would require so that it could "make findings in favor of export" of, among other species, legally taken American alligator (U.S. Fish and Wildlife Service 1979b, p.25384). However, the proposal was in large part Brown's proposal, and he delivered the a draft of the advance notice to the members of the ESSA only two working days before the Authority was to meet to vote on whether to approve the notice. When asked in the Congressional hearing that was held as a result of the furor created over the proposed rule about the advance notice being delivered to members of the ESSA, one of which was the Endangered Species Management Authority, the other body created in order to implement CITES and housed in the Interior Department, on such short notice, Brown answered; "It was the first time that the Management Authority was aware that I was going to specifically recommend that. It was the first time we had discussed the issue" (Brown 1979, p.130). Note that Brown uses the term "I" in reference to the advance notice, a clear indication that he was driving the agenda of the ESSA. In addition, Brown's actions, most notably the conditions he proposed to impose in order to issue a finding of no detriment, but also the actions discussed above, represented an attempt on his part to grab power away from the Management Authority. The role of the ESSA was to provide analysis and advice to the Management Authority, and the Management Authority would then decide whether, and under what rules and conditions, to issue permits for the export or import of CITES listed species. Brown tried to usurp the Management Authority's authority by engaging in rule making.

As for broad substance of Brown's actions, he admitted that the three conditions on the granting of a determination of no detriment were not motivated out of concern for the alligator but for other crocodilian species. "The scientific authority has never had a problem with the effect of exports on alligators," he stated. "We believe that the alligators are well managed in Florida and Louisiana" (Brown 1979, p.145). So Brown's objection to commerce hinged on two criteria: one, the potentially detrimental impacts on other of the world's crocodilian species, specifically those that were listed under Appendix I of CITES and were also used in commerce, primarily the Indopacific crocodile, various caiman species from South and Central America, and the Nile Crocodile from Africa; and two, the financial benefit alligators would provide to tanners of these Appendix I species, thereby supporting commerce in these species.

²⁴⁵ First, the major countries that tanned alligator hides had either taken out reservations to crocodilian species listed under Appendix I of CITES, France and Germany, or had not singed CITES, Italy and Japan. Taking a reservation meant that even though these countries were signatories to CITES they reserved the right to import hides from crocodilians listed under Appendix I because they wanted to keep their tanners in business. This state of affairs

One of the arguments offered up by Brown was that alligator hides could be tanned in the U.S. and therefore international commerce was largely unnecessary. The reality, however, was that U.S. tanners could not tan hides to international standards or even process the volume of hides produced in the U.S. in the late 1980s. Louisiana had to cancel its 1978 hunting season for alligators because domestic tanners were unable to absorb any more skins due to a glut of skins caused by the small number of hides from previous year's hunt. In June of 1979, the Florida Game and Freshwater Fish Commission offered some 1,500 hides for sale domestically but not a single one sold.²⁴⁶ By the summer of 1979, U.S. tanners had a total inventory of roughly 3,000 hides for which they had not been able to find buyers on the domestic market because it was saturated.²⁴⁷

In order to stymie trade, and hopefully halt it, the proposal written by William Brown contained a number of provisions, two of which were particularly problematic. First, was the requirement that the entire underside of each alligator hide be stamped with indelible ink marks, which was the same requirement the FWS had tried to impose. The marking proposal was absurd because only tanned hides could be marked. This is because if chemicals used in the

upset opponents of commerce because they saw these countries, especially France because its tanners dominated the industry, as a key link in the chain of commerce that was depleting crocodilians around the world. In terms of the alligator, once international commerce was allowed French companies were going to tan a large portion of the alligator hides. Opponents to commerce believed that commerce in alligators would help subsidize the imperilment of other crocodilian species by providing profits to French tanners, as well as stimulating demand for crocodilian products, and by serving as a means by which other crocodilian skins could be laundered. It is ironic that opponents of commerce were trying to use the ESSA's potential finding of no detriment as a means to bully nations that were not signatories to CITES, or had taken out reservations for crocodilians, to sign the Convention. After all, those who were opposed to commerce generally tended to object when the U.S. would use its power to browbeat other countries to do its bidding. And yet this is precisely what the ESSA was proposing to do, with environmental pressure groups's enthusiastic support.

The other two provisions of the ESSA's proposal, the requirement for foreign buyers, tanners and fabricators to obtain licenses similar to those required by their U.S. counterparts and the making of hides over their entire reverse sides, were closely related. The marking proposal was absurd because only tanned hides could be marked. This is because if chemicals used in the tanning process did not remove such marks, then shaving of the hides surely would, as would the fabricators' practice of covering the underside of hides with lining—with the upshot being that any three of these processes would erase or obscure the marks, thereby negating the supposed benefits of hide marking. The proposed marking requirement for tanners was also absurd and unnecessary for the same basic reason that the two requirements for fabricators, accounting for every piece of hide and engraved labels, were ridiculous; the stringent regulations already in place for buyers and tanners already formed the closed system that the FWS so craved.

²⁴⁶ Atkin 1979, p.179.

²⁴⁷ Atkin 1979, p.168.

tanning process did not remove such marks, then shaving of the hides surely would. Even if tanned and shaved hides were stamped with ink marks, fabricators' practice of covering the underside of hides with lining would totally obscure the ink stamps. The upshot was that any three of these processes would erase or obscure the ink marks, thereby negating the supposed benefits of stamping hides with ink. Shaving tanned hides was part of the process used by foreign tanners. If they could not shave hides, they could not process alligator hides.

Second, Brown proposed that trade in alligator hides could not occur with countries that were not signatories to CITES or with countries that were signatories but had not taken out reservations to any of the crocodilian species listed under CITES (which meant all species, because all crocodilians were listed). Yet the major countries that tanned alligator hides had either taken out reservations to crocodilian species listed under Appendix I of CITES (France and Germany) or had not singed CITES (Italy and Japan). Taking out a reservation, or exception, means that even though these countries were signatories to CITES they reserved the right to import hides from crocodilians listed under Appendix I because they wanted to keep their tanners in business. And under CITES commerce can occur between signatory and non-signatory nations. But Brown's proposal ran counter to the letter of CITES, as well as the voluntary nature of the Convention.

So the Scientific Authority's two requirements were a Catch-22 situation that was a recipe to prevent trade from occurring: alligator hides could not be exported to the countries that could process them to the high standards demanded by international markets; and even if they could be exported, it was impossible for foreign processors to comply with the requirement to mark the entire underside of all hides because such marks would not survive tanning and shaving. The only alternative was for U.S. tanners to process alligator hides, but this was not possible because U.S. tanners could not tan hides to the standards demanded by international markets. Even if U.S. tanners could meet international standards, they did not have enough capacity to process the increasing volume of alligator hides being produced in the late 1970s. The upshot of the Scientific Authority's requirement regarding CITES signatories and reservations to the Convention was that only tanned alligator hides could be exported from the U.S. Not surprisingly, Brown's proposal encountered strong opposition from foreign processors and most of those connected with the U.S. alligator industry.

The only support for the Scientific Authority's proposal, other than that from environmental pressure groups, came from the U.S. tanning industry. The Fouke Fur Company of South Carolina and Newman Tanneries of New Jersey supported the proposal purely due to economic protectionism and not out of any substantive concerns.²⁴⁸

There were, however, several mechanisms to deal with the so-called problems with commerce raised by opponents. These mechanisms capitalized on the hourglass nature of the crocodilian industry, which meant that there were a small handful of tanners at the narrow midpoint of the hourglass. This is why officials in Louisiana invented the use of the non-corrodible, non-reusable, serially numbered locking tag because officials realized that the most effective and efficient point at which to focus a management regime for trade was at its narrowest point and this meant the tanners. Since the early 1970s representatives from Louisiana and the alligator industry tried to educate the FWS on the need to focus trade management on tanners but to little avail. A combination of the agency's general ignorance about alligator commerce, coupled with its overall resistance and even hostility towards trade, resulted in the FWS's failure to grasp for years the importance of focusing trade management on tanners.

As for the objections to trade raised by the Scientific Authority in its 1979 proposal, there was already in place precisely the type of regulatory mechanism the Authority sought; the non-reusable locking tags. Because the tags remained on each hide from the point at which it was skinned through the entire stream of commerce up through tanning, they were an effective deterrent against the problem of laundering skins. Using this type of tag as the linchpin around which to organize a system of legal trade proved so effective that the FWS adopted it in 1975 when the agency first allowed commerce, albeit intrastate commerce. Other countries as well became convinced of the efficacy of the locking tag because it became one of the cornerstones of the system of international commerce in all species of legally traded crocodilians.

