S. HRG. 105–840

WILDLIFE CONSERVATION LEGISLATION

HEARING

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED FIFTH CONGRESS

SECOND SESSION

JULY 7, 1998

S. 263, BEAR PROTECTION ACT

S. 361, RHINO AND TIGER PRODUCT LABELING ACT

H.R. 2807, RHINO AND TIGER PRODUCT LABELING ACT

H.R. 3113, RHINOCEROS AND TIGER CONSERVATION REAUTHORIZATION ACT OF 1998

S. 659, GREAT LAKES FISH AND WILDLIFE RESTORATION ACT OF 1997

S. 1970, NEOTROPICAL MIGRATORY BIRD CONSERVATION ACT OF 1998

S. 2094, FISH AND WILDLIFE REVENUE ENHANCEMENT ACT OF 1998

S. 2244, NATIONAL WILDLIFE REFUGE SYSTEM VOLUNTEER AND PARTNERSHIP ACT OF 1998

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WILDLIFE CONSERVATION LEGISLATION

TUESDAY, JULY 7, 1998

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The committee met, pursuant to notice, at 9 a.m. in room 406, Senate Dirksen Building, Hon. John H. Chafee (chairman of the committee) presiding.

Present: Senators Chafee, Allard, and Baucus.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. The committee will come to order.

Good morning. We have a full order of business before us today. We will hear testimony on eight bills relating to the conservation of fish and wildlife. While all the bills seek to further conservation efforts here in the United States and abroad, they do so through a variety of mechanisms including financial, administrative, scientific, and enforcement programs.

There is a broad spectrum of views on these bills. Some range from avid enthusiasm and support to stiff opposition. And the witnesses for today's hearings will cover this spectrum. Most of the witnesses will speak on several bills, given that their expertise covers different bills or related topics. I hope that the witnesses will also provide recommendations for changes that they believe will improve the bills.

With the array of bills before us, I'm just going to spend a minute summarizing each of them. Now, I note that our order isn't the same as listed here on the sheet before us that the committee has, but this is the way they are going to come up, is my understanding.

The first is S. 2094, the Fish and Wildlife Revenue Enhancement Act of 1998, introduced by Senator Allard. I am a cosponsor of that as are several others. This bill would authorize revenues from the sale of items derived from fish and wildlife to go to the Fish and Wildlife Service rather than into the general treasury. It would also allow the Fish and Wildlife Service to use the revenues to cover the cost of shipping, storing, and disposing of these items, which include: loans to schools, museums, zoos, and Native Americans for educational and religious purposes. The bill would not change existing law which prohibits the sale of items made from threatened or endangered species, marine mammals, or migratory birds.

The second bill, S. 2244, the National Wildlife Refuge System Volunteer and Partnership Enhancement Act of 1998, was introduced by me and cosponsored by 14 of my colleagues. This bill promotes volunteer activities, individual donations, partnership programs, and education programs connected with the National Wildlife Refuge System. The Refuge System has a long history of relying on volunteers, with about 25,000 volunteers currently performing 20 percent of all the work done on the Refuge System.

The third topic relates to protection of rhinos and tigers. There are three bills pending before the committee, two entitled the Rhino and Tiger Product Labeling Act, S. 361 and H.R. 2807, and one, H.R. 3113, to reauthorize the Rhinoceros and Tiger Conservation Act of 1994.

S. 361 was introduced by Senator Jeffords, and that would amend the Endangered Species Act to prohibit the import and export of any product labelled as containing species listed as endangered under the Endangered Species Act or listed in Appendix I of CITES. Senator Jeffords has expressed a desire to conform his bill to the House bill, which is H.R. 2807. This bill would amend the Rhino and Tiger Conservation Act rather than the Endangered Species Act to prohibit the sale, import, and export of products intended for human consumption and claiming to contain rhino or tiger parts. In addition, H.R. 2807 would provide for civil and criminal penalties for any person violating this prohibition, and for authority for forfeitures of prohibited products.

H.R. 3113 would reauthorize the Rhinoceros and Tiger Conservation Act of 1994 through 2004 at the current level of $10 million a year. The current authorization expires in the year 2000.

The fourth topic is S. 263, the Bear Protection Act, introduced by Senator McConnell and cosponsored by 52 Senators. This would prohibit imports and exports of bear viscera and products that contain or claim to contain bear viscera. It would also prohibit the sale and purchase or transportation in interstate commerce of such products or viscera.

The fifth topic is S. 1970, the Neotropical Migratory Bird Conservation Act of 1998, introduced by Senator Abraham. This would require the Secretary of Interior to establish a program to provide financial assistance for projects to promote the conservation of neotropical migratory birds in Latin America and the Caribbean. Federal funds would not exceed 33 percent. At least 50 percent of the non-Federal share would have to be in cash.

The last bill is S. 659, the Great Lakes Fish and Wildlife Restoration Act of 1997, introduced by Senator Glenn. It would provide authority to implement recommendations of the Great Lakes Fishery Restoration and Study which was a Report to Congress. This study was mandated by Congress in 1990 in an effort to protect and restore the Great Lakes ecosystem. The bill would establish matching grants, with 25 percent of the cost of a project to be paid by non-Federal sources.

We have three panels. The first panel will be Deputy Director of Fish and Wildlife, Mr. Rogers, who will speak on all the bills. The second panel will be three conservation organizations who will speak to bear protection, rhino and tiger bills, and the revenue enhancement bill. The third panel consists of witnesses who have a

special interest in one or more of the bills, including the Bear Protection Act, the Refuge Volunteers bill, and the Great Lakes bills.

We also have written testimony from Senator Abraham on his bill, and from Senator McConnell and Senator Glenn on their bills.

So I thank everybody for being here.

Senator BAUCUS.

Senator BAUCUS. Thanks, Mr. Chairman. Good morning, Mr. Chairman, good to see you.

Senator CHAFEE. Good morning. You know that America was made great by men and women that got up early.

Senator BAUCUS. That is true.

[Laughter.]

OPENING STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM THE STATE OF MONTANA

Senator BAUCUS. There are many variations on that theme.

Mr. Chairman, thank you very much for holding this hearing. I must say that although the public tends to focus more and the press tends to focus more on major bills, like the highway bill, Superfund, or the Endangered Species Act, much of the work that this committee, as you know, has accomplished is through smaller, yet in many ways equally important, bills like those that are the subject of today's hearing.

A common thread that runs through several of these bills is partnership—partnerships with volunteers, nonprofit organizations, States and various Federal agencies, and other organizations. By building on existing legislation, working cooperatively with volunteer groups, and providing some seed money to get things started in the right direction, these bills will help to conserve some of our most endangered fish and wildlife species, both here in the United States and abroad.

And rather than elaborate on the bills, Mr. Chairman, I'd like to highlight a bill that I worked on with you and the Administration prior to its introduction; that is S. 2244, the National Wildlife Refuge System Volunteer and Partnership Enhancement Act of 1998.

The Wildlife Refuge System is a sanctuary for our Nation's fish and wildlife, many species of which are threatened or endangered. It is a sanctuary for people, too, many of whom visit our refuges each year. To ensure that those refuges are around for future generations of Americans, we recently enacted legislation to guide the management of the National Wildlife Refuge System. But even improved management cannot make up for lack of money.

One way to stretch tight Federal dollars is through the use of volunteers and partnerships with nonprofit organizations, ordinary citizens in Montana and elsewhere who care enough about fish and wildlife to contribute their time and their expertise to their local refuge. Interest has been expressed among local citizens and States like Montana in doing what they can to protect our national resources.

In fact, I might tell you, Mr. Chairman, a few years ago I worked with a group of volunteers on the Blackfoot River, a group called Blackfoot Challenge. Many of us in Congress have district workdays; I had my workday in helping the folks at Blackfoot Challenge. People from all around the area, ranchers, people in the city,

Fish and Wildlife Service personnel, Trout Unlimited, all groups that you would think would be a part of something like this, we all worked together on a volunteer basis to help change the channel of the stream so that bull trout could more likely spawn and it would help reduce the likelihood that bull trout would later be endangered. It was a wonderful effort.

It was all volunteers. This bill and other bills that are up today will help encourage even more of that. In fact, they did this work because government agencies weren't doing it. There is just too much jurisdictional pride among the various agencies they wouldn't give in to the other and work together. So local folks locally did it themselves because the agencies weren't.

Bills like this one I think will help to encourage volunteers to take a more active role in improving our wildlife refuges. This bill would allow the Secretary of Interior to work with outside organizations to undertake conservation and education projects, very similar to what I was describing. It would also authorize the Secretary to develop refuge education programs, and provide for staff to help coordinate volunteer activities.

By helping volunteers to work with the United States Fish and Wildlife Service to improve our wildlife refuges, this bill will not only benefit fish and wildlife, it will also enhance the outdoor recreation and education experience for thousands of visitors.

In closing, Mr. Chairman, I think it is a good bill, one that deserves our support and I expect it to be passed. After today's hearing, I look forward to working with you, Mr. Chairman, as well as other members of the committee to address any outstanding concerns regarding this bill or with respect to any of the others that are the subject of today's hearing. Thank you.

Senator CHAFEE. Thank you very much, Senator. I would just say we all share your enthusiasm for our wildlife refuges. I just have some facts here. We have 513 National Wildlife Refuges and they encompass 93 million acres. So it's really a big operation.

Senator Allard, you've got a good bill here. If you'd like to offer some comments, now is the time.

OPENING STATEMENT OF HON. WAYNE ALLARD, U.S. SENATOR FROM THE STATE OF COLORADO

Senator ALLARD. I would, Mr. Chairman. I just would like to thank you for your interest in a number of these bills, one of which I'm a sponsor of and a couple of which I'm a cosponsor on. I'm sponsoring S. 2094, the Fish and Wildlife Revenue Enhancement Act of 1998; cosponsor on your bill, S. 2244, the National Wildlife Refuge System Volunteer and Partnership Enhancement Act of 1998; and also a cosponsor on S. 1970, the Neotropical Migratory Bird Conservation Act of 1998. I want to compliment you for your interest in this subject matter, and I would also say that I look forward to continuing to work with both you and your staff on these pieces of legislation, particularly S. 2094.

Over the July 4 break, I had an opportunity to visit the facility where there is a holding of repository animals. These are wildlife products that have been turned over, forfeited to the Federal Government. That facility is in Rocky Mountain Arsenal in Colorado. I was especially pleased with what I saw there at the repository.

I think they need some help, and the purpose of my bill is to enhance the program.

There are three parts to the program. One is the holding of products that were forfeited, or were brought into the country illegally. Some of these products, for example, are ostrich skins. Ostriches are raised naturally in this country and ostriches are raised in other countries, but the fact is that they violated a law bringing the materials in. They're not an endangered species, but the importers violated the law. A number of items are sea shells and those kinds of things that certainly aren't endangered but do have value.

The bill would allow the Government to put those things up for sale and generate revenue to enhance the storage and disposition of many of the rare products. I think it is important that we have this program to do that. Also, I'm working with your staff on changing current law so that we make sure that nothing that's an endangered species is sold. We don't want to encourage the merchandizing of endangered species. None of us want to see that happen.

Another part of the program is the National Eagle Repository. The Native Americans of this country for cultural and religious purposes use the eagles, for example, or parts of the eagles for their cultural and religious ceremonies. Many of these eagles that I saw that were there were those that had died in the wild for one reason or another and had been picked up and brought in. Many Native Americans need the feathers. The eagle feathers are processed and then made available to the Native Americans. It is very important to the Indian tribes of this country, and a very vital program, and this money would help that.

The third aspect of the program, which I thought was perhaps the most important part, was the educational goals and programs. People learn that they can't go overseas and buy wildlife products and expect to bring them into this country. I think the educational program needs to be extended so that more Americans traveling overseas don't get themselves into trouble because of ignorance of the law. They don't realize that they can't bring those items into the country. I think we will save the lives of a lot of wildlife in foreign countries, a lot of endangered species overseas. It is a matter of education and teaching Americans abroad and teaching American school children the concepts and the principles of conservation.

I was very excited about the program. Again, I look forward to working with you in all these particular pieces of legislation, particularly this piece, which I spent some time in making myself familiar with the program. Thank you, Mr. Chairman.

Senator CHAFEE. Thank you. I want to again thank you for your work on the enhancement provision that you discussed.

Mr. Rogers, if you would come to the table, please. This is Mr. John Rogers, the Deputy Director of the U.S. Fish and Wildlife Service.

We have a vote, Mr. Rogers, scheduled, whether it will occur or not at the time, but it is scheduled for 9:30. So if you would bear that in mind in your testimony.

I also have a number of statements by committee members to place into the record.

[The statements of Senators Kempthorne, Moynihan, Lautenberg, and Graham follow:]

PREPARED STATEMENT OF HON. DIRK KEMPTHORNE, U.S. SENATOR FROM THE STATE OF IDAHO

Good morning, Mr. Chairman. Although I will not have comments on every bill before us this morning, I want to emphasize that these bills represent important issues in Fish and Wildlife Conservation.

S. 361, and H.R. 2807, two versions of the Rhino and Tiger Product Labeling Act amend the Endangered Species Act to make certain labeling of products a criminal act. I am concerned about these provisions and concerned that these bills may be placing the administration of justice above the doing of justice.

Under S. 361 specifically, if a person labels a product as containing any endangered or threatened species, this provision would make that labeling a criminal act regardless of the content of the package, and regardless of whether the package actually contains parts or products derived from the endangered or threatened species. The penalties for such labeling are enormous, potentially including confiscation of property and considerable fines. The purpose of the provision is to discourage trade in these threatened or endangered species. They say that it is impossible to test all packaging and that continuing to allow such product labeling does not sufficiently discourage trade in endangered and threatened species. Yet I fear that the means to this admirable end may be the discouragement of First Amendment rights.

I remember just a few years ago when the Spotted Owl debate raged on, a small business in the Pacific Northwest relabeled some cans of potted meat product as containing Spotted Owl, a listed species. "Spotted Owl Helper" was packaged claiming to contain Spotted Owl. This humorous attempt to parody a critical habitat designation designed to end logging in the Pacific Northwest would become a criminal act under this law. Why?

During my recent negotiations on the Endangered Species Recovery Act this provision was suggested by the Minority and rejected by the Majority. If passed, the Justice Department might choose to use this provision to stamp out criticism of executive branch policies. Innocent citizens will be made criminals. If this is not the result of this provision then we are on the verge of implicitly agreeing to legislation which is overly broad.

The House version of this bill (H.R. 2807), is preferable only in that it applies to a smaller subset of species. But the underlying problem is the same. Mere speech should not be a criminal act. Neither bill contains any exemptions. I see them as prohibitions against free speech. I fear that once this type of legislation is made law, without any of the protections this Congress could provide that the Justice Department will then seek a broader statute for all endangered and threatened species.

The problem that I have with this bill is that it has been proposed for the purpose of stopping poaching of tigers and rhinos in their native habitats to prevent their being sold in the United States as natural remedies for arthritis and other ailments. I want to make it clear that I am very much in favor of stopping such poaching. But, I see nothing coming of this bill except criminal confusion. Let's work together to find better ways of stopping poaching.

Senator Allard has recognized in S. 2094, the Fish and Wildlife Revenue Enhancement Act, that the Federal Government stores and disposes of specimens of protected species that have been abandoned or forfeited at our ports. These materials are distributed by the Government to qualified recipients for educational and scientific uses, and for religious purposes of Native Americans. Although the remaining material may be sold if it is not from an endangered or threatened species, the current law does not allow any revenue generated from sales to manage the storage and sales of these materials. Senator Allard's bill will allow the Fish and Wildlife Service to pay shipping, storage, appraisal, and other disposal costs from sale of these items. Because this will make the Government's job easier, and allow disposal rather than perpetual storage, I have chosen to cosponsor this bill.

Senator McConnell has introduced S. 263, the Bear Protection Act which would make the export of bear gall bladders and other tissues an illegal act under Federal law. Mr. Chairman, I am informed that the Black Bear populations in the United States are growing practically everywhere within their native range. The grizzly bear, a species listed under the Endangered Species Act is already protected by Federal law.

Mr. Chairman, I would like to enter into the record this letter from the Idaho Department of Fish and Game which clearly states that the poaching of Black Bear parts for sale is not a problem in my State. I believe that we will hear testimony

from witnesses today that suggests similar information is available throughout the range of the species.

I am looking forward to the testimony on S. 2244, National Wildlife Refuge System Volunteer and Partnership Enhancement Act of 1998. I was pleased to be able to cosponsor this bill with you, Mr. Chairman.

Finally, I am very pleased to see continued attention being given to the conservation of our native birds. The National Fish and Wildlife Foundation which we reauthorized recently in this committee has leveraged $5.4 million into nearly $14.5 million for birds throughout the American tropics. Mr. Chairman, I would like to enter this list of AID [Agency for International Development] and non-AID funded projects of the National Fish and Wildlife Foundation into the record. I especially want to hear the testimony on S. 1970, the Neotropical Migratory Bird Conservation Act to see how it fits into the programs we have already established.

Thank you Mr. Chairman for scheduling this hearing. I look forward to hearing the testimony of the witnesses.

IDAHO FISH & GAME,
Boise, ID, June 30, 1998.

Senator DIRK KEMPTHORNE,
U.S. Senate, Washington, DC.

DEAR SENATOR KEMPTHORNE: In response to your recent letter concerning bear viscera, I offer the following information:

Idaho does allow the sale of non-edible portions of legally taken big game animals, including black bear, providing the taker makes a report of such sale to the Department of Fish and Game.

We have not been able to substantiate major problems with efforts to poach bear simply for their parts in Idaho. I am aware this problem exists in other States and countries, but after conducting several special undercover operations, the indication is that there is no major problem with illegal commercial bear parts poaching in Idaho that we can prove. We do have considerable problems with illegally outfitted hunts for bear, but that is another type of violation altogether.

During the last two years we have made 15 arrests and given 37 warnings for bear violations consisting of a variety of illegal acts, including technical violations such as improper tagging or transport, but there have been no citations or arrests for illegal sale of bears or their parts. We also made 10 observations of incidents that were evidence of illegal harvest. Our legal harvest for this period was 2,836 bears. This means that the total average annual violations rate is about 2 percent for bear. We normally record a total rate of all violations of about 6 percent.

The average annual number of *legal* sales of bear parts is approximately 180 transactions. The most common types of parts sold are gall bladders from legally-taken bear. Generally, this is the only part of the viscera sold in Idaho. The only time we actually determined the number of gall bladders sold, it was around 80 annually. The average price paid for gall bladders in Idaho is approximately $30. This would mean that from a purely economic standpoint, bear hunters would be denied about $2,400 in legal revenue. What the dealers would realize in profits is unknown since, because of competition, they generally keep that information confidential.

The bear population in Idaho is generally stable, doing well, and does seem to be increasing in some areas. We have no evidence that harvest, legal or illegal, is affecting the population.

If it can be substantiated that such a Federal law as S. 263 will actually stop or limit illegal interstate poaching and commercialization of bears, then we wholeheartedly support it. However, our present Idaho laws and regulations make illegal the sale of bear parts from other States that prohibit such sale, so my question would simply be "Does S. 263 provide additional authority or protection that we don't already have in place?"

The Idaho Department of Fish & Game is totally opposed to illegal commercialization of wildlife and has pursued enhanced penalties in the Idaho legislature for such activities. Our Enforcement Bureau would certainly be interested in any information any State may have about illegal "laundering" of bear parts, since this activity is already illegal in Idaho. To date, we have heard rumors of such activity, but no one seems to be able to provide any significant evidence. The closest we had was intercepting a shipment of gall bladders that turned out to be not bear, but domestic pig.

I hope this provides you with useful information. If you need anything further, please contact me.

Sincerely,

STEPHEN P. MEALEY,
Director.

NATIONAL FISH AND WILDLIFE FOUNDATION

International Investments for Migratory Bird Conservation

1) **Agave Plant Propagation, # 93-174-009**
Dr. Benjamin Rodriguez-Garay
CIATEJ, A.C.
Examine the field adaptability of artificially propagated agave plants (agave vistoria-reginae) at three locations in northern Mexico.

Challenge Funds:	$0
NFWF Federal Match:	$10,000
Grant Amount:	$10,000

2) **Alta Verapaz Bird Habitat Conservation, # 98-196**
David Unger
BIDAS/Proyecto Ecologico Quetzal
Support phase two of successful sustainable agriculture and indigenous-based ecotourism program. Promote conservation of primary forest habitats for birds in highlands of central Guatemala.

Challenge Funds:	$117,000
NFWF Federal Match:	$39,000
Grant Amount:	$156,000

3) **Bahamas Bird Education, # 91-019**
Paul Butler
RARE Center for Tropical Conservation
Develop an education program for Bahamian people on endangered birds, their habitat, and why both should be conserved.

Challenge Funds:	$25,000
NFWF Federal Match:	$25,000
Grant Amount:	$50,000

4) **Bahoruco (DR) Conservation Research, # 97-271**
John Faaborg
University of Missouri
Assess values of habitat types for wintering Neotropical migratory and scarce endemic birds in Sierra de Bahoruco Natl. Park; draft preliminary management guidelines; and initiate an intensive conservation outreach program in five reserve communities.

Challenge Funds:	$69,500
NFWF Federal Match:	$52,500
Grant Amount:	$122,000

5) **Banana Amigo, # 93-093**
Chris Wille
Rainforest Alliance
Initiate a constructive dialogue between environmentalists and banana growers in Costa Rica in order to identify environmental standards for banana production and to minimize both habitat destruction and adverse impacts of pesticide use.

Challenge Funds:	$80,000
NFWF Federal Match:	$40,000
Grant Amount:	$120,000

6) **Banana Plantation Biodiversity, # 94-155**
Lenin Corrales
Rainforest Alliance
Compare levels of biological diversity, including Neotropical migratory birds, among natural habitats and forest fragments on banana plantations in Costa Rica with and without environmental guidelines recommended by the Rainforest Alliance.

Challenge Funds:	$27,980
NFWF Federal Match:	$27,980
Grant Amount:	$55,960

7) **Belize Forest Management, # 92-151**
Linda Leddy
Manomet Observatory for Conservation Sciences
Support an experimental project in Belize's 81,000-hectare Rio Bravo Conservation and Management Area to develop guidelines and workshops on tropical forest management.

Challenge Funds:	$100,000
NFWF Federal Match:	$50,000
Grant Amount:	$150,000

8) **Bird Conservation Research in Mexico-I, # 94-156**
Dr. Patricia Escalante
CIPA-MEX
Provide scholarships to two Mexican biologists to conduct research projects that will provide advanced training in practical conservation applications of remote sensing, Geographic Information System, and radio tracking of Neotropical migratory birds

Challenge Funds:	$52,608
NFWF Federal Match:	$50,000
Grant Amount:	$102,608

9) **Bird Conservation Research in Mexico-II, # 96-182**
Patricia Escalante
CIPA-MEX
Provide training to three postgraduate students in use and applications of GIS technology and remote-sensing data; and conduct research to assess amount of

Challenge Funds:	$51,600
NFWF Federal Match:	$43,780
Grant Amount:	$95,380

remaining lowland tropical forests, an ecosystem which provides essential migratory bird habitat.

