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An Ethical framework for interpreting the United States Endangered Species Act

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**AN ETHICAL FRAMEWORK FOR INTERPRETING THE
UNITED STATES ENDANGERED SPECIES ACT**

CATHRYN M ELGIN

**A Thesis Submitted to the Faculty of the University of Nevada Las Vegas College
of Urban Affairs in Partial Fulfillment of the Requirements for the Degree of
Bachelor of Arts in Environmental Studies with a Biology Minor in the
Department of Environmental Studies**

Las Vegas Nevada

May 2001

DEDICATION

This is for my mother, Judy Cherry.

ABSTRACT

In this study I argue that a holistic approach is better than an individualistic approach for interpreting the United States Endangered Species Act (ESA). I propose that the use of a holistic ethical framework, based on fundamental environmental philosophy, is better in that it more effectively fulfills the ESA's goals of species and ecosystem conservation. Holistic ethics is based on concern for a community as a whole, while individualistic ethics is based on concern for the individual. A holistic approach, I argue, is more beneficial to nature than is an individualistic approach or other non-holistic approaches. I set up basic criteria for determining the effectiveness of recovery plans for species, and I use those criteria to review eight cases of threatened and endangered species listed under the ESA. I conclude that holistic approaches are parallel with ecosystem management techniques and should be used in the protection of both species and ecosystems rather than non-holistic approaches.

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LIST OF ABBREVIATIONS

ESA	The United States Endangered Species Act of 1973
NCSE	National Council for Science & the Environment
NMFS	National Marines Fisheries Service
NRC	National Research Council
TCL	Teleological Center of Life
US	United States
USFWS	United States Fish & Wildlife Service

CHAPTER 1: INTRODUCTION

The purpose of this study is to critique the implementation of a well-known piece of United States (US) legislation using the application of ethical approaches so that the interpretation and implementation of the United States Endangered Species Act (ESA) can be improved for the benefit of all species and ecosystems.

The ESA (also referred to as “the Act” for the purposes of this paper) was enacted in 1973. It is considered to be one of the most controversial Acts in United States history because for the first time in the US species other than humans are given rights that can be protected under law (Rothenberg 1992).

Though powerful, the goals of the Act and the guidelines for interpreting it are ambiguous and unclear. Federal agencies interpret the ESA at their discretion, and they often use biased measures when doing so. This can cause discrimination and inconsistency in the implementation of the Act. A system of triage is currently used in program implementation (Winckler 1995). In this context triage means the most severely endangered species will receive care *first* (emphasis added) (Winckler 1995). This means that the resources, time, and money allotted for ESA programs are spent on trying to save the most critically endangered individual species as a priority. The United States Fish & Wildlife Service (USFWS) spent 90 percent of its endangered species money on only 54 of the 639 threatened and endangered species listed in 1991 (Simmons 1997). Only the most critically endangered species are targeted in this system of triage (Winckler 1995). A majority of other more viable species populations are left unattended and subject to extinction. A viable species population is generally a population whose individuals are genetically diverse and large enough in number to successfully reproduce to leave healthy offspring. Once a species population dwindles down to only a few individuals, the

ability of the individuals to produce healthy offspring decreases, essentially marking those individuals “lost causes.” This focus to save such individuals, and thus that particular endangered species, is futile. This approach, targeting individual species and choosing the most critically endangered, is what I call an individualistic approach.

Grumbine (1992) cites other reasons why the ESA is often referred to as ambiguous. In some cases government agencies have conflicting interpretations of the ESA. The leaders of those agencies have the flexibility to interpret the law according to their own agendas. In addition, agencies implement the Act through actions that do not correspond with the orders from higher authorities, and too often there are insufficient funds to carry out species recovery (Grumbine 1992). These problems are a direct result of varying interpretations of the ESA by federal agencies. Grumbine (1992) suggests people who have been charged with the duty to interpret and implement ESA policy should try to shift the focus from the individual species to the community as a whole.

Policymakers use ethical criteria as a basis for making all kinds of decisions. These ethically-based decisions play a major role in environmental policy and permeate all of US society. Different policymakers use different ethical value sets when interpreting the ESA, allowing for vastly different approaches to dealing with recovery of threatened and endangered species and fulfilling the ESA’s other purposes.

CHAPTER 2: APPROACH

To help resolve some of the ambiguity in the ESA I propose a clear, ethical framework to help guide interpreters of the Act. This guiding framework, I argue, should be based on holistic ethics rather than on individualistic ethics. Many environmental philosophers have agreed upon certain fundamental differences between an individualistic and a holistic ethic. I define each ethic based on principles accepted by the environmental philosophical community. Then I argue that an ethical framework based on holistic ethics is a better framework to apply to the ESA than is one based on individualistic ethics.

Briefly, holistic ethics value the interconnectedness of all species, habitats, natural processes, and ecosystems above individual species (Franklin 1993). Individualistic ethics, by contrast, value each individual species and organism for its own sake (Taylor 2001).

An ethical framework for the ESA should be based on holistic ethics in order to most fully benefit the natural environment. An example of a holistic ethic is the focus on (and protection of) an ecosystem so that natural processes and habitats are conserved (Franklin 1993). Holistic implementation is more fair and complete for species and their ecosystems than is individualistic implementation. Grumbine (1994b) presents five specific goals of maintaining a healthy ecosystem, and therefore protecting species. These are 1) maintain viable native species populations in their specific habitats, 2) maintain native ecosystem types over their natural variation range, 3) maintain natural processes (including natural extinctions), 4) maintain evolutionary potential within species and ecosystems, and 5) integrate human residence in accordance with the previous four goals (Grumbine 1994b). Many authors argue that maintaining a healthy ecosystem as a whole is critical to protecting species (e.g. Grumbine 1994a). Using ecosystem

techniques with regard to endangered species often preserves many different species in a certain habitat (Miller 1996). Using ecosystem management (holistic ethics in practice) can replace the triage system and will lead to improved implementation of the ESA.

Rothenberg (1992) argues in his ecophilosophy that the ESA document itself is individualistic and compares it to more holistic environmental protection in Norway. It may be true that the very nature of the ESA is individualistic, but interpreters of the Act will be able to use the holistic ethical framework to apply sound ecosystem techniques when working to save threatened and endangered species and their critical habitats.

But how can one set of ethics be judged better than another set of ethics? In the Methods for Data Collection section I set up basic criteria for evaluating one approach to environmental policy relative to another.

The need for an ethical framework in environmental policy formulation is clear. Craig et al. (1993) suggest that environmental policy could be improved if commonly held environmental values were included in the policy process for implementation of programs. On a holistic level economic, environmental, and informational values of species are essential to consider (Meadows 2001; Smith 1976), as well as the roles species have in the evolutionary process (Rolston III 1995).

The proposed holistic ethical framework in this paper is not meant to propose a change of the actual wording of the ESA document. Some ambiguity is needed for flexibility in unanticipated circumstances. Nor is this framework meant to be the sole interpretive force behind the decisions of environmental policymakers. It is a guideline to help with the implementation of effective ESA strategies. I am not challenging the validity of the ESA as a legal document, but I do challenge the ineffectiveness of the often individualistic implementation of the Act.

The significance of this study is that it addresses a major problem with a widely used piece of US legislation. Environmental ethics, as a branch stemming from philosophy, is a relatively new field. Many philosophers have written about differing ethical views regarding the environment. This study attempts to categorize some of those views in order for them to be clearly applied to the ESA, determining which of those views will most benefit the success of the Act.

My approach to solving this problem with the ESA is both theoretical and practical. The theory aspect of this study will involve examination of the environmental philosophical literature to distinguish between an individualistic and a holistic ethic. I draw clear differences between each ethic, as well as review fundamental aspects of ecosystem management (Grumbine 1994b) in relation to a holistic ethic and effectiveness criteria comprising the greatest benefits for nature.

CHAPTER 3: METHODS FOR DATA COLLECTION

The design of this study focuses on environmental philosophical literature and ESA case studies. I am assuming the ESA document itself will not change much over time. I am also assuming the integrity of major philosophers in their field. I do not argue the merits of the philosophers' arguments, rather I will be evaluating the appropriate ethical positions to take in implementation of the Act.

First, I give an overview of the ESA and define both threatened and endangered species as well as other key terms according to the Act. Second, I examine what different environmental philosophers have written about individualistic and holistic ethics to clearly define what they are. Third, I examine eight prominent ESA cases, considering those cases from the ethical perspectives that I have described in this study. Fourth, I list a set of criteria for determining effectiveness of ESA implementation. These criteria aim to maximize benefits to nature. Fifth, I determine whether a holistic or non-holistic approach was used in each case. I determine the success of each case based on the effectiveness to incorporate ecosystem conservation in the recovery plan of the species. I then compare the scored results of the case evaluations to the hypothesis that more holistic approaches to ESA implementation are better than individualistic or other types of approaches.

CHAPTER 4: THE LITERATURE

The US Endangered Species Act

The ESA was enacted in 1973. The Act's sections relevant to the purposes of this paper are 4, 7, and 9, which cover the following main objectives: 1) to identify the species that need protection and the means to protect and recover, 2) to prevent harm to those identified species before any federal action, and 3) to prevent and punish takings of those species and harm to their habitats (Vaughan 1994). The Act was designed to prevent unnatural extinctions of organisms within the jurisdiction of the United States no matter the cost. However, the Act also contains an ecosystem protection provision (Section 2b) whereby "the ecosystems upon which endangered species and threatened species depend may be conserved" (ESA 2000). This statutory statement is the underlying basis for this paper. It is not enough to simply prevent extinction, but ecosystems are to be protected from degradation as well. I argue that more ecosystem protection (and hence a holistic approach to ESA implementation) will not only more completely fulfill the ESA's statutory requirements, but it will also decrease the individual number of species that become listed as threatened or endangered.

Since 1973 the ESA has been reauthorized seven times and amended several times as well (USFWS 2001a). The Act was last amended in 1988. The ESA has yet to be reauthorized by Congress as of 1993, although its program still receives appropriations for species conservation efforts annually (USFWS 2001a). The Act's lead federal agencies are the United States Fish & Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) (USFWS 2001a). These two agencies are supposed to work with each other and with other agencies to implement appropriate conservation techniques and recovery plans for listed species. Though a federal program, the ESA's agencies try to

work closely with state agencies to implement protection programs for listed species (USFWS 2001a).

The ESA defines an “endangered species” as any species that is in danger of extinction throughout all or most of its range in the near future (ESA 2000). A “threatened species” is any species that is likely to become an endangered species within the foreseeable future throughout all or most of its range (ESA 2000). These definitions are vague to allow for flexibility and discretion when listing a species. Another category which a species may fall under is a candidate species. A “candidate species” is one that has not yet been proposed to be listed but may eventually need to be listed as either threatened or endangered (USFWS 2000). As described above, the ESA's provisions are open to interpretation and are thus open to the influence of political biases rather than only sound science and balanced compromise (NRC 1995).

Another provision in the ESA is the takings provision in Section 9 (ESA 2000; USFWS 2000). This provision prohibits a person from taking, or harming in any way, any individual belonging to a threatened or endangered species (USFWS 2001a). Take permits may be issued to private landowners upon conservation plan approval to ease ESA restrictions in development situations.

Section 7 of the ESA discusses Interagency Cooperation (ESA 2000). It outlines the requirements and guidelines that agencies must follow when assessing the status of a species. An important part of Section 7 is the Special Provisions subsection, in which an environmental impact statement must be created so that the impacts of human activities on threatened and endangered species or their habitats in the area in question are measured and disclosed (ESA 2000).

The current policy measures taken under the ESA are somewhat different from the

actual purposes of the Act, in that interpretation of the Act has moved away from ecosystem conservation and equal protection of species under the law (NRC 1995). In addition, ESA programs can be written up on paper, but if funds are not allocated for those programs, then implementation simply stops, and species and habitats are left vulnerable (USFWS 2000).

Other Key ESA Definitions

The term “conserve” is defined in the ESA as meaning “to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary” (ESA 2000). “Critical habitat” means “the specific areas within the geographical area occupied by the species,” and “specific areas outside the geographical area occupied by the species” (ESA 2000). That means simply the range of the environment that a species lives in and visits. “Species” is defined as “any subspecies of fish or wildlife or plants, and any distinct population segment of any species or vertebrate fish or wildlife which interbreeds when mature” (ESA 2000). Another term included for clarity is “plant,” defined as “any member of the plant kingdom, including seeds, roots and other parts thereof” (ESA 2000). Furthermore, the term “take” is defined as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (ESA 2000).

The US Fish & Wildlife Service

Below Table 1 describes the number of different types of organisms that are listed as either US Threatened or Endangered or Foreign Threatened or Endangered under the ESA as provided by the USFWS (USFWS 2001b). This data does not reveal how many species are candidates simply waiting to be listed, and only 54% of those listed actually

have recovery plans. Furthermore, even though more plants in the US (736) than animals in the US (508) are listed, it is mainly the charismatic megafauna, e.g. attractive species highly visible through public attention or unique animals, that are receiving the most assistance and funding under the ESA (USFWS 2001b).

Table 1. Threatened & Endangered Species System (TESS) Data.

Summary of Listed Species						
Listings and Recovery Plans as of 28 February 2001						
<u>Group</u>	<u>Endangered</u>	<u>Threatened</u>			<u>Total Species</u>	<u>Total Species w/Recovery Plans</u>
	US	Foreign	US	Foreign		
Mammals	63	251	9	17	340	47
Birds	78	175	15	6	274	76
Reptiles	14	64	22	15	115	30
Amphibians	10	8	8	1	27	12
Fishes	70	11	44	0	125	93
Clams	61	2	8	0	71	56
Snails	20	1	11	0	32	21
Insects	33	4	9	0	46	28
Arachnids	12	0	0	0	12	5
Crustaceans	18	0	3	0	21	12
Animal SubTotal	379	516	129	39	1063	380
Flowering Plants	564	1	141	0	706	554
Conifers and Cycads	2	0	1	2	5	2
Ferns and Allies	24	0	2	0	26	26
Lichens	2	0	0	0	2	2
Plant SubTotal	592	1	144	2	739	584
<u>Grand Total</u>	<u>971</u>	<u>517</u>	<u>273**</u>	<u>41</u>	<u>1802*</u>	<u>964</u>
Total US Endangered -- 971 (379 animals, 592 plants)						
Total US Threatened -- 273 (129 animals, 144 plants)						
Total US Species -- 1244 (508 animals**, 736 plants)						

* There are 1832 total listings (1269 U.S.). A listing is an E or a T in the "status" column of 50 CFR 17.11 or 17.12 (The Lists of Endangered and Threatened Wildlife and Plants). The following types of listings are combined as single counts in the table above: species listed both as threatened and endangered (dual status), and subunits of a single species listed as distinct population segments. Only the endangered population is tallied for dual status populations (except for the following: olive ridley sea turtle; for which only the threatened U.S. population is tallied). The dual status U.S. species that are tallied as endangered are: chinook salmon, gray wolf, green sea turtle, piping Plover, roseate tern, sockeye salmon, steelhead, Steller sea-lion. The dual status foreign species that are tallied as endangered are: argali, chimpanzee, leopard, saltwater crocodile. Distinct population segments tallied as one

include: chinook salmon, chum salmon, coho salmon, steelhead. Entries that represent entire genera or families include: African viviparous toads, gibbons, lemurs, musk deer, Oahu tree snails, sifakas, uakari.
*** 9 U.S. species have dual status (USFWS 2001b).*

(<http://ecos.fws.gov/tess/html/boxscore.html>)

Federal Funding for Listed Species

Below Table 2 describes the federal funding allotted for the Endangered Species Program from 1999 to 2001. Despite the growing number of species becoming candidates for listing and becoming threatened and endangered, the budget for species conservation has risen only 17% since 1999. Even more disturbing is the fact that most of this annual funding is concentrated to help only a small handful of those listed (Miller 1996; NRC 1995; Simmons 1997; Vaughan 1994).

Table 2. USFWS Endangered Species Program Appropriations.
 (x \$1000)

	<u>FY1999Enacted</u>	<u>FY2000Enacted</u>	<u>FY2001Request</u>	<u>FY2001Enacted</u>
Candidate Cons.	6,753	7,388	8,447	7,144
Listing	5,756	6,208	7,195	6,355
Consultation	27,231	32,342	39,400	43,496
Recovery	66,077	57,363	55,297	60,954
Landowner Incentive	5,000	4,981	4,981	4,981
Subtotal	110,817	108,282	115,320	122,930
Coop. End. Species Conservation Fund	14,000	23,000	65,000	26,925
Total	124,817	131,282	180,320	149,855

(Annual USFWS Budget Justifications, House and Senate Committee Reports for FY2001, floor debates & National Council for Science & the Environment [NCSE]: www.cnies.org)

DEFINING EACH ETHIC

An Individualistic Approach

Some argue for taking an individualistic approach when interpreting the ESA. According to Taylor's Biocentric Ethic, individualistic ethics for the environment are based in part on the following statements: 1) humans are members of Earth's community and therefore not superior to nonhuman members, 2) everything in nature, including humans, belongs to a complex web of interconnections, each element dependent on every other element, 3) each organism is a teleological center of life (TCL) (which means the organism pursues its own goal and fulfills a particular niche in an ecosystem), 4) all living forms are equal based on the first three claims, and conclusion 5) each living thing deserves equal moral consideration by humans (Pojman 2000; Taylor 1981). This argument makes individuals a priority with respect to the ESA. The current system of triage used in ESA programs reflects this individualistic approach (Winckler 1995). Threatened and endangered species must go through a long and extensive process to become listed, but a common way to speed up that listing process is if the species is on the brink of extinction (Winckler 1995). The critically endangered are given top priority through the ESA. Only the most critically endangered species are focused on as a priority in this system of triage (Winckler 1995). A majority of other, more viable species populations are then left unattended and subject to extinction. This individualistic approach to conserving nature is helping only a small portion of individuals and distorts the ESA's purposes. I argue that taking a holistic approach when interpreting the ESA is better. Past and current actions of the ESA to preserve biological diversity have focused on species, but there remains the need to use an approach more oriented toward ecosystems (Franklin 1993).

A Holistic Approach

Holistic ethics are based in part on Leopold's Land Ethic (1949) along with Naess (1989) and Devall & Sessions' (1995) concept of Deep Ecology. The Land Ethic is a philosophical argument that focuses a shift of moral concern away from plants and animals toward a moral concern for the collective biotic community (Callicott 1987). Leopold's Land Pyramid is an important section of the Land Ethic that describes energy flow through the ecosystem community, something that is more important than individuals (Callicott 1987). The Land Ethic is a conservation movement that encourages harmony between humans and the land, meaning between humans and nature as a whole (Leopold 1949).