Even though such tags had been in use since Louisiana's initial experimental harvest in 1972, and that the FWS subsequently adopted the use of them, William Brown seemed to be unaware of this in 1979. "If it were clear that the alligators would be fully traceable through some system, which might be a licensing system, that would suggest that the marking of the inside of the hides may not be as necessary as it might have appeared, and it may not contribute

²⁴⁸ Brown 1979, p.142.

that much to whichever system that the scientific authority may require in order to make our no detriment finding," Brown asserted.²⁴⁹ Such ignorance of the existing tagging system and its significance is remarkable from someone whose very job it was to have expertise about the alligator trade.

In an effort to placate Brown, French tanners, who at the time held a dominant position in the crocodilian tanning industry, made two proposals. First, was to return whole tanned hides with tags attached to the U.S. so that they could then be fabricated. Second, was to station U.S. government inspectors in French tanneries to certify that all activity was legal. This second proposal was modeled on the existing system for meat inspection in which the U.S. Department of Agriculture stationed inspectors at overseas meat processing facilities to certify that meat exported to America met U.S. health standards. As with the Department of Agriculture's program, the French crocodilian tanning industry would incur the cost of paying for the tannery inspectors. Even though the proposal to use U.S. inspectors was very innovative, modeled on an existing and well established U.S. government inspection program, had a guaranteed funding mechanism in place, and ultimately solved the objections raised by the Scientific Authority, Brown was still unsatisfied. At this point it became clear Brown was essentially opposed to commerce.

Brown's unreasonable requirements for commerce to occur and his allegations of counterfeit tags (an allegation based on hearsay and seemingly intended to tarnish the alligator industry) were so out of line and controversial that the Scientific Authority's proposal was the sole subject of an oversight hearing held by the U.S. House of Representatives that lasted an entire day. Alligator conservationists were incensed with the Authority, specifically William Brown, and they prevailed upon Representative John Breaux of Louisiana to hold the hearing. Brown represented the last best chance for opponents of commerce. Opponents were angry and desperate because the alligator's downlisting under CITES, coupled with growing evidence from Louisiana that commerce was beneficial to conservation as well as pressure from states and the alligator industry, meant that international commerce was very likely.

²⁴⁹ Brown 1979, p.145.

²⁵⁰ Atkin 1979, p.180.

William Brown was prohibitionists' last chance to stop or stymie international trade. At the Congressional hearing, when Brown was asked whether he regarded the potential use of U.S. inspectors as a solution. "I certainly think it contributes a lot to solving the problem," he replied. "It still does not answer the question of whether exports of alligators to industries which are using endangered crocodilians is not detrimental to them." When asked to explain this assertion, he answered that a representative of one of the two largest French tanners of crocodilians hides, "told me the reason they wanted to import our alligators is to re-export them back to the United States. They do perceive us as the biggest market. That suggests...that what would happen is that alligator exports would not contribute to a limited market, but to the expansion of the market." To which he added, "one factor we might consider is that alligator exports not contribute to the profit margins of those companies" purportedly engaged in processing CITES Appendix I species. 252

With these statements Brown's true agenda finally emerged. Instead of addressing the issue of trade on its merits, and seeking to implement effective management regimes to monitor trade, such as those proposed by French tanners, Brown wanted to inflict harm on tanners or at least not contribute towards their ability to make money. However, as was pointed out to Brown, if international trade were allowed the number of American alligator hides would, at the time, constitute a small portion of all crocodilian skins tanned by French tanneries. Furthermore, as was also pointed out to Brown, these tanneries were best equipped to tan hides to the highest standards. Producers of American alligator hides needed French tanners much more than the French tanners needed American alligator hides.

Not surprisingly, the two proposals by the French tanning industry to address Brown's objections to trade—returning whole, tanned hides to the U.S. for fabrication, and stationing U.S. inspectors in French tanneries—were not incorporated by the Scientific Authority or by the FWS in the final regulations that permitted international commerce. This was an indication that the Scientific Authority and the FWS were less concerned with implementing meaningful measures to ensure that only legally taken alligators entered the stream of commerce than they were with stymieing trade. Even when the final regulations were issued, the Scientific Authority and FWS

²⁵¹ Brown 1979, p.148.

²⁵² Brown 1979, pp.148-149.

still required foreign fabricators to obtain permits from the FWS, even though such a provision was largely unnecessary (because effective control had to focus on the tanners) and burdensome (because there were many, many fabricators, and they did not have the time or resources to comply with the FWS's complex permitting process). The Scientific Authority's proposed conditions for international commerce were so unreasonable that the FWS took the unusual step of disagreeing in public with William Brown.²⁵³

LAST GASP FOR PRESSURE GROUPS

Environmental pressure groups knew that the Scientific Authority's efforts provided them with their last best opportunity to stymie trade so at the Congressional hearing held by Representative Breaux they came out in force. Notably absent from testifying at the hearing, however, were the more mainstream organizations—such as the National Audubon Society, National Wildlife Federation, Environmental Defense Fund and Sierra Club—that previously were actively involved in opposing trade. The likely reason for this is that these groups, ever aware of shifting political winds, realized international commerce was essentially a foregone conclusion and they did not want to be seen as being on the wrong side of history or to waste political capital. Instead, a number of these mainstream groups aired their opposition in written comments made in response to the Scientific Authority's and the FWS's proposed rule on

²⁵³ On the matter of procedure, the FWS's Harold O'Connor, who also was the ESSA's Chairman, abstained from voting on the ESSA's advance notice of the proposed rule because, "we believed that much of substance of the regulations fell within the prerogatives of the MA [Endangered Species Management Authority], and that they were proposed without adequate consultation." As for the substance of the FWS's disagreement with the ESSA, the agency did not believe that there should be an across-the-board prohibition on trade in alligator skins with countries that did not sign CITES or signed but took out reservations for crocodilians (O'Connor 1979, p.152). And this is what the FWS proposed on July 18, two days after the acrimonious Congressional oversight hearings at which William Brown's anti-commerce agenda was laid bare (U.S. Fish and Wildlife Service 1979j). The FWS's proposed a "rebuttal presumption of no detriment" to those countries that were signatories to CITES without reservations for crocodilians. This meant that the export of alligator hides to these countries, or businesses from these countries, would be presumed not to be detrimental but could be subject to rebuttal, or review, if there was evidence to the contrary. As for those businesses in countries with reservations for crocodilians and non-signatories to CITES, the FWS proposed to make review by the ESSA optional (U.S. Fish and Wildlife Service 1979). The FWS also proposed to replace the requirement of marking the underside of the skin with the requirement of attaching FWS issued engraved labels to each finished item, whether it be a watch ban or a piece of luggage. Fabricators would also be required to account for every scrap of a tanned hide by documenting what hide or hides went into a finished product. In addition, foreign buyers, tanners and fabricators would still be required to obtain FWS issued permits. Finally, the FWS's proposed to allow intrastate commerce in meat and other parts (U.S. Fish and Wildlife Service 1979j). While a welcome provision, it fell far short of what was truly needed, interstate, or preferably international, commerce.

international commerce. Portions of some of these comments appeared in the Federal Register, a forum in which they would almost certainly not draw public attention.

As a result of this retreat by the mainstream groups, more radical groups, specifically those concerned with animal rights and welfare, stepped into the void at the Congressional hearing. Their claims about the alligator were even more outlandish and shrill than was the typical fare from the more mainstream groups. "I think it is clear that the potential in a very serious way exists to have American alligators adding to essentially subsidized extinction of other forms of crocodilians, if these forms are traded in by the companies or nations at all," claimed John Grandy, then with Defenders of Wildlife and currently with the Humane Society of the United States.²⁵⁴ Such sentiments were, however, merely dissembling tactics. Grandy's views were essentially a rehash of those put forth by Wayne King.²⁵⁵ "The more logical and justifiable step of disallowing trade is our first priority," stated Defenders of Wildlife and the Fund for Animals.²⁵⁶ "There is no need to open this international trafficking in alligator hides, as there exists ample domestic markets," they added. "Indeed, prior to the tightening of restrictions in recognition of the serious plight of the American alligator, the United States was the largest market for alligator hides."²⁵⁷ This statement is similar to those made by the National Audubon Society and other environmental pressure groups about the trade in the American peregrine

²⁵⁴ Grandy 1979, p.163.