10) **Bird Conservation at El Triunfo (MX), # 96-123**
Alejandro Hernandez Yanez
Instituto de Historia Natural
Initiate long-term monitoring and data gathering to determine critical habitats for Neotropical migratory and resident birds. Develop bird management plans and ecotourism workplan and produce outreach materials to promote bird conservation locally.

Challenge Funds:	$55,500
NFWF Federal Match:	$55,500
Grant Amount:	$111,000

11) **Birding Economics Survey, # 93-049**
Dr. Paul Kerlinger
Cape May Bird Observatory
Conduct a demographic and economic analysis of bird watchers at the local and regional levels throughout the United States and Central America.

Challenge Funds:	$20,689
NFWF Federal Match:	$10,344
Grant Amount:	$31,033

12) **Birds Beyond Borders, # 95-025**
Sue Bonfield
Colorado Bird Observatory
Develop a model bilingual education program linking grade school students in Mexico and the U.S. by providing teacher training for both U.S. and Mexican teachers to develop curricula to increase awareness and appreciation of migratory birds.

Challenge Funds:	$15,000
NFWF Federal Match:	$10,000
Grant Amount:	$25,000

13) **Campeche (MX) Reserve Management, # 96-045**
Archibaldo Sandoval
Fundacion Sandoval Caldera
Classify and map habitats and survey avifauna in a variety of habitat types to develop conservation management plans for sites critical to Neotropical migratory and rare resident birds on 20,000 acre private, multiple-use Rancho Sandoval Reserve.

Challenge Funds:	$29,000
NFWF Federal Match:	$29,000
Grant Amount:	$58,000

14) **Canada-Mexico Model Forest Program, # 96-038**
Raleigh Robertson
Queen's University
Support long-term population monitoring, behavioral ecology studies, scientific training, and public education in the Calakmul Model Forest in Mexico and the Eastern Ontario Model Forest in Canada, focusing on birds shared between the two sites.

Challenge Funds:	$72,900
NFWF Federal Match:	$44,000
Grant Amount:	$116,900

15) **Caribbean Bird Conservation Planning, # 98-203**
Joseph Wunderle
Society of Caribbean Ornithology
Convene a 2-day workshop of Caribbean biologists to identify and prioritize issues facing bird conservation in the region and recommend priority actions to address these threats.

Challenge Funds:	$10,000
NFWF Federal Match:	$10,000
Grant Amount:	$20,000

16) **Caribbean Bird Conservation-I, # 92-028**
George Wallace
Long Point Bird Observatory
Develop new survey and monitoring techniques for birds as they migrate through geographic bottleneck areas.

Challenge Funds:	$14,263
NFWF Federal Match:	$14,263
Grant Amount:	$28,526

17) **Caribbean Bird Conservation-II, # 93-021**
Dr. Michael Bradstreet
Long Point Bird Observatory
Second year support to develop new survey and monitoring techniques for birds as they migrate through geographic bottleneck areas and collect data that will be directly comparable to data collected in Caribbean wintering areas

Challenge Funds:	$18,000
NFWF Federal Match:	$9,000
Grant Amount:	$27,000

18) **Caribbean Bird Conservation-III, # 94-024**
Dr. Michael Bradstreet
Long Point Bird Observatory
Third-year support to establish new survey and monitoring techniques for birds as they migrate through geographic bottleneck areas; compare population characteristics, site

Challenge Funds:	$20,300
NFWF Federal Match:	$10,150
Grant Amount:	$30,450

persistence of migrant forest birds in relation to insect abundance/forests.

19) **Caribbean Ornithology Workshops-I, # 92-082**
Dr. J.M. Wunderle
USDA-Forest Service, Region 8
Establish a West Indies Migratory Bird Conservation Committee and develop a symposium on the biology and conservation of migrant landbirds wintering in the West Indies.

Challenge Funds:	$13,365
NFWF Federal Match:	$8,244
Grant Amount:	$21,609

20) **Caribbean Ornithology Workshops-II, # 93-155**
Catherine Levy
Society of Caribbean Ornithology
Workshop to identify conservation priorities for Neotropical migratory birds in the Caribbean and to initiate proposals to implement these recommendations.

Challenge Funds:	$10,000
NFWF Federal Match:	$10,000
Grant Amount:	$20,000

21) **Caribbean Ornithology Workshops-III, # 94-138**
Catherine Levy
Society of Caribbean Ornithology
Provide third year support for the annual meeting of the Society of Caribbean Ornithology, held in Martinique. Environmental education and public awareness workshops are planned.

Challenge Funds:	$11,756
NFWF Federal Match:	$13,244
Grant Amount:	$25,000

22) **Carricito del Huichol (MX) Bird Surveys, # 96-181**
Patricia Escalante
CIPA-MEX
Collect baseline data on distribution and habitat use of migratory and resident avifauna of old-growth pine-oak forests of the Huichol Nation in the state of Jalisco, a site being considered for protection as a Biosphere Reserve.

Challenge Funds:	$39,000
NFWF Federal Match:	$15,000
Grant Amount:	$54,000

23) **Carricito del Huichol Bird Conservation, # 98-199**
Patricia Escalante
CIPAMEX
Establish research station, long-term ecosystem monitoring program and intensive community outreach efforts in the old-growth pine-oak forests of the Huichole nation, and investigate income producing alternatives to logging.

Challenge Funds:	$56,000
NFWF Federal Match:	$40,000
Grant Amount:	$96,000

24) **Casas Grandes Protected Areas, Mexico, # 94-022**
Brian Miller & Gerardo Ceballos
Centro de Ecologia, UNAM
Conduct baseline surveys for migratory birds and other wildlife in Mexico's Chihuahuan Desert. Reliable bird distribution and abundance data will ensure that reserve boundaries include areas important for Neotropical migratory birds.

Challenge Funds:	$36,000
NFWF Federal Match:	$18,000
Grant Amount:	$54,000

25) **Central American Conservation Easements, # 97-269**
Carlos M. Chacon
CEDARENA
Produce a guide and workshop on legal frameworks, incentives, and processes for establishing conservation easements in six Central American countries; and assess existing easement programs and secure 15 new conservation easements in Costa Rica.

Challenge Funds:	$37,500
NFWF Federal Match:	$15,000
Grant Amount:	$52,500

26) **Cerro San Gil (GT) Landscape Management, # 97-272**
Marco Vinicio Cerezo
FUNDAECO
Design and implement a model conservation easement program and design management guidelines to protect habitats for migratory and resident birds in the buffer zone of Cerro San Gil National Protected Area.

Challenge Funds:	$49,500
NFWF Federal Match:	$44,000
Grant Amount:	$93,500

27) **Colombia Shade Coffee Extension, # 98-197**
Jorge Botero
CENICAFE
Document migratory and resident birds in coffee-growning region in Colombia, identify cultivation techniques that benefit bird populations, and produce outreach materials to promote these techniques to 11,500 growers and extensionists.

Challenge Funds:	$51,300
NFWF Federal Match:	$48,200
Grant Amount:	$99,500

28) **Communications Workshops for NGOs, # 96-044**
Chris Wille
Rainforest Alliance
Conduct one workshop for each of four selected conservation groups in Central America to train staff in the basics of media communications and public relations, with emphasis on migratory bird conservation and interaction with professional journalists.

Challenge Funds:	$37,500
NFWF Federal Match:	$37,500
Grant Amount:	$75,000

29) **Communications Workshops for NGOs-II, # 97-129**
Diane Jukofsky
Rainforest Alliance
Conduct workshop and follow-up activities for five bird conservation organizations in Jamaica, Mexico, Panama, and Nicaragua, and enhance each NGO's capacity to work with media and increase local support and understanding for conservation programs.

Challenge Funds:	$38,500
NFWF Federal Match:	$38,500
Grant Amount:	$77,000

30) **Conservation Training at Peten (GT), # 96-184**
David Whitacre
Peregrine Fund, Inc.
Provide technical training to three individuals in sustainable management of tropical forests to ensure local, responsible management of Maya Biosphere Reserve; enhance outreach programs to promote fire-control techniques & use of nitrogen-fixing crops.

Challenge Funds:	$36,000
NFWF Federal Match:	$36,000
Grant Amount:	$72,000

31) **Corridor Protection Pass Through, # 94-249**
John Guarnaccia
RARE Center for Tropical Conservation
Administer second-year funding for implementation of a system of forest corridors through establishing cooperative agreements with landowners and hosting a series of training workshops for local university students.

Challenge Funds:	$30,000
NFWF Federal Match:	$0
Grant Amount:	$30,000

32) **Costa Rica Conservation Easements, # 94-140**
Robert Wells
COMBOS
Develop a conservation easement manual and video outlining the legal basis for conservation easements on private lands in Costa Rica and enroll the first 10 easements in the program.

Challenge Funds:	$31,818
NFWF Federal Match:	$15,875
Grant Amount:	$47,693

33) **Costa Rica Corridor Protection, # 93-161**
Johnny Rosales
Monteverde Conservation League
Support for a pilot project in Costa Rica to plan and implement voluntary restoration of privately-owned habitat corridors connecting protected areas at high altitudes with those at lower elevations.

Challenge Funds:	$164,351
NFWF Federal Match:	$125,671
Grant Amount:	$290,022

34) **Costa Rica Corridor Protection-II, # 95-127**
Edgardo Arevalo
Monteverde Conservation League
Provide incentives, instruction, and assistance to landowners in Costa Rica to protect, restore, and manage their lands for migratory birds and other wildlife.

Challenge Funds:	$106,629
NFWF Federal Match:	$50,297
Grant Amount:	$156,926

35) **Costa Rica Monitoring Workshop, # 93-097**
Dr. Gregory Butcher
American Birding Association
Support for a one-day workshop and a one-week field course in Las Alturas, Costa Rica for Central American biologists on bird habitat and monitoring techniques.

Challenge Funds:	$4,153
NFWF Federal Match:	$2,068
Grant Amount:	$6,221

36) **Costa Rica Training Center, # 93-160**
Dra. Dagmar Werner
Fundacion Pro-Iguana Verde
Support for a series of innovative workshops to develop standardized bird monitoring protocols in Central America and Caribbean, and improve permanent field station to enhance training in natural resource management, bird monitoring, and data storage.

Challenge Funds:	$170,000
NFWF Federal Match:	$100,216
Grant Amount:	$270,216

37) **Costa Rican Biodiversity Education, # 92-039**
Dr. Daniel Janzen
University of Pennsylvania
Support for a training program for women to become paratoxonomists to inventory

Challenge Funds:	$80,000
NFWF Federal Match:	$80,000
Grant Amount:	$160,000

Costa Rica's biological diversity.

38) **Costa Rican Ornithological Meeting, # 97-125**
Gregory S. Butcher
American Birding Association
Fund 40 Costa Rican conservation leaders and 10 officers of the Costa Rican Ornithological Association to participate in a meeting with U.S. ornithologists in San José, Costa Rica.

Challenge Funds:	$43,922
NFWF Federal Match:	$7,500
Grant Amount:	$51,422

39) **Crosstraining for NGOs and Journalists, # 94-068**
Chris Wille
Rainforest Alliance
Train 30 Central American and 30 US journalists and student journalists in environmental reporting and journalism at sites in five Central American countries.

Challenge Funds:	$80,000
NFWF Federal Match:	$40,000
Grant Amount:	$120,000

40) **Decision Maker's Course, # 94-141**
Shaun Bennett
Organization for Tropical Studies
Host a one-week education program in Costa Rica on economic development and environmental concerns in tropical countries for staff of the U.S. House and Senate congressional committees, federal agencies, and private conservation groups.

Challenge Funds:	$25,000
NFWF Federal Match:	$12,000
Grant Amount:	$37,000

41) **Desert Bighorn Sheep, # 93-174-003**
Carlos Galindo
Centro Ecologico de Sonora
Provide support for aerial and ground surveys to collect data on distribution and abundance of populations of desert bighorn sheep.

Challenge Funds:	$0
NFWF Federal Match:	$2,000
Grant Amount:	$2,000

42) **Dickcissel Breeding and Wintering Study, # 92-073**
Dr. Stanley Temple
University of Wisconsin
Collect baseline data on dickcissel ecology in Wisconsin and Venezuela to evaluate the effect of agricultural chemicals.

Challenge Funds:	$4,475
NFWF Federal Match:	$4,475
Grant Amount:	$8,950

43) **Dickcissel Conservation in Venezuela, # 97-286**
Gianfranco Basili
Venezuela Audubon Society
Conduct a first-ever participatory meeting of rice and sorghum growers, biologists and agency officials, to develop conservation and management plans for agricultural sites heavily used by wintering populations of dickcissels in Venezuela.

Challenge Funds:	$9,000
NFWF Federal Match:	$7,500
Grant Amount:	$16,500

44) **Dominican Republic Conservation Workshop, # 98-050**
Rafael Lorenzo
Grupo Ecologista Tinglar
Support for the first-ever meeting to identify the most critical needs for bird conservation in the Dominican Republic and to establish a framework for implementing conservation actions through partnerships.

Challenge Funds:	$8,000
NFWF Federal Match:	$8,000
Grant Amount:	$16,000

45) **Eco-Entrepreneurs for Sustainable Develop., # 94-247**
Susan Stevenson
Ashoka: Innovators for the Public
Provide fellowship support to 20 "eco-entrepreneurs" in Latin America to develop new models for protecting biodiversity while also promoting locally sustainable methods of economic and community development.

Challenge Funds:	$600,000
NFWF Federal Match:	$100,000
Grant Amount:	$700,000

46) **Ecotourism in Chiapas, Mexico, # 93-072**
Jerry Touval
University of Maryland
Examine the economic and environmental effects of tourists in the El Triunfo Biosphere Reserve in Chiapas.

Challenge Funds:	$2,500
NFWF Federal Match:	$490
Grant Amount:	$2,990

47) **El Imposible Park Bird Conservation, # 98-051**
Wilfredo Rodriguez
SalvaNATURA
Conduct surveys to determine habitats most important for wintering migratory birds in

Challenge Funds:	$74,000
NFWF Federal Match:	$44,000
Grant Amount:	$118,000

El Salvador's El Imposible National Park, and conduct four sessions to train 40 park guards in basic guide services and nature interpretation skills.

48) **El Ocote (MX) Bird Conservation, # 97-273**
Adrian Mendez
Instituto de Historia Natural
Conduct an intensive field training workshop for 15 biologists, guards, and managers at El Ocote Forest Reserve; implement a long-term study of migratory and resident bird populations; and improve management and restoration actions to benefit birds.

Challenge Funds:	$60,000
NFWF Federal Match:	$30,000
Grant Amount:	$90,000

49) **Endangered Cacti, # 93-174-016**
Dr. Federico Gama
Can Te, A.C.
Promote artificial propagation of several species of rare cactus in Mexico to relieve market pressure. Support population and habitat studies, propagation of cacti, and training of Mexican students in conservation and propagation techniques.

Challenge Funds:	$0
NFWF Federal Match:	$10,000
Grant Amount:	$10,000

50) **Environmental Education in Mexico, # 91-065**
Rosa Maria Vidal
Pronatura Chiapas
Develop outreach materials and educational programs to promote forest conservation by local communities in the Chiapas Region of southwestern Mexico.

Challenge Funds:	$12,500
NFWF Federal Match:	$12,500
Grant Amount:	$25,000

51) **Especies en Peligro, # 93-174-019**
Mr. Oscar Moctezuma
Naturalia, A.C.
Help publish "Especies en Peligro" by acquiring graphic design and similar equipment to guarantee regular high-quality production.

Challenge Funds:	$0
NFWF Federal Match:	$7,000
Grant Amount:	$7,000

52) **Esquinas Carbon Offset Initiative, # 95-069**
Agustin Atmetlla
COMBOS
A joint-implementation, carbon sequestration project to provide funds for purchase of 4,818 acres of critically threatened lowland rainforest and important bird habitat in Costa Rica, to be included as core of Corcovado National Park.

Challenge Funds:	$511,975
NFWF Federal Match:	$200,000
Grant Amount:	$711,975

53) **Exotic Mammal Removal on Baja Islands, # 98-031**
Bernie Tershy
Island Conservation and Ecology Group
Conduct activities to conserve unique and critically threatened pelagic bird species and natural communities on Baja Pacific islands. Remove introduced mammals such as rabbits from four islands and plan to remove exotic mammals from two other islands.

Challenge Funds:	$100,000
NFWF Federal Match:	$40,000
Grant Amount:	$140,000

54) **Fallen Timber Extractive Reserve (CR), # 95-028**
Manuel Alonso
TUVA Foundation
Protect 250 acres of critical rainforest and bird habitat in Costa Rica by establishing an innovative sustainable timber reserve to be owned and operated by local communities.

Challenge Funds:	$100,000
NFWF Federal Match:	$25,000
Grant Amount:	$125,000

55) **Gould Turkey, # 93-174-011**
Carlos Galindo
Centro Ecologico de Sonora
Assist in surveys to determine the distribution, status, and habitat preferences of the Gould turkey in Sonora & Chihuahua.

Challenge Funds:	$0
NFWF Federal Match:	$5,000
Grant Amount:	$5,000

56) **Guanacaste Conservation Area, # 94-073**
Dr. Rodrigo Gamez
Instituto Nacional de Biodiversidad (INBio)
Computerize biological diversity records based on research completed in the Guanacaste Conservation Area in Costa Rica. Data will be available to conservationists, land-planners, pharmaceutical companies and others.

Challenge Funds:	$224,985
NFWF Federal Match:	$75,000
Grant Amount:	$299,985

57) **Guatemala Neotropical Bird Conservation, # 94-157**
David Whitacre
Peregrine Fund, Inc.
Train and educate local resource professionals in research, monitoring, and management techniques to benefit Neotropical migratory birds in the Maya Biosphere Reserve, and promote alternative agricutural practices to conserve natural habitats.

Challenge Funds: $47,500
NFWF Federal Match: $47,530
Grant Amount: $95,030

58) **Guatemala Raptor Monitoring Workshop, # 95-087-005**
Ingrid Arias
FUNDAECO
Support for two Mexican and one American ornithologists to conduct a six-day workshop in raptor identification and monitoring techniques for 25 individuals. Field sites will be selected for a national, long-term hawk monitoring program.

Challenge Funds: $960
NFWF Federal Match: $350
Grant Amount: $1,310

59) **Guatemala Research Training Center, # 94-158**
Marco Vinicio Cerezo
Fundacion para Ecodesarrollo y la Conservacion (FUNDAECO)
Construct a dormitory and office facilities for use by biologists and park guards at the Cerro San Gil protected area; initiate research, training, and education activities benefitting migratory birds; and establish long-term avian monitoring program.

Challenge Funds: $88,105
NFWF Federal Match: $57,408
Grant Amount: $145,513

60) **Guatemala Taking Flight Program, # 96-046**
Marco V. Cerezo
FUNDAECO
Hire and train staff in bird identification, conservation skills, and protecting park resources; establish basis of long-term bird monitoring program; enhance local appreciation for birds through education; and develop avitourism opportunities.

Challenge Funds: $89,500
NFWF Federal Match: $77,500
Grant Amount: $167,000

61) **Guatemala Tres Volcanes Conservation, # 94-159**
Nidia Rizzo
Fundacion Interamericana de Investigacion Tropical (FIIT)
Conduct a biological assessment required by the Guatemalan government to assist designation of this important wintering site for Neotropical migratory birds as a protected area, and also conduct outreach programs with local residents.

Challenge Funds: $122,533
NFWF Federal Match: $43,797
Grant Amount: $166,330

62) **Gulf of California Environmental Education, # 93-174-001**
Hans Herrman
Pronatura, A.C.
Educate three communities in upper Gulf of California region about biosphere reserve and the need for protection of critically endangered vaquita and totaba species.

Challenge Funds: $0
NFWF Federal Match: $10,000
Grant Amount: $10,000

63) **Hawks Aloft Worldwide, # 94-074**
Keith Bildstein
Hawk Mountain Sanctuary Association
Identify raptor migration routes, establish a long-term education program, and complete an atlas of raptor migration at sites in Mexico and Latin America.

Challenge Funds: $100,000
NFWF Federal Match: $50,000
Grant Amount: $150,000

64) **Hispaniola Montane Bird Conservation, # 96-186**
Christopher Rimmer
Vermont Institute of Natural Science
Research on winter distribution, habitat selection, and conservation needs of Bicknell's thrush in Hispaniola; implement locally-based monitoring program for migratory birds; and provide management recommendations for montane broad-leaf forests.

Challenge Funds: $50,600
NFWF Federal Match: $37,000
Grant Amount: $87,600

65) **Imperial Woodpecker, # 93-174-006**
Dr. Ramiro Uranga Thomas
Fundacion Chihuahuese
Conduct field observations to confirm existence of imperial woodpecker in old-growth pine forests of Sierra Madre Occidental in the state of Chihuahua.

Challenge Funds: $0
NFWF Federal Match: $10,000
Grant Amount: $10,000

66) **International Birder's Exchange, # 92-124**
Julie M. Sibbing
Manomet Observatory for Conservation Sciences
Secure and transfer donations of new and used equipment (binoculars, telescopes, bird guides, etc.) from North American groups to Latin American organizations for

Challenge Funds: $10,150
NFWF Federal Match: $5,000
Grant Amount: $15,150

research, habitat conservation, and environmental education.

67) **International Migratory Bird Week 1994, # 94-107**
Dr. Charles Walcott
Cornell University
Develop and organize International Migratory Bird Week 1994, an international celebration of the spring migration of birds from the tropics to the United States and Canada.

Challenge Funds:	$20,000
NFWF Federal Match:	$15,000
Grant Amount:	$35,000

68) **Interpreter Training Program, # 93-174-008**
Maria Isabel Araujo
Parks and Wildlife Foundation of Texas
Support training in methods and techniques of wildlife interpretation for a bilingual indvidual from Mexico, who in turn will train others in Mexico, and develop at least one interpretive program in each participating Mexican state.

Challenge Funds:	$0
NFWF Federal Match:	$4,000
Grant Amount:	$4,000

69) **Jamaica Buffer Zone Management, # 94-160**
Eric Garraway
University of West Indies, Jamaica
Develop management plans for Neotropical migratory and other birds of the buffer zone surrounding the Blue and John Crow Mountains National Parks in Jamaica, and conduct baseline bird surveys in region.

Challenge Funds:	$35,900
NFWF Federal Match:	$8,054
Grant Amount:	$43,954

70) **Jamaica Dry Forest Conservation, # 94-161**
Peter Espeut
South Coast Conservation Foundation
Conduct biological surveys of dry limestone forest habitat used by many species of Neotropical migratory birds; develop management plans for areas of critical importance; and continue studies of the endangered Jamaican iguana.

Challenge Funds:	$98,882
NFWF Federal Match:	$30,000
Grant Amount:	$128,882

71) **Jamaica National Park Bird Surveys, # 94-162**
Marcia Mundle
Gosse Bird Club
Implement a comprehensive inventory on the abundance and distribution of migratory and resident birds within the Blue and John Crow Mountains National Park, Jamaica, and initiate education and outreach activities with residents.