Furthermore, Deep Ecology is based on a fundamental change in the thinking of many people today. Some requests that Deep Ecology makes are that humans live in harmony with nature, recognize that nature has intrinsic value and equality, live simpler lives using less materials, realize that the earth has limited supplies, use appropriate technology and not dominating science, recycle materials, and follow minority traditions in their specific bioregions (Devall & Sessions 1995). There are eight basic principles of Deep Ecology discussed by Devall and Sessions. They are as follows:

- 1) The well-being and thriving of both humans and nonhumans has intrinsic value that is independent of the instrumental value of nonhumans for human purposes.
- 2) The diversity and richness of life contributes to the realization of these values, and this diversity and richness has its own intrinsic value.
- 3) Humans do not have rights to reduce the diversity and richness of life except to fulfill vital needs.

- 4) The thriving of humans and their cultures is directly related to the decrease of the human population, and the thriving of nonhuman life depends on this decrease.
- 5) Human interference with nonhumans is excessive and is getting worse.
- 6) Policies that affect basic economic, technological, and ideological structures must be changed from the present status.
- 7) The ideological change should be from following a higher standard of living to following the appreciation of life quality and intrinsic value of life.
- 8) Those humans who believe the previous points have an obligation to implement the changes that need to occur.

These basic principles encompass an environmental movement that calls not only for practical changes like consuming less and owning fewer material possessions but for a world view change to expand the understanding and care of nature as a whole (Devall & Sessions 1995).

What do the principles of the Land Ethic and Deep Ecology have to do with the ESA? The fundamental values behind these principles are more holistic than individualistic. An individualistic approach to the ESA helps only a select few and targets species primarily rather than ecosystems, natural processes, or communities.

Ecosystem Management as a Holistic Approach

Though one of the three purposes of the ESA calls for ecosystem conservation (Section 2b) (ESA 2000), the actual implementation of the Act has been more species-focused. To change this approach means shifting management of species to management of ecosystems. The ESA recovery process of species will be greatly improved by integrating ecosystem management into the process (Miller 1996). Ecosystem

management is more holistically-oriented and therefore corresponds with a holistic ethical framework to help guide the interpretation of the ESA. Grumbine (1994b) has identified ten dominant themes that define ecosystem management and correspond to a holistic ethic:

- 1) A focus on just one level of biodiversity is insufficient; managers must seek connections between all levels in a systems approach to nature.
- 2) Work with political actors along with scientists to define boundaries in ecosystems.
- 3) Protect all native diversity, meaning species, populations, and ecosystems but also patterns and processes in ecosystems.
- 4) Increase research and data collection, and manage and use it better.
- 5) Managers should monitor their actions to determine success or failure quantitatively.
- 6) Use adaptive management because conservation programs are learning processes.
- 7) Cooperate between local, state, and federal entities.
- 8) Change in ecosystem management needs to be organized and is inevitable.
- 9) Humans can not be separated from nature because of the influences they have on ecosystems.
- 10) Human values are a large part of ecosystem management goals.

Furthermore, Grumbine's five goals of ecosystem management (1994b) clearly show a holistic approach to the conservation of nature and should be, in my view, the serious long-term goals of the ESA. They are 1) maintain viable native species populations in their specific habitats, 2) maintain native ecosystem types over their

natural variation range, 3) maintain natural processes (including natural extinctions), 4) maintain evolutionary potential within species and ecosystems, and 5) integrate human residence in accordance with the previous four goals (Grumbine 1994b).

Effectiveness Criteria of ESA Implementation

The purpose of setting up criteria for evaluating ESA implementation is to determine whether the techniques currently used to save a species from extinction benefit nature as a whole. A species' recovery plan should fulfill the statutory obligations established by the ESA, and those include not only survival of species but also ecosystem conservation and critical habitat protection (ESA 2000).

Below are statements (goals) that apply to a species' recovery plan in relation to ecosystem conservation as well as successful recovery of the species. Applied to each ESA case that I examine, each statement receives a number corresponding to my judgment of how well each goal was achieved (**5 = strongly achieved, 4 = reasonably achieved, 3 = attempted, 2 = considered, 1 = overlooked**). This subjective evaluation is based on my reasoning drawn from my experiences and literature research. The goals are as listed:

- A. The population of the species was evaluated to determine viability, ensuring that diversity and healthy perpetuation of the species was still possible.
- B. The species' critical habitat was protected so that the species could thrive without human assistance.
- C. The recovery of the species benefitted other species in the habitat (to ensure balance in that ecosystem).
- D. Ecosystem conservation and efforts to restore/maintain ecosystem health were incorporated in the recovery plan of the species.
- E. Future alteration of the species' habitat by humans will be kept to a minimum.

Each case receives a total ranging from 5 to 25. Low totals indicate non-holistic approaches to species recovery; high totals indicate more holistic approaches. The higher the total for each case is, the better the ESA implementation and hence more comprehensive ecosystem conservation. A score of 25 indicates complete holistic approaches were used; a score of 5 indicates no holistic approaches were used. I expect to find low totals because of known concentrated tendencies to focus on species, indicating non-holistic approaches to ESA implementation.

CHAPTER 5: RESULTS

Evaluation of Cases

I chose eight species listed as either threatened or endangered under the ESA. These are: Amargosa niterwort (*Nitrophila mohavensis*), Black-footed ferret (*Mustela nigripes*), California condor (*Gymnogyps californianus*), Hawaiian goose (*Branta sandvicensis*), Florida manatee (*Trichechus manatus*), Northern spotted owl (*Strix occidentalis*), Red-cockaded woodpecker (*Picoides borealis*), and Smooth coneflower (*Echinacea laevigata*). This group of eight cases may seem curious. I chose to analyze these particular eight species because I wanted a variety of different species (birds, animals, and plants) of which information was readily available, and the name and circumstance of each were somewhat familiar to my readers.

1) Amargosa niterwort (*Nitrophila mohavensis*)

The status of the Amargosa niterwort under the ESA is endangered (US Forest Service 2001). This plant is found only on salt encrusted alkali flats at the south end of Carson Slough near the Nevada border (US Forest Service 2001). Its population is in decline because of road construction, alterations in its spring hole, utilization of land for agriculture, and grazing by cattle and feral horses (US Forest Service 2001). The Amargosa niterwort's limited habitat has been altered by human activities.

- A. The population of the species was evaluated to determine viability, ensuring that diversity and healthy perpetuation of the species was still possible. Score = 2
- B. The species' critical habitat was protected so that the species could thrive without human assistance. Score = 4
- C. The recovery of the species benefitted other species in the habitat (to ensure balance in that ecosystem). Score = 4

D. Ecosystem conservation and efforts to restore/maintain ecosystem health were incorporated in the recovery plan of the species. Score = 4

E. Future alteration of the species' habitat by humans will be kept to a minimum. Score = 3

Total Score = 17; I scored this species relatively high because its habitat was considered to ensure successful species recovery. This plant occurs in a high diversity and relatively small, isolated area. By protecting this one plant's habitat, many other species are protected as well.

2) Black-footed ferret (*Mustela nigripes*)

Black-footed ferrets are listed as endangered under the ESA. The black-footed ferret has always been an "obligate associate" of prairie dogs (Clark 1997). Ferrets are carnivores whose diets consist of 90% prairie dogs, and they rely on prairie dogs' underground burrows for their own shelters (Clark et al. 1994). Ferrets began declining in numbers after massive government-sponsored prairie dog control programs, which eliminated prairie dogs from about 98% of their former range (Clark 1997). The current total population of captive black-footed ferrets in the US is about 300 individuals (Clark 1997). The methods used for repopulating the ferrets have been captive breeding and reintroduction (Clark et al. 1994). Due to the small population size, inbreeding has been a problem (Clark 1997). Black-footed ferrets were first reintroduced to the wild in the fall of 1988 (Clark 1997). The only known existing ferrets are in captivity or at reintroduction sites. Survival after being released is low (Clark 1997).

A. The population of the species was evaluated to determine viability, ensuring that diversity and healthy perpetuation of the species was still possible. Score = 1

B. The species' critical habitat was protected so that the species could thrive without human assistance. Score = 1

C. The recovery of the species benefitted other species in the habitat (to ensure

balance in that ecosystem). Score = 2

D. Ecosystem conservation and efforts to restore/maintain ecosystem health were incorporated in the recovery plan of the species. Score = 2

E. Future alteration of the species' habitat by humans will be kept to a minimum. Score = 2

Total Score = 8; I gave this species a low score because this is an example of a species whose population dwindled down to only a few individuals, and yet many resources were used to ensure major captive breeding and reintroduction efforts. The individualistic approach is evident in this circumstance.

3) California condor (*Gymnogyps californianus*)

The California condor is a scavenger and is the largest flying bird in North America. This bird has been legally protected since the 1900s (Olney et al. 1994). The California condor's current status under the ESA is endangered. The condor was considered extinct in the wild in the 1980s (Olney et al. 1994). The last 27 birds alive were captured by 1987 in efforts to repopulate the species through captive breeding (USFWS 2001a). Today there are 98 birds in captivity and 161 in the wild (USFWS 2001a). In order for release of the California condor, three criteria must be met according to Olney et al. (1994): 1) 96% of the genes of the condors must be represented in the offspring before any future offspring could be eligible for release, 2) the condors must be behaviorally and physically suitable for release, and 3) at least three birds meeting the above criteria had to be released together in order for the social needs of the birds to be met.

A. The population of the species was evaluated to determine viability, ensuring that diversity and healthy perpetuation of the species was still possible. Score = 5

B. The species' critical habitat was protected so that the species could thrive

without human assistance. Score = 1

C. The recovery of the species benefitted other species in the habitat (to ensure balance in that ecosystem). Score = 2

D. Ecosystem conservation and efforts to restore/maintain ecosystem health were incorporated in the recovery plan of the species. Score = 1

E. Future alteration of the species' habitat by humans will be kept to a minimum. Score = 1

Total Score = 10; while this species' population viability was deemed highly important in its recovery plan, no habitat was protected for the present or the future. The individualistic approach is evident in this case.

4) Hawaiian goose (*Branta sandvicensis*)

The Hawaiian goose, or NeNe, is the world's rarest goose. Only 50 birds existed in 1950; today there are 500 worldwide (USFWS 2001a). Its habitat is the volcanic slopes of Hawaii, and it does not migrate (USFWS 2001a). This bird's status under the ESA is endangered (USFWS 2001a). Recovery for this species has been sought through captive breeding programs.

A. The population of the species was evaluated to determine viability, ensuring that diversity and healthy perpetuation of the species was still possible. Score = 1

B. The species' critical habitat was protected so that the species could thrive without human assistance. Score = 1

C. The recovery of the species benefitted other species in the habitat (to ensure balance in that ecosystem). Score = 2

D. Ecosystem conservation and efforts to restore/maintain ecosystem health were incorporated in the recovery plan of the species. Score = 2

E. Future alteration of the species' habitat by humans will be kept to a minimum. Score = 2

Total Score = 8; I scored this species relatively low based on the use of individual captive breeding techniques. These techniques are expensive and concentrate the use of resources on just one species. The habitat of this bird was not considered and therefore was not protected. Thus no other species in the habitat will benefit from ecosystem protection.

5) Florida manatee (*Trichechus manatus*)

The status of the Florida manatee under the ESA is endangered (USFWS 2001a). This slow-moving mammal eats marine and freshwater plants. Human activities such as collisions with boats, pollution, and habitat degradation have caused the manatee's population decline (USFWS 2001a). The goals of the current recovery plan of the Florida manatee are to reduce manatee mortality, protect necessary habitat, and restore the population to an "ecologically viable level within its ecosystem" (USFWS 2001a). The total population size is about 2000 individuals currently, and the numbers are slowing increasing (USFWS 2001a).

- A. The population of the species was evaluated to determine viability, ensuring that diversity and healthy perpetuation of the species was still possible.
Score = 3
- B. The species' critical habitat was protected so that the species could thrive without human assistance. Score = 1
- C. The recovery of the species benefitted other species in the habitat (to ensure balance in that ecosystem). Score = 2
- D. Ecosystem conservation and efforts to restore/maintain ecosystem health were incorporated in the recovery plan of the species. Score = 1
- E. Future alteration of the species' habitat by humans will be kept to a minimum.
Score = 1

Total Score = 8; I scored this species relatively low because as a large mammal, the Florida manatee needs a larger range for its habitat, and its habitat continues to be encroached upon and polluted by humans.

6) Northern spotted owl (*Strix occidentalis*)

The status of the Northern spotted owl is considered threatened under the ESA (USFWS 2001a). This owl's habitat requirement is old growth forest ecosystems in northern California, Oregon, and Washington (Clark 1997). This bird is not migratory, and it prefers old Douglas fir trees as a major part of its habitat (Clark 1997). No recovery plan under the ESA is in effect, but the owl has been designated 6.9 million acres of critical habitat on both public and private lands (USFWS 2001a). It is estimated that there currently exist 560 pairs in northern California, 1200 pairs in Oregon, and 500 pairs in Washington (USFWS 2001a).

- A. The population of the species was evaluated to determine viability, ensuring that diversity and healthy perpetuation of the species was still possible.
Score = 3
- B. The species' critical habitat was protected so that the species could thrive without human assistance. Score = 5
- C. The recovery of the species benefitted other species in the habitat (to ensure balance in that ecosystem). Score = 5
- D. Ecosystem conservation and efforts to restore/maintain ecosystem health were incorporated in the recovery plan of the species. Score = 5
- E. Future alteration of the species' habitat by humans will be kept to a minimum.
Score = 4

Total Score = 22; I scored this species the highest of the eight cases I examined because it is a true example of one species representing many species and their habitat, and it resulted in true ecosystem protection. It is an example of the holistic approach in action.

7) Red-cockaded woodpecker (*Picoides borealis*)

The red-cockaded woodpecker, now listed as endangered under the ESA, is endemic to mature open forest ecosystems of the southeastern United States (USFWS

2001a). Habitat loss and fragmentation due to clear cutting and short-rotation forestry are the cause of its decline (Clark 1997). Today there are less than 10,000 of these birds left (Clark 1997).

- A. The population of the species was evaluated to determine viability, ensuring that diversity and healthy perpetuation of the species was still possible.
Score = 3
- B. The species' critical habitat was protected so that the species could thrive without human assistance. Score = 2
- C. The recovery of the species benefitted other species in the habitat (to ensure balance in that ecosystem). Score = 2
- D. Ecosystem conservation and efforts to restore/maintain ecosystem health were incorporated in the recovery plan of the species. Score = 2
- E. Future alteration of the species' habitat by humans will be kept to a minimum.
Score = 1

Total Score = 10

8) Smooth coneflower (*Echinacea laevigata*)

The status of this perennial herb is endangered under the ESA (South Carolina Botanical Garden 2001). This plant has become endangered because of people picking it from natural areas (South Carolina Botanical Garden 2001). The smooth coneflower's recovery plan includes research into the plant's biology, maintaining cultivated sources for the species, and encouraging and assisting smooth coneflower nurseries (South Carolina Botanical Garden 2001).

- A. The population of the species was evaluated to determine viability, ensuring that diversity and healthy perpetuation of the species was still possible.
Score = 2
- B. The species' critical habitat was protected so that the species could thrive without human assistance. Score = 1

- C. The recovery of the species benefitted other species in the habitat (to ensure balance in that ecosystem). Score = 1
- D. Ecosystem conservation and efforts to restore/maintain ecosystem health were incorporated in the recovery plan of the species. Score = 1
- E. Future alteration of the species' habitat by humans will be kept to a minimum. Score = 1

Total Score = 6; I scored this species the lowest of the cases I evaluated because no steps were taken to protect the habitat of this flower. People have the mistaken notion that perpetuating this species in a greenhouse is acceptable and means that the species is not extinct. Extinction in the wild can be considered true extinction.

Table 3. Summary of Score Results.

Species	Total Score out of Possible 25
Amargosa Niterwort	17
Black-footed ferret	8
California condor	10
Hawaiian goose	8
Florida manatee	8
Northern spotted owl	22
Red-cockaded woodpecker	10
Smooth coneflower	6

CHAPTER 6: DISCUSSION

I had expected all low scores for the eight cases I reviewed; however, the Amargosa niterwort and the Northern spotted owl scored relatively high, indicating that implementation of the ESA satisfied holistic criteria in those specific cases. In the case of the Amargosa niterwort, the critical habitat and range where this plant grows are small, allowing ecosystem conservation techniques to be integrated easily without much controversy. In the case of the Northern spotted owl, whose range is quite extensive in the northwestern US, it so happened that the natural habitats (old growth forests) were absolutely essential for the survival of the species. This drew attention to the immense value of that forest ecosystem as a whole. While protecting this species of owl, ESA implementation was used to conserve a precious ecosystem as well.

Many of the other species' recoveries demonstrated "emergency room conservation" (Clark 1997). This type of conservation is when the species is cared for only when a handful of the individuals of the species are left alive. As mentioned earlier, scientists try desperately to save a species when it is at the edge of extinction in this system of triage (Winckler 1995). The method of captive breeding was and is being used to repopulate the species in the cases of the Black-footed ferret, the California condor, Hawaiian goose, Florida manatee, and Smooth coneflower. This is one method of conservation that is known as *ex situ* conservation, which means conservation of a species out of its natural habitat, usually in a human-constructed facility or conservation area (Clark et al. 1994). It is extremely expensive to carry out and can become a prolonged process with no end in sight.

Captive breeding is an individualistic approach that may never lead to reintroduction or complete recovery and survival of the species in the wild. Too many

resources are being focused on these types of expensive methods to save a few species, while many more species are left to become threatened or in danger of extinction.

The type of information available shows the bias of protecting animals more than plants; even the species of animals that have been prominently studied are mainly the charismatic megafauna. Thus, the eight cases I evaluated reflect this. The current USFWS protection techniques prioritize species and focus on the recovery of those species that are high profile and attract the most public interest. Little effort has been made to protect entire ecosystems. Education of the public about the importance of protecting ecosystems is crucial. Habitat loss and fragmentation were the major causes of declining numbers of species in the eight cases I reviewed, indicating that there has not been enough emphasis on conserving ecosystems.

The review of these eight cases reveals some non-holistic approaches to species and ecosystem conservation under the ESA. This demonstrates the need for a holistic ethical framework to accompany ESA implementation and interpretation in order to more fully benefit nature as a whole.

The Northern spotted owl and the Smooth coneflower represent the two extreme examples of holistic and individualistic approaches to ESA implementation, respectively. While the Northern spotted owl represents one of many species living in a complex old growth forest ecosystem, the Smooth coneflower is one species now grown by people in greenhouses. To protect the flower, it is essentially isolated from its natural habitat and other species. The enormous range protection of the owl protects the entire ecosystem. The secluded greenhouses protect only the coneflowers themselves. This individualistic protection bears no true ecosystem conservation element. Most cases are not so distinctly polarized as the Northern spotted owl and the smooth coneflower, however.

Each species' recovery plan may be more or less holistic, falling on a continuum from holistic at one extreme to individualistic at the other. In reality, most plans have elements of both holistic and individualistic ethics.