²⁵⁵ The argument that legal trade in American alligators would be detrimental to other crocodilian species was nothing more than the tired argument made for over the previous decade by opponents of commerce, most notably Wayne King. "[A]s attested to by Dr. F. Wayne King, a recognized authority, in his statement at the ESSA hearing, July 10, the export of alligator hides to parties or other countries exploiting endangered crocodilians will, despite the small percentage of alligator hides, subsidize the continued exploitation of endangered crocodilians by fueling the industries which are currently dependent upon them," stated John Grandy, then Executive Vice President of Defenders of Wildlife, and currently senior vice president at the Human Society of the United States (Grandy, 1979, pp.155-156). In response the subsidization argument, Don Ashley of the Southeast Alligator Association stated: "It is...unfortunate that Wayne King is not here to voice this particular argument, which has been bantered around for ten or twelve years. Frankly, we feel that it is somewhat outdated. If you take the argument of subsidization to its logical end, you would have to ban all trade in all crocodilian species. Obviously, since what he is saying is if you allow trade in any individual species that might in and of itself lead to the destruction of another species. The only way to logically end all subsidization would be to ban all trade" (Ashley 1979, p.178).

²⁵⁶ Defenders of Wildlife and Fund for Animals 1979.

²⁵⁷ Defenders of Wildlife and Fund for Animals 1979.

falcon. Such statements exhibited fundamental ignorance of how trade for these species actually functioned.

There was, however, one of the more mainstream groups opposed to trade that did testify at the hearing; TRAFFIC U.S.A. (Trade Records Analysis of Flora and Fauna in Commerce), which was part of the program office of the World Wildlife Fund-U.S. Like the Scientific Authority, TRAFFIC cloaked its anti-commerce agenda in arguments that, to the uninformed, appeared well-reasoned but were essentially baseless.²⁵⁸

At the time when international trade was being debated, U.S. alligator hides would represent .05% of world commerce in crocodilians, or 10,000 skins, so it was absurd to object to trade on the grounds that it would subsidize the crocodilian industry. No doubt if alligator hides represented a substantial portion of world trade, opponents also would have objected on the same grounds they did when alligator trade represented a miniscule portion of trade. Raising just such an objection was Nicole Duplaix, the first director of TRAFFIC. "This in itself is worrying. It is too easy to lose track of 10,000 skins on the world market particularly when non-CITES countries are involved. One legal skin can give rise to hundreds of products by reproduction of export permits" (Duplaix 1979, p.158). TRAFFIC U.S.A. had just been set up in 1979 and positioned itself as the foremost expert on wildlife trade in America. However, as is clear from Ms. Duplaix's statement, its association with WWF meant that it was a thinly veiled effort to oppose wildlife trade.

However, the ESSA basically conceded this point about the small number of alligator hides in its export proposal. "[I]ts export may not significantly affect such a large market: (U.S. Fish and Wildlife Service 1979e, p.31589). The ESSA also stated, "the question of possible stimulation of trade in other crocodilian species has been raised. A detailed study of this question would require considerably more data than are available" (U.S. Fish and Wildlife Service 1979e, p.31588). So according to William Brown, and in contrast to other statements he made, 10,000 alligator skins would have a negligible impact on world trade, and moreover the data for such an analysis did not exist.

A further point is that at time that those opposed to commerce objected to the export of 10,000 alligator skins, they raised no such objection over the fact that in 1978 Papua New Guinea exported 24,000 crocodile skins under the auspices of CITES. This likely occurred for a couple of reasons. First, the export of almost 250% more skins from Papua New Guinea than was initially anticipated from the U.S. did not stimulate illegal commerce and so undercut this argument by opponents of commerce. Second, the United Nations, through the U.N. Development Program and the Food and Agriculture Organization, was heavily involved in establishing the crocodile farms that supplied most of skins exported from Papua New Guinea. The combination of the U.N. and a program to benefit poor people in the third world—two things generally favored by the type of people opposed to commerce—meant that Papua New Guinea's export of hides was given a free pass while the U.S.'s was not. This inconsistency is emblematic of environmental pressure groups. They can treat the third world and its people who want to utilize wildlife with mawkish deference while at the same time opposing people in the first world who also want to use wildlife.

TRADE FINALLY ALLOWED

In the end, however, all the efforts to derail international trade in alligator hides were unsuccessful. The next step in the saga of the alligator and international trade came on October 12, 1979 when both the FWS and the Scientific Authority published separate rules that allowed international trade to occur. The conditions under which the Scientific Authority issued its finding of "no detriment" and the conditions under which the FWS, as the Management Authority, would grant permits were identical and revolved around two main issues. First, foreign buyers, tanners and fabricators were required to obtain FWS issued permits, and only holders of such permits would be allowed to engage in commerce of alligator skins or products. In addition, foreign buyers, tanners and fabricators were required to keep extensive records of their transactions not only in alligators but all species of CITES Appendix I crocodilians. Second, fabricators were required to affix a FWS issued label to each fabricated item. As mentioned, the inclusion of fabricators in the process and the requirement that they attach a FWS label to each product were redundant and unnecessary because it was very difficult for illegal alligator hides to reach fabricators in the first place.

Despite all of these largely unnecessary requirements for international commerce to occur, the Scientific Authority and its allies in environmental pressure groups were still not happy. The Scientific Authority grudgingly gave its approval for international commerce but not before firing off a few parting shots.²⁶⁰ "Wayne King...states that 'the highest price ever paid for

²⁵⁹ U.S. Fish and Wildlife Service 1979m, p.59083.

The ESSA wanted to require the marking of the underside of skins but reluctantly conceded on this point, but tried to portray the 10,000 alligator hides anticipated to enter commerce upon promulgation of the final rule, which would make these hides .05% of all crocodilian hides in commerce, as having a very significant impact on the market. The ESSA stated, "these figures do not accurately convey the potential impact of alligator exports." In support of this assertion were four points: "alligator hides are more valuable than many other traded hides (e.g., caiman); some tanneries "might buy a proportion of these 10,000 hides that is several-fold greater than one-half of one percent of their business"; the likely increase in the number of alligator hides exported; and "even a very small contribution to the profits of a business may have a significant effect upon its success." As the second and fourth points make clear, the overriding factor driving the ESSA was the desire to stymie those engaging in alligator commerce (U.S. Fish and Wildlife Service 1979n, p.59093). The ESSA saw the glass of commerce as half empty, meaning that their view of commerce was shaped by a pessimistic view of commerce. The ESSA also took a final shot at its critics by qualifying its statement about counterfeit tags. "[T]aging systems now used by the states of Louisiana and Florida for alligator hides are *apparently* [emphasis added] reliable and no allegations to the contrary have been substantiated" (U.S. Fish and Wildlife Service 1979n, p.59093).

American alligator hides (i.e., \$21.00 per foot) was paid by a U.S. company in 1977," stated the Scientific Authority. "Dr. King states that the U.S. market will be saturated until the metropolitan states (e.g., New York) allow the sale of alligator hides. He also states that high quality tanning and manufacturing is possible in the U.S." 261

Like a myth, the notion that high quality tanning could be done in the U.S. and the legendary highest priced alligator hides lived on. Not only was the legendary highest price paid inaccurate, but it was also irrelevant to the issue at hand because that price was an aberration. In 1977 at an auction in Florida, a French tanner apparently bluffed a U.S. tanner into massively overpaying for a group of alligator skins, but the price was \$17 per foot, not the \$21 claimed by the Scientific Authority. Bluffing is a common tactic at auctions, and it is used by knowledgeable bidders to try to get other less knowledgeable bidders to overpay, overextend themselves financially, and hopefully put themselves out of business. The more knowledgeable bidder then benefits because less competitors mean more business for him and hopefully lower prices. Two years after the U.S. tanner overpaid, he was reportedly still in possession of most, if not all, of these alligator hides because of his inability to make a profit off them, to tan hides to international standards, and to process the large number of hides he had purchased. And the process the large number of hides he had purchased.

Despite this, opponents to trade were bent on portraying the excessive price paid by the hapless tanner as evidence the U.S. tanning industry was so robust that a domestic tanner was able to out-bid foreign competitors, and therefore international trade was unnecessary. The fact

Standing shoulder-to-shoulder with the ESSA was environmental pressure groups. While the more mainstream members of the pressure groups refrained from testifying at the Congressional hearing, they supported in writing the ESSA's written proposals. In support of the ESSA's desire to require the making of the inside of hides and the licensing of foreign fabricators were, among others, Wayne King, the Environmental Defense Fund Defenders of Wildlife, National Audubon Society Fund for Animals, IUCN, TRAFFIC (USA), New York Zoological Society, and the Florida Audubon Society (U.S. Fish and Wildlife Service 1979n, p.59093).

Furthermore, in the final rule, the ESSA gave considerably more prominence, as measured in amount of column inches as well quoting from comments on the proposed rule, to environmental pressure groups than to the two other cohorts of commenters, state wildlife agencies and the alligator and crocodilian industry. Not surprisingly, while pressure groups were in favor of the ESSA's positions, the wildlife agencies and the industry were not.

²⁶¹ U.S. Fish and Wildlife Service 1979n, p.59089.

²⁶² Information on the price can be found at; Ashley and David 1987: Information on the French tanner can be found at; Atkin 1979, p.179.