Challenge Funds:	$68,553
NFWF Federal Match:	$30,000
Grant Amount:	$98,553

72) **Jamaica Naturalist Magazine Support, # 94-163**
Catherine Levy
Magazine Committee, Natural History Society of Jamaica
Publish two additional issues of the recently launched Jamaica Naturalist magazine, with focus stories on Neotropical migratory birds and Partners in Flight.

Challenge Funds:	$15,400
NFWF Federal Match:	$14,170
Grant Amount:	$29,570

73) **Jamaica Parks Bird Conservation, # 97-207**
Dan Campbell
The Nature Conservancy
With the Jamaica Conservation and Development Trust, enhance migratory bird conservation through science-based mapping and habitat management, community outreach, and training; and develop local capacity for bird-tourism as an incentive for conservation.

Challenge Funds:	$100,000
NFWF Federal Match:	$50,000
Grant Amount:	$150,000

74) **Kids for Saving the Earth-I, # 93-073**
Jonathan Giles
Organization for Tropical Studies
Supplement funds collected from school children for habitat protection and education programs in Braulio Carillo National Park, Costa Rica.

Challenge Funds:	$47,212
NFWF Federal Match:	$22,250
Grant Amount:	$69,462

75) **Latin America Conservation Mapping, # 94-164**
Dr. George Powell
RARE Center for Tropical Conservation
Distribute an interactive computer mapping software system to promote sound conservation policies and land-use planning in Latin American countries, and provide training its use.

Challenge Funds:	$120,084
NFWF Federal Match:	$60,000
Grant Amount:	$180,084

76) **Latin American Library Development, # 92-076**
Mercedes Foster & Marion Jenkinson
University of Kansas
Establish a mechanism to distribute scientific literature to Latin American libraries and scientific institutions to increase conservation science expertise and improve scientific exchange and overall educational purposes.

Challenge Funds:	$25,000
NFWF Federal Match:	$15,000
Grant Amount:	$40,000

77) **Latin American Wildlife Training Program, # 94-234**
Claudette Mo
Universidad Nacional, Costa Rica
Provide support for four outstanding graduate students to complete masters-level degrees in wildlife management, with projects focused on Neotropical migratory birds. Students will be selected from throughout Central America and the Caribbean.

Challenge Funds:	$112,237
NFWF Federal Match:	$55,000
Grant Amount:	$167,237

78) **Loon Migration & Winter Ecology-II, # 98-103**
Paul Spitzer
Center for Northern Studies
Study the effects of environmental fluctuation on loon habitat selection during mid-winter flightlessness. Overall goal of the study is to gain a broader understanding of how marine ecosystem health effects loons and other sensitive species.

Challenge Funds:	$14,000
NFWF Federal Match:	$7,000
Grant Amount:	$21,000

79) **Marine Bird Restoration, # 93-174-012**
Melida Tajbakhsh
Conservation International
Support efforts to eradicate introduced mammals from Asuncion and San Rogue Islands, restore migratory seabird colonies, train Mexican graduate students in island restoration and management and educate local community about island ecology.

Challenge Funds:	$0
NFWF Federal Match:	$15,000
Grant Amount:	$15,000

80) **Masked Bobwhite Quail, # 93-174-004**
Carlos Galindo
Centro Ecologico de Sonora
Support surveys of masked bobwhite quail populations & evaluate habitat through vegetative transect analysis.

Challenge Funds:	$0
NFWF Federal Match:	$6,990
Grant Amount:	$6,990

81) **Matamoros Training Conference, # 93-174-018**
Karen Chapman
Natl Audubon Society, Sabal Palm Sanctuary
Conduct spring conference in Matamoros. Topics include basic reforestation techniques for native plants and trees.

Challenge Funds:	$0
NFWF Federal Match:	$4,000
Grant Amount:	$4,000

82) **Mexican Spotted Owl, # 93-174-015**
Dr. Fernando Clemente
CREZAS, C.P.
Determine distribution and relative abundance of Mexican spotted owls in San Luis Potosi, characterize habitat components and habitat conditions under multiple uses and determine feeding habits and population structures of owl.

Challenge Funds:	$0
NFWF Federal Match:	$15,000
Grant Amount:	$15,000

83) **Mexico Bird Conservation Steps, # 97-287**
Peter Stangel
National Fish and Wildlife Foundation
Support for implementation of several high-priority projects important for long-term bird conservation in Mexico, including a national strategy meeting, training for young ornithologists and managers, and a Spanish ornithology text.

Challenge Funds:	$285,000
NFWF Federal Match:	$75,000
Grant Amount:	$360,000

84) **Mexico Bird Conservation Workshop, # 97-287-002**
Maria del Coro Arizmendi
CIPA-MEX
Convene a meeting of more than 120 key biologists, conservationists, and agency personnel to initiate development of an action plan and strategy for long-term conservation of migratory and resident birds in Mexico.

Challenge Funds:	$15,000
NFWF Federal Match:	$10,000
Grant Amount:	$25,000

85) **Mexico Endangered Species Project, # 93-174**
Doug Ryan
U.S. Fish and Wildlife Service
Administer funds on behalf of the U.S. Fish and Wildlife Service for Neotropical

Challenge Funds:	$0
NFWF Federal Match:	$198,143
Grant Amount:	$198,143

migratory bird and endangered species projects in Mexico.

86) **Mexico FWS Liaison, # 93-174-020**
Yuriria Blanco Castillo
U.S. Fish and Wildlife Service
Provide funding to support a USFWS liaison in Mexico to facilitate the management of cooperative conservation projects throughout the region and promote participation in Partners in Flight by Mexican organizations.

Challenge Funds:	$0
NFWF Federal Match:	$44,313
Grant Amount:	$44,313

87) **Mexico Monitoring Workshop, # 94-165**
Dr. Daniel Evans
Point Reyes Bird Observatory
Support for two workshops to train 30 Mexican biologists in bird monitoring and field biology techniques.

Challenge Funds:	$56,537
NFWF Federal Match:	$34,496
Grant Amount:	$91,033

88) **Mexico NAWCC Field Coordinator, # 97-287-001**
Carlos Valdes-Casillas
Wetlands International-Mexico
Support for a half-time field coordinator to develop and refine new projects and partners for the North America Wetlands Conservation Council grants program in Mexico and to conduct an assessment of critical needs for Mexican wetlands conservation.

Challenge Funds:	$20,000
NFWF Federal Match:	$0
Grant Amount:	$20,000

89) **Michoacan (MX) Monitoring Workshops, # 97-274**
Laura E. Villasenor Gomez
Universidad Michoacana de San Nicolas Hidalgo
Conduct a short training course and a university course in field ornithology, continue a long-term bird monitoring program, and expand the "Birds Beyond Borders" migratory bird education program with schools in Michoacan and Colorado.

Challenge Funds:	$47,000
NFWF Federal Match:	$27,000
Grant Amount:	$74,000

90) **Migrants in the Dominican Republic-I, # 92-077**
Dr. Joseph Wunderle
USDA-Forest Service, Region 8
Research on the diversity, abundance, and survival rates of Neotropical migratory birds in agricultural areas and forestry plantations on the Dominican Republic.

Challenge Funds:	$14,878
NFWF Federal Match:	$14,878
Grant Amount:	$29,756

91) **Migrants in the Dominican Republic-II, # 94-075**
Dr. Joseph Wunderle
USDA-Forest Service, Inst. of Tropical Forestry
Second year support for research on the diversity, abundance and survival rates of Neotropical migratory birds in coffee plantations of different sizes in the Dominican Republic.

Challenge Funds:	$17,351
NFWF Federal Match:	$17,351
Grant Amount:	$34,702

92) **Migrants in the Dominican Republic-III, # 94-231**
Dr. Joseph Wunderle
USDA-Forest Service, Institute of Tropical Forestry
Third year support for research on the distribution, abundance, and ecology of wintering Neotropical migratory birds in coffee plantations of different sizes in the Dominican Republic.

Challenge Funds:	$21,928
NFWF Federal Match:	$21,928
Grant Amount:	$43,856

93) **Migratory Bird Conservation Workshop, # 98-204**
Teresa Zuniga
Amigos de la Tierra/Espana
Convene a two day workshop to assess migratory bird conservation efforts in Mesoamerica and identify priority needs for long-tem conservation.

Challenge Funds:	$11,500
NFWF Federal Match:	$10,500
Grant Amount:	$22,000

94) **Migratory Bird Education in West Mexico, # 97-287-004**
Robert Petty
Montana Audubon Society
An experienced bird team will combine the most effective components of two existing, successful programs to train a team of teachers and provide materials for teaching migratory bird ecology and conservation in western Mexico states.

Challenge Funds:	$47,600
NFWF Federal Match:	$14,000
Grant Amount:	$61,600

95) **Migratory Bird Habitat in Costa Rica, # 91-121**
Donald Stone
Organization for Tropical Studies
Acquired approximately 1,200 hectares of important forest habitat in Costa Rica used during non-breeding season by 65 species of Neotropical migratory birds.

Challenge Funds:	$449,900
NFWF Federal Match:	$89,323
Grant Amount:	$539,223

96) **Migratory Bird Habitat in Costa Rica-II, # 94-248**
Donald E. Stone
Organization for Tropical Studies
Acquire about 4,900 acres of critical primary forest habitat to widen a protected forest corridor that extends from Braulio Carillo National Park in the central highlands of Costa Rica to La Selva Biological Station in the Atlantic coast lowlands.

Challenge Funds:	$250,100
NFWF Federal Match:	$135,677
Grant Amount:	$385,777

97) **Migratory Bird Liaison, # 97-084**
Megan Hill
Megan Hill
Support a Central America-based liaison to assist NFWF in developing new partners and grants, working with NGOs to design clear projects and proposals, and helping grantees comply with NFWF requirements.

Challenge Funds:	$0
NFWF Federal Match:	$88,500
Grant Amount:	$88,500

98) **Migratory Bird Liaison-II, # 98-224**
Megan Hill
Megan Hill (contractor)
Year-two support for a Central America-based liaison to assist NFWF in developing new partners and grants, working with NGOs to design clear projects and proposals, and helping grantees comply with NFWF requirements.

Challenge Funds:	$0
NFWF Federal Match:	$90,000
Grant Amount:	$90,000

99) **Migratory Bird Workshop, # 93-174-013**
Yuriria Blanco Castillo
U.S. Fish and Wildlife Service
Conduct workshop for regional educators to update and adapt existing educational materials on migratory birds to focus on songbirds. Materials will be taken back to communities, revised by teachers. Revisions will then be compiled and published.

Challenge Funds:	$0
NFWF Federal Match:	$5,000
Grant Amount:	$5,000

100) **Migratory Birds in Colombian Choco, # 96-122**
Elsa Matilde Escobar
Fundacion Natura Colombia
Identify and evaluate critical migratory and resident bird habitats in Colombia's Utria National Park to determine habitat preferences and develop conservation actions. Train three park guards and produce educational materials for local residents.

Challenge Funds:	$60,000
NFWF Federal Match:	$60,000
Grant Amount:	$120,000

101) **Migratory Birds in El Salvador Wetlands, # 96-190**
Juan Marcos Alvarez
SalvaNATURA
Assess value of five wetland sites in El Salvador to migratory and resident birds, and determine threats to each site; produce outreach posters for local awareness; and host national meeting to develop plans to sustainably use and conserve these sites.

Challenge Funds:	$54,600
NFWF Federal Match:	$54,600
Grant Amount:	$109,200

102) **Migratory Birds in Southern Mexico, # 90-063**
Dr. Russell Greenberg
Smithsonian Institution
Study the response of Neotropical migratory bird populations to alternative land uses near natural habitats.

Challenge Funds:	$0
NFWF Federal Match:	$21,100
Grant Amount:	$21,100

103) **Migratory Birds in Western Mexico-I, # 90-061**
Dr. Richard Hutto
University of Montana
Research on habitat preferences of wintering Neotropical migratory birds in western Mexico.

Challenge Funds:	$0
NFWF Federal Match:	$69,736
Grant Amount:	$69,736

104) **Migratory Birds in Western Mexico-II, # 92-051**
Dr. Richard Hutto
University of Montana
Second-year support for research on the habitat preferences of wintering Neotropical migratory birds in western Mexico.

Challenge Funds:	$0
NFWF Federal Match:	$91,731
Grant Amount:	$91,731

105) **Migratory Birds in Western Mexico-III, # 93-154**
Dr. Richard L. Hutto
University of Montana
Third year support for research on habitat preferences of wintering Neotropical migratory birds in western Mexico.

Challenge Funds:	$3,525
NFWF Federal Match:	$3,525
Grant Amount:	$7,050

106) **Migratory Birds of Isla Cozumel, # 93-174-010**
Dr. Patricia Escalante
Instituto de Biologia, UNAM
Develop list of birds of Cozumel Island using mist netting, censuses, selective collecting. Verify habitat preferences & seasonal distribution, with information used in the establishment of protected preserves.

Challenge Funds:	$0
NFWF Federal Match:	$10,000
Grant Amount:	$10,000

107) **Migratory Shorebird Workshop, # 94-166**
Pablo Canevari
Wetlands for the Americas
Support for a major workshop of biologists and managers to assess the progress of shorebird conservation programs in the Western Hemisphere and develop plans for future research and management projects of the Western Hemisphere Shorebird Reserve Network.

Challenge Funds:	$74,484
NFWF Federal Match:	$50,000
Grant Amount:	$124,484

108) **Neotropical Habitat Management, # 91-066**
Diane Wood
World Wildlife Fund- U.S.
Develop management programs for wintering Neotropical migrants in critical areas in Mexico and Belize.

Challenge Funds:	$250,000
NFWF Federal Match:	$100,000
Grant Amount:	$350,000

109) **Neotropical Mig. Bird Documentation Center, # 94-235**
Enrique Quesada
Universidad Nacional, Costa Rica
Establish a library of books, journals, and unpublished literature on Neotropical migrants, for use by scientists, managers, and students from throughout Central America and Caribbean. Materials are stored at the Regional Wildlife Management Program.

Challenge Funds:	$22,310
NFWF Federal Match:	$12,000
Grant Amount:	$34,310

110) **Neotropical Migrants in Guatemala-I, # 92-052**
Dr. David Whitacre
Peregrine Fund, Inc.
Inventory, monitor, and conduct conservation-related research on Neotropical migratory birds in Maya, Calakmul, Rio Bravo biosphere reserves in Guatemala, Mexico, and Belize, respectively.

Challenge Funds:	$54,000
NFWF Federal Match:	$54,000
Grant Amount:	$108,000

111) **Neotropical Migrants in Guatemala-II, # 93-048**
Dr. David Whitacre
Peregrine Fund, Inc.
Second-year funding to inventory, monitor, and conduct conservation-related research of Neotropical migratory birds in Maya, Calakmul, Rio Bravo biosphere reserves in Guatemala, Mexico, and Belize, respectively.

Challenge Funds:	$37,500
NFWF Federal Match:	$18,750
Grant Amount:	$56,250

112) **Neotropical Newsletter and Poster, # 92-066**
Peter Stangel
National Fish and Wildlife Foundation
Produce a poster and a newsletter for the "Partners in Flight" program.

Challenge Funds:	$5,000
NFWF Federal Match:	$2,000
Grant Amount:	$7,000

113) **Neotropical Small Grants Fund-1991, # 91-123**
Peter Stangel
National Fish and Wildlife Foundation
Support for small-scale Neotropical migratory bird conservation projects: golden-cheeked warbler research in Texas; and replanting greenways and setting up small nurseries in Haiti to provide urban habitats for migratory and resident birds.

Challenge Funds:	$3,500
NFWF Federal Match:	$1,500
Grant Amount:	$5,000

114) **Neotropical Small Grants Fund-1994, # 94-023**
Peter W. Stangel
National Fish and Wildlife Foundation
Support small-scale Neotropical migratory bird conservation projects: research on

Challenge Funds:	$10,000
NFWF Federal Match:	$11,724
Grant Amount:	$21,724

overwinter mortality rates of dickcissels in Venezuela and research on the winter ecology of common loons.

115) **Neotropical Small Grants Fund-1995, # 95-087**
Peter W. Stangel
National Fish and Wildlife Foundation
Support for small-scale Neotropical migratory bird conservation projects, including birding festivals at American Falls, Idaho and Rio Grande, Texas, designed to raise local appreciation for migratory birds; and a raptor monitoring workshop in Guatemala.

Challenge Funds:	$16,860
NFWF Federal Match:	$10,378
Grant Amount:	$27,238

116) **Neotropical Waterfowl and Wetlands, # 90-062**
Mike Moser
IWRB/WHSRN
Promote conservation of waterfowl and wetland habitats in Latin America through public education and workshops for professionals.

Challenge Funds:	$25,000
NFWF Federal Match:	$25,000
Grant Amount:	$50,000

117) **Nicaragua Bird Conservation and Training, # 98-206**
Juan Carlos Martinez
Fundacion Cocibolca
Provide intensive field ornithology training to 6 biologists and conduct avian surveys and habitat assesments at 30 key sites throughout Nicaraqua; the 10 most critical sites will be further studied for specific management recommendations.

Challenge Funds:	$54,000
NFWF Federal Match:	$45,000
Grant Amount:	$99,000

118) **Overwinter Mortality of the Dickcissel, # 94-023-002**
Gianfranco Basili
University of Wisconsin - Madison
Gather data on winter ecology of the dickcissel; train Venezualan students in field techniques; produce educational film and pamphlets; and develop a conservation management plan.

Challenge Funds:	$7,000
NFWF Federal Match:	$3,500
Grant Amount:	$10,500

119) **PROBEA Teacher Training, # 93-174-017**
Merle O'Neill
Daedalus Education Foundation
Support training of 60-90 teachers to improve environmental literacy and to promote proactive measures in Tijuana region, through hands-on experiential training, field study, and investigation.

Challenge Funds:	$0
NFWF Federal Match:	$4,840
Grant Amount:	$4,840

120) **Panama Bird Conservation, # 93-177**
Luis Carles & Graciela Palacios
ANCON
Restore a buffer zone surrounding the Darien National Park in Panama, and conduct research on habitat use and benefits to Neotropical migratory birds.

Challenge Funds:	$100,000
NFWF Federal Match:	$100,000
Grant Amount:	$200,000

121) **Panama Canal Zone Workshop, # 98-100**
Katie Distler
National Fish and Wildlife Foundation
Convene a workshop in Panama that will focus on the conservation of natural resources and the potential value from tourism, research, and nature related businesses in Panama, specifically as related to Panama Canal Zone.

Challenge Funds:	$0
NFWF Federal Match:	$59,271
Grant Amount:	$59,271

122) **Panama Training Workshops, # 96-183**
Osvaldo Jordan
Panama Audubon Society
Conduct a series of five workshops for 50 staff members of several protected areas in Panama to provide training in basic bird identification and field observation techniques, and establish long-term database for these sites.

Challenge Funds:	$10,300
NFWF Federal Match:	$10,100
Grant Amount:	$20,400

123) **Partners in Flight West Mexico Meeting, # 96-076**
Mike Carter
Colorado Bird Observatory
Provide travel/translation services for the Partners in Flight West Working Group meetings in Jalisco, Mexico and Vancouver, B.C., through a partnership w/ Bureau of Land Management. Meeting goals include strategizing priority bird conservation

Challenge Funds:	$4,615
NFWF Federal Match:	$4,200
Grant Amount:	$8,815

actions.

124) **Portland Bight (JM) Bird Conservation, # 98-198**
Ann M. Haynes-Sutton
South Coast Conservation Foundation
Identify and map critical habitats for migratory and resident birds in the mangrove wetlands of Portland Bright in South Jamaica, and prepare management recommendations in anticipation of official protection decree.

Challenge Funds:	$47,250
NFWF Federal Match:	$31,500
Grant Amount:	$78,750

125) **Private Land Management and Shorebirds, # 93-107**
Dr. Gonzalo Castro
Wetlands for the Americas
Support for workshops for private landowners on how to manage wetlands to benefit shorebirds, and to establish demonstration sites.

Challenge Funds:	$240,000
NFWF Federal Match:	$80,000
Grant Amount:	$320,000

126) **RESERVA Training Program, # 93-138**
Eric W. Gustafson
Ducks Unlimited, Mexico (DUMAC)
Scholarships for Latin American reserve managers to attend an intensive management training course in Mexico.

Challenge Funds:	$6,150
NFWF Federal Match:	$4,500
Grant Amount:	$10,650

127) **Race to Save the Neotropics, # 97-124**
Chris Wille
Rainforest Alliance
Three-year participatory evaluation of existing conservation and sustainable development projects in Latin America. Results will help guide conservation groups, grant-makers, and governments toward more effective programs to conserve biodiversity.

Challenge Funds:	$130,000
NFWF Federal Match:	$10,000
Grant Amount:	$140,000

128) **Raptor Migration in Mexico, # 92-033**
Cynthia Lenhart
Hawk Mountain Sanctuary Association
Develop educational programs about raptors' spring and fall migrations through Veracruz, Mexico, and pursue research on habitat needs during migration.

Challenge Funds:	$22,504
NFWF Federal Match:	$22,504
Grant Amount:	$45,008

129) **Rio Bravo Training Program, # 94-167**
Mary Vasquez
Programme for Belize
Construct dormitory, library, and laboratory facilities at the Rio Bravo Conservation and Management Area in Belize, for use by scientists and students working on the conservation of Neotropical migratory birds.

Challenge Funds:	$145,338
NFWF Federal Match:	$75,000
Grant Amount:	$220,338

130) **Rio Laja (MX) Riparian Restoration, # 96-189**
Judith Hernandez
Audubon Society of Mexico
In cooperation with local ejidos (communal landowners), restore two sites along the denuded Rio Laja to serve as model restoration projects; produce two manuals and workshops to guide restoration projects; and produce bird conservation outreach materials

Challenge Funds:	$66,200
NFWF Federal Match:	$57,500
Grant Amount:	$123,700

131) **Shortgrass Prairie Partners, # 96-104**
Michael Carter
Colorado Bird Observatory
Launch a comprehensive program designed to conserve shortgrass prairies and the birds that depend on them. The program promotes conservation through coalition-building, monitoring, management, education, and measures on-the-ground conservation progress.

Challenge Funds:	$130,000
NFWF Federal Match:	$65,000
Grant Amount:	$195,000

132) **Sierra Gorda (MX) Bird Conservation, # 98-200**
Martha Isabel Ruiz Corzo
Grupo Ecologico de Sierra Gorda, A.C.
Initiate long-term migratory and resident bird monitoring program, identify critical habitats, and design conservation management goals in old-growth pine-oak forests of Sierra Gorda Biosphere Reserve, and develop local bird conservation education tools.

Challenge Funds:	$80,000
NFWF Federal Match:	$40,000
Grant Amount:	$120,000

133) **Skutch Farm, Costa Rica, Acquisition, # 93-178**
Maria Ileana Mora
Tropical Science Center
Acquire 190 acres of critically endangered premontane wet forest in SW Costa Rica belonging to noted ornithologist Alexander Skutch, to be used for ongoing bird research and community conservation education programs.

Challenge Funds:	$47,819
NFWF Federal Match:	$22,000
Grant Amount:	$69,819

134) **Songbird Symposium, # 91-109**
Dr. John Hagan
Manomet Observatory for Conservation Sciences
Purchase and distribute at no cost to Central American citizens a symposium publication on Neotropical migrant conservation.