I portrayed my argument to be black and white, but as I near the end of my study, I realize there is much gray area surrounding the ESA and its interpretation. It is possible to mix holistic ethics with individualistic and other non-holistic ethics. Compromise has always been a part of environmental policy and will continue as such. Incorporation of holistic approaches to comply with the ESA will both practically and ethically improve the Act's program implementation and future interpretation and will benefit nature as a whole.

Through the process of writing this paper I have noticed that sometimes protection of one beloved or charismatic species can have the effect of acting as a holistic approach in disguise. A threatened or endangered species can represent many other species in one habitat. This species is often called a flagship species. The best example of a flagship species I found in my research was the Northern spotted owl. This bird has an extensive range and needs old growth forest habitat to survive. The protection of this owl included protection of an entire ecosystem and thus, all of the other species living there. A seemingly individualistic attempt to save one species was actually holistic ethics at work. Dietz et al. (1994) give three main criteria for the selection of an effective flagship species. They are 1) the geographical location of the species should be an area rich in biodiversity, 2) the ecological characteristics of the species are important, whether the species is an a) predator, b) mutualist, c) provides vital resources during times of scarcity, or d) has a large range, and 3) the species has at least the potential for recruiting public support (Dietz et al. 1994). The Northern spotted owl meets these criteria and

has been a holistic ethics success story.

The example of using flagship species to achieve ecosystem conservation is one that does not try to change people's values or ethical beliefs. Rather, it is an example of working with, not against, what people *do* value. Despite my objections, people do value charismatic, beautiful, and cuddly species. By working with that concept, however, ecosystem management techniques and ecosystem conservation can be incorporated into that which the public already values.

Rohlf (1997) discusses six biological reasons why the ESA does not work. His main argument is that biodiversity is not adequately protected under the ESA. Rohlf (1997) attacks the actual language of the Act more so in that definitions are vague and unclear. He argues that uncertainty and the human-related component of environmental stochasticity is not adequately considered in the decision making process (Rohlf 1997). I argue that sufficient ecosystem conservation would help to eliminate these problems without having to change the language of the ESA. The biodiversity component is already included in the consideration of whole ecosystems.

Not only are holistic approaches more ethical regarding environmental policy compared to non-holistic approaches, but they are more practical. Many species continue to be listed under the ESA, and many more are being added to waiting lists. Very few species have become delisted. Funding will benefit more species and ecosystems if there is a holistic ethical element in ESA implementation. People may disagree with my ethical argument, but no one can doubt the increased efficiency of protecting many species at once in their natural habitat.

Throughout this paper I have argued that the goals of the ESA (species *and* ecosystem conservation) will be better fulfilled through the Act's implementation using

holistic approaches rather than non-holistic approaches. However, I realize that not everyone will interpret the goals of the ESA the same way. Public and political forces are often powerful in deciding allocation and amount of funds for recovery plans of species. The first step toward better ESA interpretation is realizing the importance of ecosystems themselves. Holistic approaches will inevitably play a part in following the ESA. The approach or ethical position will depend largely on the particular goal. Different goals often reveal different ethics in people. My point is that my argument is useless if the goals in mind are other than species *and* ecosystem conservation under the ESA.

CHAPTER 7: RECOMMENDATIONS - A HOLISTIC ETHICAL FRAMEWORK

Holistic approaches to interpret the ESA should be utilized instead of non-holistic approaches. My guiding holistic ethical framework for the Act is one way to help change the individualistic tendencies to become more holistic and thus more focused on ecosystems. Ecosystems should be the priority in ESA programs, though policies and their implementations, especially environmental ones, often arise from the status quo of a particular time in history. My holistic ethical framework below is not a quick fix to solving wildlife preservation problems, but it may help guide policymakers in a direction more beneficial to the natural environment.

A Holistic Ethical Framework

A holistic ethical framework will help ESA program implementers to maximize benefits for all aspects of nature. My following principles are derived from holistic ethics and should act as a guide to use when interpreting the ESA and developing species recovery plans:

- 1) Consider equality in the value of each species.
- 2) Consider viable population size of the species.
- 3) Consider natural habitats of the species, focusing on the health of the ecosystem and its natural processes, rather than on the health of individuals of a species.
- 4) Consider a species' relationship to other species and the role or niche of the species in its habitat.
- 5) Consider the cumulative effects of humans on each species and its ecosystem.
- 6) Consider human relationship to the species, human impact on the species, and human integration, cooperation, and coexistence with nature.

- 7) Consider feasibility of recovery of the species given limited human resources and time constraints.

Suggestions for Policymakers

- Increase program funding and program efficiency for a more balanced protection of species under the ESA.
- Identify long term management goals for ecosystems and their species.
- Use experts and sound scientific methods when designing species recovery programs.
- Seek local community involvement in *ecosystem conservation*; educate the public, or at least earn its support.
- Development is inevitable: use sustainable development techniques that include the survival of ecosystems and their species.

REFERENCES

- Bart, Jonathan. (1995). Acceptance Criteria for Using Individual-Based Models to Make Management Decisions. Ecological Applications, 5(2), 411-420.
- Bean, Michael J., Sarah G. Fitzgerald, & Michael A. O'Connell. (1991). Reconciling Conflicts Under the Endangered Species Act. Washington, D. C.: World Wildlife Fund.
- Brown, Donald A. (1987). Ethics, Science, and Environmental Regulation. In Donald VanDeVeer & Christine Pierce (Eds.), The Environmental Ethics & Policy Book, Second Edition pp. 335-346. Belmont: Wadsworth Publishing Company.
- Callicott, J. Baird. (1999). Beyond the Land Ethic: More Essays in Environmental Philosophy. Albany: State of University of New York Press.
- Callicott, J. Baird. (1989). In Defense of the Land Ethic: Essays in Environmental Philosophy. Albany: State of University of New York Press.
- Callicott, J. Baird. (1987). The Conceptual Foundations of the Land Ethic. In Donald VanDeVeer & Christine Pierce (Eds.), The Environmental Ethics & Policy Book, Second Edition pp. 184-198. Belmont: Wadsworth Publishing Company.
- Clark, Tim W. (1997). Averting Extinction: Reconstructing Endangered Species Recovery. New Haven: Yale University Press.
- Clark, Tim W., Richard P. Reading, & Alice L. Clarke (Eds.). (1994). Endangered Species Recovery. Washington, D.C.: Island Press.
- Craig, Paul, Harold Glasser, & Willett Kempton. (1993). Ethics and Values in Environmental Policy: The Said and the UNCED. Environmental Values 2(2), 137-157.

- Dietz, J.M., L.A. Dietz, & E.Y. Nagagata. (1994). The Effective Use of Flagship Species for Conservation of Biodiversity. In Olney, P.J.S., G.M. Mace, & A.T.C. Feistner (Eds.), Creative Conservation. New York: Chapman & Hall.
- Devall, Bill & George Sessions. (1995). Deep Ecology. In James P. Sterba (Ed.), Earth Ethics pp. 157-165. Englewood Cliffs: Prentice-Hall, Inc.
- Devall, Bill & George Sessions. (1985). Deep Ecology. In Donald VanDeVeer & Christine Pierce (Eds.), The Environmental Ethics & Policy Book, Second Edition pp. 221-226. Belmont: Wadsworth Publishing Company.
- Endangered Species Act: Summary from Federal Wildlife Laws Handbook. (1999). Endangered Species Act of 1973. [On-Line]. Available: <http://www.fws.gov/laws/federal/summaries/esa.html>.
- Franklin, Jerry F. (1993). Preserving Biodiversity: Species, Ecosystems, or Landscapes? Ecological Applications, 3(2), 202-205.
- Gillespie, Alexander. (1997). International Environmental Law, Policy and Ethics. Oxford: Clarendon Press.
- Golley, Frank B. (1994). Grounding Environmental Ethics in Ecological Science. In Frederick Ferre and Peter Hartel (Eds.), Ethics and Environmental Policy pp. 9-20. Athens: University of Georgia Press.
- Gould, Stephen Jay. (2001). The Golden Rule - A Proper Scale for Our Environmental Crisis. In Louis P. Pojman (Ed.), Environmental Ethics: Reading in Theory and Application, Third Edition pp. 214-218. Belmont: Wadsworth/Thomson Learning.

- Gould, Stephen Jay. (1992). What Is a Species? In Donald VanDeVeer & Christine Pierce (Eds.), The Environmental Ethics & Policy Book, Second Edition pp. 493-497. Belmont: Wadsworth Publishing Company.
- Grove-White, Robin & Bronislaw Szerszynski. (1992). Getting Behind the Environmental Ethics. Environmental Values 1(4), 285-296.
- Grumbine, R. Edward. (1994a). Environmental Policy and Biodiversity. Washington, DC: Island Press.
- Grumbine, R. Edward. (1994b). What is Ecosystem Management? Conservation Biology, 8(1), 27-38.
- Grumbine, R. Edward. (1992). Ghost Bears: Exploring the Biodiversity Crisis. Washington, DC: Island Press.
- Jorgensen, Sven Erik. (1997). Integration of Ecosystem Theories: A Pattern, Second Revised Edition. Boston: Kluwer Academic Publishers.
- Kohm, Kathryn A. (Ed.). (1991). Balancing on the Brink of Extinction. Washington, DC: Island Press.
- Leopold, Aldo. (1949). The Land Ethic. In Donald VanDeVeer & Christine Pierce (Eds.), The Environmental Ethics & Policy Book, Second Edition pp. 175-184. Belmont: Wadsworth Publishing Company.
- Meadows, Donella H. (2001). Biodiversity: The Key to Saving Life on Earth. In Louis P. Pojman (Ed.), Environmental Ethics: Reading in Theory and Application, Third Edition pp. 206-208. Belmont: Wadsworth/Thomson Learning.
- Miller, George. (1996). Ecosystem Management: Improving the Endangered Species Act. Ecological Applications, 6(3), 715-717.

- Naess, Arne. (1989). Ecology, Community and Lifestyle. David Rothenberg (Trans. & Ed.). New York: Cambridge University Press.
- National Audubon Society. (2000). [On-Line]. Available: aububon.org.
- National Council for Science & the Environment (NCSE). (2001). The Endangered Species Act: Continuing Controversy. [On-Line]. Available: cnie.org.
- National Research Council. (1995). Science and the Endangered Species Act. Washington, DC: National Academy Press.
- Olney, P.J.S., G.M. Mace, & A.T.C. Feistner (Eds.). (1994). Creative Conservation. New York: Chapman & Hall.
- Pojman, Louis P. (2000). Global Environmental Ethics. London: Mayfield Publishing Company.
- Poli, Corrado. (1994). The Political Consequences of an Environmental Question. In Frederick Ferre & Peter Hartel (Eds.), Ethics and Environmental Policy pp. 125-141. Athens: University of Georgia Press.
- Primack, Richard B. (1998). Essentials of Conservation Biology, Second Edition. Sunderland: Sinauer Associates, Inc.
- Rohlf, Daniel J. (1997). Environmental Policy and Biodiversity: Six Reasons Why the ESA Doesn't Work and What to Do About It. In R.E. Grumbine (Ed.), Averting Extinction: Reconstructing Endangered Species Recovery pp. 181-193. New Haven: Yale University Press.
- Rohlf, Daniel J. (1989). The Endangered Species Act: A Guide to Its Protections and Implementation. Stanford: Stanford Environmental Law Society.

- Rolston III, Holmes. (2001). Naturalizing Values: Organisms and Species. In Louis P. Pojman (Ed.), Environmental Ethics: Readings in Theory and Application, Third Edition pp. 76-86. Belmont: Wadsworth/Thomson Learning.
- Rolston III, Holmes. (1995). Duties to Endangered Species. In James P. Sterba (Ed.), Earth Ethics pp. 317-328. Englewood Cliffs: Prentice-Hall, Inc.
- Rolston III, Holmes. (1994). Winning and Losing in Environmental Ethics. In Frederick Ferre & Peter Hartel (Eds.), Ethics and Environmental Policy pp. 217-234. Athens: University of Georgia Press.
- Rolston III, Holmes. (1991). Why Species Matter. In Donald VanDeVeer & Christine Pierce (Eds.), The Environmental Ethics & Policy Book, Second Edition pp. 504-511. Belmont: Wadsworth Publishing Company.
- Rolston III, Holmes. (1986). Philosophy Gone Wild: Essays in Environmental Ethics. Buffalo: Prometheus Books.
- Rothenberg, David. (1992). Individual or Community? Two Approaches to Ecophilosophy in Practice. Environmental Values 1(2), 123-132.
- Russow, Lilly-Marlene. (2001). Why Do Species Matter? In Louis P. Pojman (Ed.), Environmental Ethics: Reading in Theory and Application, Third Edition pp. 208-214. Belmont: Wadsworth/Thomson Learning.
- Simmons, Randy T. (1997). Fixing the Endangered Species Act. In Terry L. Anderson (Ed.), Breaking the Environmental Policy Gridlock pp. 82-114. Stanford: Hoover Institution Press.
- Slocombe, D. Scott. (1998). Defining Goals and Criteria for Ecosystem-Based Management. Environmental Management, 22(4), 483-493.

- Smith, Robert Leo. (1976). Ecological Genesis of Endangered Species: The Philosophy of Preservation. Annual Review of Ecology and Systematics, 7, 33-55.
- Solomon, Barry D. (1998). Impending Recovery of Kirtland's Warbler: Case Study in the Effectiveness of the Endangered Species Act. Environmental Management, 22(1), 9-17.
- South Carolina Botanical Garden. (2001). [On-Line]. Available:
<http://virtual.clemson.edu/groups/scbg>.
- Sterba, James P. (2001). Three Challenges to Ethics: Environmentalism, Feminism, and Multiculturalism. New York: Oxford University Press.
- Sterba, James P. (2000). Earth Ethics: Introductory Readings on Animal Rights and Environmental Ethics, Second Edition. Upper Saddle River: Prentice Hall, Inc.
- Sterba, James P. (1995). From Biocentric Individualism to Biocentric Pluralism. Environmental Ethics 17(2), 191-207.
- Stone, Christopher D. (2001). Should Trees Have Standing? Toward Legal Rights for Natural Objects. In Louis P. Pojman (Ed.), Environmental Ethics: Reading in Theory and Application, Third Edition pp. 240-248. Belmont: Wadsworth/Thomson Learning.
- Tasso, Jon P. (1998). Habitat Conservation Plans as Recovery Vehicles: Jump-Starting the Endangered Species Act. UCLA Journal of Environmental Law & Policy, 16(2), 297-318.
- Taylor, Paul. (2001). Biocentric Egalitarianism. In Louis P. Pojman (Ed.), Environmental Ethics: Reading in Theory and Application, Third Edition pp. 100-112. Belmont: Wadsworth/Thomson Learning.

- Taylor, Paul. (1981.) The Ethics of Respect for Nature. In Donald VanDeVeer & Christine Pierce (Eds.), The Environmental Ethics & Policy Book, Second Edition pp. 160-173. Belmont: Wadsworth Publishing Company.
- Tucker, Mary Evelyn & John A. Grim (Eds.). (1993). Worldviews and Ecology. Lewisburg: Bucknell University Press.
- US Fish & Wildlife Service. (2001a). [On-Line]. Available: <http://endangered.fws.gov>.
- US Fish & Wildlife Service. (2001b). Threatened & Endangered Species System (TESS). [On-Line]. Available: <http://ecos.fws.gov/tess/html/boxscore.html>.
- US Fish & Wildlife Service. (2000). The Endangered Species Act of 1973. [On-Line]. Available: <http://endangered.fws.gov/esa.html>.
- US Forest Service. (2001). [On-Line]. Available: <http://www.fs.fed.us>.
- VanDeVeer, Donald & Christine Pierce. (1998). The Environmental Ethics & Policy Book, Second Edition. Belmont: Wadsworth Publishing Company.
- Varner, G. E. (1987). Do Species Have Standing? Environmental Ethics 9, 57-72.
- Vaughan, Ray. (1994). Endangered Species Act Handbook. Rockville: Government Institutes, Inc.
- Wilson, E.O. (1992). The Diversity of Life. In Donald VanDeVeer & Christine Pierce (Eds.), The Environmental Ethics & Policy Book, Second Edition pp. 486-493. Belmont: Wadsworth Publishing Company.
- Winckler, Suzanne. (1995). Stopgap Measures. In James P. Sterba (Ed.), Earth Ethics pp. 329-335. Englewood Cliffs: Prentice-Hall, Inc.

APPENDIX

The United States Endangered Species Act of 1973

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FINDINGS, PURPOSES, AND POLICY [^]_^

SEC. 2.

(a) FINDINGS.-The Congress finds and declares that-

- (1) various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation;
- (2) other species of fish, wildlife, and plants have been so depleted in numbers that they are in danger of or threatened with extinction;
- (3) these species of fish, wildlife, and plants are of aesthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people;
- (4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to-
 - (A) migratory bird treaties with Canada and Mexico;
 - (B) the Migratory and Endangered Bird Treaty with Japan;
 - (C) the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere;
 - (D) the International Convention for the Northwest Atlantic Fisheries;
 - (E) the International Convention for the High Seas Fisheries of the North Pacific Ocean;
 - (F) the Convention on International Trade in Endangered Species of Wild Fauna and Flora; and
 - (G) other international agreements; and
- (5) encouraging the States and other interested parties, through Federal financial assistance and a system of incentives, to develop and maintain conservation programs which meet national and international standards is a key to meeting the Nation's international commitments and to better safeguarding, for the benefit of all citizens, the Nation's heritage in fish, wildlife, and plants.

(b) PURPOSES.-The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.

(c) POLICY.-

(1) It is further declared to be the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act.

(2) It is further declared to be the policy of Congress that Federal agencies shall cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species.

DEFINITIONS [^]_^

SEC. 3. For the purposes of this Act-

(1) The term "alternative courses of action" means all alternatives and thus is not limited to original project objectives and agency jurisdiction.

(2) The term "commercial activity" means all activities of industry and trade, including, but not limited to, the buying or selling of commodities and activities conducted for the purpose of facilitating such buying and selling: Provided, however, that it does not include exhibitions of commodities by museums or similar cultural or historical organizations.

(3) The terms "conserve," "conserving," and "conservation" mean to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

(4) The term "Convention" means the Convention on International Trade in Endangered Species of Wild Fauna and Flora, signed on March 3, 1973, and the appendices thereto.

(5)(A) The term "critical habitat" for a threatened or endangered species means-

(i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of this Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and

(ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

(B) Critical habitat may be established for those species now listed as threatened or endangered species for which no critical habitat has heretofore been established as set forth in subparagraph (A) of this paragraph.

(C) Except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species.

(6) The term "endangered species" means any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of this Act would present an overwhelming and overriding risk to man.

(7) The term "Federal agency" means any department, agency, or instrumentality of the United States.