²⁶³ Atkin 1979, p.179.

that the price of \$21 per foot was an anomaly was of little if any concern to opponents of trade. In a similar departure from reality was Wayne King's implication that U.S. tanners could produce finished hides that could compete with the highest quality hides produced by foreign tanners.

In 1979 when the federal government finally allowed international commerce to occur the states and alligator industry were relieved. But they were dismayed by the FWS's and Scientific Authority's unreasonable requirements, specifically the permitting requirement for fabricators and the use of FWS labels attached to every fabricated product.²⁶⁴

On the up side, at the end of 1979 Congress amended the ESA, and one amendment was to transfer power over the Scientific Authority to the Interior Department by making the Interior Secretary, through the FWS, the Scientific Authority.²⁶⁵ The meddlesome role played by the Scientific Authority in the case of the alligator seems to have contributed to this change. William Brown, however, proved harder to get rid of because another of the ESA's 1979 amendments created the International Convention Advisory Commission (ICAC), essentially the Scientific Authority without regulatory power. None other than William Brown was the named as the first director of ICAC. He left the ICAC in 1981 to take a job with the Environmental Defense Fund. In 1982 the ICAC was abolished.²⁶⁶

In 1980, due to complaints from states and the alligator industry, the FWS rescinded the requirement for fabricators to obtain permits and to attach FWS issued engraved labels to each finished item (e.g., wallet, handbag).²⁶⁷ By doing so, it finally dawned upon the FWS that the primary regulatory focus should be tanners because of the hourglass shape of the crocodilian industry. "In the process of becoming manufactured products, American alligator hides, as well as hides of other crocodilians, are funneled through a limited number of tanners worldwide who are capable of fully tanning marketable hides," stated the FWS. "At the end of this bottleneck numerous fabricators exist capable of manufacturing marketable products from those hides. Eliminating the permit requirement for fabricators would enable the Service to concentrate its

²⁶⁴ U.S. Fish and Wildlife Service 1979m.

²⁶⁵ Endangered Species Act of 1979.

²⁶⁶ Endangered Species Act of 1982.

²⁶⁷ U.S. Fish and Wildlife Service 1980b.

enforcement efforts where they are likely to be most effective—at the point where American alligator hides are tanned."²⁶⁸ These were precisely the points state officials and the alligator industry had been making to the FWS for years. Unfortunately, it took the FWS eight years to realize this, since Louisiana held its first experimental harvest in 1972 and initiated the use of locking tags on hides. While the industry and fabricators were grateful the FWS finally came to its senses by eliminating the onerous requirements for fabrications, it should not have taken the agency over a year to make this change after allowing international trade.²⁶⁹

The FWS took another five years before the agency allowed international trade in meat and parts.²⁷⁰ The fact that this did not occur six years earlier, when the agency allowed international trade in hides, is just one more example of how slow the FWS moved and how unprepared the agency was to deal with issues pertaining to alligator commerce. It is likely this lack of preparation stemmed in part from the FWS's opposition to commerce. Had the agency not been opposed to commerce then in all likelihood it would have been much more knowledgeable about how commerce actually worked. Instead, the FWS's opposition to commerce left the agency ignorant and ill prepared to deal with commerce when the issue could no longer be avoided due to the change in the alligator's status under CITES. But even in 1987, when the FWS delisted the alligator over the remaining portions of its range, the agency still maintained a regulatory role over trade for two reasons: one, the alligator was still listed under the ESA's Similarity of Appearance provision; and two, the alligator was also still listed under CITES.

CITES AND COMMERCE

It may appear that international commerce in alligator hides would have occurred earlier than 1979 but for the species' status under CITES, and therefore the FWS was not to blame for the lack of international commerce prior to action by CITES. This was not the case, as is apparent from an examination of the alligator's tenure under CITES. The U.S. heavily influenced CITES and had the U.S. wanted to change the alligator's status under CITES prior to

²⁶⁸ U.S. Fish and Wildlife Service 1980a, p.52849.

²⁶⁹ U.S. Fish and Wildlife Service 1980b.

²⁷⁰ U.S. Fish and Wildlife Service 1985c.

1979 it could have done so. But before taking a look at the alligator's tenure under CITES it would be useful to have a general understanding of the Convention.

The outward appearance of CITES is that it is controlled equally by all its member states, and when the first meeting of CITES was first convened in 1973 the U.S. was but one of twenty-one countries that signed the convention, and one of the first ten countries to ratify it. As a result of ratification, the convention came into force in 1975. In addition, when international commerce in the alligator was permitted in 1979 an additional thirty-one countries had become signatories to the convention. So by the combination of these factors, the U.S. would seem to have played a relatively minor role in CITES. Or at least America's influence was diluted by the presence of so many other countries in the implementation of CITES and the listing of the American alligator under the Convention. If this were the case then criticism of the FWS for stymicing international commerce in alligator hides under the auspices of the ESA would be somewhat unwarranted. After all, if after the ESA's passage the FWS knew that the alligator's status under CITES precluded international trade then it was perfectly reasonable for the agency to wait until the alligator's status under CITES changed before it followed suit under the ESA.

In reality, however, the U.S. heavily controlled CITES, as is apparent from the alligator's tenure under the Convention. The U.S. was one of a handful of countries that pushed to get CITES passed. As for the alligator, in 1973 the U.S. recommended it be listed under the Convention despite the lack of any specific criteria for listing species under CITES. Not surprisingly, the alligator was listed under Appendix I, as were all crocodilian species regardless of their actual status in yet another example of the precautionary principle at work. Listing criteria for species under CITES were not adopted until 1976 at the First Conference of Parties, the biennial meetings held to make amendments to the Convention.

When CITES came into force in 1975, the American alligator was, of course, still listed under Appendix I. As such, this precluded international trade from occurring. In 1978 Louisiana, with agreement from the 16 member states of the Southeastern Association of Game and Fish Commissioners, petitioned the FWS to change the alligator's status under CITES from Appendix I to Appendix II so that widespread trade could occur.²⁷¹ At the second Conference of Parties, held in Costa Rica in March 1979, the American alligator was moved from Appendix I to

²⁷¹ Joanen and McNease 1978.

II, which was announced in the U.S. on June 28 of that same year.²⁷² It was not until four months later that the FWS promulgated the regulations that allowed international commerce to occur.²⁷³ Had Louisiana not petitioned the FWS to downlist the alligator to Appendix II, it is entirely likely the FWS would not have done so, given the agency's and Interior Department's long-standing opposition to commerce.

The FWS and environmental pressure groups appear to have used CITES as a means to further their anti-trade bent. CITES provided an ideal forum for this because the Convention was more difficult to amend for those in favor of international trade, such as the state of Louisiana and the U.S. alligator industry, than the ESA. This was because, as an international body, CITES was less accessible to states and the private sector than Congress and federal agencies. In addition, the Convention was heavily influenced by opponents of trade.

The listing of the American alligator under CITES shows a couple of things. First, from its inception CITES was heavily influenced by anti-commerce environmental pressure groups. For example in 1973, John Grandy, then with the National Parks and Conservation

Association—and later with Defenders of Wildlife and currently with the Humane Society of the United States—was a member of the U.S. Secretariat appointed to negotiate the treaty.²⁷⁴ Grandy was, and remains, an ardent proponent of animal rights which means he is unalterably opposed to wildlife trade and to killing animals. When the first Conference of Parties to CITES was held in 1976, Buff Bohlen, the Deputy Assistant Interior Secretary whose opposition to commerce has been well documented, led the U.S. delegation.²⁷⁵ The only member of the delegation who was not a federal employee was none other than Wayne King, perhaps the leading non-federal opponent of alligator trade.²⁷⁶

When a "special working session" of CITES was held a year later, King was again on the U.S. delegation, and he was joined by John Grandy, as well as William Brown and Roger

²⁷² 44 FR 25480, May 1, 1979.

²⁷³ U.S. Fish and Wildlife Service 1979m.

²⁷⁴ Grandy 1979, p.153.

²⁷⁵ U.S. Fish and Wildlife Service 1976g.

²⁷⁶ Convention on International Trade 1977.