Challenge Funds:	$10,000
NFWF Federal Match:	$10,000
Grant Amount:	$20,000

135) **Sonoran Pronghorn, # 93-174-007**
Carlos Galindo
Centro Ecologico de Sonora
Support surveys to document life history and habitat needs of Sonoran pronghorn and complete a management plan for this subspecies.

Challenge Funds:	$0
NFWF Federal Match:	$13,000
Grant Amount:	$13,000

136) **Swainson's Hawk Conservation in Argentina, # 95-184**
Brian Woodbridge
USDA-Forest Service, Klamath NF (CA)
Study pesticide threats to Swainson's hawks in Argentina, develop guidelines for alternative methods of pesticide application to agricultural grasslands, and educate Argentina's agricultural community about birds and their habitat requirements.

Challenge Funds:	$32,000
NFWF Federal Match:	$15,000
Grant Amount:	$47,000

137) **Swainson's Hawk Outreach in Argentina, # 96-039-002**
Jane Lyons
BirdLife International
Develop an education campaign for agricultural producers, resource managers, and the public to teach about the harmful effects of pesticide use to humans and especially to Swainson's hawks, and promote alternative pest management techniques.

Challenge Funds:	$2,000
NFWF Federal Match:	$2,000
Grant Amount:	$4,000

138) **Swallow-tailed Kite Conservation Plan, # 97-267**
Ken Meyer
Avian Research and Conservation Initiative
Comprehensive effort to acquire baseline data on swallow-tailed kites throughout their range in order to develop a conservation plan. Project funds will pay for training, equipment, and salary for one seasonal Latin American worker.

Challenge Funds:	$60,000
NFWF Federal Match:	$30,000
Grant Amount:	$90,000

139) **Tangara Newsletter Support-II, # 98-205**
Borja Mila
Point Reyes Bird Observatory
Produce and distribute La Tangara, the main vehicle for communication of Partners in Flight and bird conservation information on an international level, reaching more than 1,000 institutions throughout the hemisphere.

Challenge Funds:	$10,000
NFWF Federal Match:	$10,000
Grant Amount:	$20,000

140) **Training Course for Local Naturalists, # 95-130**
Brett Jenks
RARE Center for Tropical Conservation
To increase support for local conservation efforts, 15 residents in Costa Rica and 15 residents in Baja, Mexico, received training as local natural history guides for ecotourists (tourists interested in local natural or environmental sites).

Challenge Funds:	$70,000
NFWF Federal Match:	$25,000
Grant Amount:	$95,000

141) **Training Course for Local Naturalists-II, # 97-037**
Brett Jenks
RARE Center for Tropical Conservation
Help local NGOs adopt and replicate the Nature Guide Training program (created with previous NFWF support) in Baja, California; Yucatan, Mexico; and Costa Rica. An evaluation component will be instituted.

Challenge Funds:	$100,000
NFWF Federal Match:	$50,000
Grant Amount:	$150,000

142) **Training Course for Local Naturalists-III, # 98-052**
Brett Jenks
RARE Center for Tropical Conservation
Implement several local nature guide training courses in areas that provide critical

Challenge Funds:	$100,000
NFWF Federal Match:	$50,000
Grant Amount:	$150,000

migratory bird habitats: the Yucatan Peninsula, the Honduran north coast, and the Ecuadorian Andes; and evaluate needs and potential for a Dominican Republic course.

143) **Tropical Conservation Newsbureau-I, # 89-086**
Chris Wille
Rainforest Alliance
Support for a program to disseminate news articles on tropical conservation issues to media in the United States and Latin America, in an effort to increase knowledge of conservation issues in Central and South America.

Challenge Funds:	$20,000
NFWF Federal Match:	$20,000
Grant Amount:	$40,000

144) **Tropical Conservation Newsbureau-II, # 92-043**
Chris Wille
Rainforest Alliance
Second year support for a program to disseminate news articles and radio programs on tropical conservation issues to media in the United States and Latin America.

Challenge Funds:	$60,000
NFWF Federal Match:	$30,000
Grant Amount:	$90,000

145) **Veracruz Ornithology Training Course, # 97-287-003**
Francisco Ornelas
Instituto de Ecologia, A.C.
Scholarship support for 13 Mexican and Central American biologists to participate in an intensive five week advanced conservation ornithology course.

Challenge Funds:	$26,000
NFWF Federal Match:	$13,000
Grant Amount:	$39,000

146) **Veracruz River of Raptors-I, # 94-236**
Ernesto Ruelas Inzunza
Pronatura Veracruz
Provide support to highlight importance of Veracruz (MX) as flyway for millions of migrating raptors; develop innovative education programs and materials for children and farmers; establish intensive monitoring effort; and expand ecotourism potentials.

Challenge Funds:	$58,646
NFWF Federal Match:	$30,000
Grant Amount:	$88,646

147) **Veracruz River of Raptors-II, # 96-124**
Ernesto Ruelas Inzunza
Pronatura Veracruz
Conduct outreach programs with private landowners and schools to promote appreciation for migratory birds and respect for their habitat needs, and develop an observatory to provide a center for local conservation awareness and ecotourism development.

Challenge Funds:	$100,000
NFWF Federal Match:	$75,000
Grant Amount:	$175,000

148) **WHSRN Shorebird Conservation Network, # 91-122**
Linda Leddy
Western Hemisphere Shorebird Reserve Network
Integrate shorebird conservation into wetlands conservation programs in cooperation with the North American Waterfowl Management Plan and the International Waterfowl & Wetlands Research Bureau.

Challenge Funds:	$182,800
NFWF Federal Match:	$100,000
Grant Amount:	$282,800

149) **Waterfowl Management in El Llano, # 93-174-002**
Dr. Fernando Clemente
CREZAS, C.P.
Evaluate waterfowl species abundance & develop management recommendations for wintering area created by construction of irrigation ponds.

Challenge Funds:	$0
NFWF Federal Match:	$15,000
Grant Amount:	$15,000

150) **West Indies Bird Guide, # 91-069**
Dr. Herbert Raffael
U.S. Fish and Wildlife Service, Region 9
Prepare and publish a comprehensive guide to birds of the West Indies region, with emphasis on current conservation needs.

Challenge Funds:	$25,000
NFWF Federal Match:	$25,000
Grant Amount:	$50,000

151) **West Mexico Connection, # 93-179**
Leo M. Eisel
Denver Audubon Society
Provide training in field research to graduate students at IMECBIO; establish bird monitoring program at Sierra de Manantlan Biosphere Reserve; publish bird checklist for area; conduct extensive local outreach programs; and organize fire control patrols.

Challenge Funds:	$57,500
NFWF Federal Match:	$39,500
Grant Amount:	$97,000

152) **West Mexico Connection-II, # 98-201** Eduardo Santana *IMECBIO-Universidad de Guadalajara* Consolidate long-term bird monitoring program at Sierra de Manantlan Biosphere Reserve; establish advanced field ornithology workshop for western biologists; and develop bird conservation education tools for use in coastal Jalisco.	***Challenge Funds:*** ***NFWF Federal Match:*** ***Grant Amount:***	$34,500 $30,000 $64,500
153) **Western Ecuador Bird Education, # 98-202** Eric Hortsman *Fundacion Pro Bosque* Establish community environmental education center and mobile sustainable agriculture team to promote conservation of bird habitat in northwest coastal Ecuador.	***Challenge Funds:*** ***NFWF Federal Match:*** ***Grant Amount:***	$110,250 $36,750 $147,000
154) **Western Songbird Conservation Network, # 92-127** Michael Carter *Colorado Bird Observatory* Produce and publish a catalog of resource needs for protected areas in western Mexico for distribution to potential funders in the United States and elsewhere.	***Challenge Funds:*** ***NFWF Federal Match:*** ***Grant Amount:***	$27,500 $12,000 $39,500
155) **Winter Habitat Remote Sensing Project, # 91-110** Dr. John Rappole *Smithsonian Institution* Use satellite imagery to document changes in habitat critical for wintering Neotropical migrants in Central America.	***Challenge Funds:*** ***NFWF Federal Match:*** ***Grant Amount:***	$40,059 $40,059 $80,118
156) **Wintering Birds of Rio Metlach Basin, # 93-174-005** Ernesto Ruelas Inzunza *Pronatura, A.C.* Document and evaluate distribution and abundance of wintering birds in primary forest, secondary forest, and agroecosystems of the Rio Metlach basin, with special emphasis on endangered and endemic species.	***Challenge Funds:*** ***NFWF Federal Match:*** ***Grant Amount:***	$0 $7,000 $7,000
157) **Wintering Migrants in El Cielo, Mexico, # 93-052** Dr. John Faaborg *University of Missouri* Provide technical support and training to Mexican biologists; initiate long-term avian surveys; conduct research on ecology and overwinter site fidelity of migratory birds; and assist with management of the El Cielo Biosphere Reserve in Tamaulipas.	***Challenge Funds:*** ***NFWF Federal Match:*** ***Grant Amount:***	$45,000 $29,959 $74,959
158) **Yucatan (MX) Conservation Education, # 97-130** Susana Rojas Gonzalez-Castillo *Pronatura Peninsula de Yucatan* Develop a model conservation education program for children in Rio Lagartos and Rio Celestun reserves, based on habitat needs and appreciation for birds and marine turtles; develop a curriculum and workbooks; and train 30 teachers in applications.	***Challenge Funds:*** ***NFWF Federal Match:*** ***Grant Amount:***	$50,000 $50,000 $100,000

Total Projects: 158	***Total Challenge Funds:*** ***Total NFWF Federal Match:*** ***Total Grant Amount:***	$8,971,689 $5,414,182 $14,385,871

Challenge Funds: non-federal funds raised by NFWF and its conservation partners (grantees) from third parties to leverage NFWF federal matching funds.

NFWF Federal Match: federal funds appropriated, and/or otherwise committed (via cooperative agreement, etc.) to NFWF for use as matching funds. Funds come from range of federal agencies including: U.S. Fish and Wildlife Service, NOAA, A.I.D., Bureau of Land Managment, Bureau of Reclamation, USDA-Forest Service, USDA-Natural Resources Conservation Service, Department of State, National Park Service, and Department of Defense.

PREPARED STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, U.S. SENATOR FROM THE STATE OF NEW YORK

Mr. Chairman, I am pleased to voice my support for S. 659, the Great Lakes Fish and Wildlife Restoration Act. The unique partnerships established by this Act greatly benefit the Great Lakes region of the United States.

In 1990 I cosponsored the original legislation which directed the United States Fish and Wildlife Service (the Service) to produce a comprehensive study of the status, assessment, management, and restoration needs of the fishery resources of the Great Lakes Basin. Completion of the study required a high degree of cooperation and coordination between Federal, State, Tribal, and international agencies.

The Service issued the Great Lakes Fishery Resources Restoration Study in 1995. In the study, the Service specifies 32 "high priority" policy recommendations designed to protect the Great Lakes ecosystem. For example, the Service identifies best practices to prevent the introduction of nonindigenous species—species which,

like the zebra mussel and purple loostrife, can disrupt the equilibrium of native ecosystems. Other recommendations address the problems of contaminated sediments and their impacts on wildlife and human health.

The Fish and Wildlife Service was charged by Congress to assess the needs of the Great Lakes ecosystems, and to produce policy recommendations. The task before us now is to ensure that these policy recommendations are put into action. The reauthorizing legislation before us today directs the agency to carry out three tasks. First, the Service must establish a committee to review proposals which implement the highest priority recommendations of the Fishery Restoration Study. Those proposals which are selected by the committee will be funded through a competitive grant process. Second, the bill funds three U.S. Fish and Wildlife Service offices located within the Great Lakes Basin. These divisions would continue to coordinate interagency efforts to improve the health of the region. Third, the Act requires the Service to report to Congress on its progress in implementing the recommendations of the original Study.

The Great Lakes Fish and Wildlife Restoration Act is a truly innovative piece of legislation. Too few laws enacted by this body recognize the complexity of the ecosystems we regulate, and few coordinate the diverse skills of the agencies which share in the stewardship of these valuable resources. I hope that my colleagues will join me in lending their unqualified support to this legislation.

PREPARED STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM THE STATE OF NEW JERSEY

As a cosponsor of S. 263, the Bear Protection Act, I would like to reiterate my support for this important legislation that would provide the domestic bear population with needed protection before they are destroyed by commercial trade.

Numerous studies on the bear parts trade have concluded that, as a result of the continuing decline of Asian bear populations, trade in the gallbladders of North American bears species for medicinal use is on the rise. This fact is confirmed by wildlife enforcement officials who note that poaching of North American black bears is increasing, largely as a result of growing demand for bear gallbladders. In my home State, wildlife officials have found the carcasses of black bears with their gallbladders and paws removed. Several years ago, Pennsylvania conservation officers working undercover and in cooperation with New Jersey law enforcement officers were able to purchase numerous gallbladders brought into the State by Pennsylvanians intent on selling them in New Jersey.

Trade in black bears and their parts is already known to occur throughout the species' range. According to a report by the World Wildlife Fund and TRAFFIC North America, wildlife agencies in the United States and Canada indicate that there already exist a well-developed market for the parts of the American black bear, and evidence of well-developed networks of hunters, middlemen and retailers, only suggest that the trade is likely to continue and expand in the future. I believe that the Bear Protection Act would give State and Federal law enforcement agencies a much needed tool to deter further illegal commercialization of black bear products, while not interfering with States' right to manage their resident bear populations as they see fit. I strongly support the bill and urge my colleagues to report it out of committee.

PREPARED STATEMENT OF HON. BOB GRAHAM, U.S. SENATOR FROM THE STATE OF FLORIDA

Mr. Chairman, I am very pleased to join my colleague Senator McConnell and 52 other cosponsoring Senators in supporting the Bear Protection Act. I fully support this Act and believe that it is key to ensuring the long-term viability of the world's eight bear species and, specifically, to protect the health of American bears.

I feel that this legislation is worthy of support for many reasons. First, it will ensure that the United States does not contribute to the disastrous trade in bear parts by prohibiting the importation and exportation of U.S. bear viscera. The Bear Protection Act will also make it illegal for a person to sell, barter, offer to sell or barter bear viscera, in interstate or foreign commerce. Enforcement provisions of this statute fall under U.S. Lacey Act of 1981 that will authorize the imposition of civil and criminal penalties, permit the forfeiture of wildlife contraband, and authorize rewards to persons providing information leading to arrests, criminal convictions, or civil penalty assessments.

The Bear Protection Act will also promote international cooperation to protect bears by requiring that the United States Trade Representatives and the Secretary

of the Interior work with the representatives of the leading importing, exporting, and consuming countries of bear viscera to establish a coordinated strategy to end this detrimental trade. It will allow Congress to remain involved and retain oversight of progress by requiring an annual report.

The Bear Protection Act's provisions will protect America's bears by preventing exploitation and potential population decimation by poachers supplying the widespread demand for valuable bear parts. Although bear populations in the United States are currently thriving, the dramatic decline of bear populations outside the United States could lead poachers to turn to American bears to fill the increasing demand for bear viscera.

In Florida, the unique black bear subspecies *Ursus americanus floridanus*, is considered threatened with extinction. At one time, black bears in Florida and parts of Southern Georgia and Alabama numbered more that 12,000. Florida's bears were found in every part of the State, including the Florida keys. Now, fewer than 1,500 bears remain in scattered and isolated populations, lee than 20 percent of the bears' historic range. Development and loss of habitat are the main threats to the survival of the species. However, illegal harvest of bears and the existing market for bear galls are a pressing problem in the State of Florida and are a concern for the wildlife law enforcement community.

In Florida, it is illegal to sell the carcasses or parts of black bears. When Florida Game and Fresh Water Fish Commission Officers began encountering individuals selling bear carcasses and parts, the alleged offenders would often identify them as coming from other species of bears in order to circumvent the law. To combat this problem of enforcement, it became obvious that legislative modifications were necessary. In 1994 the law was modified to make it illegal to sell any bear carcass or parts from any species of bear. This law made enforcement much easier and more effective for our officers.

On a national level, The Bear Protection Act would allow U.S. law enforcement officials to address the poaching of bears and the sale of their parts in an effective manner. As long as some States legally permit the sale of bear parts, poachers will be able to exploit these animals for profit through these States. The outright ban on trade, sale, or barter of bear viscera will close these existing enforcement and jurisdictional loopholes that exist as a result of a patchwork of State laws.

The Bear Protection Act will establish national guidelines for trade in bear parts, but will not weaken any existing State laws that have been instituted to deal with this issue. The prohibitions in the Bear Protection Act are not as restrictive as Florida Law; however, such stringent restrictions may not be as essential on a nationwide basis for States who do not have threatened species. Moreover, this legislation is a step in the right direction to allow the continued harvest of bears where appropriate and specifically addresses the issue of the sale of bear viscera, which is not an integral part of bear hunting by legitimate sport hunters.

STATEMENT OF HON. JOHN ROGERS, DEPUTY DIRECTOR, U.S. FISH AND WILDLIFE SERVICE, WASHINGTON, DC

Mr. ROGERS. Thank you very much, Mr. Chairman. It's a pleasure to be here this morning. As you noted earlier, I have a rather extensive statement that I would like submitted for the record. I will summarize it here. But with seven bills to be considered, I may take a little longer than the standard time, with your indulgence.

Senator CHAFEE. You go ahead.

Mr. ROGERS. First, I'd like to begin with S. 2094, the Eagle Repository bill, just summarized by Senator Allard. The Service strongly supports S. 2094. Enactment of this bill will allow more efficient use of the proceeds received from the sale of abandoned or forfeited wildlife parts and products. I want to stress, as Senator Allard mentioned, that only products which could legally be imported into the United States would be available for sale under this bill.

These items were voluntarily abandoned or they were forfeited. I also want to stress that these salable products do not include endangered or threatened species, migratory birds, marine mammals,

or other species listed under Appendix I of Convention on International Trade and Endangered Species.

Currently, there are approximately 450,000 wildlife items of the National Wildlife Property Repository near Denver.

Senator CHAFEE. Are these all in one central spot, in Denver?

Mr. ROGERS. That's correct. There are some in law enforcement offices around the country, but the overwhelming bulk of them is at the repository.

The Service is authorized to dispose of these items, including by gift, sale, loan, or destruction. But our priority is to donate or loan these to scientific and educational institutions. Of the estimated 450,000 abandoned or forfeited wildlife items, some 200,000 are surplus to the needs of scientific and educational programs and could legally be sold at auction. We estimate that an auction of these backlogged forfeited and abandoned items would generate more than $1 million in proceeds.

Under S. 2094, we would be able to use the proceeds of the already allowed sales of abandoned and forfeited fish and wildlife and plants to pay the costs associated with shipping, storage, inventory, security, appraisal of these items, and also pay the cost associated with auctions. It would also allow the Fish and Wildlife Service to use these proceeds to pay for processing and shipping of eagles and other migratory birds to Native Americans for religious purposes.

Mr. Chairman, we believe this bill, if enacted, would allow us to more efficiently operate two important programs—the distribution of wildlife property to scientific and educational institutions, and the distribution of eagles and other migratory birds to Native Americans for religious purposes.

Next, I would like to address S. 2244, the National Wildlife Refuge System Volunteer and Partnership Enhancement Act. We certainly appreciate your leadership and the leadership of Senator Baucus in bringing us to this point.

As you know, the National Wildlife Refuge System Improvement Act strengthened the legal underpinnings of the system and emphasizes public participation in its operation. The volunteer bill before the committee today increases that emphasis on participation and provides direction for the Service's volunteers and its partnership organizations.

Our volunteers play a vital role in helping to fulfill our mission of conserving, protecting, and enhancing America's fish and wildlife and their habitats. Volunteers provide essential services that Fish and Wildlife Service does not have the resources or staff to provide. The number of our volunteers has increased from 4,200 in 1982 to more than 25,000 in 1996. Commensurate with this increase in individuals, volunteer hours have also increased from 128,000 to more than 1 million in 1996.

S. 2244 will further encourage the use of volunteers to assist the Service in the management of our National Wildlife Refuges. It will facilitate partnerships between the Service and non-Federal entities, and it will promote public awareness of the resources of the Refuge System and public participant in the conservation of those resources. It will also encourage donations and other contributions

by persons and organizations to individual refuges and the Refuge System.

The bill also affirms our authority for cost-share projects, which to date have been authorized in annual appropriation bills. The concept of matching funds is very effective in stimulating the donation of funds or in-kind services to achieve the goal of improving a refuge. Permanent authorization and direction could help this program grow beyond its current $3.3 million size, thus leveraging available funds.

S. 2244 would also establish a 3-year pilot program to test the effects of locating a volunteer coordinator at between two and 20 selected refuges. The bill further enhances our volunteer capability by authorizing the establishment of a senior volunteer corps. Also, S. 2244 provides guidance for our refuge educational programs which could lead to both an expansion of our efforts and greater community involvement in these efforts.

I'll next address H.R. 3113, authorization of the Rhinoceros and Tiger Conservation Act of 1994, also with its companions S. 361 and H.R. 2807, the House and Senate bills for the Rhino and Tiger Product Labeling Act.

The Department strongly supports the reauthorization of the Rhino and Tiger Conservation Act through the year 2004, as passed by the House on March 30, 1998.

Senator CHAFEE. Now wait. Which one is that? I get mixed up. We've got three different bills here on that.

Mr. ROGERS. H.R. 3113 is the basic underlying reauthorization act.

Senator CHAFEE. That has passed the House, and that's the one you support.

Mr. ROGERS. Correct. And S. 361 is the Senate version, as you just mentioned, offered by Mr. Jeffords, for the Labeling Act, and H.R. 2807 is the House-passed version of the Labeling Act.

Senator CHAFEE. Now which one are you for of those two?

Mr. ROGERS. The House version of the Labeling Act. However, as you mentioned, Senator Jeffords has changed his position on S. 361, so we could also support S. 361.

Senator CHAFEE. OK.

Mr. ROGERS. The need for increased action is highlighted by the desperate situation facing our world's remaining tiger and rhino populations. Reauthorization of the Rhino and Tiger Conservation Act will send a strong message that the American people care deeply about these resources, and it will demonstrate a commitment by the U.S. Government to provide sufficient funding and continued support to the conservation of these key representatives of Asian and African fauna.

We do seek some technical amendments with our fiscal year 1999 budget proposal to consolidate the African elephant, Asian elephant, and rhino and tiger conservation funds under a multi-species conservation fund.

However, conservation assistance is only half of the job. In order to break the cycle of poaching and illegal trade that has devastated so many rhino and tiger populations, we must also work to break the supply lines and remove rhino and tiger products from the marketplace. Unfortunately, not all the problems with the trade in

rhino and tiger parts is in Asia. There is also a thriving trade in medicines which are at least labeled as containing rhino and tiger parts in traditional medicine shops in most cities having large Asian communities.

And we in the United States are not exempt from this problem. Every year the Service wildlife inspectors all over the country routinely encounter shipments containing wildlife products labeled as containing protected species parts, especially rhino and tiger. Once these products reach the United States, even when their labels blatantly claim that they contain rhino and tiger parts, the burden of proof is still on the Fish and Wildlife Service to demonstrate conclusively and scientifically that those products in fact contain those products.