(8) The term "fish or wildlife" means any member of the animal kingdom, including without limitation any mammal, fish, bird (including any migratory, nonmigratory, or endangered bird for which protection is also afforded by treaty or other international agreement), amphibian, reptile, mollusk, crustacean, arthropod or other invertebrate, and includes any part, product, egg, or offspring thereof, or the dead body or parts thereof.

(9) The term "foreign commerce" includes, among other things, any transaction-

(A) between persons within one foreign country;

(B) between persons in two or more foreign countries;

(C) between a person within the United States and a person in a foreign country; or

(D) between persons within the United States, where the fish and wildlife in question are moving in any country or countries outside the United States.

(10) The term "import" means to land on, bring into, or introduce into, or attempt to land on, bring into, or introduce into, any place subject to the jurisdiction of the United States, whether or not such landing, bringing, or introduction constitutes an importation within the meaning of the customs laws of the United States.

(11) The term "permit or license applicant" means, when used with respect to an action of a Federal agency

for which exemption is sought under section 7, any person whose application to such agency for a permit or license has been denied primarily because of the application of section 7(a) to such agency action.

(12) "The term person means an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States."

(13) The term "plant" means any member of the plant kingdom, including seeds, roots and other parts thereof.

(14) The term "Secretary" means, except as otherwise herein provided, the Secretary of the Interior or the Secretary of Commerce as program responsibilities are vested pursuant to the provisions of Reorganization Plan Numbered 4 of 1970; except that with respect to the enforcement of the provisions of this Act and the Convention which pertain to the importation or exportation of terrestrial plants, the term also means the Secretary of Agriculture.

(15) The term "species" includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species or vertebrate fish or wildlife which interbreeds when mature.

(16) The term "State" means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, the Virgin Islands, Guam, and the Trust Territory of the Pacific Islands.

(17) The term "State agency" means any State agency, department, board, commission, or other governmental entity which is responsible for the management and conservation of fish, plant, or wildlife resources within a State.

(18) The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

(19) The term "threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

(20) The term "United States," when used in a geographical context, includes all States.

DETERMINATION OF ENDANGERED SPECIES AND THREATENED SPECIES [^]

Sec. 4.

(a) GENERAL.-

(1) The Secretary shall by regulation promulgated in accordance with subsection (b) determine whether any species is an endangered species or a threatened species because of any of the following factors:

(A) the present or threatened destruction, modification, or curtailment of its habitat or range;

(B) overutilization for commercial, recreational, scientific, or educational purposes;

(C) disease or predation;

(D) the inadequacy of existing regulatory mechanisms;

(E) other natural or manmade factors affecting its continued existence.

(2) With respect to any species over which program responsibilities have been vested in the Secretary of Commerce pursuant to Reorganization Plan Numbered 4 of 1970-

(A) in any case in which the Secretary of Commerce determines that such species should-

(i) be listed as an endangered species or a threatened species, or

(ii) be changed in status from a threatened species to an endangered species, he shall so inform the Secretary of the Interior, who shall list such species in accordance with this section;

(B) in any case in which the Secretary of Commerce determines that such species should-

(i) be removed from any list published pursuant to subsection (c) of this section, or

(ii) be changed in status from an endangered species to a threatened species, he shall recommend such action to the Secretary of the Interior, and the Secretary of the Interior, if he concurs in the recommendation, shall implement such action; and

(C) the Secretary of the Interior may not list or remove from any list any such species, and may not change the status of any such species which are listed, without a prior favorable determination made pursuant to this section by the Secretary of Commerce.

(3) The Secretary, by regulation promulgated in accordance with subsection (b) and to the maximum extent prudent and determinable-

(A) shall, concurrently with making a determination under paragraph (1) that a species is an endangered species or a threatened species, designate any habitat of such species which is then considered to be critical habitat; and

(B) may, from time-to-time thereafter as appropriate, revise such designation.

(b) BASIS FOR DETERMINATIONS.-

(1)(A) The Secretary shall make determinations required by subsection (a)(1) solely on the basis of the best scientific and commercial data available to him after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction, or on the high seas.

(B) In carrying out this section, the Secretary shall give consideration to species which have been-

(i) designated as requiring protection from unrestricted commerce by any foreign nation, or pursuant to any international agreement; or

(ii) identified as in danger of extinction, or likely to become so within the foreseeable future, by any State agency or by any agency of a foreign nation that is responsible for the conservation of fish or wildlife or plants.

(2) The Secretary shall designate critical habitat, and make revisions thereto, under subsection (a)(3) on the basis of the best scientific data available and after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.

(3)(A) To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 553(e) of title 5, United States Code, to add a species to, or to remove a species from, either of the lists published under subsection (c), the Secretary shall make a finding as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted. If such a petition is found to present such information, the Secretary shall promptly commence a review of the status of the species concerned. The Secretary shall promptly publish each finding made under this subparagraph in the Federal Register.

(B) Within 12 months after receiving a petition that is found under subparagraph (A) to present substantial information indicating that the petitioned action may be warranted, the Secretary shall make one of the following findings:

(i) The petitioned action is not warranted, in which case the Secretary shall promptly publish such finding in the Federal Register.

(ii) The petitioned action is warranted in which case the Secretary shall promptly publish in the Federal Register a general notice and the complete text of a proposed regulation to implement such action in accordance with paragraph (5).

(iii) The petitioned action is warranted but that-

(I) the immediate proposal and timely promulgation of a final regulation implementing the petitioned action in accordance with paragraphs (5) and (6) is precluded by pending proposals to determine whether any species is an endangered species or a threatened species, and

(II) expeditious progress is being made to add qualified species to either of the lists published under subsection (c) and to remove from such lists species for which the protections of the Act are no longer necessary, in which case the Secretary shall promptly publish such finding in the Federal Register, together with a description and evaluation of the reasons and data on which the finding is based.

(C)(i) A petition with respect to which a finding is made under subparagraph (B)(iii) shall be treated as a petition that is resubmitted to the Secretary under subparagraph (A) on the date of such finding and that presents substantial scientific or commercial information that the petitioned action may be warranted.

(ii) Any negative finding described in subparagraph (A) and any finding described in subparagraph (B) (i) or (iii) shall be subject to judicial review.

(iii) The Secretary shall implement a system to monitor effectively the status of all species with respect to which a finding is made under subparagraph (B)(iii) and shall make prompt use of the authority under paragraph 7 to prevent a significant risk to the well being of any such species.

(D)(i) To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 553(e) of title 5, United States Code, to revise a critical habitat designation, the Secretary shall make a finding as to whether the petition presents substantial scientific information indicating that the revision may be warranted. The Secretary shall promptly publish such finding in the

Federal Register.

(ii) Within 12 months after receiving a petition that is found under clause (i) to present substantial information indicating that the requested revision may be warranted, the Secretary shall determine how he intends to proceed with the requested revision, and shall promptly publish notice of such intention in the Federal Register.

(4) Except as provided in paragraphs (5) and (6) of this subsection, the provisions of section 553 of title 5, United States Code (relating to rulemaking procedures), shall apply to any regulation promulgated to carry out the purposes of this Act.

(5) With respect to any regulation proposed by the Secretary to implement a determination, designation, or revision referred to in subsection (a) (1) or (3), the Secretary shall-

(A) not less than 90 days before the effective date of the regulation-

(i) publish a general notice and the complete text of the proposed regulation in the Federal Register, and
(ii) give actual notice of the proposed regulation (including the complete text of the regulation) to the State agency in each State in which the species is believed to occur, and to each county or equivalent jurisdiction in which the species is believed to occur, and invite the comment of such agency, and each such jurisdiction, thereon;

(B) insofar as practical, and in cooperation with the Secretary of State, give notice of the proposed regulation to each foreign nation in which the species is believed to occur or whose citizens harvest the species on the high seas, and invite the comment of such nation thereon;

(C) give notice of the proposed regulation to such professional scientific organizations as he deems appropriate;

(D) publish a summary of the proposed regulation in a newspaper of general circulation in each area of the United States in which the species is believed to occur; and

(E) promptly hold one public hearing on the proposed regulation if any person files a request for such a hearing within 45 days after the date of publication of general notice.

(6)(A) Within the one-year period beginning on the date on which general notice is published in accordance with paragraph (5)(A)(i) regarding a proposed regulation, the Secretary shall publish in the Federal Register-

(i) if a determination as to whether a species is an endangered species or a threatened species, or a revision of critical habitat, is involved, either-

(I) a final regulation to implement such determination,

(II) a final regulation to implement such revision or a finding that such revision should not be made,

(III) notice that such one-year period is being extended under subparagraph (B)(i), or

(IV) notice that the proposed regulation is being withdrawn under subparagraph

(B)(ii), together with the finding on which such withdrawal is based; or

(ii) subject to subparagraph (C), if a designation of critical habitat is involved, either-

(I) a final regulation to implement such designation, or

(II) notice that such one-year period is being extended under such subparagraph.

(B)(i) If the Secretary finds with respect to a proposed regulation referred to in subparagraph (A)(i) that there is substantial disagreement regarding the sufficiency or accuracy of the available data relevant to the determination or revision concerned the Secretary may extend the one-year period specified in subparagraph (A) for not more than six months for purposes of soliciting additional data.

(ii) If a proposed regulation referred to in subparagraph (A)(i) is not promulgated as a final regulation within such one-year period (or longer period if extension under clause (i) applies) because the Secretary finds that there is not sufficient evidence to justify the action proposed by the regulation the Secretary shall immediately withdraw the regulation. The finding on which a withdrawal is based shall be subject to judicial review. The Secretary may not propose a regulation that has previously been withdrawn under this clause unless he determines that sufficient new information is available to warrant such proposal.

(iii) If the one-year period specified in subparagraph (A) is extended under clause (i) with respect to a proposed regulation, then before the close of such extended period the Secretary shall publish in the Federal Register either a final regulation to implement the determination or revision concerned, a finding that the revision should not be made, or a notice of withdrawal of the regulation under clause (ii), together with the finding on which the withdrawal is based.

(C) A final regulation designating critical habitat of an endangered species or a threatened species shall be published concurrently with the final regulation implementing the determination that such species is endangered or threatened, unless the Secretary deems that-

(i) it is essential to the conservation of such species that the regulation implementing such determination

be promptly published; or

(ii) critical habitat of such species is not then determinable, in which case the Secretary, with respect to the proposed regulation to designate such habitat, may extend the one-year period specified in subparagraph (A) by not more than one additional year, but not later than the close of such additional year the Secretary must publish a final regulation, based on such data as may be available at that time, designating, to the maximum extent prudent, such habitat.

(7) Neither paragraph (4), (5), or (6) of this subsection nor section 553 of title 5, United States Code, shall apply to any regulation issued by the Secretary in regard to any emergency posing a significant risk to the well-being of any species of fish and wildlife or plants, but only if-

(A) at the time of publication of the regulation in the Federal Register the Secretary publishes therein detailed reasons why such regulation is necessary; and

(B) in the case such regulation applies to resident species of fish or wildlife, or plants, the Secretary gives actual notice of such regulation to the State agency in each State in which such species is believed to occur. Such regulation shall, at the discretion of the Secretary, take effect immediately upon the publication of the regulation in the Federal Register. Any regulation promulgated under the authority of this paragraph shall cease to have force and effect at the close of the 240-day period following the date of publication unless, during such 240-day period, the rulemaking procedures which would apply to such regulation without regard to this paragraph are complied with. If at any time after issuing an emergency regulation the Secretary determines, on the basis of the best appropriate data available to him, that substantial evidence does not exist to warrant such regulation, he shall withdraw it.

(8) The publication in the Federal Register of any proposed or final regulation which is necessary or appropriate to carry out the purposes of this Act shall include a summary by the Secretary of the data on which such regulation is based and shall show the relationship of such data to such regulation; and if such regulation designates or revises critical habitat, such summary shall, to the maximum extent practicable, also include a brief description and evaluation of those activities (whether public or private) which, in the opinion of the Secretary, if undertaken may adversely modify such habitat, or may be affected by such designation.

(c) **LISTS.-**

(1) The Secretary of the Interior shall publish in the Federal Register a list of all species determined by him or the Secretary of Commerce to be endangered species and a list of all species determined by him or the Secretary of Commerce to be threatened species. Each list shall refer to the species contained therein by scientific and common name or names, if any, specify with respect to such species over what portion of its range it is endangered or threatened, and specify any critical habitat within such range. The Secretary shall from time to time revise each list published under the authority of this subsection to reflect recent determinations, designations, and revisions made in accordance with subsections (a) and (b).

(2) The Secretary shall-

(A) conduct, at least once every five years, a review of all species included in a list which is published pursuant to paragraph (1) and which is in effect at the time of such review; and

(B) determine on the basis of such review whether any such species should-

(i) be removed from such list;

(ii) be changed in status from an endangered species to a threatened species; or

(iii) be changed in status from a threatened species to an endangered species. Each determination under subparagraph (B) shall be made in accordance with the provisions of subsection (a) and (b).

(d) **PROTECTIVE REGULATIONS.-**Whenever any species is listed as a threatened species pursuant to subsection (c) of this section, the Secretary shall issue such regulations as he deems necessary and advisable to provide for the conservation of such species. The Secretary may by regulation prohibit with respect to any threatened species any act prohibited under section 9(a)(1), in the case of fish or wildlife, or section 9(a)(2), in the case of plants, with respect to endangered species; except that with respect to the taking of resident species of fish or wildlife, such regulations shall apply in any State which has entered into a cooperative agreement pursuant to section 6(c) of this Act only to the extent that such regulations have also been adopted by such State.

(e) **SIMILARITY OF APPEARANCE CASES.-**The Secretary may, by regulation of commerce or taking, and to the extent he deems advisable, treat any species as an endangered species or threatened species even though it is not listed pursuant to section 4 of this Act if he finds that-

- (A) such species so closely resembles in appearance, at the point in question, a species which has been listed pursuant to such section that enforcement personnel would have substantial difficulty in attempting to differentiate between the listed and unlisted species;
- (B) the effect of this substantial difficulty is an additional threat to an endangered or threatened species; and
- (C) such treatment of an unlisted species will substantially facilitate the enforcement and further the policy of this Act.

(f)(1) **RECOVERY PLANS.**-The Secretary shall develop and implement plans (hereinafter in this subsection referred to as "recovery plans") for the conservation and survival of endangered species and threatened species listed pursuant to this section, unless he finds that such a plan will not promote the conservation of the species. The Secretary, in development and implementing recovery plans, shall, to the maximum extent practicable-

- (A) give priority to those endangered species or threatened species, without regard to taxonomic classification, that are most likely to benefit from such plans, particularly those species that are, or may be, in conflict with construction or other development projects or other forms of economic activity;

- (B) incorporate in each plan-

- (i) a description of such site-specific management actions as may be necessary to achieve the plan's goal for the conservation and survival of the species;
- (ii) objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of this section, that the species be removed from the list; and
- (iii) estimates of the time required and the cost to carry out those measures needed to achieve the plan's goal and to achieve intermediate steps toward that goal.

(2) The Secretary, in developing and implementing recovery plans, may procure the services of appropriate public and private agencies and institutions, and other qualified persons. Recovery teams appointed pursuant to this subsection shall not be subject to the Federal Advisory Committee Act.

(3) The Secretary shall report every two years to the Committee on Environment and Public Works of the Senate and the Committee on Merchant Marine and Fisheries of the House of Representatives on the status of efforts to develop and implement recovery plans for all species listed pursuant to this section and on the status of all species for which such plans have been developed.

(4) The Secretary shall, prior to final approval of a new or revised recovery plan, provide public notice and an opportunity for public review and comment on such plan. The Secretary shall consider all information presented during the public comment period prior to approval of the plan.

(5) Each Federal agency shall, prior to implementation of a new or revised recovery plan, consider all information presented during the public comment period under paragraph (4).

(g) **MONITORING.**-

(1) The Secretary shall implement a system in cooperation with the States to monitor effectively for not less than five years the status of all species which have recovered to the point at which the measures provided pursuant to this Act are no longer necessary and which, in accordance with the provisions of this section, have been removed from either of the lists published under subsection (c).

(2) The Secretary shall make prompt use of the authority under paragraph 7 of subsection (b) of this section to prevent a significant risk to the well being of any such recovered species.

(h) **AGENCY GUIDELINES.**-The Secretary shall establish, and publish in the Federal Register, agency guidelines to insure that the purposes of this section are achieved efficiently and effectively. Such guidelines shall include, but are not limited to-

- (1) procedures for recording the receipt and the disposition of petitions submitted under subsection (b)(3) of this section;
- (2) criteria for making the findings required under such subsection with respect to petitions;
- (3) a ranking system to assist in the identification of species that should receive priority review under subsection (a)(1) of the section; and
- (4) a system for developing and implementing, on a priority basis, recovery plans under subsection (f) of this section. The Secretary shall provide to the public notice of, and opportunity to submit written comments on, any guideline (including any amendment thereto) proposed to be established under this subsection.

(i) If, in the case of any regulation proposed by the Secretary under the authority of this section, a State

agency to which notice thereof was given in accordance with subsection (b)(5)(A)(ii) files comments disagreeing with all or part of the proposed regulation, and the Secretary issues a final regulation which is in conflict with such comments, or if the Secretary fails to adopt a regulation pursuant to an action petitioned by a State agency under subsection (b)(3), the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency's comments or petition.

LAND ACQUISITION [△]

SEC. 5.

(a) **PROGRAM.**-The Secretary, and the Secretary of Agriculture with respect to the National Forest System, shall establish and implement a program to conserve fish, wildlife, and plants, including those which are listed as endangered species or threatened species pursuant to section 4 of this Act. To carry out such a program, the appropriate Secretary-

(1) shall utilize the land acquisition and other authority under the Fish and Wildlife Act of 1956, as amended, the Fish and Wildlife Coordination Act, as amended, and the Migratory Bird Conservation Act, as appropriate; and

(2) is authorized to acquire by purchase, donation, or otherwise, lands, waters, or interest therein, and such authority shall be in addition to any other land acquisition vested in him.

(b) **ACQUISITIONS.**-Funds made available pursuant to the Land and Water Conservation Fund Act of 1965, as amended, may be used for the purpose of acquiring lands, waters, or interests therein under subsection (a) of this section.

COOPERATION WITH THE STATES [△]

SEC. 6.

(a) **GENERAL.**-In carrying out the program authorized by this Act, the Secretary shall cooperate to the maximum extent practicable with the States. Such cooperation shall include consultation with the States concerned before acquiring any land or water, or interest therein, for the purpose of conserving any endangered species or threatened species.

(b) **MANAGEMENT AGREEMENTS.**-The Secretary may enter into agreements with any State for the administration and management of any area established for the conservation of endangered species or threatened species. Any revenues derived from the administration of such areas under these agreements shall be subject to the provisions of section 401 of the Act of June 15, 1935 (49 Stat. 383; 16 U.S.C. 715s).