McManus of the Endangered Species Scientific Authority.²⁷⁷ Not surprisingly, McManus was, and has continued to be, a long-standing leader of environmental pressure groups. Like Brown, he has spun repeatedly through the revolving door between pressure groups and the federal government.²⁷⁸ The only pro-commerce member of the 1977 delegation was Andy Oldfield of Safari Club International, a hunting advocacy organization. The other two non-federal delegation members were fairly non-political, one of whom was affiliated with a zoo and the other with the New Mexico Department of Natural Resources.²⁷⁹

When the second CITES Conference of Parties was held in 1979, environmental pressure groups were even more heavily represented. Along with Wayne King, the U.S. delegation included Christine Stevens, long the doyenne of the animal rights movement and someone who was utterly opposed to wildlife trade, and Louis Clapper, a longtime lobbyist for the National Wildlife Federation.²⁸⁰

In June 1979, an event called the "First and Second Extraordinary Meetings of the Conference of Parties" occurred and Lynn Greenwalt, then Director of the U.S. Fish and Wildlife Service, led the U.S. delegation. After Greenwalt left the FWS in 1982, he went through the revolving door to the National Wildlife Federation where, from 1983 until his retirement in 1996, he was a Vice President.²⁸¹

Starting with the third Conference of Parties in 1981, three factors diminished the overt participation of environmental pressure groups on the U.S. delegations. One, as CITES became higher profile participation by pressure groups was sure to draw increasing attention and objection. Two, with President Reagan in the White House pressure groups lost influence.

²⁷⁷ Convention on International Trade 1978.

²⁷⁸ McManus was the White House Council on Environmental Quality during the Carter Administration, then the Center for Marine Conservation from 1980-2000 during which he was the organization's president from 1985 on, Senior Advisor for Oceans to Interior Secretary Babbitt in 2000, Director of the Missouri Botanical Garden's Center for Conservation and Sustainable Development from the Spring of 2001-2004, and then from 2004 to the present, Senior Director of Global Marine Conservation, Conservation International.

²⁷⁹ These two members were: Dr. Don D. Faust, Gladys Porter Endangered Species Zoo, Brownsville, Texas; and William S. Huey, Department of Natural Resources, New Mexico.

²⁸⁰ Convention on International Trade 1980.

²⁸¹ Convention on International Trade 1986.

Three, pressure groups had grown so powerful and successful that they no longer needed to have their employees on the U.S. delegations because the delegations, which since 1981 have consisted almost totally of federal personnel, had become shot-through with people who were *defacto* members of environmental pressure groups. For example, Jeff Curtis was a member of the delegation to the 1981 Third Conference of Parties, and currently he is Western Conservation Director for Trout Unlimited, an organization that is an enthusiastic supporter of the ESA.²⁸²

At the Fourth Conference of Parties in 1983, the U.S. delegation had on it: Donald J. Barry, a high ranking official with the Interior Department, who during his career went on to work for the World Wildlife Fund, the Wilderness Society and Defenders of Wildlife; and Steve Shimberg, then Counsel to the U.S. Senate Committee on Environment and Public Works, who, after leaving his Senate job became a Vice President with the National Wildlife Federation. Recall that Barry was the person who chortled about the ESA emanating from the Executive branch because "what you had at that time were highly progressive East Coast Republicans infecting the Nixon administration." For the Fifth, Sixth and Seventh CITES conferences, Barry was again on the U.S. delegation.

The second aspect about CITES that the alligator's listing underscored was the Convention became the international wildlife version of the precautionary principle (the notion that action must be taken to remedy a perceived problem even if the data is fuzzy or largely non-existent). In the case of the alligator, this meant that it and all other crocodilian species were listed under CITES because of the perceived threat to them from international trade even if certain species, like the alligator, was not imperiled. CITES proved to be a toxic intersection of these two ideas—opposition to commerce and the precautionary principle—because commerce was even more necessary to conserve crocodilians in most countries other than the U.S. The vast majorities of crocodilians lived, and still live, in the less developed world where the realities of poverty make land use decisions very stark. If people cannot make money off wildlife, they will

²⁸² Convention on International Trade 1983.

²⁸³ Convention on International Trade 1984.

²⁸⁴ Zakin 2001.

²⁸⁵ Convention on International Trade 1986b; Convention on International Trade 1988; Convention on International Trade 1990.

convert wildlife habitat to forms of land use from which they can earn a living, such as livestock and row crops. Or these people will hunt crocodilians without much regard for conserving them as a renewable source of income. Instead of prohibiting trade, the key is to bring as much trade as possible within the ambit of legal markets. Unfortunately, due to environmental pressure groups CITES turned out be more of a treaty to halt, rather than facilitate, trade. This is also why, as with the ESA, alligator conservation was successful in spite of CITES, not because of it.

There are a number of indications of how out of step the FWS and CITES were from the realities of species conservation, one of which became apparent in 1978 when the agency made a preliminary recommendation to reclassify the alligator to Appendix II. The FWS also recommended that a number of other species be reclassified, but these species never should have been listed under CITES in the first place. Among the species were the bald eagle in Alaska from Appendix I to Appendix II, and the American kestrel, northern harrier and mearns quail deleted from Appendix II.²⁸⁶ The bald eagle has always had a massive population in Alaska, as roughly 40-50% the species' entire population, some 50,000 birds, live in the state. The American kestrel is the smallest species of falcon in North America, and it was far from imperiled. The northern harrier, also a raptor, was "a common species" and "available data indicate a stable population," according to the FWS in 1979.²⁸⁷ The FWS not only admitted that the mearns quail was common but erroneously listed. "In view of the questionable basis for the original listing of this subspecies, the absence of significant international trade and the occurrence of populations large enough to support legal hunting in New Mexico and Arizona," the FWS decided to support deletion from Appendix II.²⁸⁸

It might appear that the FWS attempt to reclassify the eagle and delete the three other birds from the list indicated that the U.S. was keeping pace with the realities of these species' status. However, these species never would have been listed under CITES in the first place, but they were because the U.S. assented and in all likelihood submitted the proposals to list them. In the early days of the Convention countries were generally given deference over their indigenous wildlife especially if such wildlife, like the eagle, kestrel, harrier, and quail, had little in any

²⁸⁶ U.S. Fish and Wildlife Service 1978b.

²⁸⁷ U.S. Fish and Wildlife Service 1979a, p.9691.

²⁸⁸ U.S. Fish and Wildlife Service 1979a, p.9692.

involvement in international trade. The listing of these species under CITES provides yet more evidence that some species were listed under the Convention with little, if any, consideration of whether they merited such "protection."

Even though the U.S. favored reclassifying these four birds, other nations that had ratified CITES did not. Following the second Conference of Parties, only the mearns quail was accorded the status recommended by the U.S., and it was deleted from the Appendices. The bald eagle in Alaska was retained under Appendix I, and the kestrel and harrier were retained under Appendix II. 289 The reason given for retaining all three under their original status was that this was necessary for "control purposes," according to the FWS²⁹⁰ The initial listing of these species and then the refusal to reclassify them provides a cautionary lesson about the integrity of CITES. One other aspect of CITES that bears mentioning is that the Convention and the 1969 amendments to the Lacey Act share a similarity because provisions for both were attached to the 1969 Endangered Species Conservation Act (ESCA). States with alligators, especially Louisiana, advocated passing the ESCA as a means to amend the Lacey Act. In addition, the ESCA called for an international ministerial meeting to craft a Convention on the conservation of imperiled species, which became CITES. So the ESCA had a double boomerang effect on states, particularly Louisiana, as well as those in the private sector that wanted to engage in legal trade of alligator hides. The ESCA help cement the alligator's status as a species on the brink of extinction, and the Act paved the way for the passage of CITES, which hindered international trade. Both of these consequences of the ESCA did more harm than good to the alligator.

CONCLUSIONS ON CONSERVATION THROUGH COMMERCE

The use of the alligator's commercial value as a conservation tool proved to be an overwhelming success. Led by Louisiana and those in the alligator industry, the alligator's high value provided valuable funds and incentives for conserving the species and its habitat.

Despite this, anti-commerce sentiments are nothing if not durable, as they continue to be made by ESA supporters. "Until recently, the American alligator was threatened with extinction

²⁸⁹ 44 FR 25484, May 1, 1979.

²⁹⁰ 44 FR 25484, May 1, 1979.

by a powerful adversary: the world economy," claimed the U.S. Environmental Protection Agency in 1995. "The lucrative hide trade provided a major financial incentive to scour the nation's swamps and bayous for the legendary alligator and its valuable skin." This type of simplistic reasoning misses the fundamental point, which is that the alligator was not threatened by the presence of markets; it was threatened by the lack of legal markets.