As you might expect, this is an expensive process, and forensic experts estimate a cost of up to $100,000 to develop a DNA test to identify any particular group of wildlife, such as in this case all rhinos or all tigers, and the process then only works if the DNA markers have not been destroyed in the compounding process. For example, if a product purported to contain tiger bone has been treated to high temperatures during compounding, a DNA analysis test might not be conclusive.

Given these results, seized items must often be returned to the importer because no violation of U.S. law can be shown. Some ports have chosen not to seize tiger bone products because the burden of proof with respect to content has made enforcement so difficult. As a result, products claiming to contain tiger and rhino continue to be readily available and continue to stimulate demand and feed a market that ultimately depends on killing of these critically endangered species.

H.R. 2807, the Rhino and Tiger Product Labeling Act, would close this major gap in our existing laws by adding new criminal prohibitions to the existing Act. The Administration strongly supports this new measure which is designed to prohibit the importation and sale of products that claim to contain rhino horn or tiger products. The proposed prohibition on import and export of such products will allow us to seize these substances at U.S. ports of entry and demand their immediate forfeiture. And the prohibition on sale of these products will help keep stockpiles which are already in this country off the shelves.

The bill is fully in keeping with an international consensus on the need for such legislation in every country. Recognizing that trade in rhino and tiger medicines is a global problem, the CITES conference of the parties has adopted a series of resolutions calling on all countries to adopt new legislation to control this trade.

Now let me address S. 263, the Bear Protection Act. S. 263 is intended to prevent American black bear populations from becoming harmed as a result of the demand for bear viscera which is used in certain Asian medicinal products.

Although significant illegal trade in Asiatic species of bear exists primarily to supply the Asiatic medicinal market, the Service does not have evidence to support the claim that bears in the United States are threatened by the demand for bear viscera. With the exception of black bear populations in Florida and Louisiana, bear populations in the United States and Canada are generally increas-

ing, due in large part to the effective wildlife management activities carried out by the States.

The Service believes that bears in the United States have been adequately protected to date, and the bill addresses an issue which has not been a major resource problem. If the committee moves forward, however, with S. 263, there are some technical/legal concerns relating to references to the Lacey Act, as set forth in my formal statement, that should be addressed prior to final passage.

The next bill is S. 1970, the Neotropical Migratory Bird Conservation Act of 1998. We support S. 1970 and wish to thank Senator Abraham for his sponsorship of the act.

The Fish and Wildlife Service, through four bilateral treaties, has responsibility for maintaining healthy populations of some 778 species of migratory nongame birds and 58 species of migratory game birds, approximately 350 species of which—the so-called neotropical migrants—migrate between Latin America, the Caribbean, and North America.

The greatest challenge facing us as migratory bird managers is to halt the declines of many of these species. The decline is due, in part, to major habitat destruction and degradation. S. 1970 can be a major step toward halting and even reversing this trend.

Again, we do, however, have several recommended changes that would make this initiative even more effective. These include adding a North American component to include both U.S.-based as well as Latin American- and Caribbean-based products so that the conservation benefits will be maximized in both the breeding, the wintering, and the migration areas. Also, we would like to increase the authorized appropriation from $4 million to $8 million for fiscal year 1999 to 2001. We have other suggested changes that are addressed in the formal statement.

Finally, Mr. Chairman, the Administration would like to see Congress pass S. 659, a bill that authorizes needed appropriations to fund the recommendations in the Great Lakes Fishery Resources Restoration Study. This bill establishes a coordinated process to identify and fund projects that will help restore the fish and wildlife resources of the Great Lakes. It provides a creative funding mechanism that requires a 75–25 Federal-non-Federal match to ensure broad support for restoration projects.

In addition, the legislation facilitates movement from study to action and provides the critical framework for the development and implementation of partner restoration projects. Finally, S. 659 will continue the momentum and strong Federal presence with States, tribes, the Great Lakes Commission, and non-governmental organizations and partners to continue to work together to restore the resource.

If the bill is not passed, the Administration believes that partner projects may disintegrate due to lack of funding and lack of coordinated support. Lake trout, poster brook trout, Atlantic salmon, and lake sturgeon restoration activities currently underway may be impeded or stopped. Federal facilitation of resolution of Great Lakes inter-jurisdictional fishery issues could be impaired and, in addition, Federal credibility at all levels within the Great Lakes natural resource management community may be diminished and future efforts made less effective.

S. 659 will enable the Service to continue to provide support and needed Federal funding to restore fish and wildlife resources of one of the Nation's most important ecosystems.

Mr. Chairman, that's a very quick run down of our positions on these important pieces of legislation. I would be happy to answer any questions that you or the other members of the committee may have.

Senator CHAFEE. Thank you, Mr. Rogers. As I understand it, you were for all of these, but the Bear Protection Act you had some questions on.

Mr. ROGERS. Correct.

Senator CHAFEE. We will stay in touch with you and the service department on that.

The rest, it seemed to me—is it fair to say you are for the rest of them?

Mr. ROGERS. That's correct. A few recommended changes, but basically for them.

Senator CHAFEE. OK. We've got your testimony on that. That's very helpful.

There's one thing that we didn't bring up, and just while I've got you here, this wasn't on the list, and this deals with the so-called Duck Stamp Act. The question was whether we should allow a portion of the receipts from the Duck Stamp Act to be used for marketing the duck stamp so that we could get greater revenue from that. That is not now a permissible use of the funds. What do you think of that?

Mr. ROGERS. That's correct, sir. The Fish and Wildlife Service, in the face of declining duck stamp sales, had given some thought to and developed a proposal whereby we would use a portion of the income from the sale of duck stamps to try to enhance the sale of this important tool to maintain and increase wetland habitat.

We had started advancing this proposal, and the congressional members of the Migratory Bird Conservation Commission—that is Senator Breaux, Senator Cochran, Congressman Dingell, and Congressman Weldon—while generally in favor, raised the issue of potential oversight by the Commission as well as whether we were asking for the appropriate amount of funding. We have worked through these two issues and are again ready to advance a proposal that would accomplish this. It would be a relatively brief pilot program to see if our efforts could broaden and expand the sale of duck stamps to provide increased revenues for wetland enhancement.

Senator CHAFEE. When you've got that ready why don't you send it on up here.

Mr. ROGERS. We'll do that.

Senator CHAFEE. Senator Allard, do you have some questions?

Senator ALLARD. Mr. Chairman, I don't.

Thank you very much for your testimony, Mr. Rogers.

Senator CHAFEE. On the tiger and rhino legislation that came over from the House, H.R. 2807 and H.R. 3113, it is my understanding that the principal purpose is to prohibit products labeled as containing these and to close the markets, and that all seems to make sense. It has pretty extensive civil and criminal penalties and forfeiture authorities. To what extent do you think the Service

would expect to see criminal penalties and forfeitures used to prohibit these?

Mr. ROGERS. We are not out to immediately turn Asian medicine shopkeepers into criminals. The aim of this bill would be to get those products off the market and decrease the incentive for take of the critters in the wild. We would begin by using educational and softer methods, as we have done in Los Angeles without this bill behind us, to try to reduce the presence of these things on the market.

But we wouldn't be swooping down on all Asian markets and throwing the shopkeepers in jail or subjecting them to great fines. The criminal provisions would be used as a last resort to go after those who were knowingly and continually perpetuating this activity.

Senator CHAFEE. You mentioned that the neotropical bird legislation could be a compliment to the North American Waterfowl Management Plan. As you know, the North American Waterfowl Plan just involves Canada, the United States, and Mexico, all who have some kind of framework in place. Do you think such a framework can be developed by the Caribbean and Latin American countries for neotropical birds? In other words, it's a long step from what they're doing to have some kind of a framework that can make this succeed.

Mr. ROGERS. That's a very important point, Senator. We have extensive experience in the Caribbean and all through Latin America working with the countries and the non-governmental organizations in those countries on neotropical birds. What has been missing to kind of glue the whole thing together has been an overriding act that would, in fact, bring it together, as this does, and also the potential mechanism for funding this disparate activities.

So, yes, we do believe that they can be brought together, a framework similar to the North American plan can be established, and we believe that this Act would be very important in accomplishing that.

Senator CHAFEE. OK. We've got a vote on. What I would like to do is recess. I don't think there are any more questions.

Do you have any questions of Mr. Rogers?

Senator ALLARD. No, I don't, Mr. Chairman.

Senator CHAFEE. So, Mr. Rogers, that completes your testimony. Thank you.

Mr. ROGERS. Thank you, Mr. Chairman.

Senator CHAFEE. When we come back we will deal with Panel II and then to Panel III. So we will have a little recess here for about 10 minutes while we vote. Thank you.

[Recess.]

Senator CHAFEE. We'll now go to the second panel. Ms. Ginette Hemley, vice president for Species Conservation, World Wildlife Fund; Mr. Wayne Pacelle, senior vice president, The Humane Society of the United States; and Ms. Kristin Vehrs, deputy director, American Zoo and Aquarium Association.

So we'll start with you, Ms. Hemley.

STATEMENT OF GINETTE HEMLEY, VICE PRESIDENT FOR SPECIES CONSERVATION, WORLD WILDLIFE FUND, WASHINGTON, DC

Ms. HEMLEY. Thank you, Mr. Chairman and members of the committee. I appreciate the opportunity to appear here today. I am Ginette Hemley, vice president for Species Conservation at World Wildlife Fund. My written testimony addresses several of the legislative issues before us today. But this morning I will speak principally about three of them.

First, the Rhino and Tiger Product Labeling Act. As this committee is well aware, rhinos and tigers are among the most critically endangered species on earth. Virtually all populations have experienced staggering declines due to poaching, a problem stemming directly from the demand for tiger bone and rhino horn used in traditional medicine principally in East Asia, but also in countries such as the United States.

Fortunately, and largely because of U.S. pressure, several key East Asian countries and consumer markets, including Taiwan, China, South Korea, and Hong Kong, have made significant strides in addressing the illegal trade in recent years, strengthening their own laws and enforcement programs. The result is that positive and illegal trade has slowed down. But, ironically, the United States has yet to take action to close what we consider a loophole in the enforcement system in this country that has allowed a trade in products containing, or labeled as containing, tiger and rhino to flourish.

A recent report by World Wildlife Fund of its trade monitoring program traffic revealed that there are more tiger medicinal products on North American markets today than there were 5 years ago. This alarming trend must be reversed through more effective enforcement and by working directly with traditional Chinese medicine communities to reduce demand for these products and promote alternatives. On the latter issue, I am pleased to report that we are seeing some progress. Unfortunately, it is not enough to solve the problem.

World Wildlife Fund strongly urges the Senate to pass the Rhino and Tiger Product Labeling Act in a form similar to that passed by the House in April, that is H.R. 2807, to make it illegal to import and sell any medicinal product labeled as containing rhino or tiger ingredients, thus allowing for direct enforcement action and seizure of such products wherever they are found. This action, as you have heard, has been recommended by CITES. We are aware that there are differing views about the enforcement and penalty provisions contained in the House bill, and we would like to work with the committee to resolve these differences. We believe that these provisions could appropriately be toned down without undercutting the aim of the legislation, and that is to get these products off store shelves.

Turning now to the Bear Protection Act, World Wildlife Fund greatly appreciates the interest of Senator McConnell and the other cosponsors of S. 263 in improving the conservation status of the world's bears. We offer the following comments with the aim of ensuring that any legislation passed by Congress truly contributes to global bear conservation.

Mr. Chairman, while we very much support the overall intent of the bill, to help bears, we question some of the bill's findings which, in our view, do not accurately portray the status of bears and the bear trade. We are very fortunate here in North America to have some of the healthiest bear populations in the world, with the American black bear in particular considered stable or increasing throughout most of its range with the exception of populations in Louisiana and Florida.

Further, there is little indication that these or other bear populations in the United States have been negatively impacted overall by poaching for commercial trade in bear parts, particularly viscera, for medicinal uses. Most States already prohibit the commercial trade in bear parts, but seven apparently still allow it for products taken from bears within their borders. Although there is concern that inconsistent State laws may facilitate illegal trade and laundering of bear parts, to the best of our knowledge, there is little evidence that this is a major conservation problem.

With this in mind, Mr. Chairman, World Wildlife Fund would like to offer the following recommendations on the proposed legislation.

First, because most of the information on the illegal trade of bear parts is based on anecdotal reports, there is a clear need to better define the problem. We recommend that Congress direct and provide financial support for the Department of Interior to conduct an assessment of the illegal trade in bear parts in the United States and its links to the Asian medicinal trade. Such data, in our view, are essential to responsible trade control and enforcement.

Second, we question the need at this point for broad prohibitions on trade in bear products, particularly in interstate commerce, pending the outcome of the kind of review I have just suggested.

Finally, Mr. Chairman, we believe that the Bear Protection Act will do little to achieve its aims without authorizing new funding for two important activities—bear anti-poaching and trade enforcement in the United States, and conservation of endangered bear species outside of our borders. Support for such activity is essential if we are truly going to help the world's bears.

Let me now turn briefly to the Fish and Wildlife Revenue Enhancement Act, the legislation proposed by Mr. Allard and others, that would allow the Fish and Wildlife Service to recoup some of the cost associated with using forfeited and abandoned wildlife products in educational, scientific, and Native American religious activities.

We strongly support the Service's educational initiatives that utilize forfeited wildlife products, such as the "suitcase for survival" and "cargo for conservation" programs. These, in our view, are the priorities for which such products should be used. But it's clear that these programs operate successfully only at substantial cost to the Service, and even with such programs a large surplus of forfeited wildlife will, unfortunately, likely remain.

We see the potential benefit to the Fish and Wildlife Service of selling certain non-endangered wildlife products if the proceeds of such sales can be directed back into educational and related activities. But such sales should be undertaken only with the utmost

caution and products from species listed under the Endangered Species Act and other laws should never be allowed to be sold.

World Wildlife Fund would, therefore, offer two recommendations for the proposed legislation.

First, the Fish and Wildlife Service should be instructed to develop a system of evaluating the types of products that would be sold, making it a priority to use them first for educational and related purposes, but taking into account the legal and conservation status of the affected species in their various countries of origin to be fully aware of any conservation concerns or impacts that might be associated with selling any products.

Second, we suggest that language be added to the bill specifically prohibiting the sale of species listed under the ESA, the Marine Mammal Act, Migratory Bird Treaty Act, or in CITES Appendix I.

Senator CHAFEE. I think Senator Allard has that in his bill. Don't you?

Senator ALLARD. We're working with your staff, Mr. Chairman, to get that provision in the bill. Hopefully, it will be in the Chairman's mark.

Senator CHAFEE. I see. Thank you.

Ms. HEMLEY. In closing, Mr. Chairman, I have two very brief comments about one other bill, the proposed Neotropical Migratory Bird Conservation Act. First, while we wholeheartedly support the effort to provide new funding mechanisms for protecting important migratory bird habitat in Latin America and the Caribbean, we believe that any new programs should also extend to conservation of important breeding areas for neotropical migrants in North America. Without this component, any new program would simply be incomplete.

Second, we believe it is important to better define how the program supported by this new legislation would relate to and compliment other existing Government and private sector initiatives aimed at protecting neotropical migratory bird habitat in both the Northern and Southern Hemispheres.

Thank you, Mr. Chairman. That concludes my statement. I'll be happy to answer any questions.

Senator CHAFEE. Thank you very much. What we'll do is complete the witnesses in this panel and then have some questions for all three of you.

Mr. Pacelle.

STATEMENT OF WAYNE PACELLE, SENIOR VICE PRESIDENT, THE HUMANE SOCIETY OF THE UNITED STATES

Mr. PACELLE. Thank you, Mr. Chairman. Again, my name is Wayne Pacelle and I'm senior vice president for communications and government affairs for the Humane Society of the United States. On behalf of our 6.2 million members and constituents, I offer this testimony, also signing on to more than 30 pieces of testimony in support of these bills.

I'm going to comment on the Bear Protection Act, the rhino and tiger legislation, very briefly, and the Fish and Wildlife Revenue Enhancement Act. All of these bills focus on the need to stem the tide of illegal trade in wildlife—that's the over-arching concern here today. The bills relating to the disposal of stockpiles dem-

onstrates the enormous magnitude of the illegal wildlife trade in this country.

The bills relating to the conservation of rhinos and tigers and the trade in products made from them and other threatened and endangered species are the latest in a series of domestic and international steps to solve the illegal trade in products of these animals which have been driven to the brink of extinction by this trade. The bill relating to bear parts trade seeks to stem the precipitous decline of Asian bear species whose parts are traded globally, and the bill also seeks to proactively protect America's bears from the same strong markets that have had such a significant adverse impact on Asian bear populations.

In short, we support the Rhino and Tiger Conservation Reauthorization Act, and we do support Senator Jeffords in his efforts to modify his bill to have expeditious passage of the Rhino and Tiger Product Labeling Act. We have met with Senator Allard's staff; we do have some concerns about that legislation, although we surely agree with him that the purpose of the legislation in terms of funding law enforcement is a critically important one.

I want to reserve the balance of my remarks for the Bear Protection Act. As you know, Mr. Chairman, this legislation has 53 cosponsors in the Senate—24 Republicans and 29 Democrats. There are 13 cosponsors on this committee. In the House, there is companion legislation which has 135 cosponsors, again of a very bipartisan nature. There are hundreds of groups that endorse this legislation. I do want to mention a couple of others that came in late. The Idaho Wildlife Federation and the Idaho Sporting Congress, both hunting groups, do support the Bear Protection Act.

The principal intent of the Bear Protection Act is to assist State and Federal wildlife law enforcement and the enforcement agencies of other nations by doing three things, and I think it's very important to note all three things because some have focused on just one component of the legislation. No. 1, is to protect endangered Asian bears from international markets for their organs; No. 2, protect American bears from being poached to supply foreign demand for their parts; and No. 3, to protect American bears from domestic markets in bear parts.

In 1994, Mr. Chairman, Dr. Chris Servheen, representing the U.S. Fish and Wildlife Service at the International Union for the Conservation of Nature Species Survival Committee Bear Specialist Group, noted, "There is a serious impact on global bear populations from the trade in bear parts." In 1995, he added, "As Asian bear populations decline and wild bear bile and other bear parts become more difficult to obtain, sources of bear parts outside Asia will be developed by traders and others willing to make significant profits."

In 1995, the World Wildlife Fund annual report stated, "A recent traffic study reported that American black bear populations are targets of illegal traders in bear parts. The booming medicinal market for these parts where a single gall bladder can be sold for as much as $11,000 in some Far Eastern markets has already sent Asian bear populations into decline and is causing traders to turn increasingly to American black bears. A complex patchwork of

State laws in the United States makes it impossible to regulate the trade."

So, in short, I think that there is no dispute that a patchwork of laws exist at the State level: 32 States ban commercializing of the trade in bear parts, 9 States allow trade only of gall bladders taken from outside the State, 7 States allow commerce regardless of origin, 2 States have no regulations at all. This current system allows poachers to kill bears illegally in one State where the sale of bear parts is prohibited and to sell the parts legally in another State or ship them out of the country entirely, completely circumventing the first State's prohibition on sale of bear parts.

I just would like to give you and Senator Allard an example. In 1994, Alaskan wildlife officials were alerted to a shipment of 385 pounds of bear feet coming into Alaska from Idaho via Washington. Agents discovered that the shipment also included 40 bear gall bladders. Because the actual sale of the gall bladders took place in Idaho, where such sale is lawful, an Alaskan court ruled that the shipment did not violate State laws even though the sale of bear gall bladders is prohibited in both Washington and Alaska. I think that case illustrates one of the interstate issues that the legislation is trying to get at.

In 1995–96, the Humane Society of the United States and other organizations surveyed the States on this matter. More than 30 State wildlife agency representatives and/or law enforcement personnel responded that this legal disparity makes wildlife law enforcement difficult and endorsed a uniform legal framework to prohibit the trade in bear viscera. We do know that there is a significant anecdotal evidence of widespread trade in bear gall bladders. Operation Berkshire in New York and Massachusetts, Operation Smokey, Operation Ursus, all of these sting operations have yielded major gall bladder troves.

Passage of this Act is a precautionary exercise to protect America's black bears, and it is also needed to protect endangered Asian bears. One major reason we need a uniform ban on the sale of bear parts is the look alike problem. It is impossible to visually distinguish the gall bladder of, for example, an endangered Asiatic black bear from an American black bear. By passing this prohibition, we can help State and foreign bear conservation enforcement efforts. Because the endangered bear gall bladders can easily pass for the non-endangered bladders, international poachers use American black bear galls as a shield to hide their sale of endangered bear galls. And I do want to note that a U.S. co-authored resolution at the 10th conference of the parties at CITES urged parties to adopt national legislation to demonstrably reduce illegal bear parts or derivatives. The guiding assumption behind the resolution was that legal trade provides an avenue for illegal trade.

In closing, Mr. Chairman, it's very appropriate we think for the Federal Government to ban the trade in bear gall bladders as a matter of policy whether or not American black bears are endangered. We're not disputing the fact that many American black bear populations are healthy. But we think as a matter of policy, just as there is a prohibition on airborne hunting under the Federal Airborne Hunting Act, just as there is a Federal prohibition on baiting, whether or not the baiting activity would cause

endangerment in itself or airborne hunting would cause endangerment, as a Congress, you have decided in the past to bar those activities, and we think that trade in gall bladders does not serve the national interest. Who is hurt by this legislation? Nobody except poachers and smugglers. And even if five gall bladders are traded, that's five too many, causing the unnecessary killing of bears for their parts.

I do want to note as a final point that there are alternatives accepted by traditional practitioners of traditional Chinese medicine. According to both the Earth Care Society and the Association of Chinese Medicine, the two prominent Hong Kong non-governmental organizations, there are at least 54 herbal alternatives to bear bile and its various applications.

Trade in bear gall bladders does not serve any compelling national interest and we think that this legislation helps to stop that trade and protect black bears here in the United States and abroad.

Thank you very much.

Senator CHAFEE. Thank you very much, Mr. Pacelle.

And now Ms. Kristin Vehrs, deputy director, American Zoo and Aquarium Association.

STATEMENT OF KRISTIN VEHRS, DEPUTY DIRECTOR, AMERICAN ZOO AND AQUARIUM ASSOCIATION, BETHESDA, MD

Ms. VEHRS. Thank you. Good morning, Mr. Chairman and members of the committee. My name is Kristin Vehrs. I am the deputy director of the American Zoo and Aquarium Association (AZA). AZA is a professional organization representing 184 accredited zoological parks, aquariums, and oceanariums in North America. We do appreciate the opportunity to testify before the committee this morning, and I would like to comment briefly on four bills you're addressing.

S. 2094, the Fish and Wildlife Revenue Enhancement Act of 1998, would allow the Fish and Wildlife Service to retain all proceeds from already authorized and future sales of eligible wildlife materials obtained while enforcing its laws. The proceeds could cover the costs of shipping, storing, appraising, and auctioning off eligible wildlife items. We understand that Fish and Wildlife Service may still use proceeds for its "Reward Account" and for more extensive distribution of these materials for educational, scientific, and Native American religious purposes.