(c)(1) **COOPERATIVE AGREEMENTS.**-In furtherance of the purposes of this Act, the Secretary is authorized to enter into a cooperative agreement in accordance with this section with any State which establishes and maintains an adequate and active program for the conservation of endangered species and threatened species. Within one hundred and twenty days after the Secretary receives a certified copy of such a proposed State program, he shall make a determination whether such program is in accordance with this Act. Unless he determines, pursuant to this paragraph, that the State program is not in accordance with this Act, he shall enter into a cooperative agreement with the State for the purpose of assisting in implementation of the State program. In order for a State program to be deemed an adequate and active program for the conservation of endangered species and threatened species, the Secretary must find, and annually thereafter reconfirm such finding, that under the State program-

(A) authority resides in the State agency to conserve resident species of fish or wildlife determined by the State agency or the Secretary to be endangered or threatened;

(B) the State agency has established acceptable conservation programs, consistent with the purposes and policies of this Act, for all resident species of fish or wildlife in the State which are deemed by the Secretary to be endangered or threatened, and has furnished a copy of such plan and program together with all pertinent details, information, and data requested to the Secretary;

(C) the State agency is authorized to conduct investigations to determine the status and requirements for survival of resident species of fish and wildlife;

(D) the State agency is authorized to establish programs, including the acquisition of land or aquatic habitat or interests therein, for the conservation of resident endangered or threatened species of fish or

wildlife; and

(E) provision is made for public participation in designating resident species of fish or wildlife as endangered or threatened, or that under the State program-

(i) the requirements set forth in paragraphs (3), (4), and (5) of this subsection are complied with, and

(ii) plans are included under which immediate attention will be given to those resident species of fish and wildlife which are determined by the Secretary or the State agency to be endangered or threatened and which the Secretary and the State agency agree are most urgently in need of conservation programs; except that a cooperative agreement entered into with a State whose program is deemed adequate and active pursuant to clause (i) and this clause and this subparagraph shall not affect the applicability of prohibitions set forth in or authorized pursuant to section 4(d) or section 9(a)(1) with respect to the taking of any resident endangered or threatened species.

(2) In furtherance of the purposes of this Act, the Secretary is authorized to enter into a cooperative agreement in accordance with this section with any State which establishes and maintains an adequate and active program for the conservation of endangered species and threatened species of plants. Within one hundred and twenty days after the Secretary receives a certified copy of such a proposed State program, he shall make a determination whether such program is in accordance with this Act. Unless he determines, pursuant to this paragraph, that the State program is not in accordance with this Act, he shall enter into a cooperative agreement with the State for the purpose of assisting in implementation of the State program. In order for a State program to be deemed an adequate and active program for the conservation of endangered species of plants and threatened species of plants, the Secretary must find, and annually thereafter reconfirm such finding, that under the State program-

(A) authority resides in the State agency to conserve resident species of plants determined by the State agency or the Secretary to be endangered or threatened;

(B) the State agency has established acceptable conservation programs, consistent with the purposes and policies of this Act, for all resident species of plants in the State which are deemed by the Secretary to be endangered or threatened, and has furnished a copy of such plan and program together with all pertinent details, information, and data requested to the Secretary;

(C) the State agency is authorized to conduct investigations to determine the status and requirements for survival of resident species of plants; and

(D) provision is made for public participation in designating resident species of plants as endangered or threatened; or that under the State program-

(i) the requirements set forth in subparagraphs (C) and (D) of this paragraph are complied with, and

(ii) plans are included under which immediate attention will be given to those resident species of plants which are determined by the Secretary or the State agency to be endangered or threatened and which the Secretary and the State agency agree are most urgently in need of conservation programs; except that a cooperative agreement entered into with a State whose program is deemed adequate and active pursuant to clause (i) and this clause shall not affect the applicability of prohibitions set forth in or authorized pursuant to section 4(d) or section 9(a)(1) with respect to the taking of any resident endangered or threatened species.

(d) ALLOCATION OF FUNDS.-

(1) The Secretary is authorized to provide financial assistance to any State, through its respective State agency, which has entered into a cooperative agreement pursuant to subsection (c) of this section to assist in development of programs for the conservation of endangered and threatened species or to assist in monitoring the status of candidate species pursuant to subparagraph (C) of section 4(b)(3) and recovered species pursuant to section 4(g). The Secretary shall allocate each annual appropriation made in accordance with the provisions of subsection (i) of this section to such States based on consideration of-

(A) the international commitments of the United States to protect endangered species or threatened species;

(B) the readiness of a State to proceed with a conservation program consistent with the objectives and purposes of this Act;

(C) the number of endangered species and threatened species within a State;

(D) the potential for restoring endangered species and threatened species within a State;

(E) the relative urgency to initiate a program to restore and protect an endangered species or threatened species in terms of survival of the species;

(F) the importance of monitoring the status of candidate species within a State to prevent a significant risk to the well being of any such species; and

(G) the importance of monitoring the status of recovered species within a State to assure that such species do not return to the point at which the measures provided pursuant to this Act are again necessary.

So much of the annual appropriation made in accordance with provisions of subsection (i) of this section allocated for obligation to any State for any fiscal year as remains unobligated at the close thereof is authorized to be made available to that State until the close of the succeeding fiscal year. Any amount allocated to any State which is unobligated at the end of the period during which it is available for expenditure is authorized to be made available for expenditure by the Secretary in conducting programs under this section.

(2) Such cooperative agreements shall provide for-

(A) the actions to be taken by the Secretary and the States;

(B) the benefits that are expected to be derived in connection with the conservation of endangered or threatened species;

(C) the estimated cost of these actions; and

(D) the share of such costs to be borne by the Federal Government and by the States; except that-

(i) the Federal share of such program costs shall not exceed 75 percent of the estimated program cost stated in the agreement; and

(ii) the Federal share may be increased to 90 percent whenever two or more States having a common interest in one or more endangered or threatened species, the conservation of which may be enhanced by cooperation of such States, enter jointly into agreement with the Secretary.

The Secretary may, in his discretion, and under such rules and regulations as he may prescribe, advance funds to the State for financing the United States pro rata share agreed upon in the cooperative agreement. For the purposes of this section, the non-Federal share may, in the discretion of the Secretary, be in the form of money or real property, the value of which will be determined by the Secretary whose decision shall be final.

(e) REVIEW OF STATE PROGRAMS.-Any action taken by the Secretary under this section shall be subject to his periodic review at no greater than annual intervals.

(f) CONFLICTS BETWEEN FEDERAL AND STATE LAWS.-Any State law or regulation which applies with respect to the importation or exportation of, or interstate or foreign commerce in, endangered species or threatened species is void to the extent that it may effectively

(1) permit what is prohibited by this Act or by any regulation which implements this Act, or

(2) prohibit what is authorized pursuant to an exemption or permit provided for in this Act or in any regulation which implements this Act. This Act shall not otherwise be construed to void any State law or regulation which is intended to conserve migratory, resident, or introduced fish or wildlife, or to permit or prohibit sale of such fish or wildlife. Any State law or regulation respecting the taking of an endangered species or threatened species may be more restrictive than the exemptions or permits provided for in this Act or in any regulation which implements this Act but not less restrictive than the prohibitions so defined.

(g) TRANSITION.-

(1) For purposes of this subsection, the term "establishment period" means, with respect to any State, the period beginning on the date of enactment of this Act and ending on whichever of the following dates first occurs:

(A) the date of the close of the 120-day period following the adjournment of the first regular session of the legislature of such State which commences after such date of enactment, or

(B) the date of the close of the 15 month period following such date of enactment.

(2) The prohibitions set forth in or authorized pursuant to sections 4(d) and 9(a)(1)(B) of this Act shall not apply with respect to the taking of any resident endangered species or threatened species (other than species listed in Appendix I to the Convention or otherwise specifically covered by any other treaty or Federal law) within any State-

(A) which is then a party to a cooperative agreement with the Secretary pursuant to section 6(c) of this Act (except to the extent that the taking of any such species is contrary to the law of such State); or

(B) except for any time within the establishment period when-

(i) the Secretary applies such prohibition to such species at the request of the State, or

(ii) the Secretary applies such prohibition after he finds, and publishes his finding, that an emergency exists posing a significant risk to the well-being of such species and that the prohibition must be applied to protect such species. The Secretary's finding and publication may be made without regard to the public hearing or comment provisions of section 553 of title 5, United States Code, or any other provision of this

Act; but such prohibition shall expire 90 days after the date of its imposition unless the Secretary further extends such prohibition by publishing notice and a statement of justification of such extension.

(h) **REGULATIONS.**-The Secretary is authorized to promulgate such regulations as may be appropriate to carry out the provisions of this section relating to financial assistance to States.

(i) **APPROPRIATIONS.**-

(1) To carry out the provisions of this section for fiscal years after September 30, 1988, there shall be deposited into a special fund known as the cooperative endangered species conservation fund, to be administered by the Secretary, an amount equal to five percent of the combined amounts covered each fiscal year into the Federal aid to wildlife restoration fund under section 3 of the Act of September 2, 1937, and paid, transferred, or otherwise credited each fiscal year to the Sport Fishing Restoration Account established under 1016 of the Act of July 18, 1984.

(2) Amounts deposited into the special fund are authorized to be appropriated annually and allocated in accordance with subsection (d) of this section.

INTERAGENCY COOPERATION ^

SEC. 7.

(a) **FEDERAL AGENCY ACTIONS AND CONSULTATIONS.**-

(1) The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act.

(2) Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.

(3) Subject to such guidelines as the Secretary may establish, a Federal agency shall consult with the Secretary on any prospective agency action at the request of, and in cooperation with, the prospective permit or license applicant if the applicant has reason to believe that an endangered species or a threatened species may be present in the area affected by his project and that implementation of such action will likely affect such species.

(4) Each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under section 4 or result in the destruction or adverse modification of critical habitat proposed to be designated for such species. This paragraph does not require a limitation on the commitment of resources as described in subsection (d).

(b) **OPINION OF SECRETARY.**-

(1)(A) Consultation under subsection (a)(2) with respect to any agency action shall be concluded within the 90-day period beginning on the date on which initiated or, subject to subparagraph (B), within such other period of time as is mutually agreeable to the Secretary and the Federal agency;

(B) in the case of an agency action involving a permit or license applicant, the Secretary and the Federal agency may not mutually agree to conclude consultation within a period exceeding 90 days unless the Secretary, before the close of the 90th day referred to in subparagraph (A)-

(i) if the consultation period proposed to be agreed to will end before the 150th day after the date on which consultation was initiated, submits to the applicant a written statement setting forth-

(I) the reasons why a longer period is required;

(II) the information that is required to complete the consultation; and

(III) the estimated date on which consultation will be completed; or

(ii) if the consultation period proposed to be agreed to will end 150 or more days after the date on which consultation was initiated, obtains the consent of the applicant to such period. The Secretary and the Federal agency may mutually agree to extend a consultation period established under the preceding sentence

if the Secretary, before the close of such period, obtains the consent of the applicant to the extension.

(2) Consultation under subsection (a)(3) shall be concluded within such period as is agreeable to the Secretary, the Federal agency, and the applicant concerned.

(3)(A) Promptly after conclusion of consultation under paragraph (2) or (3) of subsection (a), the Secretary shall provide to the Federal agency and the applicant, if any, a written statement setting forth the Secretary's opinion, and a summary of the information on which the opinion is based, detailing how the agency action affects the species or its critical habitat. If jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and prudent alternatives which he believes would not violate subsection (a)(2) and can be taken by the Federal agency or applicant in implementing the agency action.

(B) Consultation under subsection (a)(3), and an opinion based by the Secretary incident to such consultation, regarding an agency action shall be treated respectively as a consultation under subsection (a)(2), and as an opinion issued after consultation under such subsection, regarding that action if the Secretary reviews the action before it is commenced by the Federal agency and finds, and notifies such agency, that no significant changes have been made with respect to the action and that no significant change has occurred regarding the information used during the initial consultation.

(4) If after consultation under subsection (a)(2) of this section, the Secretary concludes that-

(A) the agency action will not violate such subsection, or offers reasonable and prudent alternatives which the Secretary believes would not violate such subsection;

(B) the taking of an endangered species or a threatened species incidental to the agency action will not violate such subsection; and

(C) if an endangered species or threatened species of a marine mammal is involved, the taking is authorized pursuant to section 1371(a)(5) of this title; the Secretary shall provide the Federal agency and the applicant concerned, if any, with a written statement that-

(i) specifies the impact of such incidental taking on the species,

(ii) specifies those reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact,

(iii) in the case of marine mammals, specifies those measures that are necessary to comply with section 1371(a)(5) of this title with regard to such taking, and

(iv) sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or applicant (if any), or both, to implement the measures specified under clauses (ii) and (iii).

(c) BIOLOGICAL ASSESSMENT.-

(1) To facilitate compliance with the requirements of subsection (a)(2) each Federal agency shall, with respect to any agency action of such agency for which no contract for construction has been entered into and for which no construction has begun on the date of enactment of the Endangered Species Act Amendments of 1978, request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action. If the Secretary advises, based on the best scientific and commercial data available, that such species may be present, such agency shall conduct a biological assessment for the purpose of identifying any endangered species or threatened species which is likely to be affected by such action. Such assessment shall be completed within 180 days after the date on which initiated (or within such other period as is mutually agreed to by the Secretary and such agency, except that if a permit or license applicant is involved, the 180-day period may not be extended unless such agency provides the applicant, before the close of such period, with a written statement setting forth the estimated length of the proposed extension and the reasons therefor) and, before any contract for construction is entered into and before construction is begun with respect to such action. Such assessment may be undertaken as part of a Federal agency's compliance with the requirements of section 102 of the National Environmental Policy Act of 1969 (42 U.S.C. 4332).

(2) Any person who may wish to apply for an exemption under subsection (g) of this section for that action may conduct a biological assessment to identify any endangered species or threatened species which is likely to be affected by such action. Any such biological assessment must, however, be conducted in cooperation with the Secretary and under the supervision of the appropriate Federal agency.

(d) LIMITATION ON COMMITMENT OF RESOURCES.-After initiation of consultation required under subsection (a)(2), the Federal agency and the permit or license applicant shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not

violate subsection (a)(2).

(e)(1) ESTABLISHMENT OF COMMITTEE.-There is established a committee to be known as the Endangered Species Committee (hereinafter in this section referred to as the "Committee").

(2) The Committee shall review any application submitted to it pursuant to this section and determine in accordance with subsection (h) of this section whether or not to grant an exemption from the requirements of subsection (a)(2) of this action for the action set forth in such application.

(3) The Committee shall be composed of seven members as follows:

(A) The Secretary of Agriculture.

(B) The Secretary of the Army.

(C) The Chairman of the Council of Economic Advisors.

(D) The Administrator of the Environmental Protection Agency. Agency.

(E) The Secretary of the Interior.

(F) The Administrator of the National Oceanic and Atmospheric Administration.

(G) The President, after consideration of any recommendations received pursuant to subsection (g)(2)(B) shall appoint one individual from each affected State, as determined by the Secretary, to be a member of the Committee for the consideration of the application for exemption for an agency action with respect to which such recommendations are made, not later than 30 days after an application is submitted pursuant to this section.

(4)(A) Members of the Committee shall receive no additional pay on account of their service on the Committee.

(B) While away from their homes or regular places of business in the performance of services for the Committee, members of the Committee shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703 of title 5 of the United States Code.

(5)(A) Five members of the Committee or their representatives shall constitute a quorum for the transaction of any function of the Committee, except that, in no case shall any representative be considered in determining the existence of a quorum for the transaction of any function of the Committee if that function involves a vote by the Committee on any matter before the Committee.

(B) The Secretary of the Interior shall be the Chairman of the Committee.

(C) The Committee shall meet at the call of the Chairman or five of its members.

(D) All meetings and records of the Committee shall be open to the public.

(6) Upon request of the Committee, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of the personnel of such agency to the Committee to assist it in carrying out its duties under this section.

(7)(A) The Committee may for the purpose of carrying out its duties under this section hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence, as the Committee deems advisable.

(B) When so authorized by the Committee, any member or agent of the Committee may take any action which the Committee is authorized to take by this paragraph.

(C) Subject to the Privacy Act, the Committee may secure directly from any Federal agency information necessary to enable it to carry out its duties under this section. Upon request of the Chairman of the Committee, the head of such Federal agency shall furnish such information to the Committee.

(D) The Committee may use the United States mails in the same manner and upon the same conditions as a Federal agency.

(E) The Administrator of General Services shall provide to the Committee on a reimbursable basis such administrative support services as the Committee may request.

(8) In carrying out its duties under this section, the Committee may promulgate and amend such rules, regulations, and procedures, and issue and amend such orders as it deems necessary.

(9) For the purpose of obtaining information necessary for the consideration of an application for an exemption under this section the Committee may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents.

(10) In no case shall any representative, including a representative of a member designated pursuant to paragraph (3)(G) of this subsection, be eligible to cast a vote on behalf of any member.

(f) REGULATIONS.-Not later than 90 days after the date of enactment of the Endangered Species Act Amendments of 1978, the Secretary shall promulgate regulations which set forth the form and manner in

which applications for exemption shall be submitted to the Secretary and the information to be contained in such applications. Such regulations shall require that information submitted in an application by the head of any Federal agency with respect to any agency action include but not be limited to-

- (1) a description of the consultation process carried out pursuant to subsection (a)(2) of this section between the head of the Federal agency and the Secretary; and
- (2) a statement describing why such action cannot be altered or modified to conform with the requirements of subsection (a)(2) of this section.

(g) APPLICATION FOR EXEMPTION AND REPORT TO THE COMMITTEE.-

(1) A Federal agency, the Governor of the State in which an agency action will occur, if any, or a permit or license applicant may apply to the Secretary for an exemption for an agency action of such agency if, after consultation under subsection (a)(2), the Secretary's opinion under subsection (b) indicates that the agency action would violate subsection (a)(2). An application for an exemption shall be considered initially by the Secretary in the manner provided for in this subsection, and shall be considered by the Committee for a final determination under subsection (h) after a report is made pursuant to paragraph (5). The applicant for an exemption shall be referred to as the "exemption applicant" in this section.

(2)(A) An exemption applicant shall submit a written application to the Secretary, in a form prescribed under subsection (f), not later than 90 days after the completion of the consultation process; except that, in the case of any agency action involving a permit or license applicant, such application shall be submitted not later than 90 days after the date on which the Federal agency concerned takes final agency action with respect to the issuance of the permit or license. For purposes of the preceding sentence, the term "final agency action" means (i) a disposition by an agency with respect to the issuance of a permit or license that is subject to administrative review, whether or not such disposition is subject to judicial review; or (ii) if administrative review is sought with respect to such disposition, the decision resulting after such review. Such application shall set forth the reasons why the exemption applicant considers that the agency action meets the requirements for an exemption under this subsection.

(B) Upon receipt of an application for exemption for an agency action under paragraph (1), the Secretary shall promptly

(i) notify the Governor of each affected State, if any, as determined by the Secretary, and request the Governors so notified to recommend individuals to be appointed to the Endangered Species Committee for consideration of such application; and

(ii) publish notice of receipt of the application in the Federal Register, including a summary of the information contained in the application and a description of the agency action with respect to which the application for exemption has been filed.