Remarkably, one of the Act's most prominent and knowledgeable defenders, Michael Bean of the Environmental Defense Fund, actually contends that listing the alligator under the ESA and banning commerce were beneficial. "The American alligator is now [as of 1990] sufficiently abundant and well managed to support a sizable commercial harvest. Only a few decades ago, however, it was on the ropes because of excessive trade, uncontrolled poaching and interstate trade." He adds, "To secure the survival of this species throughout its range, trade everywhere was temporarily banned. Louisiana, where alligators were most abundant even at the nadir of the animal's fortunes, objected to these across-the-board restrictions, just as South Africa now objects to ivory controls [as] unnecessary for its own elephants." Bean concludes, "The alligator trade ban ultimately made possible, however, the recovery of the species throughout its range and the initiation of a controlled and sustainable commercial harvest." 292

These and other similar assertions are baseless, as the trade ban clearly harmed alligator conservation. Furthermore, Louisiana was the state that most actively pushed to get the Lacey Act amendment of 1969 passed, which essentially shut down illegal trade. There is one thing Bean has right, however, and that is the analogy between the ban on trade of the alligator and the African elephant because both have been detrimental to conservation efforts for these species. An additional similarity is that both bans were imposed by people with relatively little management experience and who usually lived far away from the on-the-ground realities and difficulties of alligator and elephant conservation. Armchair conservationists like Bean could afford to take such views because they bore few, if any, of the costs of managing dangerous wildlife and convincing the people who share habitat with these animals that such species should be conserved because of their economic value.

²⁹¹ U.S. Environmental Protection Agency 1995.

²⁹² Bean 1990b.

CONSERVATION HARMED BY THE ESA

Not only did the alligator's population increase for reasons unrelated to the ESA, but the Act was detrimental to alligator conservation because it halted trade and stymied research efforts. The "only thing the Endangered Species Act did was to slow-up research," asserts Ted Joanen of the Louisiana Wildlife and Fisheries Department. "I don't see anything the Endangered Species Act did for the state of Louisiana and the alligator." The ESA, "took management away from states," and it was, "a hindrance...in operations and research," he adds. The alligator's listing under the ESA put management authority into the hands of federal personnel who were very unfamiliar with alligator biology, ecology and conservation, but who were trying to assert their authority over states through the newly-passed Act. As a result, federal personnel were able to be a significant impediment to conservation programs.

Louisiana officials have long been aware of the hazards posed by federal imperiled species legislation. "Passage of the Endangered Species Conservation Act [the 1969 predecessor to the ESA]...strengthened state and local protectionist groups which are opposed to any killing of wild animals," asserted Robert Chabreck, then a professor with Louisiana State University and a member of the Louisiana Wildlife and Fisheries Commission.²⁹⁵ "Fund raising organizations attempt to attract public sympathy and thereby stimulate a mood for giving. Stories and pictures of endangered species apparently have a strong motivating force as indicated by the large number of organizations now using this theme. While many organizations do make sizable efforts to the conservation of endangered species, many others use this as a gimmick and contribute very little to this cause."²⁹⁶

When Congress passed the ESA in 1973, the Act's negative impacts on alligator conservation were immediately felt, as it shut down trade and hindered research and management programs, including Louisiana's experimental harvest. "The law...stripped states of management authority for all resident species included on the federal list. As a result,

²⁹³ Joanen 1994b.

²⁹⁴ Joanen 1997.

²⁹⁵ Chabreck 1975, p.712.

²⁹⁶ Chabreck 1975, p.713.

management and research programs were immediately stymied at the state level," noted Ted Joanen and Larry McNease of LDWF. "Even scientific studies, which were allowed through a permit system, were curtailed because detailed paperwork had to be submitted and approved by the proper federal agency prior to the initiation of a project." For example, in 1974 the state of Mississippi wanted to capture and transport alligators from Louisiana to Mississippi to augment the state's depleted populations. Even though the permit should have been quickly issued as a formality, the FWS took nine months and twenty-seven days to issue it. There are a number of other examples like this in which the FWS took months to issue permits, even for academic researchers, a process that should have taken a few weeks at most. Another example of FWS

²⁹⁹ The Following a table of research and some conservation projects needlessly delayed by FWS.

APPLICANT	PERMIT PURPOSE	DATE OF PERMIT APPLICATION TO FWS	DATE PERMIT GRANTED BY FWS	TIME LAPSE BETWEEN APPLICATION AND GRANTED
Louisiana Dept. of Wildlife and Fisheries	Delisting in southwest Louisiana (Cameron, Calcasieu and Vermillion Parishes)	3/29/74	9/25/75	18 months
Charles A. Ross (university researcher)	Capture and examine alligators for morphological data. Alligators to be released when research finished.	7/9/74	2/14/75	7 months, 5 days
Mississippi Game and Fish Commission	Capture and transport alligators from Louisiana to Mississippi for stocking purposes	8/9/74	5/6/75	9 months, 27 days
Louisiana Dept. of Wildlife and Fisheries	Ship two live alligators to Dr. A.J. Scholefied in London, England for a university research project	2/12/76	12/14/76	10 months, 2 days
Louisiana Dept. of Wildlife and Fisheries	Telemetric research in northeast Louisiana on distribution, abundance, status and nuisance complaints	2/23/76	8/25/76	6 months, 2 days

²⁹⁷ Joanen and McNease 1979a, p.6.

^{298.} Joanen and McNease 1981a, Table 1.

foot dragging is delisting petitions submitted to the FWS by Louisiana. The first petition, submitted in 1974, resulted in eighteen months of negotiations, and the result was the FWS delisted only three parishes. The second petition involved three years of negotiations, the result of which was as unsatisfactory as the first petition; only nine more parishes delisted in 1979.³⁰⁰ It would take two more years until the FWS delisted the alligator in the state's remaining 52 parishes.

The other harm the Act did was to halt and stymie trade. Following the ESA's passage, Louisiana's experimental harvest program had to stop until it could resume in 1975, but only then for the three parishes in which the FWS delisted the alligator. "Private alligator farm operations were likewise curtailed because commercial transactions were prohibited for a short while," according to Joanen and Larry McNease of LWDF. "State supported alligator research programs were terminated until permits could be evaluated and issued by federal authorities." In another blow, the ESA, coupled with New York's Mason-Smith Act essentially closed down the U.S. crocodilian tanning industry.

The state of Louisiana's compliance with myriad federal and international regulations was very costly in terms of hours spent by personnel as well as fund expended. This helped foster an antagonistic relationship between the state of Louisiana and federal authorities. "Probably the most detrimental effect of the endangered species program at our state level has been the loss of landowner, land manager, and public respect for the program," assert Joanen and McNease. "This relates directly to the way the Act was interpreted and administered. Most

Louisiana Dept. of Wildlife and Fisheries	Application to delist alligator in 27 parishes in southcentral and southeastern Louisiana. FWS only Delisted 9 parishes.	7/26/76	7/20/79	35 months, 25 days
Myrna Watanabe (university researcher)	Capture and tag alligators and take no more than twenty eggs	7/22/77	1/31/78	6 months, 9 days
Louisiana Dept. of Wildlife And Fisheries	Ship five eggs from farm raised alligators to Dr. E.J. Crossman, Royal Ontario Museum, Ontario, Canada	9/27/78	2/5/79	4 months, 8 days

Adapted from: Joanen and McNease 1981a, Table 1.

³⁰⁰ Joanen and McNease 1979a.

³⁰¹ Joanen and McNease 1979a, p.6.

private citizens can understand the rationale behind the Endangered Species program. However, they cannot understand why the program is not more responsive to their needs and desires."³⁰² Joanen also noted that private landowners "are the people who are going to detect a problem" such as illegal hunting or changes in alligator populations. But "if no one's interested," due to hunting being curtailed or halted and the resultant apathy or even antipathy towards wildlife authorities, "that's what worries me," according to Joanen.³⁰³ As Allan Ensminger of the LDWF observed, "we were the first state to close [the hunting season for alligators]. We invented the idea, rather that the Feds. We kind of view ourselves like the guy who threw a snowball off a mountain and the avalanche ran over us."³⁰⁴ Such is the reward Louisiana got for its innovative and forward-thinking alligator conservation efforts.

Despite that states, not the federal government, undertook almost all the research and conservation efforts for alligators, environmental pressure groups claim otherwise. "The US Fish & Wildlife Service worked in conjunction with southern conservation groups and state governments to monitor the health of the species to ensure its survival," asserts U.S. PIRG. "These measures allowed the alligator populations to rebound to sustainable levels, and the species was removed from the endangered species list in June 1987." A similar claim is made by Earthjustice and the Endangered Species Coalition: "In March 1967, under the authority of the Endangered Species Protection Act...the Fish and Wildlife Service listed the species as threatened. The Fish and Wildlife Service and several state wildlife agencies began planning a cooperative recovery effort. As a result of measures put in place, such as protecting their habitat and prohibiting hunting and trade in skins, the alligator began to recovery steadily." 306

Clearly, these claims are bogus and highly misleading. First, the FWS and environmental pressure groups had virtually nothing to do with alligator conservation work; the states did, especially Louisiana and Florida. Second, in all likelihood, there was very little, if any, habitat conserved at the federal level specifically for the alligator. Third, the Lacey Act, not endangered

³⁰² Joanen and McNease 1979a, p.10.

³⁰³ Joanen 1994c.

³⁰⁴ New York Times 1981.