We continue to be interested in the availability of fish and wildlife related items for these educational programs. The AZA, Fish and Wildlife Service, the World Wildlife Fund, the National Fish and Wildlife Foundation, and Samsonite have a cooperative educational effort entitled Suitcase for Survival. It's an extremely popular educational tool for our member zoo and aquariums. Since its 1991 inception, the Suitcase for Survival program has reached millions of school children throughout North America, and as of 1997, there were 187 suitcases in circulation with a long waiting list for more suitcases.

If S. 2094 is enacted, we would like to see a continued balance between paying these costs for auctions, providing products for edu-

cation, and providing money into the Reward Account. I believe AZA would support the suggestions offered by World Wildlife Fund.

Turning to the Rhino and Tiger Product Labeling Act, AZA believes that H.R. 2807 must be enacted into law. This legislation would prohibit the import into or export from the United States of any product labeled as or actually containing any species of tiger or rhinoceros.

The bill would stop the significant importation of rhino and tiger products into the U.S. Recent World Wildlife Fund and Wildlife Conservation Society reports indicate that more than 50 percent of all retail stores in North America Chinatowns sell illegal endangered species products despite a 20-year CITES ban. The bill also would eliminate the expensive and time consuming laboratory testing necessary to determine if a confiscated product really contains ingredients originating from rhinos or tigers.

Mr. Chairman, I understand that some members of the committee are concerned that the enforcement language in H.R. 2807 is too extreme, allowing seizure of equipment, vessels, vehicles, items used in the import/export selling of rhino and tiger products. We are willing to work with you and the committee to resolve this issue. We would like to see H.R. 2807 enacted this session of Congress.

H.R. 3113, the Rhinoceros and Tiger Conservation Authorization Act, is an act AZA strongly supports. This is an example of an effective public-private partnership designed to deliver immediate results by assisting conservation organizations in the field in saving animals from extinction. The funds are needed to keep conservation efforts in the field ongoing.

S. 263, the Bear Protection Act—Mr. Chairman, we support the intent of S. 263 to conserve bear species. Our reluctance to fully support the bill is our fear that we don't fully understand the problems yet. There appears to be a disconnect between data from protection organizations and data from State fish and game and Federal officials. Most black bear populations remain stable or are increasing except those in Florida and Louisiana. Seven States allow export and sale of bear parts, and yet, according to Fish and Wildlife Service, virtually no permits for export have been requested.

We're further not aware of an increase in poaching. While I do understand HSUS' policy argument, that it would be good policy for Congress to enact that there be no trade in bear parts or products, I guess I want to make sure we don't lose this opportunity to learn more about what the actual problems are.

In that vein, AZA joined the World Wildlife Fund and the National Wildlife Federation in making some recommendations to strengthen S. 263. We would like to see the legislation amended to allow for a broad review of the trade by the Department of Interior with the assistance of State fish and wildlife agencies, with specific funding for this project and a tight deadline. We do not want to hold up conservation of bears. We just want to make sure that we're really solving the problem.

Our suggestion also was to provide the Department of Interior with greater flexibility to impose different kinds of trade restrictions; to include authorization language for enforcement funding to strengthen the long term enforcement goals of the Bear Protection

Act; and finally, include a provision in the legislation authorizing specific funding to support conservation programs for endangered bears.

Thank you for allowing me to testify on these four important wildlife bills.

Senator CHAFEE. Thank you very much, Ms. Vehrs.

It seemed to me that Mr. Pacelle wanted to charge ahead on the Bear Protection Act, if I understood you right. Is that correct?

Mr. PACELLE. Absolutely, Mr. Chairman.

Senator CHAFEE. Your belief is that even though the bears are now in good shape in the United States that there's the possibility of——

Mr. PACELLE. Well, the eight species of bears in the world—many of them have gall bladders that look exactly alike. Under CITES, the American black bear is listed under Appendix II for look-alike reasons. Because the American black bear gall bladder looks just like the Asiatic black bear gall bladder, this creates a very significant enforcement problem and it allows a smokescreen for the poachers to use the American gall bladders and the Asiatic ones and to mix them up. It makes enforcement a very difficult proposition.

But we've never charged, and I'm just afraid that some, not necessarily here today, are offering a red herring. We've never made the allegation that black bears in the United States are endangered, with the exception of the two subspecies, the Florida black bear which is expected to be listed as threatened, and also the Louisiana black bear which is threatened. We're saying that as a matter of policy, trading in bear gall bladders is not a good thing, it doesn't serve any national interest.

Senator CHAFEE. Ms. Vehrs, I'm not quite sure that I understand your position on S. 2094. It seems to me you support the education programs, but have you taken a position on the portion of the bill that would generate more money?

Ms. VEHRS. No, sir. Actually, our board of directors has not been asked to take a formal position. My staff recommendation to our board of directors would be to go ahead and support the bill with the caveat that we continue to balance the offering of these wildlife-related products for educational use, payment into that Reward Account, which then pays for the care of live animals while the legal proceedings are taking place, and using the funds for the payment of the shipping, the storage, and the handling.

Senator CHAFEE. Senator Allard.

Senator ALLARD. Mr. Chairman, if I may try and respond to some of the comments of Ms. Vehrs. In reviewing the storage facility and the personal tour through there, I'm convinced that their top priority is education. I think that when they look at products that they have there, they try and single out those that have the greatest educational value. For example, if they should get hold of a stuffed animal, they don't consider any other purposes than for educational purposes. That's their top priority.

So I felt in my tour of the facility that certainly education was that top priority. And I hope that would alleviate some of your concerns that you may have in that regard.

Ms. VEHRS. It may.

Senator ALLARD. Mr. Chairman, I have a question for Mr. Pacelle. I don't know whether you've seen some of the amendment language that we're looking at. The way I understand it and it's been explained to me, the way current law is interpreted, they do have the ability to sell endangered species. And with the amendment that I would be working with the chairman to introduce my legislation; it specifically states, "In carrying out paragraph (1), the Secretary of the Interior and the Secretary of Commerce may not sell endangered or threatened species, marine mammals, or migratory birds, or items derived from such species, mammals, or birds."

Even with the adoption of that amendment, you cannot support the bill?

Mr. PACELLE. Well, we noted in our testimony that that was one of the curative suggestions. So we appreciate that.

We do have a bit of a philosophical concern that I imagine it's going to be difficult to deal with, which is that we see the Service as an enforcement agency and we would rather not have the Service get involved in wildlife trade. And even though it's with a laudable purpose, we are concerned about the message sent that the primary Federal law enforcement agency on wildlife trade issues is abetting trade in some way. So that's kind of the underlying philosophical concern. We do sincerely appreciate your making it explicit in the legislation regarding Appendix I species.

Senator ALLARD. I think there's a practical approach, too. I agree with you that I don't want them getting out there and merchandizing the products. But I think there is a practical matter. We're enhancing enforcement, which protects species, and we're enhancing the educational program, which I think protects species.

So I hope that you would look at this legislation in regard to the amendment, and I hope we could count on your support.

Mr. PACELLE. I think that given that you are the author of this legislation, your sending that message to the Service in terms of its conduct of these sales is very important. Because you can have two different messages sent depending upon the conduct of these sales. So I appreciate your thought in that regard.

Senator ALLARD. Thank you very much for your testimony.

Senator CHAFEE. I want to thank everybody for their testimony. We appreciate your coming here.

Now we will go to the next panel, which has Ms. Molly Krival, past president, Ding Darling Wildlife Society, from Florida; Mr. Gary Taylor, legislative director of the International Association of Fish and Wildlife Agencies; and Mr. Thomas Crane, program manager of the Great Lakes Commission.

Ms. Krival, you may proceed.

STATEMENT OF MOLLY KRIVAL, PAST PRESIDENT, "DING" DARLING WILDLIFE SOCIETY, SANIBEL, FL

Ms. KRIVAL. Thank you for the privilege of appearing here today. I am Molly Krival. I have been a volunteer at the J.N. "Ding" Darling National Wildlife Refuge for 10 years, accumulating 5,000 volunteer hours. I also joined the "Ding" Darling Wildlife Society, a Friends group, and I served as its president for three terms. The Society has provided up to $50,000 a year for refuge projects. I

have participated in training programs for refuge managers on how to develop Friends groups, and I'm a member of a mentoring team which visits refuges to help them start a Friends organization. This year I was honored as the Volunteer of the Year by the National Wildlife Refuge System.

Those are my credentials for speaking in support of S. 2244. I will direct my remarks to three of its provisions. First, it encourages the use of volunteers and donations and facilitates partnerships. Refuge staffing is often at a bare minimum to manage the resource. When they train volunteers, the staff multiplies its productivity.

Partnerships also increase productivity by funding projects not covered by Federal appropriations. The "Ding" Darling Wildlife Society does that. So do partnerships with cities, like Sanibel, and private groups, like the Sanibel Captiva Conservation Foundation. We have noted that grant providing institutions like funding partnership projects which tend to do more for the dollar.

Second, section 3 of this bill allows donations to be made to individual refuges and creates a new matching grants program to encourage donations. During my first week as a volunteer, a woman who had known "Ding" Darling came to the visitors center with a drawing he had given her. She wanted to give the drawing to the refuge. The staff member I consulted looked frustrated—the refuge couldn't keep donations but the "Ding" Darling Wildlife Society could. Since not all refuges have a 501(c)(3) Friends group to receive donations, gifts have either been refused or sent to some mysterious agency reservoir never to be seen again.

I find that local people form an allegiance to their local refuge first and want to support it. That conviction of the heart leads to donations of time and other gifts. Being sure our donations will stay at home is very important to us.

The "Ding" Darling Wildlife Society is raising $2 million in private funds to build a Center for Education. So far we have about $1.4 million. But other refuge Friends groups have goals that far outstrip their fund-raising capabilities, such as to build a first visitor center, to purchase items to manage the wildlife, to upgrade environmental education in their community. They need money. Almost always they can raise a portion themselves, but the option for a matching grant is very encouraging. That provision in this bill would startup a lot of good things.

Three, S. 2244 includes a pilot project that provides a volunteer coordinator to certain refuges. Volunteers are people with all sorts of skills who want to help the refuge. We need a staff member who can organize and train us and develop a program for us. Without such a program, we may lose interest.

In summary, all of the provisions of S. 2244 help people to volunteer, to form a 501(c)(3) Friends group, and to donate to their local national wildlife refuge. Many of us find enormous satisfaction in helping conserve the best of what we have for future generations. We see a bird, an alligator, or a flowering plant for the miracle of nature that it is. Our hearts leap up.

I think Senator Chafee and his co-signers have produced truly helpful legislation in this bill, and I hope you will agree. Thank you for the privilege of addressing you.

Senator CHAFEE. Well, thank you very much. And congratulations to you for your honor. It's my understanding you are the Volunteer of the Year at Wildlife Refuges.

Ms. KRIVAL. That's right.

Senator CHAFEE. Good for you.

Ms. KRIVAL. Thank you.

Senator CHAFEE. I must say, I don't know where Sanibel is.

Ms. KRIVAL. It's off the southwest coast of Florida, off of Fort Myers. It's a barrier island. More than half of it is comprised of the "Ding" Darling National Wildlife Refuge.

Senator CHAFEE. So you escaped the fires, did you?

Ms. KRIVAL. Yes, we did, fortunately. That was in mid-eastern Florida. We're southwest.

Senator CHAFEE. Well, they certainly were horrible, and still are. They haven't controlled them yet.

Ms. KRIVAL. Yes.

Senator CHAFEE. Thank you for your testimony.

Mr. Gary Taylor, legislative director, International Association of Fish and Wildlife Agencies.

Mr. Taylor.

STATEMENT OF GARY TAYLOR, LEGISLATIVE DIRECTOR, INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES, WASHINGTON, DC

Mr. TAYLOR. Thank you, Mr. Chairman. I am Gary Taylor, legislative director of the International Association of Fish and Wildlife Agencies. I appreciate the opportunity to share with you today the Association's perspectives on several fish and wildlife conservation bills before the committee. All 50 State fish and wildlife agencies are members of our Association.

You have asked us particularly for our comment on the Bear Protection Act, the Great Lakes Fish and Wildlife Restoration Act, and the Neotropical Migratory Bird Conservation Act.

Let me begin, Mr. Chairman, with our comments on S. 263, the Bear Protection Act. The Association cannot support S. 263 as introduced. We understand the intent of the bill sponsors is to help address the poaching of Asian bear species for their gall. However, the bill as currently drafted focuses its application largely on the regulation of trade of bear viscera in the United States based on the premise that domestic poaching of U.S. indigenous bear species is contributing to the market demand for bear gall and is having, or could in the future have, a significant negative impact on U.S. bear populations.

Mr. Chairman, there is no substantiation to support either of these premises. The Association therefore concludes that as drafted S. 263 is neither helpful nor necessary in addressing the decline of foreign bear species.

Let me offer right up front, Mr. Chairman, that the Association is certainly willing to work with the bill's sponsors and the U.S. Fish and Wildlife Service on a more appropriately focused import/export bill that would address any existing regulatory deficiencies under the Convention on International Trade in Endangered Species of Fauna and Flora. However, S. 263 as introduced is not focused on that perspective.

Mr. Chairman, as you are aware, bear populations throughout the United States are robust and generally increasing. Also, as you are aware, the statutory responsibility for the conservation and management of bear species in the United States lies largely with the State fish and wildlife agencies, except for the polar bear, the grizzly bear, and the Louisiana black bear where the Fish and Wildlife Service shares responsibility with the States. Regulation of bear harvest and allowable use of any parts or products, such as fur, claws, gall, and other products, is thus closely regulated by the State fish and wildlife agencies, including through the application and enforcement of the Lacey Act by State and Federal wildlife officers.

The Lacey Act already makes it a Federal violation to transport or sell across State lines or national borders any wildlife that is illegally taken in the State of origin. As recently as May of last year, our Association surveyed all 38 bear range States regarding illegal harvest and population impact. The information from the States clearly substantiates that while incidental illegal harvest occurs, there is no significant population impact from illegal harvest in any bear range State. If there were, Mr. Chairman, I can assure you that our State fish and wildlife agencies would take appropriate action to address this.

The Association believes, therefore, that the application of the Lacey Act to all U.S. domestic commerce in bear viscera, whether it is legal in a State or not, as proposed in S. 263, is unnecessary for bear resource protection and is an inappropriate Federal intrusion in the State management authorities and prerogatives. Mr. Chairman, the States spend tens of millions of dollars each year in wildlife law enforcement, and I assure you they would be aware of and respond to any significant poaching of domestic bear populations. The States' record on conservation law enforcement speaks for itself, and we believe there is no substantiated evidence that would compel Federal intervention.

Let me suggest, Mr. Chairman, rather than the creation of additional Federal statutory authority, as contemplated in S. 263, especially where it preempts State management prerogatives, that the provision of additional resources to the U.S. Fish and Wildlife Service Division of Law Enforcement would be a more appropriate and effective means of effecting Asian bear populations by the regulation of illegal trade and their parts or products.

As I indicated earlier, there is little data to substantiate if U.S. bear gall is contributing to a market demand for Asian bear gall and thus affecting the Asian bear parts trade and consequently the Asian bear population. The Association would thus encourage additional support to the Fish and Wildlife Service to address this question also.

And finally, as I indicated earlier, Mr. Chairman, we would be happy to work with bill sponsors and the Service on a more narrowly focused import/export bill that could address legal deficiencies in CITES that might exist now.

Let me now turn to S. 659, the Great Lakes Fish and Wildlife Conservation Act. In general, Mr. Chairman, while the Association supports this bill from a perspective that it could facilitate more effective cooperation between Federal, State, and tribal entities rel-

ative to fisheries restoration, we would question whether this legislation is necessary to accomplish that objective.

We believe the Fish and Wildlife Service already has the necessary authority to implement its role in carrying out the recommendations of the Great Lakes Fishery Restoration Study. Whether or not the statutory establishment within the Fish and Wildlife Service of another committee is necessary to consider funding for proposals to implement this study is also subject to question.

The Association believes that the Fish and Wildlife Service can and should, if appropriate, increase its budget request to fulfill its role and obligations in the Great Lakes fisheries effort regardless of whether S. 659 is enacted into law. We are also interested in ensuring that any additional authorization under S. 659 is directed at on the ground efforts in fishery restoration and conservation and not toward furthering U.S. Fish and Wildlife Service offices, facilities, or administrative infrastructure.

Having said all this, Mr. Chairman, I can share with you the support of the Association for S. 659, but should also let you know that the enthusiasm of this support among the eight Great Lakes State fish and wildlife agencies varies widely.

Finally, Mr. Chairman, let me briefly comment on S. 1970, the Neotropical Migratory Bird Conservation Act. As you know, the Association has long played an active role in migratory bird conservation, from the negotiation and ratification of the Migratory Bird Treaty in 1916 and passage of the Migratory Bird Treaty Act in 1918 to the North American Wetlands Conservation Act currently before this Congress for reauthorization. The Association and our member State fish and wildlife agencies are also very active in Partners in Flight, the Western Hemisphere Shore Bird Reserve Program, the North American Waterfowl Management Plan, and other international endeavors to conserve migratory birds throughout their range.

The Association therefore supports S. 1970 as another measure to facilitate the conservation of migratory birds, particularly in Latin America and the Caribbean.

Mr. Chairman, as you are well aware, our habitat conservation efforts in the United States encompassing the breeding range of these species will be successful only if the habitat in their winter range is likewise secured. The Association believes that S. 1970 establishes a protocol that will facilitate that and therefore supports this measure.

Mr. Chairman, that concludes my remarks. I thank you for the opportunity to share our perspectives. I would be pleased to answer any questions.

Senator CHAFEE. Thank you very much, Mr. Taylor.

Now, Mr. Crane, program manager, Great Lakes Commission.

STATEMENT OF THOMAS CRANE, PROGRAM MANAGER, GREAT LAKES COMMISSION, ANN ARBOR, MI

Mr. CRANE. Good morning, Mr. Chairman.

Senator CHAFEE. Good morning, Mr. Crane.

Mr. CRANE. I am Thomas Crane. I'm a program manager for resource management and environmental quality on staff of the

Great Lakes Commission. We're located in Ann Arbor, MI. It's my pleasure to be here and to have the opportunity to summarize a detailed written statement that was prepared by Dr. Michael Donahue, the executive director of the Great Lakes Commission, that was submitted for the record. I appear today on behalf of the eight member States of the Great Lakes Commission, and will speak in support of S. 659, reauthorization of the Great Lakes Fish and Wildlife Restoration Act.

Passage and implementation of the original Act provided the Great Lakes States, and the entire Great Lakes governance infrastructure, with a framework for the cooperative conservation, restoration, and management of Great Lakes fish and wildlife resources. Reauthorization of the Act will ensure that present progress is maintained and new initiatives are pursued, including implementation of recommendations from the Great Lakes Fishery Resources Restoration Study.

Reauthorization will offer citizens of the region and the Nation improved sport fishing, enhanced use and enjoyment of wildlife, increased aquatic recreation activities, and stronger local economies.

The Great Lakes Commission is an interstate compact agency that is founded in State and Federal law and mandated to represent the collective views of the eight Great Lakes States before the Congress and the Federal Government. Our enabling legislation, the Great Lakes Basin Compact, directs the Commission to promote the orderly integrated and comprehensive development, use, and conservation of the water resources of the Great Lakes Basin.

The Great Lakes Commission membership, comprised of senior State officials, legislators, and Governor-appointees, endorsed S. 659 by unanimous action on April 3, 1998, when adopting its legislative and appropriations priorities for the second session of the 105th Congress. Commission support for this bill is based upon four observations:

First, the bill reflects and furthers evolving resource management philosophies that have been embraced by the Commission. The Act emphasizes management by ecosystem as opposed to geopolitical boundaries. It features interjurisdictional partnerships among Federal, State, and tribal governments. It builds on existing authorities and existing institutional mechanisms as opposed to creating new bureaucracy. It provides the States and tribal authorities, via the Great Lakes Fish and Wildlife Restoration Proposal Review Committee, with recommendatory authority over allocation of grant moneys. And it positions the Federal Government to provide services that are well-suited to intergovernmental partnership, such as technical assistance, coordination, research, and financial support.

Second, the bill enhances an already strong partnership between the U.S. Fish and Wildlife Service, the Great Lakes Commission, and the Great Lakes States. Service fishery resource offices have been established in Michigan, Wisconsin, and New York that have provided the region with a first point of contact on fisheries issues that affect the States individually and collectively.

Third, the original Act provided for the Great Lakes Fishery Resources Restoration Study and its 32 recommendations that war-

rant serious consideration and action. The Great Lakes Commission recognizes the prospective benefits of study implementation. The 32 recommendations are focused on five areas that are highly consistent with the Commission's management philosophy: (1) coordinating and harmonizing programs across disciplines and Basin jurisdictions; (2) building upon and supporting existing programs and institutional arrangements; (3) strengthen the Basin's decision support system by promoting research, monitoring, assessment, evaluation, data enhancement, and associated functions; (4) calling for the development, funding, and implementation of action plans and various new initiatives; and finally (5) promoting public information and education.

And finally, the Great Lakes Commission recognizes the reauthorization bill is supported within the Great Lakes community and addresses a number of State concerns with the original legislation. Memorandum of Understanding between the U.S. Fish and Wildlife Service, the Great Lakes States, and the Great Lakes Fishery Commission, and several tribal authorities has helped prepare for effective implementation of the Act.

With regard to specific provisions in the bill, the Great Lakes Commission endorses the legislative language as presented. In particular, we applaud section 6, language that establishes a State and tribal committee that will review and offer recommendations to the U.S. Fish and Wildlife Service on fish and wildlife restoration proposals based on the results of the Restoration Study.

Further, we concur with changes in the reauthorization language that provide for enhanced focus on project implementation, reliance on existing institutional arrangements, and reduction in the annual authorization from $10 million to $5 million, with $3.5 million of the latter to be made available to State and tribal partners. We emphasize however that appropriation of the authorized amount will be essential if the goals of the Act are to be fully realized.

The Great Lakes Commission emphasizes that reauthorizing the Act rather than solely relying on existing U.S. Fish and Wildlife Service authorities is necessary to maintain and enhance progress under the original Act. Reauthorization will ensure that (1) recommendations from the Great Lakes Fishery Resources Restoration Study will be implemented, (2) the existing network of regional offices will be maintained, (3) the restoration proposals and resultant projects will be properly evaluated and targeted, (4) existing institutional arrangements will be used to the extent possible, and (5) the authorization levels will be set and targeted with an emphasis on project implementation.

So, to conclude, the bill provides a much needed vehicle for the U.S. Fish and Wildlife Service to provide technical assistance, coordination, research funding, and related support to the collective Great Lakes fishery management effort. The Act builds upon existing agreements and institutional arrangements, provides for a Federal-State-tribal partnership, is action oriented, and offers a mechanism for implementing recommendations of the Great Lakes Fishery Resources Restoration Study.

The Great Lakes Commission therefore urges support of this legislation.

That concludes my remarks and I would be happy to answer questions.

Senator CHAFEE. Thank you, Mr. Crane.

We also would now include within the record a statement by Senator Glenn, a statement by Senator Abraham, and a statement by Senator McConnell.