(3) The Secretary shall within 20 days after the receipt of an application for exemption, or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary

(A) determine that the Federal agency concerned and the exemption applicant have-

(i) carried out the consultation responsibilities described in subsection (a) in good faith and made a reasonable and responsible effort to develop and fairly consider modifications or reasonable and prudent alternatives to the proposed agency action which would not violate subsection (a)(2);

(ii) conducted any biological assessment required by subsection (c); and

(iii) to the extent determinable within the time provided herein, refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d); or

(B) deny the application for exemption because the Federal agency concerned or the exemption applicant have not met the requirements set forth in subparagraph (A) (i), (ii), and (iii). The denial of an application under subparagraph (B) shall be considered final agency action for purposes of chapter 7 of title 5, United States Code.

(4) If the Secretary determines that the Federal agency concerned and the exemption applicant have met the requirements set forth in paragraph (3)(A) (i), (ii) and (iii) he shall, in consultation with the Members of the Committee, hold a hearing on the application for exemption in accordance with sections 554, 555, and 556 (other than subsection (b) (1) and (2) thereof) of title 5, United States Code, and prepare the report to be submitted pursuant to paragraph (5).

(5) Within 140 days after making the determinations under paragraph (3) or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary, the Secretary shall submit to the Committee a report discussing-

(A) the availability of reasonable and prudent alternatives to the agency action, and the nature and extent of the benefits of the agency action and of alternative courses of action consistent with conserving the species

of the critical habitat;

(B) a summary of the evidence concerning whether or not the agency action is in the public interest and is of national or regional significance;

(C) appropriate reasonable mitigation and enhancement measures which should be considered by the Committee; and

(D) whether the Federal agency concerned and the exemption applicant refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d).

(6) To the extent practicable within the time required for action under subsection (g) of this section, and except to the extent inconsistent with the requirements of this section, the consideration of any application for an exemption under this section and the conduct of any hearing under this subsection shall be in accordance with sections 554, 555, and 556 (other than subsection (b)(3) of section 556) of title 5, United States Code.

(7) Upon request of the Secretary, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of the personnel of such agency to the Secretary to assist him in carrying out his duties under this section.

(8) All meetings and records resulting from activities pursuant to this subsection shall be open to the public.

(h) EXEMPTION.-

(1) The Committee shall make a final determination whether or not to grant an exemption within 30 days after receiving the report of the Secretary pursuant to subsection (g)(5). The Committee shall grant an exemption from the requirements of subsection (a)(2) for an agency action if, by a vote of not less than five of its members voting in person-

(A) it determines on the record, based on the report of the Secretary, the record of the hearing held under subsection (g)(4), and on such other testimony or evidence as it may receive, that-

(i) there are no reasonable and prudent alternatives to the agency action;

(ii) the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the species or its critical habitat, and such action is in the public interest;

(iii) the action is of regional or national significance; and

(iv) neither the Federal agency concerned nor the exemption applicant made any irreversible or irretrievable commitment of resources prohibited by subsection (d); and

(B) it establishes such reasonable mitigation and enhancement measures, including, but not limited to, live propagation, transplantation, and habitat acquisition and improvement, as are necessary and appropriate to minimize the adverse effects of the agency action upon the endangered species, threatened species, or critical habitat concerned.

Any final determination by Committee under this subsection shall be considered final agency action for purposes of chapter 7 of title 5 of the United States Code.

(2)(A) Except as provided in subparagraph (B), an exemption for an agency action granted under paragraph (1) shall constitute a permanent exemption with respect to all endangered or threatened species for the purposes of completing such agency action-

(i) regardless whether the species was identified in the biological assessment; and

(ii) only if a biological assessment has been conducted under subsection (c) with respect to such agency action.

(B) An exemption shall be permanent under subparagraph (A) unless-

(i) the Secretary finds, based on the best scientific and commercial data available, that such exemption would result in the extinction of a species that was not the subject of consultation under subsection (a)(2) or was not identified in any biological assessment conducted under subsection (c), and

(ii) the Committee determines within 60 days after the date of the Secretary's finding that the exemption should not be permanent.

If the Secretary makes a finding described in clause (i), the Committee shall meet with respect to the matter within 30 days after the date of the finding.

(i) REVIEW BY SECRETARY OF STATE.-Notwithstanding any other provision of this Act, the Committee shall be prohibited from considering for exemption any application made to it, if the Secretary of State, after a review of the proposed agency action and its potential implications, and after hearing, certifies, in writing, to the Committee within 60 days of any application made under this section that the granting of any such exemption and the carrying out of such action would be in violation of an

international treaty obligation or other international obligation of the United States. The Secretary of State shall, at the time of such certification, publish a copy thereof in the Federal Register.

(j) Notwithstanding any other provision of this Act, the Committee shall grant an exemption for any agency action if the Secretary of Defense finds that such exemption is necessary for reasons of national security.

(k) **SPECIAL PROVISIONS.**-An exemption decision by the Committee under this section shall not be a major Federal action for purposes of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.): Provided, That an environmental impact statement which discusses the impacts upon endangered species or threatened species or their critical habitats shall have been previously prepared with respect to any agency action exempted by such order.

(l) COMMITTEE ORDERS.-

(1) If the Committee determines under subsection (h) that an exemption should be granted with respect to any agency action, the Committee shall issue an order granting the exemption and specifying the mitigation and enhancement measures established pursuant to subsection (h) which shall be carried out and paid for by the exemption applicant in implementing the agency action. All necessary mitigation and enhancement measures shall be authorized prior to the implementing of the agency action and funded concurrently with all other project features.

(2) The applicant receiving such exemption shall include the costs of such mitigation and enhancement measures within the overall costs of continuing the proposed action. Notwithstanding the preceding sentence the costs of such measures shall not be treated as project costs for the purpose of computing benefit-cost or other ratios for the proposed action. Any applicant may request the Secretary to carry out such mitigation and enhancement measures. The costs incurred by the Secretary in carrying out any such measures shall be paid by the applicant receiving the exemption. No later than one year after the granting of an exemption, the exemption applicant shall submit to the Council on Environmental Quality a report describing its compliance with the mitigation and enhancement measures prescribed by this section. Such report shall be submitted annually until all such mitigation and enhancement measures have been completed. Notice of the public availability of such reports shall be published in the Federal Register by the Council on Environmental Quality.

(m) **NOTICE.**-The 60-day notice requirement of section 11(g) of this Act shall not apply with respect to review of any final determination of the Committee under subsection (h) of this section granting an exemption from the requirements of subsection (a)(2) of this section.

(n) **JUDICIAL REVIEW.**-Any person, as defined by section 3(13) of this Act, may obtain judicial review, under chapter 7 of title 5 of the United States Code, of any decision of the Endangered Species Committee under subsection (h) in the United States Court of Appeals for

(1) any circuit wherein the agency action concerned will be, or is being, carried out, or

(2) in any case in which the agency action will be, or is being, carried out outside of any circuit, the District of Columbia, by filing in such court within 90 days after the date of issuance of the decision, a written petition for review. A copy of such petition shall be transmitted by the clerk of the court to the Committee and the Committee shall file in the court the record in the proceeding, as provided in section 2112, of title 28, United States Code. Attorneys designated by the Endangered Species Committee may appear for, and represent the Committee in any action for review under this subsection.

(o) EXEMPTION AS PROVIDING EXCEPTION ON TAKING OF ENDANGERED SPECIES.-

Notwithstanding sections 1533(d) and 1538(a)(1)(B) and (C) of this title, sections 1371 and 1372 of this title, or any regulation promulgated to implement any such section-

(1) any action for which an exemption is granted under subsection (h) of this section shall not be considered to be a taking of any endangered species or threatened species with respect to any activity which is necessary to carry out such action; and

(2) any taking that is in compliance with the terms and conditions specified in a written statement provided under subsection (b)(4)(iv) of this section shall not be considered to be a prohibited taking of the species concerned.

(p) EXEMPTIONS IN PRESIDENTIALLY DECLARED DISASTER AREAS. In any area which has been declared by the President to be a major disaster area under the Disaster Relief Act of 1974, the President is authorized to make the determinations required by subsections (g) and (h) of this section for any project for the repair or replacement of a public facility substantially as it existed prior to the disaster under section 401 or 402 of the Disaster Relief Act of 1974, and which the President determines

(1) is necessary to prevent the recurrence of such a natural disaster and to reduce the potential loss of human life, and

(2) to involve an emergency situation which does not allow the ordinary procedures of this section to be followed. Notwithstanding any other provision of this section, the Committee shall accept the determinations of the President under this subsection.

INTERNATIONAL COOPERATION [△]

SEC. 8.

(a) FINANCIAL ASSISTANCE.-As a demonstration of the commitment of the United States to the worldwide protection of endangered species and threatened species, the President may, subject to the provisions of section 1415 of the Supplemental Appropriation Act, 1953 (31 U.S.C. 724), use foreign currencies accruing to the United States Government under the Agricultural Trade Development and Assistance Act of 1954 or any other law to provide to any foreign country (with its consent) assistance in the development and management of programs in that country which the Secretary determines to be necessary or useful for the conservation of any endangered species or threatened species listed by the Secretary pursuant to section 4 of this Act. The President shall provide assistance (which includes, but is not limited to, the acquisition, by lease or otherwise, of lands, waters, or interests therein) to foreign countries under this section under such terms and conditions as he deems appropriate. Whenever foreign currencies are available for the provision of assistance under this section, such currencies shall be used in preference to funds appropriated under the authority of section 15 of this Act.

(b) ENCOURAGEMENT OF FOREIGN PROGRAMS.-In order to carry out further the provisions of this Act, the Secretary, through the Secretary of State shall encourage-

(1) foreign countries to provide for the conservation of fish or wildlife and plants including endangered species and threatened species listed pursuant to section 4 of this Act;

(2) the entering into of bilateral or multilateral agreements with foreign countries to provide for such conservation; and

(3) foreign persons who directly or indirectly take fish or wildlife or plants in foreign countries or on the high seas for importation into the United States for commercial or other purposes to develop and carry out with such assistance as he may provide, conservation practices designed to enhance such fish or wildlife or plants and their habitat.

(c) PERSONNEL.-After consultation with the Secretary of State, the Secretary may-

(1) assign or otherwise make available any officer or employee of his department for the purpose of cooperating with foreign countries and international organizations in developing personnel resources and programs which promote the conservation of fish or wildlife or plants, and

(2) conduct or provide financial assistance for the educational training of foreign personnel, in this country or abroad, in fish, wildlife, or plant management, research and law enforcement and to render professional assistance abroad in such matters.

(d) INVESTIGATIONS.-After consultation with the Secretary of State and the Secretary of the Treasury, as appropriate, the Secretary may conduct or cause to be conducted such law enforcement investigations and research abroad as he deems necessary to carry out the purposes of this Act.

CONVENTION IMPLEMENTATION

SEC. 8A.

(a) MANAGEMENT AUTHORITY AND SCIENTIFIC AUTHORITY.-The Secretary of the Interior (hereinafter in this section referred to as the "Secretary") is designated as the Management Authority and the Scientific Authority for purposes of the Convention and the respective functions of each such Authority shall be carried out through the United States Fish and Wildlife Service.

(b) **MANAGEMENT AUTHORITY FUNCTIONS.** -The Secretary shall do all things necessary and appropriate to carry out the functions of the Management Authority under the Convention.

(c) **SCIENTIFIC AUTHORITY FUNCTIONS.** -

(1) The Secretary shall do all things necessary and appropriate to carry out the functions of the Scientific Authority under the Convention.

(2) The Secretary shall base the determinations and advice given by him under Article IV of the Convention with respect to wildlife upon the best available biological information derived from professionally accepted wildlife management practices; but is not required to make, or require any State to make, estimates of population size in making such determinations or giving such advice.

(d) **RESERVATIONS BY THE UNITED STATES UNDER CONVENTION.** -If the United States votes against including any species in Appendix I or II of the Convention and does not enter a reservation pursuant to paragraph (3) of Article XV of the Convention with respect to that species, the Secretary of State, before the 90th day after the last day on which such a reservation could be entered, shall submit to the Committee on Merchant Marine and Fisheries of the House of Representatives, and to the Committee on the Environment and Public Works of the Senate, a written report setting forth the reasons why such a reservation was not entered.

(e) **WILDLIFE PRESERVATION IN WESTERN HEMISPHERE.** -

(1) The Secretary of the Interior (hereinafter in this subsection referred to as the "Secretary"), in cooperation with the Secretary of State, shall act on behalf of, and represent, the United States in all regards as required by the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (56 Stat. 1354, T.S. 982, hereinafter in this subsection referred to as the "Western Convention"). In the discharge of these responsibilities, the Secretary and the Secretary of State shall consult with the Secretary of Agriculture, the Secretary of Commerce, and the heads of other agencies with respect to matters relating to or affecting their areas of responsibility.

(2) The Secretary and the Secretary of State shall, in cooperation with the contracting parties to the Western Convention and, to the extent feasible and appropriate, with the participation of State agencies, take such steps as are necessary to implement the Western Convention. Such steps shall include, but not be limited to

(A) cooperation with contracting parties and international organizations for the purpose of developing personnel resources and programs that will facilitate implementation of the Western Convention;

(B) identification of those species of birds that migrate between the United States and other contracting parties, and the habitats upon which those species depend, and the implementation of cooperative measures to ensure that such species will not become endangered or threatened; and

(C) identification of measures that are necessary and appropriate to implement those provisions of the Western Convention which address the protection of wild plants.

(3) No later than September 30, 1985, the Secretary and the Secretary of State shall submit a report to Congress describing those steps taken in accordance with the requirements of this subsection and identifying the principal remaining actions yet necessary for comprehensive and effective implementation of the Western Convention.

(4) The provisions of this subsection shall not be construed as affecting the authority, jurisdiction, or responsibility of the several States to manage, control, or regulate resident fish or wildlife under State law or regulations.

PROHIBITED ACTS ^

SEC. 9.

(a) **GENERAL.** -

(1) Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of fish or wildlife listed pursuant to section 4 of this Act it is unlawful for any person subject to the jurisdiction of the United States to-

(A) import any such species into, or export any such species from the United States;

(B) take any such species within the United States or the territorial sea of the United States;

(C) take any such species upon the high seas;

(D) possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any such species taken in

violation of subparagraphs (B) and (C);

(E) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species;

(F) sell or offer for sale in interstate or foreign commerce any such species; or

(G) violate any regulation pertaining to such species or to any threatened species of fish or wildlife listed pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act.

(2) Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of plants listed pursuant to section 4 of this Act, it is unlawful for any person subject to the jurisdiction of the United States to-

(A) import any such species into, or export any such species from, the United States;

(B) remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any such area; or remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any law or regulation of any state or in the course of any violation of a state criminal trespass law;

(C) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species;

(D) sell or offer for sale in interstate or foreign commerce any such species; or

(E) violate any regulation pertaining to such species or to any threatened species of plants listed pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act.

(b)(1) SPECIES HELD IN CAPTIVITY OR CONTROLLED ENVIRONMENT. The provisions of subsections (a)(1)(A) and (a)(1)(G) of this section shall not apply to any fish or wildlife which was held in captivity or in a controlled environment on

(A) December 28, 1973, or

(B) the date of the publication in the Federal Register of a final regulation adding such fish or wildlife species to any list published pursuant to subsection (c) of section 4 of this Act: Provided, That such holding and any subsequent holding or use of the fish or wildlife was not in the course of a commercial activity. With respect to any act prohibited by subsections (a)(1)(A) and (a)(1)(G) of this section which occurs after a period of 180 days from

(i) December 28, 1973, or

(ii) the date of publication in the Federal Register of a final regulation adding such fish or wildlife species to any list published pursuant to subsection (c) of section 4 of this Act, there shall be a rebuttable presumption that the fish or wildlife involved in such act is not entitled to the exemption contained in this subsection.

(2)(A) The provisions of subsections (a)(1) shall not apply to-

(i) any raptor legally held in captivity or in a controlled environment on the effective date of the Endangered Species Act Amendments of 1978; or

(ii) any progeny of any raptor described in clause (i); until such time as any such raptor or progeny is intentionally returned to a wild state.

(B) Any person holding any raptor or progeny described in subparagraph (A) must be able to demonstrate that the raptor or progeny does, in fact, qualify under the provisions of this paragraph, and shall maintain and submit to the Secretary, on request, such inventories, documentation, and records as the Secretary may by regulation require as being reasonably appropriate to carry out the purposes of this paragraph. Such requirements shall not unnecessarily duplicate the requirements of other rules and regulations promulgated by the Secretary.

(c) VIOLATION OF CONVENTION.-

(1) It is unlawful for any person subject to the jurisdiction of the United States to engage in any trade in any specimens contrary to the provisions of the Convention, or to possess any specimens traded contrary to the provisions of the Convention, including the definitions of terms in article I thereof

(2) Any importation into the United States of fish or wildlife shall, if-

(A) such fish or wildlife is not an endangered species listed pursuant to section 4 of this Act but is listed in Appendix II of the Convention;

(B) the taking and exportation of such fish or wildlife is not contrary to the provisions of the Convention and all other applicable requirements of the Convention have been satisfied;

(C) the applicable requirements of subsections (d), (e), and (f) of this section have been satisfied; and

(D) such importation is not made in the course of a commercial activity; be presumed to be an importation not in violation of any provision of this Act or any regulation issued pursuant to this Act.

(d) IMPORTS AND EXPORTS.-

(1) **IN GENERAL.**-It is unlawful for any person, without first having obtained permission from the Secretary, to engage in business-

(A) as an importer or exporter of fish or wildlife (other than shellfish and fishery products which

(i) are not listed pursuant to section 4 of this Act as endangered species or threatened species, and

(ii) are imported for purposes of human or animal consumption or taken in waters under the jurisdiction of the United States or on the high seas for recreational purposes) or plants; or

(B) as an importer or exporter of any amount of raw or worked African elephant ivory.

(2) **REQUIREMENTS.**-Any person required to obtain permission under paragraph (1) of this subsection shall-

(A) keep such records as will fully and correctly disclose each importation or exportation of fish, wildlife, plants, or African elephant ivory made by him and the subsequent disposition made by him with respect to such fish, wildlife, plants, or ivory;

(B) at all reasonable times upon notice by a duly authorized representative of the Secretary, afford such representative access to his place of business, an opportunity to examine his inventory of imported fish, wildlife, plants, or African elephant ivory and the records required to be kept under subparagraph (A) of this paragraph, and to copy such records; and

(C) file such reports as the Secretary may require.

(3) **REGULATIONS.**-The Secretary shall prescribe such regulations as are necessary and appropriate to carry out the purposes of this subsection.