³⁰⁵ U.S. Public Interest Research Group, ND.: Matsumoto 2003.

³⁰⁶ Matsumoto 2003.

species legislation, was the key to shutting down trade. The fact that the amended Lacey Act was attached to the 1969 Endangered Species Conservation Act is essentially irrelevant because the Lacey Act could have been amended independent of endangered species legislation. Fourth, by pegging the alligator's conservation to the 1966 Endangered Species Protection Act (ESPA), these groups are undermining their own case for trying to credit the ESA of 1973 with the alligator's "recovery."

Under the ESPA the Departments of Interior, Agriculture and Defense were directed to conserve listed species but were given the option of not doing so if conservation interfered with the Departments' other activities. Private property owners were essentially unaffected because the ESPA's overriding purpose was to get federal agencies to conserve species on lands they controlled. The ESPA contained no punitive regulations pertaining to private land, but it did allow for acquisition of private property by the Department of Interior. The ESPA had virtually no impact on the alligator because almost all alligators have always existed on private land. Yet by invoking the ESPA, the Act's proponents are tacitly admitting that the ESA of 1973 was not responsible, and hence not necessary, for a significant portion of the alligator's conservation because the late 1960s was, according to ESA proponents, when the alligator was teetering on the brink of extinction. Fifth, in addition to being baseless, these claims contain no citations and so cannot be verified.

NEEDLESS LISTING ON PERIPHERY OF RANGE

The FWS's listing of the alligator in Arkansas, North Carolina and Oklahoma, which have always been on the edge of the species' range, was unnecessary and a waste of resources. When the alligator was delisted in 1987, the FWS admitted these states were "on the periphery of its range...and populations in these states represent less than one percent of the species' total range (based on amount of occupied habitat). Because these areas represent a small fraction of the alligator's total range, and because populations of most species fluctuate naturally along the periphery of their range...the Service believe [*sic*] that populations in Arkansas, North Carolina and Oklahoma have little bearing on the status of the species as a whole."³⁰⁷ No doubt some will

³⁰⁷ U.S. Fish and Wildlife Service 1987b, p.21060.

point out that the alligator was listed in these states in order to prevent alligator hides from other states being "laundered" through them, but this is an inadequate explanation because it fails to address the fundamental fact that the alligator's entire population never should have been listed under the ESA in the first place. In addition, species will always be uncommon or rare on the edges or their range. In many cases it is a questionable use of scarce conservation resources to protect species in these peripheral areas when funds and efforts would be better spent on areas with more optimal habitat for species that are truly imperiled.

NO RECOVERY PLAN

Even though the FWS appointed a recovery team for the alligator, the team was unable to produce a recovery plan. Recovery plans can be thought of as the blueprint for recovery, and the ESA mandates the FWS produce them unless doing so would not aid the conservation of a species. In April of 1975 the FWS designated a recovery team, the group of people tasked with writing a recovery plan for the American alligator. The FWS made a big deal of this because the alligator team was part of the cohort of the first thirty-one recovery teams designated by the agency. The FWS chose to announce the designation of these teams with a press release in order to draw attention to the nascent endangered species program: "The species announced today include animals that are in critical condition in the wild and animals with which a reasonable degree of success likely or which have been the subject of considerable field research programs for some time." To its credit the FWS appointed Ted Joanen of Louisiana as the recovery team leader. To its credit the FWS appointed Ted Joanen of Louisiana as the recovery team leader. There was, however, one hitch. "One of the biggest problems we have had is to write a recovery plan for a species that is already recovered," stated Tommy Hines of the Florida Game and Freshwater Fish Commission, and one of the recovery team members.

No recovery plan for the alligator was ever finalized; the alligator miraculously "recovered" without the "benefit" of one. In all likelihood Joanen and Hines agreed to be on the recovery team not because they thought the alligator needed a recovery plan but because, in the

³⁰⁸ U.S. Fish and Wildlife Service 1975b.

³⁰⁹ U.S. Fish and Wildlife Service 1975b.

³¹⁰ Hines 1977, p.346.

event that a recovery plan were ever written approved, they were trying to minimize the damage it might do in light of the FWS's and environmental pressure groups' ongoing efforts to stymie state conservation programs.

DELAYED DELISTING

The FWS delisted or downlisted the American alligator a total of seven times over various portions of its range. This gradual change of status is unprecedented in the history of the ESA and it was driven by three factors.

First, this process began in 1975 when the FWS proposed to delist the alligator in three Louisiana parishes and to downlist alligators in Alabama, Georgia, Louisiana (but for the three parishes proposed for delisting), Mississippi and Texas.³¹¹ The FWS's proposal was in response to a March, 1974 petition from the Governor of Louisiana to delist the alligator in the three coastal parishes and to downlist in the rest of coastal region. Yet the FWS only delisted the three Louisiana parishes.³¹² This occurred because of opposition from environmental pressure groups, which the FWS feared would sue if wide scale downlisting occurred.³¹³ Resistance from environmental pressure groups, as well as the FWS's own resistance, was driven in part by opposition or aversion to commerce. "We don't subscribe to any form of wildlife management," said an un-named spokesman for Friends of Animals, the animal rights group, in 1976. "We think the animals should be left alone."³¹⁴

Second, pressure groups also likely resisted delisting because they realized the proposal to reclassify the alligator over almost its entire range just a year-and-a-half after being listed under the ESA would call into question the validity of the species' listing in the first place. So the final decision was to save face and delist only the three parishes.

In addition, the petition from Louisiana, submitted just three months after the ESA's passage, was a source of embarrassment and annoyance to the FWS because it signified the

³¹¹ U.S. Fish and Wildlife Service 1975e.

³¹² U.S. Fish and Wildlife Service 1975g

³¹³ Ricciuti 1976, p.7.

³¹⁴ Ricciuti 1976, p.7.

state's view that the alligator was listed erroneously. This petition was but one of the salvos in the long running battle between Louisiana and the FWS. Louisiana was a thorn in the side of the FWS because the state had far more knowledge and expertise about alligator biology, ecology and management than the Service. This expertise led the state to conclude that the alligator did not merit protection under the ESA. The FWS was well aware of Louisiana's vastly superior knowledge, but the agency was loath to concede this because it was in the initial stages of building its ESA empire. Such a concession would cast serious doubt on whether the alligator merited protection under the Act and whether the FWS had adequate knowledge of endangered species in general because the alligator was such a high profile species. So the FWS adopted the tactic of delisting and downlisting the alligator incrementally, which became the *modus operandi* for the agency over the next twelve years as it put the reclassification of the alligator on the slow track in an attempt to mask the fact that the species never should have been listed under the ESA in the first place.

Third, and related to the above two factors, was that the FWS's suspicion of trade, which would occur once delisting was finalized. This reality, coupled with the FWS's ignorance about alligator management, led to agency fears that delisting would inevitably lead to widespread illegal commerce. The FWS feared alligators illegally taken in regions where the species was still listed as endangered or threatened would be laundered through those areas in which delisting had occurred. So the FWS's approach was incremental delisting and downlisting. While this may seem to have been a sensible approach, it was clearly unwarranted due to two factors. One, the alligator was not ecologically imperiled, as the FWS itself admitted in 1975. Two, a sophisticated management system for insuring that only legally taken hides entered the stream of commerce had already been developed by Louisiana and tested successfully during the state's two experimental harvest seasons in 1972 and 1973.

The next step occurred in 1977 when, owing to a status review initiated due to data gathered in response to Louisiana's 1974 petition, the FWS downlisted the alligator in all of Florida, and certain coastal regions of Georgia, Louisiana, South Carolina, and Texas.³¹⁵ This should have occurred a year-and-a-half earlier but did not because of the FWS's stalling tactics.

³¹⁵ U.S. Fish and Wildlife Service 1977a.

The following year the FWS delisted the alligator in nine Louisiana parishes. This action in all likelihood would have occurred earlier, probably prior to the 1977 downlisting in several states, but for foot dragging at the Interior Department. In July of 1976, the Governor of Louisiana submitted another petition, this time to delist the alligator in all of the state's southern parishes. However, it was not until February of 1977 that Curtis "Buff" Bohlen, then the Acting Assistant Secretary of Interior, responded by telling Louisiana that additional data in support of the petition were required. This began a maddening process for Louisiana over the next year-and-a-half in which the state sent data to Interior on three separate occasions—April 1977, December 1977 and June 1978—in response to requests from Interior. It is extraordinary that the number three person at Interior was the point person for Louisiana's petition because such minutia should have been handled by the FWS's Office of Endangered Species, which had been formed specifically to implement the ESA.