[The prepared statements of Senators Daschle, Glenn, Abraham, and McConnell follow:]

PREPARED STATEMENT OF HON. THOMAS A. DASCHLE, U.S. SENATOR FROM THE STATE OF SOUTH DAKOTA

Mr. Chairman, thank you for providing me with this opportunity to testify today on behalf of S. 1970, the Neotropical Migratory Bird Conservation Act. I strongly support this bill, and believe that it will be of great assistance in our efforts to preserve native bird species.

Some of our most valuable and beautiful species of birds—those that most of us take for granted, including bluebirds, goldfinches, robins and orioles—are challenged by habitat destruction in our hemisphere. It is not widely recognized that many North American bird species once considered common are in decline. In fact, a total of 90 species of migratory birds are listed as endangered or threatened in the United States, and another 124 species are considered to be of high conservation concern.

Mr. Chairman, there is no doubt of the benefit that these birds bring to the United States. Healthy bird populations prevent hundreds of millions of dollars in economic losses each year to farming and timber interests. By controlling insect populations, they help to prevent damage to crops. In addition, birdwatching and feeding generates $20 billion every year in revenue. Approximately 25 million Americans travel to observe birds each year, and 60 million American adults watch and feed birds at home.

While we have taken steps to help protect these birds in the United States, they are also threatened by habitat destruction elsewhere in our hemisphere when they migrate south during winter months. For that reason, it is essential that we work with nations in Latin America and the Caribbean to establish protected stopover areas during their migrations. This bill achieves that goal by fostering partnerships between businesses, nongovernmental organizations and other nations to bring together the capital and expertise needed to preserve habitat throughout our hemisphere.

Specifically, the Act establishes a 3-year demonstration project providing $4 million each year to help establish programs in Latin America and the Caribbean to manage and conserve neotropical migratory bird populations. The Act is designed to promote cooperation among nongovernmental organizations. The Federal share of each project's cost is limited to 33 percent, and half the non-Federal contribution must be in cash, not in-kind contributions.

Mr. Chairman, I hope that you and the subcommittee will offer this bill your strong support. It has been endorsed by the National Audubon Society, the American Bird Conservancy and the Ornithological Council. I believe that it will substantially improve upon our ability to maintain critical habitat in our hemisphere and help to halt the decline of these important species. Thank you again for allowing me to testify in support of the bill.

PREPARED STATEMENT OF HON. JOHN GLENN, U.S. SENATOR FROM THE STATE OF OHIO

Mr. Chairman, I would like to thank the committee for holding this hearing on wildlife bills. While many of these bills are "small" in comparison to others taken up by the committee this during the 105th Congress, they are nonetheless critically important to the regions and resources affected.

I introduced The Great Lakes Fish and Wildlife Restoration Act (GLFWRA) of 1997 (S. 659) in the Senate in April 1997, in coordination with the introduction of the companion bill (H.R. 1481) in the House by Congressman Steve LaTourette. It's been a long process, but with the favorable hearing held in the House June 18th and the hearing held by this committee here today, I am positive that we can still pass this critical piece of legislation this year.

The primary purpose of the Great Lakes Fish and Wildlife Restoration Act is to implement proposals that address recommendations put forth by the Great Lakes Fishery Resources Restoration Study. To this end, the Act reauthorizes the existing

Great Lakes Coordination and Great Lakes Fishery Resources Offices. The bill also sets up a proposal review committee identified with the existing Council of Lake Committees to review grant proposals and identify projects of the highest priority for the restoration of the fish and wildlife resources of the Great Lakes Basin. The Act encourages, supports, and coordinates Federal and non-Federal cooperative habitat restoration and natural resource management programs in the Great Lakes Basin.

The Great Lakes Fish and Wildlife Restoration Act represents a new generation of environmental legislation, one that recognizes the complexity and inter-relatedness of ecosystems. This Act seeks to address natural resource management in a comprehensive and conscientious manner by building partnerships among the Great Lakes States, U.S. and Canadian governments, and native American Tribes. Through regional cooperation, I believe we can address the environmental and economic concerns of the Great Lakes Basin and continue on the road toward the recovery of this precious natural and national resource. By passing this legislation, we in the Congress will be taking the right next step toward responsible stewardship of the Great Lakes as we venture into the new millennium.

The bill enjoys widespread bicameral and bipartisan support. The bill has eight Senate sponsors, including myself. Twenty-eight of our colleagues on the House have cosponsored the companion measure. This bill represents the consensus of a diverse collaboration of tribal, State, Federal and international agencies with jurisdiction over the management of fish and wildlife resources of the Great Lakes. The bill also has received favorable review and broad support of organizations throughout the Great Lakes region for the approach it takes toward restoration of the ecological integrity of the Great Lakes ecosystem.

This fall, as I look back on the earth from space, I will be sure to look down on the Great Lakes. I know that they will be a cleaner, safer place for both humans and wildlife to live than they were at the time of my last flight because of the efforts we have made over the past decades. With the passage of this legislation, I will also be sure that they will continue to become even cleaner, safer places where fish and wildlife communities, and the human communities who enjoy them can continue to prosper.

PREPARED STATEMENT OF HON. SPENCER ABRAHAM, U.S. SENATOR FROM THE STATE OF MICHIGAN

Mr. Chairman, thank you for the opportunity to address the committee with respect to the "Neotropical Migratory Bird Conservation Act of 1998." This legislation, which Senator Daschle and I introduced, is designed to protect over 90 endangered species of birds spending certain seasons in the United States and other seasons in other nations of the Western Hemisphere.

Every year, approximately 25 million Americans travel to observe birds, and 60 million American adults watch and feed birds at home. Bird-watching is a source of great pleasure to many Americans, as well as a source of important revenue to States, like my own State of Michigan, which attract tourists to their scenes of natural beauty. Bird watching and feeding generates fully $20 billion every year in revenue across America.

Birdwatching is a popular activity in Michigan, and its increased popularity is reflected by an increase in tourist dollars being spent in small, rural communities. Healthy bird populations also prevent hundreds of millions of dollars in economic losses each year to farming and timber interests. They help control insect populations, thereby preventing crop failures and infestations.

Despite the enormous benefits we derive from our bird populations, many of them are struggling to survive. Ninety species are listed as endangered or threatened in the United States. Another 124 species are of high conservation concern. The primary reason for these declines is the degradation and loss of bird habitat.

What makes this all the more troubling is that efforts in the United States to protect these birds' habitats can only be of limited utility. Among bird watchers' favorites, many neotropical birds are endangered or of high conservation concern.

Because neotropical migratory birds range across a number of international borders every year, we must work to establish safeguards at both ends of their migration routes, as well as at critical stopover areas along their way. Only in this way can conservation efforts prove successful.

The Neotropical Migratory Bird Conservation Act will protect bird habitats across international boundaries by establishing partnerships between the business community, nongovernmental organizations and foreign nations. By teaming businesses with international organizations concerned to protect the environment we will com-

bine capital with know-how. By partnering these entities with local organizations in countries where bird habitat is endangered we will see to it that local people receive the training they need to preserve this habitat and maintain this critical natural resource.

This Act establishes a 3-year demonstration project providing $4 million each year to help establish programs in Latin America and the Caribbean. These programs will manage and conserve neotropical migratory bird populations. Those eligible to participate will include national and international nongovernmental organizations and business interests, as well as U.S. Government entities.

The key to this Act is cooperation among nongovernmental organizations. The Federal share of each project's cost is never to exceed 33 percent, and half the non-Federal contribution must be in cash, not in-kind contributions.

The approach taken by this legislation differs from that of current programs in that it is proactive and, by avoiding a crisis management approach, may prove significantly more cost effective. In addition, this legislation does not call for complicated and expensive bureaucratic structures such as councils, commissions or multi-tiered oversight structures. Further, this legislation will bring needed attention and expertise to areas now receiving relatively little attention in the area of environmental degradation.

This legislation has the support of the National Audubon Society, the American Bird Conservancy and the Ornithological Council. As I understand it, the Fish and Wildlife Service has a letter of support currently working its way through OMB. I expect the Fish and Wildlife Service will recommend several small changes and anticipate that most, if not all, of them will be acceptable.

Again, Mr. Chairman, I want to thank you and the members of this committee for considering this legislation and allowing me the opportunity to comment. I look forward to working with all of you in the effort to enhance the protection of migratory bird habitat.

PREPARED STATEMENT OF HON. MITCH MCCONNELL, U.S. SENATOR FROM THE STATE OF KENTUCKY

Mr. Chairman, I would like to thank you and the members of the committee for holding these hearings and allowing me to testify in support of S. 263, the Bear Protection Act. This legislation, is aimed at protecting the American bear population from the growing illegal trade in bear parts, in which at least 18 Asian countries are known to participate. The poaching of bears is a national problem that is destined to become worse. Currently, there are enforcement and jurisdictional loopholes, which exist as a result of a patchwork of State laws, that allow this illegal poaching to flourish. I believe that we have a real opportunity, if we act now, to protect the bear populations in this country from individuals seeking to profit from the slaughter and sale of the organs of these magnificent animals.

Mr. Chairman, as you may know, bear viscera, such as gall bladders and bile, is a very popular ingredient in traditional Asian medicine. It is used to treat everything from heart disease to hangovers, and is also popular as an ingredient in luxury shampoos and as an aphrodisiac. Because of the popularity of bear parts in these products, bear populations, including the panda, sloth, sun, and Asiatic black bears have been hunted to near-extinction in Asia. All of these bear populations are listed under the Convention on International Trade in Endangered Species (CITES), Appendix I. This classification is the highest level of protection provided to an animal species. However, these bear populations remain threatened by the high demand and black market trade in exotic and traditional medicine cures. Moreover, American bear species are now in more danger, since the dramatic decline of bear populations outside the United States has led poachers to turn to American bears to fill the increasing demand.

I am pleased to report that U.S. bear populations have, for the most part, remained stable. But the increasing trade in bear parts poses a serious threat. It is estimated that the number of black bears in the United States is nearly 400,000. Brown bear populations, which include Grizzly, are estimated at 40,000, with less than 1,000 in the lower 48 States.

Each year, nearly 40,000 black bears are legally hunted in 36 States and Canada. Unfortunately, it has been estimated that roughly the same number is illegally poached every year, according to John Doggett, former chief of law enforcement for the U.S. Fish and Wildlife Service. This number is expected to increase as the source of Asian bears declines and the demand for bear viscera continues to grow.

According to various reports, including those from the U.S. Fish and Wildlife Service, hundreds of bear carcasses are turning up in the United States and Canada, completely intact, except for missing gallbladders, paws, and claws.

Since 1981, State and Federal wildlife agents have conducted many successful undercover operations to stop the illegal hunting and sale of bear gallbladders. In 1988, Federal wildlife officials engaged in "Operation Smokey" in the Great Smokey Mountains National Park. These efforts uncovered 368 illegal black bear kills. In 1994, an investigation uncovered a group arranging illegal bear hunts for South Koreans in California. It was determined that at least 30 to 35 bears were killed as a result of these trips. Last year, in Michigan, there was an incident reported in which a 350-pound male bear was found dead, having had its meat, paws, and gallbladder removed. The officer leading the investigation stated that "whoever shot the bear wanted the highly salable parts of the animal which can bring very big prices in illegal trade." As recently as this year, undercover investigations conducted by State and Federal officials in California and Utah uncovered cases in which poachers were circumventing State laws in an effort to obtain bear gallbladders for sale to Asia.

Mr. Chairman, the main reason behind these astronomical numbers is greed. In fact, in South Korea, bear gall bladders are worth more than their weight in gold, fetching a price of about $10,000 a piece! It is estimated that in my State of Kentucky, there are only 50–100 bears remaining in the wild. This is in stark contrast to the time when black bears roamed free across the Appalachian mountains, through the rolling hills of the bluegrass, all the way to the Mississippi River. Obviously, times have changed and we cannot restore the numbers of bears that we once had, but we can ensure that the remaining bears are not sold for profit to the highest bidder. This is a growing problem—a national problem—and I, for one, will not stand by and allow our own bear populations to be decimated by poachers.

Currently, U.S. law enforcement officials have little power to address the poaching of bears and the sale of their parts in an effective manner. The Department of the Interior has neither the manpower nor the budget to test all bear parts sold legally in the United States. Without extensive testing, law enforcement officials cannot determine if gall bladders or other parts were taken from threatened of endangered species. This problem perpetuates the poaching of endangered or threatened bears.

Mr. Chairman, due to the patchwork of State laws, poachers are effectively able to "launder" the gall through the eight States that permit the sale of bear parts. The outright ban on the trade, sale, or barter of bear viscera, including items that claim to contain bear parts, will close the existing loopholes and will allow State and Federal wildlife officials to focus their limited resources on much needed conservation efforts.

The Bear Protection Act will establish national guidelines for trade in bear parts, but it will not weaken any existing State laws that have been instituted to deal with this issue. The Lacey Act, enacted in 1900, was the first Federal wildlife law intended to put an end to the interstate traffic of animals illegally killed in their State of origin. Unfortunately, this legislation has been ineffective in reducing the laundering of bear parts through those States that permit their sale. As long as a few States permit this action to go on, poaching for profit will continue.

To effectively manage their own bear populations, States need a minimum level of protection. This is also true if we are to curtail the international trade in bear parts. Since a number of countries, including Taiwan and South Korea, have not signed the Convention on International Trade in Endangered Species (CITES), it is difficult to enforce this agreement. In recognition of this reality, the most recent CITES conference, to which the United States was a party, urged all parties to the convention to take immediate action to eliminate the illegal trade in bear parts. The United States delegation, headed by Donald Barry, Assistant Secretary for Fish, Wildlife, and Parks at the Department of Interior, coauthored the Conservation of and Trade in Bears Resolution, which propounded the adoption of national legislation to deter the illegal trade. This resolution was passed unanimously by the CITES convention in June, 1997. To this end, we can greatly assist in protecting American bear populations by passing this legislation in the Senate. Mr. Chairman, I request that a copy of this resolution be included with my statement in the record.

This bill also instructs the Secretary of the Interior and the United States Trade Representative to establish a dialog with the appropriate countries to coordinate efforts aimed at curtailing the international bear trade. Obviously, efforts to reduce the demand in Asia are of the utmost importance. Moreover, efforts to encourage foreign governments to increase usage of synthetic or other natural products as an alternative to bear gall will greatly improve the situation.

Efforts to bolster protection in Canada should also be a priority. Canada has mandated fewer across-the-board protections of their bear populations and do not pro-

hibit the sale of bear viscera in all Provinces. Canada and the United States share thousands of miles of open border that can't possible be adequately monitored to stop poaching or smugglers. These actions must be stopped if we are to effectively protect our bears.

It is important to note that my bill would in no way affect legal hunting of bears. Hunters would still be allowed to keep trophies and furs of bears killed during legal hunts. I believe that S. 263 is crafted narrowly enough to deal with the poaching of the American bears for profit, while still ensuring the rights of the American sportsmen.

Mr. Chairman, it is important that we act now to protect the American bear population, just as it is important that Congress pass legislation to protect rhinos and tigers, whose populations are in grave danger overseas. I believe that we have the opportunity to pass proactive legislation to ensure that America's bears do not suffer the same fate as so many Asian bears or rhinos and tigers in Asia and Africa. If we act now, we can stop the poaching of bears, which left unchecked, will surely lead to their extinction.

I would like to thank the Chairman, Senator Chafee, for holding this hearing. I urge my colleagues to join me, and 53 other Senators, in support of this much needed legislation.

Senator CHAFEE. Just in passing—it didn't have anything to do with your testimony—how is the lamprey eel doing and how are you doing with that out there?

Mr. CRANE. That's still a big challenge. The Great Lakes Fishery Commission, of course, has the primary role for lamprey control in the lakes. It's been an increasing challenge over recent years because the lamprey do better with cleaner water and, as the water has been cleaned up in the Great Lakes, more tributaries have been available for the lamprey to spawn. So it continues to be a big challenge for the Great Lakes Fishery Commission and the other fisheries management agencies.

Senator CHAFEE. Ms. Krival, as you know, the refuge volunteer bill that we have, S. 2244, establishes a pilot project to hire volunteer coordinators. You've had a lot of experience in all of this. What do you think of that idea?

Ms. KRIVAL. I think it is very important. In a recent training program at the National Conservation Training Center, I was giving a program on volunteer programs and ways in which they could be organized and so on, and I asked the group of refuge managers and National Park superintendents how many of them had volunteer programs. It was 100 percent. Then I said, "How many of you feel that they're going well?" Well, the hands weren't quite so active.

It sounds as though it should be very simple. If you get a hundred gung-ho volunteers who love their refuge and they want to do something for the refuge, it sounds as though that should be easily done. It's not. Somebody has to be in charge. Somebody has to ask the volunteer what kind of skills he has. Somebody has to set up a program. It really needs someone to coordinate.

Senator CHAFEE. Well, I agree with you. It's sort of like getting political volunteers. They all want to go to work but then you've got to make sure you give them something constructive to do to keep their enthusiasm and match their talents with the jobs that might be available.

Ms. KRIVAL. Yes. And sometimes training them.

Senator CHAFEE. And training, that's right.

Mr. Crane, in connection with S. 659, we have so many existing authorities, the Clean Water Act, the Endangered Species Act—couldn't they implement the recommendations that come forward from the studies?

Mr. CRANE. We really feel that this Act is necessary because the coordination office that has been set up has really been instrumental in building partnerships in the Great Lakes region. A lot of the other Federal agencies have similar coordination offices. We feel that this has really benefited the Fish and Wildlife Service in having this office that coordinates activities not only within the agency itself, but also with the whole range of Great Lakes agencies and institutions that are present.

So, we would hate to see that office not be available to the Service, and we really feel that it is best equipped to help implement those study recommendations. And through a series of MOUs, as I had mentioned, I think they really have the infrastructure in place to efficiently move forward and implement the program.

Senator CHAFEE. Mr. Taylor, I don't think anybody, and certainly I'm sure you don't, wants any trade in the United States on bear parts. So what's the harm in doing it? As I understood the other witnesses, their point was, true, it's not a problem with our domestic bear population now, but it could well be. And there are certain anecdotal and more positive indications that there have been instances of the gall bladder or the feet, or whatever it might be, being cutoff and bodies of those bears discovered. So what's the harm with going ahead and doing efforts to prohibit it?

Mr. TAYLOR. Mr. Chairman, with all due respect, I think the appropriate question to ask is, how are the States, where, as you are well aware, the legal authority and responsibility for conservation of bears within their borders largely lies, how are the States doing in management of bear populations? And the answer has to be, resoundingly, very well.

As you're also aware, Mr. Chairman, we have a unique legal relationship in this country between the States and the Federal Government when it comes to management of our fish and wildlife resources. I think it's fair to say that that relationship and the conservation program that it has engendered is justifiably the envy of the rest of the world.

Mr. Chairman, there would be no hesitation within the States to further restrict what legal trade exists now in indigenous bear parts or products if there was any substantiation at all that this was contributing significantly to the demand for Asian bear market or certainly to the decline of the U.S. bear populations. We simply cannot substantiate, and the Fish and Wildlife Service has corroborated this in a paper that they gave last year at an international symposium on bear parts, that there is evidence that illegal poaching of U.S. bear is contributing significantly to the Asian market, nor is there any evidence that illegal poaching of U.S. bear is contributing significantly to the decline of U.S. bear populations.

Senator CHAFEE. OK. Well, I want to thank you all very, very much for coming, and thank the previous panels likewise.

What we would like to do is have a markup on these various bills. We're shooting toward July 22, a couple of weeks from now.

So thank you all very much for coming.

That concludes the hearing.

[Whereupon, at 10:48 a.m., the committee was adjourned, to reconvene at the call of the chair.]

[Texts of bills and statements submitted for the record follow:]

PREPARED STATEMENT OF JOHN ROGERS, DEPUTY DIRECTOR FOR THE U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR

Good Morning Mr. Chairman. I am John Rogers, the Deputy Director for the U.S. Fish and Wildlife Service. I appreciate this opportunity to testify on a number of fish and wildlife bills before the committee.

S. 1970, THE NEOTROPICAL MIGRATORY BIRD CONSERVATION ACT OF 1998

Let's begin with S. 1970, the Neotropical Migratory Bird Conservation Act of 1998. We would like to take this opportunity to thank Senator Abraham for his support and sponsorship of S. 1970.

The Service—through 4 bilateral treaties—has responsibility for maintaining healthy populations of some 778 species of migratory nongame birds and 58 species of migratory game birds, approximately 350 species of which (the so-called "neotropical migrants") migrate between the Caribbean/Latin America and North America. Migratory birds continue to face enormous and increasing challenges. Despite our current efforts, many populations of migratory birds continue to decline, some quite markedly. For example, 124 species of migratory birds are currently on the list of Migratory Nongame Birds of Management Concern. If population trajectories of these birds stay on their present course, the next place for these species will be the Endangered Species Act, or worse yet, possible extinction. Ninety species of North American birds presently are listed on ESA. Mexico presently lists some 390 bird species as endangered, threatened, vulnerable, or rare. These current and projected future losses have far-reaching economic, social, ecological, and recreational implications.

Birds are important to us for many reasons—whether we reside in North America, Latin America, or the Caribbean. Birdwatching and other forms of bird-related recreation are tremendous pastimes in North America, with a growing interest in the Caribbean and Latin American countries. Nearly 70 million Americans spend more than $20 billion each year participating in bird-related recreation. Birdwatching is America's fastest growing major form of outdoor recreation. Birds prevent billions of dollars of economic losses each year by eating crop-damaging insect pests and weed seeds in North and Latin America and the Caribbean. They are important pollinators of many commercially valuable plants. Neotropical migratory birds are thus an important component of biological diversity in the Western Hemisphere. The American public expects the Fish and Wildlife Service to enhance its efforts to conserve migratory birds in support of these vast economic, ecological, and social benefits.

The Service and our international partners have recognized for many years that only a well-coordinated strategy and set of actions on breeding and wintering grounds and stopover sites can prevent populations of migratory species from declining. Neotropical migratory birds spend approximately 5 months of the year at Caribbean/Latin American wintering sites, 4 months at North American breeding sites, and 3 months en route to these areas during spring and autumn migrations. The nature of this "shared trust" resource makes migratory bird management a true international challenge. The greatest challenge is to halt the precipitous declines of many of these species—due in major part to habitat destruction and degradation. S. 1970 is a major step in the right direction in helping to halt and even reverse this trend. The legislation will aid in the international conservation and management of neotropical migratory birds. Severely declining bird species are causing grave concerns among natural resource managers and the public in both Caribbean/Latin American countries and in North America. S. 1970 will help the United States and our international partners reverse species declines, conserving bird populations before they reach the point of requiring protection under the ESA. Equally as important, the legislation will help keep our "common birds common," preventing the expenditure of enormous amounts of tax dollars and precluding the likely legal and public relations battles that surround listing issues.

Mr. Chairman, this legislation goes a long way in promoting the effective conservation and management of neotropical migratory birds. We do, however, have several recommended changes that will make this initiative even more effective in sustaining populations of these—declining species, in better collaborating with our international partners, and in garnering a groundswell of support both in North America and in the Caribbean/Latin America.