(4) **RESTRICTION ON CONSIDERATION OF VALUE OR AMOUNT OF AFRICAN ELEPHANT IVORY IMPORTED OR EXPORTED.**-In granting permission under this subsection for importation or exportation of African elephant ivory, the Secretary shall not vary the requirements for obtaining such permission on the basis of the value or amount of ivory imported or exported under such permission.

(e) **REPORTS.**-It is unlawful for any person importing or exporting fish or wildlife (other than shellfish and fishery products) which

(1) are not listed pursuant to section 4 of this Act as endangered or threatened species, and

(2) are imported for purposes of human or animal consumption or taken in waters under the jurisdiction of the United States or on the high seas for recreational purposes) or plants to fail to file any declaration or report as the Secretary deems necessary to facilitate enforcement of this Act or to meet the obligations of the Convention.

(f) DESIGNATION OF PORTS.-

(1) It is unlawful for any person subject to the jurisdiction of the United States to import into or export from the United States any fish or wildlife (other than shellfish and fishery products which

(A) are not listed pursuant to section 4 of this Act as endangered species or threatened species, and

(B) are imported for purposes of human or animal consumption or taken in waters under the jurisdiction of the United States or on the high seas for recreational purposes) or plants, except at a port or ports designated by the Secretary of the Interior. For the purposes of facilitating enforcement of this Act and reducing the costs thereof, the Secretary of the Interior, with approval of the Secretary of the Treasury and after notice and opportunity for public hearing, may, by regulation, designate ports and change such designations. The Secretary of the Interior, under such terms and conditions as he may prescribe, may permit the importation or exportation at nondesignated ports in the interest of the health or safety of the fish or wildlife or plants, or for other reasons if, in his discretion, he deems it appropriate and consistent with the purpose of this subsection.

(2) Any port designated by the Secretary of the Interior under the authority of section 4(d) of the Act of December 5, 1969 (16 U.S.C. 666cc 4(d)), shall, if such designation is in effect on the day before the date of the enactment of this Act, be deemed to be a port designated by the Secretary under paragraph (1) of this subsection until such time as the Secretary otherwise provides.

(g) **VIOLATIONS.**-It is Unlawful for any person subject to the jurisdiction of the United States to attempt to commit, solicit another to commit, or cause to be committed, any offense defined in this section.

EXCEPTIONS ^**SEC. 10.****(a) PERMITS.-**

(1) The Secretary may permit, under such terms and conditions as he shall prescribe-

(A) any act otherwise prohibited by section 9 for scientific purposes or to enhance the propagation or survival of the affected species, including, but not limited to, acts necessary for the establishment and maintenance of experimental populations pursuant subsection (j); or

(B) any taking otherwise prohibited by section 9(a)(1)(B) if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

(2)(A) No permit may be issued by the Secretary authorizing any taking referred to in paragraph (1)(B) unless the applicant therefor submits to the Secretary a conservation plan that specifies-

(i) the impact which will likely result from such taking;

(ii) what steps the applicant will take to minimize and mitigate such impacts, and the funding that will be available to implement such steps;

(iii) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized; and

(iv) such other measures that the Secretary may require as being necessary or appropriate for purposes of the plan.

(B) If the Secretary finds, after opportunity for public comment, with respect to a permit application and the related conservation plan that-

(i) the taking will be incidental;

(ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;

(iii) the applicant will ensure that adequate funding for the plan will be provided;

(iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and

(v) the measures, if any, required under subparagraph (A)(iv) will be met; and he has received such other assurances as he may require that the plan will be implemented, the Secretary shall issue the permit. The permit shall contain such terms and conditions as the Secretary deems necessary or appropriate to carry out the purposes of this paragraph, including, but not limited to, such reporting requirements as the Secretary deems necessary for determining whether such terms and conditions are being complied with.

(C) The Secretary shall revoke a permit issued under this paragraph if he finds that the permittee is not complying with the terms and conditions of the permit.

(b) HARDSHIP EXEMPTIONS.-

(1) If any person enters into a contract with respect to a species of fish or wildlife or plant before the date of the publication in the Federal Register of notice of consideration of that species as an endangered species and the subsequent listing of that species as an endangered species pursuant to section 4 of this Act will cause undue hardship to such person under the contract, the Secretary, in order to minimize such hardship, may exempt such person from the application of section 9(a) of this Act to the extent the Secretary deems appropriate if such person applies to him for such exemption and includes with such application such information as the Secretary may require to prove such hardship; except that (A) no such exemption shall be for a duration of more than one year from the date of publication in the Federal Register of notice of consideration of the species concerned, or shall apply to a quantity of fish or wildlife or plants in excess of that specified by the Secretary; (B) the one-year period for those species of fish or wildlife listed by the Secretary as endangered prior to the effective date of this Act shall expire in accordance with the terms of section 3 of the Act of December 5, 1969 (83 Stat. 275); and (C) no such exemption may be granted for the importation or exportation of a specimen listed in Appendix I of the Convention which is to be used in a commercial activity.

(2) As used in this subsection, the term "undue economic hardship" shall include, but not be limited to:

(A) substantial economic loss resulting from inability caused by this Act to perform contracts with respect to species of fish and wildlife entered into prior to the date of publication in the Federal Register of a notice of consideration of such species as an endangered species;

(B) substantial economic loss to persons who, for the year prior to the notice of consideration of such species as an endangered species, derived a substantial portion of their income from the lawful taking of any listed species, which taking would be made unlawful under this Act; or

(C) curtailment of subsistence taking made unlawful under this Act by persons

- (i) not reasonably able to secure other sources of subsistence; and
- (ii) dependent to a substantial extent upon hunting and fishing for subsistence; and
- (iii) who must engage in such curtailed taking for subsistence purposes.

(3) The Secretary may make further requirements for a showing of undue economic hardship as he deems fit. Exceptions granted under this section may be limited by the Secretary in his discretion as to time, area, or other factor of applicability.

(c) NOTICE AND REVIEW.-The Secretary shall publish notice in the Federal Register of each application for an exemption or permit which is made under this section. Each notice shall invite the submission from interested parties, within thirty days after the date of the notice, of written data, views, or arguments with respect to the application; except that such thirty-day period may be waived by the Secretary in an emergency situation where the health or life of an endangered animal is threatened and no reasonable alternative is available to the applicant, but notice of any such waiver shall be published by the Secretary in the Federal Register within ten days following the issuance of the exemption or permit. Information received by the Secretary as part of any application shall be available to the public as a matter of public record at every stage of the proceeding.

(d) PERMIT AND EXEMPTION POLICY.-The Secretary may grant exceptions under subsections

(a)(1)(A) and (b) of this section only if he finds and publishes his finding in the Federal Register that

- (1) such exceptions were applied for in good faith,
- (2) if granted and exercised will not operate to the disadvantage of such endangered species, and
- (3) will be consistent with the purposes and policy set forth in section 2 of this Act.

(e) ALASKA NATIVES.-

(1) Except as provided in paragraph (4) of this subsection the provisions of this Act shall not apply with respect to the taking of any endangered species or threatened species, or the importation of any such species taken pursuant to this section, by-

(A) any Indian, Aleut, or Eskimo who is an Alaskan Native who resides in Alaska; or

(B) any non-native permanent resident of an Alaskan native village; if such taking is primarily for subsistence purposes. Non-edible byproducts of species taken pursuant to this section may be sold in interstate commerce when made into authentic native articles of handicrafts and clothing; except that the provisions of this subsection shall not apply to any non-native resident of an Alaskan native village found by the Secretary to be not primarily dependent upon the taking of fish and wildlife for consumption or for the creation and sale of authentic native articles of handicrafts and clothing.

(2) Any taking under this subsection may not be accomplished in a wasteful manner.

(3) As used in this subsection-

(i) The term "subsistence" includes selling any edible portion of fish or wildlife in native villages and towns in Alaska for native consumption within native villages or towns; and

(ii) The term "authentic native articles of handicrafts and clothing" means items composed wholly or in some significant respect to natural materials, and which are produced, decorated or fashioned in the exercise of traditional native handicrafts without the use of pantographs, multiple carvers, or other mass copying devices. Traditional native handicrafts include, but are not limited to, weaving, carving, stitching, sewing, lacing, beading, drawing, and painting.

(4) Notwithstanding the provisions of paragraph (1) of this subsection, whenever the Secretary determines that any species of fish or wildlife which is subject to taking under the provisions of this subsection is an endangered species or threatened species, and that such taking materially and negatively affects the threatened or endangered species, he may prescribe regulations upon the taking of such species by any such Indian, Aleut, Eskimo, or non-native Alaskan resident of an Alaskan native village. Such regulations may be established with reference to species, geographical description of the area included, the season for taking, or any other factors related to the reason for establishing such regulations and consistent with the policy of this Act. Such regulations shall be prescribed after a notice and hearings in the affected judicial districts of Alaska and as otherwise required by section 103 of the Marine Mammal Protection Act of 1972, and shall be removed as soon as the Secretary determines that the need for their impositions has disappeared.

(f)(1) As used in this subsection-

(A) The term "Pre-Act endangered species part" means-

(i) any sperm whale oil, including derivatives thereof, which was lawfully held within the United States on December 28, 1973, in the course of a commercial activity; or

(ii) any finished scrimshaw product, if such product or the raw material for such product was lawfully held within the United States on December 28, 1973, in the course of a commercial activity.

(B) The term "scrimshaw product" means any art form which involves the substantial etching or engraving of designs upon, or the substantial carving of figures, patterns, or designs from, any bone or tooth of any marine mammal of the order Cetacea. For purposes of this subsection, polishing or the adding of minor superficial markings does not constitute substantial etching, engraving, or carving.

(2) The Secretary, pursuant to the provisions of this subsection, may exempt, if such exemption is not in violation of the Convention, any pre-Act endangered species part from one or more of the following prohibitions:

(A) The prohibition on exportation from the United States set forth in section 9(a)(1)(A) of this Act.

(B) Any prohibition set forth in section 9(a)(1) (E) or (F) of this Act.

(3) Any person seeking an exemption described in paragraph (2) of this subsection shall make application therefor to the Secretary in such form and manner as he shall prescribe, but no such application may be considered by the Secretary unless the application-

(A) is received by the Secretary before the close of the one year period beginning on the date on which regulations promulgated by the Secretary to carry out this subsection first take effect;

(B) contains a complete and detailed inventory of all pre-Act endangered species parts for which the applicant seeks exemption;

(C) is accompanied by such documentation as the Secretary may require to prove that any endangered species part or product claimed by the applicant to be a pre-Act endangered species part is in fact such a part; and

(D) contains such other information as the Secretary deems necessary and appropriate to carry out the purposes of this subsection.

(4) If the Secretary approves any application for exemption made under this subsection, he shall issue to the applicant a certificate of exemption which shall specify-

(A) any prohibition in section 9(a) of this Act which is exempted;

(B) the pre-Act endangered species parts to which the exemption applies;

(C) the period of time during which the exemption is in effect, but no exemption made under this subsection shall have force and effect after the close of the three-year period beginning on the date of issuance of the certificate unless such exemption is renewed under paragraph (8); and

(D) any term or condition prescribed pursuant to paragraph (5)(A) or (B), or both, which the Secretary deems necessary or appropriate.

(5) The Secretary shall prescribe such regulations as he deems necessary and appropriate to carry out the purposes of this subsection. Such regulations may set forth-

(A) terms and conditions which may be imposed on applicants for exemptions under this subsection (including, but not limited to, requirements that applicants register inventories, keep complete sales records, permit duly authorized agents of the Secretary to inspect such inventories and records, and periodically file appropriate reports with the Secretary); and

(B) terms and conditions which may be imposed on any subsequent purchaser of any pre-Act endangered species part covered by an exemption granted under this subsection; to insure that any such part so exempted is adequately accounted for and not disposed of contrary to the provisions of this Act. No regulation prescribed by the Secretary to carry out the purposes of this subsection shall be subject to section 4(f)(2)(A)(i) of this Act.

(6)(A) Any contract for the sale of pre-Act endangered species parts which is entered into by the Administrator of General Services prior to the effective date of this subsection and pursuant to the notice published in the Federal Register on January 9, 1973, shall not be rendered invalid by virtue of the fact that fulfillment of such contract may be prohibited under section 9(a)(1)(F).

(B) In the event that this paragraph is held invalid, the validity of the remainder of the Act, including the remainder of this subsection, shall not be affected.

(7) Nothing in this subsection shall be construed to-

(A) exonerate any person from any act committed in violation of paragraphs (1)(A),

(1)(E), or (1)(F) of section 9(a) prior to the date of enactment of this subsection; or

(B) immunize any person from prosecution for any such act.

(8)(A)(i) Any valid certificate of exemption which was renewed after October 13, 1982, and was in effect on March 31, 1988, shall be deemed to be renewed for a 6-month period beginning on the date of enactment

of the Endangered Species Act Amendments of 1988. Any person holding such a certificate may apply to the Secretary for one additional renewal of such certificate for a period not to exceed 5 years beginning on the date of such enactment.

(B) If the Secretary approves any application for renewal of an exemption under this paragraph, he shall issue to the applicant a certificate of renewal of such exemption which shall provide that all terms, conditions, prohibitions, and other regulations made applicable by the previous certificate shall remain in effect during the period of the renewal.

(C) No exemption or renewal of such exemption made under this subsection shall have force and effect after the expiration date of the certificate of renewal of such exemption issued under this paragraph.

(D) No person may, after January 31, 1984, sell or offer for sale in interstate or foreign commerce, any pre-Act finished scrimshaw product unless such person holds a valid certificate of exemption issued by the Secretary under this subsection, and unless such product or the raw material for such product was held by such person on October 13, 1982.

(g) In connection with any action alleging a violation of section 9, any person claiming the benefit of any exemption or permit under this Act shall have the burden of proving that the exemption or permit is applicable, has been granted, and was valid and in force at the time of the alleged violation.

(h) CERTAIN ANTIQUE ARTICLES.-

(1) Sections 4(d), 9(a), and 9(c) do not apply to any article which-

(A) is not less than 100 years of age;

(B) is composed in whole or in part of any endangered species or threatened species listed under section 4;

(C) has not been repaired or modified with any part of any such species on or after the date of the enactment of this Act; and

(D) is entered at a port designated under paragraph (3).

(2) Any person who wishes to import an article under the exception provided by this subsection shall submit to the customs officer concerned at the time of entry of the article such documentation as the Secretary of the Treasury, after consultation with the Secretary of the Interior, shall by regulation require as being necessary to establish that the article meets the requirements set forth in paragraph (1) (A), (B), and (C).

(3) The Secretary of the Treasury, after consultation with the Secretary of the Interior, shall designate one port within each customs region at which articles described in paragraph

(1) (A), (B), and (C) must be entered into the customs territory of the United States.

(4) Any person who imported, after December 27, 1973, and on or before the date of the enactment of the Endangered Species Act Amendments of 1978, any article described in paragraph (1) which-

(A) was not repaired or modified after the date of importation with any part of any endangered species or threatened species listed under section 4;

(B) was forfeited to the United States before such date of the enactment, or is subject to forfeiture to the United States on such date of enactment, pursuant to the assessment of a civil penalty under section 11; and

(C) is in the custody of the United States on such date of enactment; may, before the close of the one-year period beginning on such date of enactment make application to the Secretary for return of the article.

Application shall be made in such form and manner, and contain such documentation, as the Secretary prescribes. If on the basis of any such application which is timely filed, the Secretary is satisfied that the requirements of this paragraph are met with respect to the article concerned, the Secretary shall return the article to the applicant and the importation of such article shall, on and after the date of return, be deemed to be a lawful importation under this Act.

(i) NONCOMMERCIAL TRANSSHIPMENTS.-Any importation into the United States of fish or wildlife shall, if-

(1) such fish or wildlife was lawfully taken and exported from the country of origin and country of reexport, if any;

(2) such fish or wildlife is in transit or transshipment through any place subject to the jurisdiction of the United States enroute to a country where such fish or wildlife may be lawfully imported and received;

(3) the exporter or owner of such fish or wildlife gave explicit instructions not to ship such fish or wildlife through any place subject to the jurisdiction of the United States, or did all that could have reasonably been done to prevent transshipment, and the circumstances leading to the transshipment were beyond the

exporter's or owner's control;

(4) the applicable requirements of the Convention have been satisfied; and

(5) such importation is not made in the course of a commercial activity, be an importation not in violation of any provision of this Act or any regulation issued pursuant to this Act while such fish or wildlife remains in the control of the United States Customs Service.

(j) EXPERIMENTAL POPULATIONS.-

(1) For purposes of this subsection, the term "experimental population" means any population (including any offspring arising solely therefrom) authorized by the Secretary for release under paragraph (2), but only when, and at such times as, the population is wholly separate geographically from nonexperimental populations of the same species.

(2)(A) The Secretary may authorize the release (and the related transportation) of any population (including eggs, propagules, or individuals) of an endangered species or a threatened species outside the current range of such species if the Secretary determines that such release will further the conservation of such species.

(B) Before authorizing the release of any population under subparagraph (A), the Secretary shall by regulation identify the population and determine, on the basis of the best available information, whether or not such population is essential to the continued existence of an endangered species or a threatened species.

(C) For the purposes of this Act, each member of an experimental population shall be treated as a threatened species; except that-

(i) solely for purposes of section 7 (other than subsection (a)(1) thereof), an experimental population determined under subparagraph (B) to be not essential to the continued existence of a species shall be treated, except when it occurs in an area within the National Wildlife Refuge System or the National Park System, as a species proposed to be listed under section 4; and

(ii) critical habitat shall not be designated under this Act for any experimental population determined under subparagraph (B) to be not essential to the continued existence of a species.

(3) The Secretary, with respect to populations of endangered species or threatened species that the Secretary authorized, before the date of the enactment of this subsection, for release in geographical areas separate from the other populations of such species, shall determine by regulation which of such populations are an experimental population for the purposes of this subsection and whether or not each is essential to the continued existence of an endangered species or a threatened species.

PENALTIES AND ENFORCEMENT [^]

SEC. 11.

(a) CIVIL PENALTIES.-

(1) Any person who knowingly violates, and any person engaged in business as an importer or exporter of fish, wildlife, or plants who violates, any provision of this Act, or any provision of any permit or certificate issued hereunder, or of any regulation issued in order to implement subsection (a)(1)(A), (B), (C), (D), (E), or (F), (a)(2)(A), (B), (C), or (D), (c), (d) (other than regulation relating to recordkeeping or filing of reports), (f), or (g) of section 9 of this Act, may be assessed a civil penalty by the Secretary of not more than \$25,000 for each violation. Any person who knowingly violates, and any person engaged in business as an importer or exporter of fish, wildlife, or plants who violates, any provision of any other regulation issued under this Act may be assessed a civil penalty by the Secretary of not more than \$12,000 for each such violation. Any person who otherwise violates any provision of this Act, or any regulation, permit, or certificate issued hereunder, may be assessed a civil penalty by the Secretary of not more than \$500 for each such violation. No penalty may be assessed under this subsection unless such person is given notice and opportunity for a hearing with respect to such violation. Each violation shall be a separate offense. Any such civil penalty may be remitted or mitigated by the Secretary. Upon any failure to pay a penalty assessed under this subsection, the Secretary may request the Attorney General to institute a civil action in a district court of the United States for any district in which such person is found, resides, or transacts business to collect the penalty and such court shall have jurisdiction to hear and decide any such action. The court shall hear such action on the record made before the Secretary and shall sustain his action if it is supported by substantial evidence on the record considered as a whole.