The next chapter in the alligator's saga came in 1981 when the FWS delisted alligators in those areas of Louisiana from which they had not previously been delisted. While this was a welcome development, it fell far short of what should have happened; delisting over all of the alligator's range. By this point, the FWS's foot dragging on delisting was so obvious that it even drew a rebuke from Howard Campbell, then the Chairman of the IUCN (World Conservation Union) Crocodile Specialist Group, and a professor at the University of Florida:

"My only reservation is with regard to the relative abundance of the alligator in the areas proposed (for delisting) as compared to areas not included in the proposal. There are many areas in Florida and some in Georgia and Texas that have full as many 'gators and many of these areas have quite a few more 'gators than do these Louisiana areas. It strikes me as quite inconsistent and not at all to the Service's credit to see the alligator with such a hodge-podge of status areas which bear so little resemblance to the actual abundance of the species in the various areas. I would recommend that the Service cease dealing with the 'gator in this crazy-quilt fashion and prepare a range wide reclassification that recognizes the actual data available"

³¹⁶ U.S. Fish and Wildlife Service 1981a, p.40665.

The Crocodile Specialist Group is acknowledged as the world's foremost authority on crocodilians, and as chairman Campbell's views on American alligator conservation carried a great deal of weight. The IUCN and its various committees and specialist groups were well known for their discretion and non-confrontational attitudes. So for someone as prominent as Campbell to make such a stinging rebuke of the FWS was a telling indication of how out of step the agency was with the realities of alligator conservation.

The FWS continued to delist the alligator in piecemeal fashion. Delisting in Texas occurred in 1983, followed by Florida in 1985 and then the remaining portions of its range in 1987. By prolonging delisting, it seems the FWS was trying to do two things; conceal the fact that alligator was a case of data error and stymie legal commerce. The longer the species remained listed over portions of its range the more it would appear that the ESA was responsible for the alligator's rebound.

ESA DID MORE HARM THAN GOOD

The ESA did more harm than good to the American alligator because the Act halted trade and stymied research and conservation efforts. This was especially true in Louisiana where the ESA and FWS halted and hindered pioneering research and management efforts. "I don't see anything the Endangered Species Act did for the state of Louisiana and the alligator," asserts Ted Joanen. The Act, "probably hurt more than helped." The main accomplishment of the ESA was it "took management away from the states."³¹⁷

The only thing positive thing the Act did that Ted Joanen can recall was to provide funds for management in Arkansas. Prior to the passage of the ESA, Arkansas, which was on the periphery of the alligator's range, was doing little or no research or conservation work. With ESA funding Arkansas was able to establish an alligator management program. But the states that were already actively managing their alligators prior to the ESA and which contained the vast majority of the entire population—Louisiana, Florida and Texas—received very little, if any, money through the ESA.³¹⁸ In the case of Florida, the ESA, "did not conserve or acquire

³¹⁷ Joanen 1997.

³¹⁸. Joanen 1997.

any land specifically for alligators," states Tommy Hines. In 1979 the Government Accountability Office (GAO), or General Accounting Office prior to its 2004 name change, claimed that significant amounts of land were acquired for the alligator, but almost all the acquisition, 91%, occurred *prior* to the ESA's passage.

Fiscal Year	Acres	Cost
	<u>Acquired</u>	
1970	14,575	\$580,200
1971	1,428	\$54,000
1972	5,107	\$208,565
1974	486	\$43,300
1975	1,693	\$49,000
1976	Not specified	\$12,000
TOTAL	23,289	\$947,065

Adapted from: General Accounting Office. 1979. Endangered Species—A Controversial Issue Needing Resolution, pp.111-112. CED-79-65. General Accounting Office; Washington, D.C.

And as for the FWS or other federal agencies using the ESA's land use restrictions for the purpose of alligator conservation, Hines said, "I know of no specific case where that was a reality." Given that the ESA was not the key to stopping illegal commerce, and that the law's punitive regulations—sections 7 and 9, which are the ESA's two powerful land and resource use control provisions—were essentially of no use to the alligator, it is unclear why the Act was necessary for the alligator's conservation. It is, after all, the ESA's ability to control use of land and water that distinguishes it and has made it environmental pressure groups' most cherished law.

Some may claim that the ESA was beneficial to the alligator because the Act was the mechanism that set up the legal and management framework by which alligator products, primarily hides, could enter the stream of commerce, especially international commerce under CITES. This, however, would be a highly misleading argument because in order to implement CITES the U.S. did not have to pass the ESA as it existed. It would have been possible for the U.S. simply to pass stand-alone legislation to implement the Convention and extend protection to domestic imperiled species.

Basically all the FWS did under the auspices of the ESA was to implement Louisiana's management techniques. Even though the FWS did this, the agency was like a meddlesome

^{326.} Joanen 1997.

novice that had to put its own imprimatur on alligator management. The results were predictable; a hodge-podge of pointless and inane regulations that stymied commerce. The FWS withdrew most of its counterproductive regulations as the agency gained knowledge of alligator commerce and conservation.

Despite the overwhelming body of evidence that the alligator is a case of data error, factors other than the ESA were responsible for conserving the alligator, and that the ESA harmed the species' conservation, there are those who contend otherwise. "The American alligator is an example of a success story," claims the FWS. "Unregulated killing for the exotic leather trade threatened this reptile with extinction. In 1987, it was taken off the endangered species list, due to the efforts of many agencies working together to save it from over exploitation."320 According to Nathaniel Reed, former Assistant Interior Secretary for Fish Wildlife and Parks, and Dennis Drabelle, a science writer; "Occasionally merely listing a species—with all the consequences listing entails—is enough to reverse the trend toward extinction. This happened in the case of the American alligator, which became endangered due to overhunting in the 1950s. When the FWS listed the species in 1966, thereby outlawing alligator hunting, several states followed suit. The elimination of hunting was all the alligator needed."321 These claims, in addition to being utterly baseless, cannot be taken seriously due to basic errors, such as Reed's and Drabelle's false assertion about hunting prohibitions. Furthermore, states were the first to outlaw hunting, Louisiana and Florida in 1962, not the federal government in 1966.

The American alligator is similar to the American peregrine falcon and the three species of kangaroo, because all are species that would have been better served had they not been listed under the ESA. Furthermore, the alligator never should have been listed in the first place because with a population low point of almost three-quarters of a million, it was never threatened with extinction, especially when Congress passed the ESA in 1973.

CONCLUSIONS

³²⁰ U.S. Fish and Wildlife Service ND, *Endangered Means*.

³²¹ Reed and Drabelle 1984, p.107.

The American alligator is a conservation success story but not because of the ESA, the federal government or environmental pressure groups, all of whom did more harm than good by halting and stymieing trade and research. Also, the alligator never should have been listed under the ESA because it was too abundant to merit the Act's protection. Credit for the alligator's conservation goes to the states and the citizens in these states, especially Louisiana, not the FWS, not the ESA, and not environmental pressure groups. It was, after all, the handful of dedicated biologists and wildlife managers, especially in Louisiana but also Florida, who undertook almost all of the painstaking research and developed the management programs that have proven so successful in conserving the alligator. This research and management programs have served as valuable sources of information for the conservation of other crocodilian species around the world. It was the states that addressed alligator conservation years before the federal government became involved. Even when the FWS jumped on the bandwagon, state-based conservation efforts continued to surpass federal efforts by such a wide margin that there is essentially no comparison. And it was the states and their citizens that were motivated to conserve the alligator because they saw the species could be a source of income and jobs.

All Louisiana got for its decades of dedicated and painstaking alligator conservation efforts from environmental pressure groups, with the National Audubon Society leading the way, was ridicule and derision. Instead of lauding people like Ted Joanen as heroes because their pioneering work helped successfully conserved the alligator, as well as other species or crocodilians around the world, through the incentives created by commerce, pressure groups opposed and mocked these innovators at just about every turn. It was easy for Audubon, other pressure groups, and their supporters to do so. Comfortably ensconced in their offices and homes in New York, San Francisco, and other urbanized areas, opponents of commerce were usually far removed from the day-to-day realities of alligator conservation.

These realities involved long hours of hard work under difficult conditions; slogging through hot and humid swamps, handling one of the most dangerous animals in North America, and trying to convince rural landowners, who could be skeptical or even hostile, to tolerate the presence of alligators and even conserve their habitat because the species could be a valuable source of income. So it was cheap and easy for environmental pressure groups, the FWS and their supporters to take pot shots at Louisiana and others advocating conservation through commerce because these critics were free from incurring the very real costs of conserving

alligators in the wild, as opposed to on paper. These armchair conservationists did virtually nothing to conserve the alligator, and, in the final analysis, did more harm than good by opposing legal commerce. The alligator is thriving today and this is testament to the enormous efforts to conserve it made by the states, in particular Louisiana, not the FWS, not environmental pressure groups, and not the Endangered Species Act, all of which ended up doing far more harm than good to the conservation of the American alligator.