(2) Hearings held during proceedings for the assessment of civil penalties by paragraph (1) of this subsection shall be conducted in accordance with section 554 of title 5, United States Code. The Secretary may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and administer oaths. Witnesses summoned shall be paid the same fees and

mileage that are paid to witnesses in the courts of the United States. In case of contumacy or refusal to obey a subpoena served upon any person pursuant to this paragraph, the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the Secretary or to appear and produce documents before the Secretary, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(3) Notwithstanding any other provision of this Act, no civil penalty shall be imposed if it can be shown by a preponderance of the evidence that the defendant committed an act based on a good faith belief that he was acting to protect himself or herself, a member of his or her family, or any other individual from bodily harm, from any endangered or threatened species.

(b) CRIMINAL VIOLATIONS.-

(1) Any person who knowingly violates any provision of this Act, of any permit or certificate issued hereunder, or of any regulation issued in order to implement subsection (a)(1)(A), (B), (C), (D), (E), or (F); (a)(2)(A), (B), (C), or (D), (c), (d) (other than a regulation relating to recordkeeping, or filing of reports), (f), or (g) of section 9 of this Act shall, upon conviction, be fined not more than \$50,000 or imprisoned for not more than one year, or both. Any person who knowingly violates any provision of any other regulation issued under this Act shall, upon conviction, be fined not more than \$25,000 or imprisoned for not more than six months, or both.

(2) The head of any Federal agency which has issued a lease, license, permit, or other agreement authorizing a person to import or export fish, wildlife, or plants, or to operate a quarantine station for imported wildlife, or authorizing the use of Federal lands, including grazing of domestic livestock, to any person who is convicted of a criminal violation of this Act or any regulation, permit, or certificate issued hereunder may immediately modify, suspend, or revoke each lease, license, permit, or other agreement. The Secretary shall also suspend for a period of up to one year, or cancel, any Federal hunting or fishing permits or stamps issued to any person who is convicted of a criminal violation of any provision of this Act or any regulation, permit, or certificate issued hereunder. The United States shall not be liable for the payments of any compensation, reimbursement, or damages in connection with the modification, suspension, or revocation of any leases, licenses permits stamps, or other agreements pursuant to this section.

(3) Notwithstanding any other provision of this Act, it shall be a defense to prosecution under this subsection if the defendant committed the offense based on a good faith belief that he was acting to protect himself or herself, a member of his or her family, or any other individual, from bodily harm from any endangered or threatened species.

(c) DISTRICT COURT JURISDICTION.-The several district courts of the United States; including the courts enumerated in section 460 of title 28, United States Code, shall have jurisdiction over any actions arising under this Act. For the purpose of this Act, American Samoa shall be included within the judicial district of the District Court of the United States for the District of Hawaii.

(d) REWARDS AND CERTAIN INCIDENTAL EXPENSES.-The Secretary or the Secretary of the Treasury shall pay, from sums received as penalties, fines, or forfeitures of property for any violation of this chapter or any regulation issued hereunder

(1) a reward to any person who furnishes information which leads to an arrest, a criminal conviction, civil penalty assessment, or forfeiture of property for any violation of this chapter or any regulation issued hereunder, and

(2) the reasonable and necessary costs incurred by any person in providing temporary care for any fish, wildlife, or plant pending the disposition of any civil or criminal proceeding alleging a violation of this chapter with respect to that fish, wildlife, or plant. The amount of the reward, if any, is to be designated by the Secretary or the Secretary of the Treasury, as appropriate. Any officer or employee of the United States or any State or local government who furnishes information or renders service in the performance of his official duties is ineligible for payment under this subsection. Whenever the balance of sums received under this section and section 6(d) of the Act of November 16, 1981 (16 U.S.C. 3375(d)) as penalties or fines, or from forfeitures of property, exceed \$500,000, the Secretary of the Treasury shall deposit an amount equal to such excess balance in the cooperative endangered species conservation fund established under section 6(i) of this Act.

(e) ENFORCEMENT.-

(1) The provisions of this Act and any regulations or permits issued pursuant thereto shall be enforced by the Secretary, the Secretary of the Treasury, or the Secretary of the Department in which the Coast Guard is operating, or all such Secretaries. Each such Secretary may utilize by agreement, with or without reimbursement, the personnel, services, and facilities of any other Federal agency or any State agency for purposes of enforcing this Act.

(2) The judges of the district courts of the United States and the United States magistrates may within their respective jurisdictions, upon proper oath or affirmation showing probable cause, issue such warrants or other process as may be required for enforcement of this Act and any regulation issued thereunder.

(3) Any person authorized by the Secretary, the Secretary of the Treasury, or the Secretary of the Department in which the Coast Guard is operating, to enforce this Act may detain for inspection and inspect any package, crate, or other container, including its contents, and all accompanying documents, upon importation or exportation. Such persons may make arrests without a warrant for any violation of this Act if he has reasonable grounds to believe that the person to be arrested is committing the violation in his presence or view and may execute and serve any arrest warrant, search warrant, or other warrant or civil or criminal process issued by any officer or court of competent jurisdiction for enforcement of this Act. Such person so authorized may search and seize, with or without a warrant, as authorized by law. Any fish, wildlife, property, or item so seized shall be held by any person authorized by the Secretary, the Secretary of the Treasury, or the Secretary of the Department in which the Coast Guard is operating pending disposition of civil or criminal proceedings, or the institution of an action in rem for forfeiture of such fish, wildlife, property, or item pursuant to paragraph (4) of the subsection; except that the Secretary may, in lieu of holding such fish, wildlife, property, or item, permit the owner or consignee to post a bond or other surety satisfactory to the Secretary, but upon forfeiture of any such property to the United States, or the abandonment or waiver of any claim to any such property, it shall be disposed of (other than by sale to the general public) by the Secretary in such a manner, consistent with the purposes of this Act, as the Secretary shall by regulation prescribe.

(4)(A) All fish or wildlife or plants taken, possessed, sold, purchased, offered for sale or purchase, transported, delivered, received, carried, shipped, exported, or imported contrary to the provisions of this Act, any regulation made pursuant thereto, or any permit or certificate issued hereunder shall be subject to forfeiture to the United States.

(B) All guns, traps, nets, and other equipment, vessels, vehicles, aircraft, and other means of transportation used to aid the taking, possessing, selling, purchasing, offering for sale or purchase, transporting, delivering, receiving, carrying, shipping, exporting, or importing of any fish or wildlife or plants in violation of this Act, any regulation made pursuant thereto, or any permit or certificate issued thereunder shall be subject to forfeiture to the United States upon conviction of a criminal violation pursuant to section 11(b)(1) of this Act.

(5) All provisions of law relating to the seizure, forfeiture, and condemnation of a vessel for violation of the customs laws, the disposition of such vessel or the proceeds from the sale thereof, and the remission or mitigation of such forfeiture, shall apply to the seizures and forfeitures incurred, or alleged to have been incurred, under the provisions of this Act, insofar as such provisions of law are applicable and not inconsistent with the provisions of this Act; except that all powers, rights, and duties conferred or imposed by the customs laws upon any officer or employee of the Treasury Department shall, for the purposes of this Act, be exercised or performed by the Secretary or by such persons as he may designate.

(6) The Attorney General of the United States may seek to enjoin any person who is alleged to be in violation of any provision of this Act or regulation issued under authority thereof.

(f) REGULATIONS.-The Secretary, the Secretary of the Treasury, and the Secretary of the Department in which the Coast Guard is operating, are authorized to promulgate such regulations as may be appropriate to enforce this Act, and charge reasonable fees for expenses to the Government connected with permits or certificates authorized by this Act including processing applications and reasonable inspections, and with the transfer, board, handling, or storage of fish or wildlife or plants and evidentiary items seized and forfeited under this Act. All such fees collected pursuant to this subsection shall be deposited in the Treasury to the credit of the appropriation which is current and chargeable for the cost of furnishing the services. Appropriated funds may be expended pending reimbursement from parties in interest.

(g) CITIZEN SUITS.-

(1) Except as provided in paragraph (2) of this subsection any person may commence a civil suit on his

own behalf-

- (A) to enjoin any person, including the United States and any other governmental instrumentality or agency (to the extent permitted by the eleventh amendment to the Constitution), who is alleged to be in violation of any provision of this Act or regulation issued under the authority thereof; or
- (B) to compel the Secretary to apply, pursuant to section 6(g)(2)(B)(ii) of this Act, the prohibitions set forth in or authorized pursuant to section 4(d) or section 9(a)(1)(B) of this Act with respect to the taking of any resident endangered species or threatened species within any State; or
- (C) against the Secretary where there is alleged a failure of the Secretary to perform any act or duty under section 4 which is not discretionary with the Secretary.

The district courts shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce any such provision or regulation or to order the Secretary to perform such act or duty, as the case may be. In any civil suit commenced under subparagraph (B) the district court shall compel the Secretary to apply the prohibition sought if the court finds that the allegation that an emergency exists is supported by substantial evidence.

(2)(A) No action may be commenced under subparagraph (1)(A) of this section-

- (i) prior to sixty days after written notice of the violation has been given to the Secretary, and to any alleged violator of any such provision or regulation;
- (ii) if the Secretary has commenced action to impose a penalty pursuant to subsection (a) of this section; or
- (iii) if the United States has commenced and is diligently prosecuting a criminal action in a court of the United States or a State to redress a violation of any such provision or regulation.

(B) No action may be commenced under subparagraph (1)(B) of this section-

- (i) prior to sixty days after written notice has been given to the Secretary setting forth the reasons why an emergency is thought to exist with respect to an endangered species or a threatened species in the State concerned; or
- (ii) if the Secretary has commenced and is diligently prosecuting action under section 6(g)(2)(B)(ii) of this Act to determine whether any such emergency exists.

(C) No action may be commenced under subparagraph (1)(C) of this section prior to sixty days after written notice has been given to the Secretary; except that such action may be brought immediately after such notification in the case of an action under this section respecting an emergency posing a significant risk to the wellbeing of any species of fish or wildlife or plants.

(3)(A) Any suit under this subsection may be brought in the judicial district in which the violation occurs.

(B) In any such suit under this subsection in which the United States is not a party, the Attorney General, at the request of the Secretary, may intervene on behalf of the United States as a matter of right.

(4) The court, in issuing any final order in any suit brought pursuant to paragraph (1) of this subsection, may award costs of litigation (including reasonable attorney and expert witness fees) to any party, whenever the court determines such award is appropriate.

(5) The injunctive relief provided by this subsection shall not restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any standard or limitation or to seek any other relief (including relief against the Secretary or a State agency).

(h) **COORDINATION WITH OTHER LAWS.**-The Secretary of Agriculture and the Secretary shall provide for appropriate coordination of the administration of this Act with the administration of the animal quarantine laws (21 U.S.C. 101-105, 111-135b, and 612-614) and section 306 of the Tariff Act of 1930 (19 U.S.C. 1306). Nothing in this Act or any amendment made by this Act shall be construed as superseding or limiting in any manner the functions of the Secretary of Agriculture under any other law relating to prohibited or restricted importations or possession of animals and other articles and no proceeding or determination under this Act shall preclude any proceeding or be considered determinative of any issue of fact or law in any proceeding under any Act administered by the Secretary of Agriculture. Nothing in this Act shall be construed as superseding or limiting in any manner the functions and responsibilities of the Secretary of the Treasury under the Tariff Act of 1930, including, without limitation, section 527 of that Act (19 U.S.C. 1527), relating to the importation of wildlife taken, killed, possessed, or exported to the United States in violation of the laws or regulations of a foreign country.

ENDANGERED PLANTS [^]

SEC. 12. The Secretary of the Smithsonian Institution, in conjunction with other affected agencies, is authorized and directed to review (1) species of plants which are now or may become endangered, or

threatened and (2) methods of adequately conserving such species, and to report to Congress, within one year after the date of the enactment of this Act, the results of such review including recommendations for new legislation or the amendment of existing legislation.

CONFORMING AMENDMENTS [△]

SEC. 13.

(a) Subsection 4(c) of the Act of October 15, 1966 (80 Stat. 928, 16 U.S.C. 668dd(c)), is further amended by revising the second sentence thereof to read as follows: "With the exception of endangered species and threatened species listed by the Secretary pursuant to section 4 of the Endangered Species Act of 1973 in States wherein a cooperative agreement does not exist pursuant to section 6(c) of that Act, nothing in this Act shall be construed to authorize the Secretary to control or regulate hunting or fishing of resident fish and wildlife on lands not within the system."

(b) Subsection 10(a) of the Migratory Bird Conservation Act (45 Stat. 1224, 16 U.S.C. 715i(a)) and subsection 401(a) of the Act of June 15, 1935 (49 Stat. 383, 16 U.S.C. 715s(a)) are each amended by striking out "threatened with extinction," and inserting in lieu thereof the following: "listed pursuant to section 4 of the Endangered Species Act of 1973 as endangered species or threatened species."

(c) Section 7(a)(1) of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-9(a)(1)) is amended by striking out:
 "THREATENED SPECIES.-For any national area which may be authorized for the preservation of species of fish or wildlife that are threatened with extinction." and inserting in lieu thereof the following:
 "ENDANGERED SPECIES AND THREATENED SPECIES.-For lands, waters, or interests therein, the acquisition of which is authorized under section 5(a) of the Endangered Species Act of 1973, needed for the purpose of conserving endangered or threatened species of fish or wildlife or plants."

(d) The first sentence of section 2 of the Act of September 28, 1962, as amended (76 Stat. 653, 16 U.S.C. 460k-1), is amended to read as follows:

"The Secretary is authorized to acquire areas of land, or interests therein, which are suitable for-

"(1) incidental fish and wildlife-oriented recreational development;

"(2) the protection of natural resources;

"(3) the conservation of endangered species or threatened species listed by the Secretary pursuant to section 4 of the Endangered Species Act of 1973; or

"(4) carrying out two or more of the purposes set forth in paragraphs (1) through (3) of this section, and are adjacent to, or within, the said conservation areas, except that the acquisition of any land or interest therein pursuant to this section shall be accomplished only with such funds as may be appropriated therefor by the Congress or donated for such purposes, but such property shall not be acquired with funds obtained from the sale of Federal migratory bird hunting stamps."

(e) The Marine Mammal Protection Act of 1972 (16 U.S.C. 1361-1407) is amended-

(1) by striking out "Endangered Species Conservation Act of 1969" in section 3(l)(B) thereof and inserting in lieu thereof the following: "Endangered Species Act of 1973";

(2) by striking out "pursuant to the Endangered Species Conservation Act of 1969" in section 101(a)(3)(B) thereof and inserting in lieu thereof the following: "or threatened species pursuant to the Endangered Species Act of 1973";

(3) by striking out "endangered under the Endangered Species Conservation Act of 1969" in section 102(b)(3) thereof and inserting in lieu thereof the following: "an endangered species or threatened species pursuant to the Endangered Species Act of 1973"; and

(4) by striking out "of the interior and revisions of the Endangered Species List, authorized by the Endangered Species Conservation Act of 1969," in section 202(a)(6) thereof and inserting in lieu thereof the following: "such revisions of the endangered species list and threatened species list published pursuant to section 4(c)(1) of the Endangered Species Act of 1973".-

(f) Section 2(1) of the Federal Environmental Pesticide Control Act of 1972 (Public Law 92-516) is amended by striking out the words "by the Secretary of the Interior under Public Law 91-135" and inserting in lieu thereof the words "or threatened by the Secretary pursuant to the Endangered Species Act

of 1973".

REPEALER ^

SEC. 14. The Endangered Species Conservation Act of 1969 (sections 1 through 3 of the Act of October 15, 1966, and sections 1 through 6 of the Act of December 5, 1969; 16 U.S.C. 668aa-668cc-6), is repealed.

AUTHORIZATION OF APPROPRIATIONS ^

SEC. 15.

(a) IN GENERAL.-Except as provided in subsections (b), (c), and (d), there are authorized to be appropriated-

(1) not to exceed \$35,000,000 for fiscal year 1988, \$36,500,000 for fiscal year 1989, \$38,000,000 for fiscal year 1990, \$39,500,000 for fiscal year 1991, and \$41,500,000 for fiscal year 1992 to enable the Department of the Interior to carry out such functions and responsibilities as it may have been given under this Act;

(2) not to exceed \$5,750,000 for fiscal year 1988, \$6,250,000 for each of fiscal years 1989 and 1990, and \$6,750,000 for each of fiscal years 1991 and 1992 to enable the Department of Commerce to carry out such functions and responsibilities as it may have been given under this Act; and

(3) not to exceed \$2,200,000 for fiscal year 1988, \$2,400,000 for each of fiscal years 1989 and 1990, and \$2,600,000 for each of fiscal years 1991 and 1992, to enable the Department of Agriculture to carry out its functions and responsibilities with respect to the enforcement of this Act and the Convention which pertain to the importation or exportation of plants.

(b) EXEMPTIONS FROM ACT.-There are authorized to be appropriated to the Secretary to assist him and the Endangered Species Committee in carrying out their functions under section 7 (e), (g) and (h) not to exceed \$600,000 for each for fiscal years 1988, 1989, 1990, 1991, and 1992.

(c) CONVENTION IMPLEMENTATION.-There are authorized to be appropriated to the Department of the Interior for purposes of carrying out section 8A(e) not to exceed \$400,000 for each of fiscal years 1988, 1989, and 1990, and \$500,000 for each of fiscal years 1991 and 1992, and such sums shall remain available until expended.

EFFECTIVE DATE ^

SEC. 16. This Act shall take effect on the date of its enactment.

MARINE MAMMAL PROTECTION ACT OF 1972 ^

SEC. 17. Except as otherwise provided in this Act, no provision of this Act shall take precedence over any more restrictive conflicting provision of the Marine Mammal Protection Act of 1972.

ANNUAL COST ANALYSIS BY THE FISH AND WILDLIFE SERVICE

SEC. 18. On or before January 15, 1990, and each January 15 thereafter, the Secretary of the Interior, acting through the Fish and Wildlife Service, shall submit to the Congress an annual report covering the preceding fiscal year which shall contain-

(1) an accounting on a species by species basis of all reasonably identifiable Federal expenditures made primarily for the conservation of endangered or threatened species pursuant to this Act; and

(2) an accounting on a species by species basis for all reasonably identifiable expenditures made primarily for the conservation of endangered or threatened species pursuant to this Act by states receiving grants under section 6.