As currently worded, the legislation directs attention to these long-distance travelers during only one part of their annual cycle. This premise is inconsistent with the unanimous belief among scientists that conservation actions are necessary in both Latin America/Caribbean and in North America if the population problems of neotropical migrants are to be stemmed. By amending section 3 of S. 1970 to include

both U.S.-based projects as well as those in the Caribbean and in Latin America, conservation benefits will be maximized in wintering, breeding, and migration areas. Projects in the United States should be for the same species for which projects are being undertaken in Latin America and the Caribbean, thus ensuring that the projects are complimentary. A multi-national effort will provide an excellent opportunity to highlight to the American public the importance of an international approach to conservation. This is a win-win situation for the birds, the public, North America, and our international partners.

In the Findings section of the Bill, we suggest including a discussion of existing initiatives that are working to improve the conservation of neotropical migrants. The language should include a clarification that the aim of this legislation is to link, bolster, and augment these conservation efforts rather than create new and separate initiatives. For example, numerous public-private bird conservation partnerships have been developed during the past few years but, because of shortfalls, have not yet maximized their contributions to bird conservation. Partners in Flight, the Western Hemisphere Shorebird Reserve Network, a colonial waterbird conservation plan, the North American Waterfowl Management Plan, marshbird and raptor monitoring action plans and thousands of North American private and public partners that these initiatives bring with them all stand to benefit from this legislation. The infrastructure and mechanisms are already in place for North American bird conservation. S. 1970 can provide the critical stimulus to deliver this conservation on the ground in very tangible ways.

S. 1970 can become a perfect "complement" for the North American Waterfowl Management Plan, which has funded well over $1 billion of wetland habitat restoration and enhancement projects in Mexico, the United States, and Canada during the past decade. Collaborative efforts with the NAWMP would allow S. 1970 to "partner up" with a program which has a tremendous amount of leverage and is anxious to implement habitat projects that complement—not duplicate—the waterfowl focus of its habitat conservation efforts. In addition, because neotropical migratory birds share habitats with many other species, this legislation's true impact will go far beyond just neotropical migratory birds, including resident species in North and Latin America and the Caribbean.

Regarding cost sharing in section 4(e) of the Bill, we recommend the requirement that a non-Federal U.S. cash match be obligatory only for those projects submitted by U.S. entities. Projects submitted directly by Latin American and Caribbean institutions would have the option of generating the required two-thirds match locally in either hard currency or in in-kind support. This approach will better promote the long-term sustainability of projects in host countries and will facilitate the participation of small, but dedicated, local entities with limited funding or other resources.

Concerning committee membership in section 5, we recommend expanding the committee to include no more than eight additional voting members, at least half of whom represent non-Federal entities actively involved in bird conservation. Two of these additional voting members should be the Department of State and the U.S. Agency for International Development as permanent members, to ensure full coordination with U.S. foreign policy and USAID's ongoing 530 million per year programs to preserve biodiversity and habitat in Latin America and the Caribbean. The remainder of these positions would be rotated every 4 years. We also propose that the number of non-voting members be raised to a maximum of three from Latin America and the Caribbean to provide technical expertise for proposals originating from tropical locations. Such regional representation will also help to orient the committee to the realities of implementing projects in this region. Consideration should also be given to involving Canada as an observer/non-voting member of this committee. Also within section 5, concerning the duties of this committee, we recommend adding the function that grant processes be coordinated and facilitated among entities involved in neotropical bird conservation.

To heighten the interest in this initiative and to increase the number of eligible partners through Federal matching funds, we suggest increasing the authorizing appropriations ceiling in section 9 from $4 million to 58 million for fiscal year 1999–2001. I would note that funding for this program will be appropriated to the Department of the Interior and not the U.S. Agency for International Development's or the Department of State. As you are certainly aware, the conservation needs of migratory birds are great and we are confident that our private and State partners will show a tremendous interest in participating in this program.

In conclusion, Mr. Chairman, while we support S. 1970, we believe that our recommended changes will substantially strengthen and improve this Bill.

S. 2094, THE FISH AND WILDLIFE REVENUE ENHANCEMENT ACT

The next bill on the committee's agenda is S. 2094, the Fish and Wildlife Revenue Enhancement Act. The Administration supports strongly S. 2094 which would enable the Secretary of the Interior to more effectively utilize the proceeds of sales of certain items. Enactment of this bill will allow more efficient use of the proceeds received from the sale of abandoned or forfeited wildlife parts and products which are not endangered or threatened species, and do not include migratory birds or marine mammals. It would authorize all proceeds of such sales to be used for rewards and other incidental expenses as provided for in the Lacey Act Amendments of 1981 and the Endangered Species Act of 1973. The use of these funds would also be expanded to pay the costs associated with shipping, storage, and disposal of wildlife items.

The Fish and Wildlife Service is charged with enforcing several laws that protect a wide variety of fish and wildlife species. The Service has numerous outreach programs to educate the public about these laws, and Service personnel routinely answer questions and help those who seek assistance to comply with the law. Unfortunately, violations do occur. Wildlife parts and products that are the fruits of violations of Federal wildlife laws are subject to being abandoned or forfeited to the United States. The majority of these items are shipped to the National Wildlife property Repository near Denver, Colorado, for storage and disposal. Those items not shipped to the Repository are retained at the location of the seizure and normally used for scientific and educational purposes.

Currently, there are approximately 450,000 wildlife items at the Repository, and many additional items stored in warehouses across the country. The Fish and Wildlife Improvement Act of 1978 authorizes the Secretary of the Interior to dispose of these items in a manner that he deems appropriate, including, but not limited to, loan, gift, sale, or destruction. The Service's priority is to donate or loan these wildlife items to scientific and educational organizations. Recipients include museums where they are displayed to educate the public, universities where they are used for research, and elementary schools where teachers use them to help students learn about our world's wildlife resources. A wide variety of wildlife items are provided to schools for use in their environmental education projects through the Service's "Cargo for Conservation" and "Suitcase for Survival" programs.

Between July 1, 1995, and February 1, 1997, the National Wildlife Property Repository received 553 boxes of forfeited or abandoned items consisting of 117,000 individual pieces of wildlife parts or products. During this period, 271 educational kits, containing 5,706 items, were sent to various scientific and educational organizations. These items were shipped at no cost to the recipient.

Of the 450,000 wildlife items now in the Service's inventory of property that has been forfeited or abandoned to the United States, some 200,000 are surplus to the needs of scientific and educational programs and could legally be sold at auction. These potentially "salable" items do not include migratory birds, eagles, threatened or endangered species, species listed on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, or marine mammals—all of which are protected from such commercialization. It has taken about 10 years for this stock of surplus wildlife items to accumulate. Approximately 10 percent of these items have been forfeited to the United States pursuant to a criminal or civil action related to a specific violation of Federal wildlife laws. The remaining 90 percent were voluntarily abandoned to the United States by the alleged defendant(s) to avoid involvement in a proposed forfeiture action.

We estimate that an auction of these backlogged, forfeited and abandoned items would generate over $1 million in proceeds. There are, however, insufficient appropriated funds to pay the 14 percent auctioneer commission, or other expenses related to such an auction. Currently, the Service cannot pay these costs from auction proceeds. Both the Lacey Act and Endangered Species Act authorize sums received from the sale of forfeited property to be used to pay for rewards or for the cost of storage of wildlife pending disposition of civil or criminal proceedings. No wildlife statute addresses the use of proceeds from the sale of abandoned property, so these funds are submitted to the Treasury as miscellaneous receipts and are not available for program operations. The Fish and Wildlife Improvement Act of 1978 gives the Secretary of the Interior the authority to sell forfeited and abandoned items, but it is silent as to how the proceeds from the sales may be used.

If enacted, S. 2094 would accomplish two necessary functions. First, it would direct all proceeds from the sale of surplus wildlife property to the reward and incidental expense account, which is authorized by both the Lacey Act and the Endangered Species Act. Currently, only the proceeds from the sales of forfeited wildlife property are deposited in this account. S. 2094 would authorize proceeds from the

sale of abandoned items to also be deposited in the reward and incidental expense account.

Second, S. 2094 would expand the uses of the Reward and Incidental Expense Account to include authority to pay costs associated with storage, shipping, and processing of fish, wildlife, plants, and other property that have been forfeited or abandoned to the United States. This account currently may be used only to (1) pay rewards to persons who furnish information that leads to an arrest, a criminal conviction, civil penalty assessment, or forfeiture of property for any violation of either the Lacey or Endangered Species Acts or regulations issued thereunder, and (2) cover the costs incurred by any person providing temporary care for any fish, wildlife, or plant pending the disposition of any criminal or civil proceeding alleging a violation of either Act with respect to that fish, wildlife, or plant. Authorized costs that could be paid from this account would be expanded to include: (a) shipping of such items from one location to another; (b) storage, inventory, and security of such items; (c) appraisal of such items; (d) sale or other disposal of such items, including auctioneer expenses; (e) payment of any valid lien against said property; and (f) processing and shipping of eagles and other migratory birds to Native Americans.

Another benefit of enacting S. 2094 would be the authority for the Service to use the proceeds from the sale of these items to pay for processing and shipping of eagles and other migratory birds to Native Americans. The Service recognizes its trust responsibility to Native Americans and the need to accommodate their religious beliefs, which include the use of eagles and other protected species for religious purposes. Over a thousand dead eagles are received annually by the National Eagle Repository in Denver, Colorado. Most have been either shot, electrocuted, died while being cared for by a rehabilitation facility, or hit by a vehicle. In 1996, the National Eagle Repository filled 1,320 requests from Native Americans for eagles (996), eagle feathers (82), and other raptors (242). These eagles are processed and shipped to Native Americans to be used for religious purposes. The Service supplies boxes for shipping and dry ice, and the birds are shipped at no cost to Native Americans.

Mr. Chairman, we believe this bill, if enacted, would allow us to operate more efficiently two important programs: distribution of wildlife property to scientific and educational institutions and the distribution of eagles to Native Americans for religious purposes.

H.R. 3113, THE REAUTHORIZATION OF THE RHINOCEROS AND TIGER CONSERVATION ACT OF 1994 S. 361 AND H.R. 2807, THE RHINO AND TIGER PRODUCT LABELING ACT

Next, I'll turn to H.R. 3113, the Reauthorization of the Rhinoceros and Tiger Conservation Act of 1994. and S. 361 and H.R. 2807, the Senate and House bills for the Rhino and Tiger Product Labeling Act. The Department strongly supports the reauthorization of the Rhinoceros and Tiger Conservation Act through the year 2004 as passed by the House on March 30, 1998. We also support the enactment of the product labeling legislation as passed by the House on April 28, 1998. We appreciate the House's support and passage of these two bills and commend the Congress for its commitment and continuous support to conserve these important endangered species. While we are sympathetic to the objectives of S. 361 as introduced by Senator Jeffords and supported by eight cosponsors, we believe that it would be more practical to adopt the Rhino and Tiger Product Labeling Act as passed by the House.

It is a great pleasure for me to be here today to address a subject of international importance, the drastic decline of rhino and tiger populations in Africa and Asia, due in large part to poaching for the traditional medicine trade. It is clear that we would not be able to turn this situation around without aggressive action on two fronts: expanded assistance to range countries to build their capacity to conserve rhinos, tigers, and their essential habitats; and concerted international pressure to halt the terrible trade in rhino and tiger parts and products.

I note with great satisfaction that these are also exactly the areas covered by the legislation which you have asked me to address today, and that we are truly building a bipartisan consensus to continue the U.S. leadership role in conservation of these magnificent but imperiled species. Today I would like to summarize for you some of the important actions we have already undertaken for rhino and tiger conservation, and outline the reasons why there is an urgent need for more action—action which will be enormously enhanced by the legislation you have put forward today.

The Interior Department, through the U.S. Fish and Wildlife Service, has had a long history of proactive programs on behalf of endangered species and their habitats in Asia and Africa. The Service's two decades of conservation efforts in India and South Asia, for example, emphasizing local institutional development and train-

ing, greatly facilitated local wildlife researchers and mangers protecting their resources more effectively. However, prior to 1994, this effort was chronically underfunded, particularly for programs outside of India, with available resources falling far short of the conservation needs. In Africa, the Service had built a successful program for elephant conservation, assisting a number of countries under the African Elephant Conservation Fund, but that program could at best produce only indirect benefits for African rhinos, despite the fact that rhino populations were in far more desperate straits than elephants.

Let me summarize what we know of the situation facing our world's remaining tiger and rhino populations.

The situation with most of the world's remaining rhinos in Africa and Asia is indeed very serious. Poaching for rhino horn is the major threat for all five species, and habitat degradation is also a significant threat for the Asian species which live in tropical rain forests. All three species of Asian rhinos are in danger of extinction, two critically so. The total population numbers for all three Asian species combined may in fact be less than the number of black rhinos remaining in Africa, in spite of the fact that the decline of the African species has received much more publicity over the last decade.

While the overall paucity of rhino numbers is one factor of concern, another is their distribution. The Javan rhino is the rarest, with fewer than an estimated 100 individuals surviving. Most are in a single protected area in Indonesia, with a few more in an unprotected area in Vietnam. Although the Sumatran rhino numbers may be slightly larger, at 250–450 animals, its situation is considered the most critical, because of its fragmented distribution in small pockets of Sumatra, Peninsula Malaysia, Sabah. Tiny remnants may remain in Sarawak, Thailand, Myanmar, and Laos, but if they still exist at all their viability is very low. The Indian rhino was once in the same condition as the other Asian rhinos, but a vigorous effort by governments in India and Nepal has succeeded in increasing its numbers to over 2000 animals. However, this species is still under serious threat, particularly from poaching, and increased protection is still needed to ensure its survival.

In Africa, the situation for the black rhino and the Northern white rhino is similar. Over the past few decades, black rhino populations have declined by at least 96 percent, due to poaching for the trade in traditional medicines and dagger handles. The Northern white rhino has been reduced to nine individuals in zoos and a wild population of no more than 30 individuals in a single national park in the Democratic Republic of the Congo. Only the Southern white rhino in South Africa is prospering; here, intensive protection and management have brought its numbers in the wild to almost 8,000.

Wild tigers are arguably in even worse peril. The Cat Specialist Group of the IUCN-World Conservation Union has assembled information from government sources and independent specialists in tiger range countries about the status of the world's wild tiger population. Their best estimate—given the secretive nature of tigers and the lack of resources in range countries to conduct accurate surveys—is that there are no more than 5,000 to 7,500 remaining tigers. There are no comparable scientific data from earlier times, but with suitable habitat and prey the tiger is a prolific hunter and breeder, and there were undoubtedly many tens of thousands of tigers up to a century ago. Unfortunately, since then, loss of tiger habitat, reduction in prey populations, and deliberate tiger killing have taken a terrible toll: three of the recognized subspecies of tigers have become extinct, and the remaining five subspecies have come under severe threat. During this same time period, human populations have increased from about 1.5 billion to nearly six billion, resulting in extensive conversion of forest for human use, loss of tiger habitat, and a steep decline of tigers and their prey. Furthermore, over the last decade, poaching and illegal trade—driven by the demand for bones and other parts of the tiger for the oriental medicine market—have become an increasing threat.

In most of its 14 range countries, the tiger has adequate legal protection on paper. International commerce in tigers and their products is banned under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and Laos is the only one of the 14 range countries not a Party to CITES. Even the principal consumers, China, Taiwan and South Korea, have banned trade—after strong pressure from the United States. However, despite these existing national and international legal mechanisms, the enforcement is sometimes weak or nonexistent, due to a combination of factors including poor communication and coordination, lack of local governmental support, inadequate or no local infrastructure, funds, personnel, or equipment.

While the status of tigers and many rhino populations is bleak, the rhino situations in South Africa and India give us some reasons for optimism. Where governments and private conservation organizations have made a serious commitment to

conservation, these animals can survive and prosper. To accomplish this, however, they need our help. This is the kind of help made possible by the Rhinoceros and Tiger Conservation Act.

REAUTHORIZATION OF THE RHINOCEROS AND TIGER CONSERVATION ACT

The Rhinoceros and Tiger Conservation Act of 1994—patterned after the African Elephant Conservation Act, which has made an enormous contribution to restoring elephant populations—is a clear indication that the American people are concerned with the fate of tigers and rhinos as endangered species. It assigned responsibility for implementation to the Department of the Interior, in consultation with the Administrator of the Agency for International Development, for undertaking a rhino and tiger conservation program. Within the Department of the Interior, the U.S. Fish and Wildlife Service was given the lead to administer the Act, because of its 20 years of experience in administering programs in Asia and Africa. The first congressional appropriation to the fund was for $200,000 in fiscal year 1996; this amount was doubled to $400,000 in fiscal year 1997 and another $400,000 was appropriated in fiscal year 1998.

To initiate this new program, the Fish and Wildlife Service sent out a call for proposals to an extensive mailing list of potential cooperators, developed from its long experience with regional and range country agencies and organizations in Asia and Africa, including CITES partners and the CITES Secretariat. The Act gave clear guidance that priority was to be given to proposals which directly supported and enhanced wild rhinoceros and tiger populations and which included matching funds. A review panel composed of representatives from the Service and the Agency for International Development—a very beneficial partnership—was set up to evaluate proposals received and recommend the awarding of funds.

During the 1996–1997 grant cycle, 68 proposals were submitted for consideration, and 77 new proposals have been received thus far in fiscal year 1998. Of the total 145 proposals received, 30 have so far been funded in 10 range countries in Africa and Asia, at a cost of $582,000 disbursed or committed. Another 25 grant applicants have been provided suggestions about how their proposals can be modified so that they might meet the criteria for approval.

This is a small grant program, but it is amazing how much even a small amount of money can mean to our partners in other countries. The simple act of providing boots, raincoats, radios, and basic training can make an enormous difference in the ability of rangers in India or Tanzania to undertake effective monitoring and antipoaching patrols. Something more intangible—but often even more important—is the boost to their morale when they realize that we the United States care enough to help them. Some examples of current projects, and what they mean to rhino and tiger range countries:

• In India, the Fund is providing clothing, equipment, and radio networks to help guards stop poaching in Kaziranga National Park and Pobitora, Orang, and Laokhowa wildlife sanctuaries in Assam. While the Assam rhino conservation program is considered one of the best in the country, the lack of even the most basic protective clothing and equipment is illustrative of what is needed in many countries if we are to win the war against poaching. Project Manager Anne Wright reports that the new equipment provided by the Fund has given hope and encouragement for guards working long and dangerous assignments in difficult terrain. She intends to broaden this initial effort by obtaining critical transportation equipment and developing programs among local villagers to increase awareness and encourage reporting of illegal activity.

• In Viet Nam, where tiger habitats are highly fragmented and degraded, the Fund is helping researchers map areas such as Phuoc Son/Tra My Reserve, which is populated by ethnic minorities and possibly up to 30 tigers. Tigers which kill livestock are in turn killed by the villagers to protect their herds or profit from poaching. This collaborative project will assess the tigers' presence in the reserve and surrounding forest and develop a model for reducing conflicts between human land use and tiger conservation.

• In Tanzania, extensive poaching has fragmented and reduced the Tanzanian black rhino population to less than 100. The Selous Game Reserve, one of the largest protected areas in Africa, may be the last hope for survival of the black rhinoceros in that country. The Fund has enabled surveillance and monitoring training for field staff and a survey on the Selous rhino population that will yield specific recommendations for establishing potential Intensive Protection Zones in the reserve.

In the short history of the program, the Service has received many comments about the utility and importance of the Fund, both within the United States and

from other countries. Dr. Thomas Foose, of the International Rhino Foundation says that "The Rhino and Tiger Conservation Fund is an important component of the entire package of partnerships. Many had origins before (the Fund), but it helps them flourish, and stimulates matching requirements." From India, Ms. Belinda Wright of the Wildlife Protection Society, says that "FWS (U.S. Fish and Wildlife Service) is perhaps the one (organization) we respect the most, because we have had such a long and close interaction with them. They are genuinely aware of all the issues . . . they understand and care."

The Service has also developed a strong partnership with the National Fish and Wildlife Foundation's "Save the Tiger Fund," serving on the Council which oversees it and coordinating reviews for all of the project proposals received by each program.

The Rhino and Tiger Conservation Fund has gotten off to an excellent start over the past 3 years. The job has only just begun, however. There is much more work to do and no shortage of committed partners seeking our help in Africa and Asia. Reauthorization of the Rhinoceros and Tiger Conservation Act will send a strong message that the American people care deeply about these resources of commitment by the U.S. Government to provide sufficient funding and continued support to the conservation of these key representatives of the Asian and African continents and fill an important void.

The Administration supports the passage of H.R. 3113 and also seeks some technical amendments consistent with our FY99 budget proposal to consolidate the African elephant, Asian elephant, and rhino and tiger conservation funds under a Multinational Species Conservation Fund. The purpose of the consolidation would be to streamline bookkeeping and eliminate unnecessary duplication and overhead. Separate sub-accounts would be retained for the Rhino and Tiger Conservation program and each of the other specialized programs under this Fund.

THE RHINO AND TIGER PRODUCT LABELING ACT/H.R. 2807

I would now like to discuss the Rhino and Tiger Product Labeling Act, introduced by Chairman Saxton. Chairman Saxton's bill, H.R. 2807, addresses a critical part of the remaining problem. Conservation assistance is only half of the job, however. In order to break the cycle of poaching and illegal trade which has devastated so many rhino and tiger populations, we must also work to break supply lines and remove rhino and tiger products from the marketplace.

In 1993, we became aware that authorities in China and Taiwan were ignoring or even, in some cases, aiding and abetting a flourishing trade in rhino and tiger parts within their borders. It was determined that coordinated U.S. and international action were necessary. The Pelly Amendment to the Fisherman's Protective Act was invoked by certifying both China and Taiwan and CITES nations worked to obtain an international consensus on the need for corrective action. In response to a clear statement of our expectations for improvement in the situation, China took some immediate positive steps to improve their laws and enforcement. Taiwan failed to make similar progress, however, and in 1994 the President took the unprecedented step of applying trade sanctions. The sanctions—combined with continued efforts at constructive engagement—eventually resulted in enormous improvements on Taiwan. As a result, in 1995 the President was able to remove the sanctions, and the Pelly certification was lifted in 1996. With strong U.S. encouragement, Taiwan has continued these positive efforts.

Unfortunately, not all of the problems with the trade in rhino and tiger parts is in Asia. There is also a thriving trade in medicines which are at least labeled as containing tiger or rhino parts in traditional medicine shops in major cities having large Asian communities all around the world—and we are not exempt from this problem in the United States. Recognizing this, in 1994 the Fish and Wildlife Service was asked to undertake a program to help remove these medicines from the U.S. marketplace. As a result, the Service began a pilot program in Los Angeles involving outreach to local Asian communities, incorporation of the plight of rhinos and tigers into the curriculum in local schools, and other community-based activities. In addition, in Los Angeles an interagency wildlife law enforcement task force has also made concentrated efforts to interdict shipments of wildlife products—including rhino and tiger medicines—with excellent results.

The Los Angeles programs have clearly had an impact. A recent survey by TRAFFIC, the World Wildlife Fund's wildlife trade monitoring organization, found that of seven U.S. and Canadian cities, Los Angeles had by far the lowest incidence of medicines labeled as tiger and rhino medicines in traditional medicine shops. On the other hand, the survey also reveals the depth of the problem which we are facing in other cities, and highlights a continuing problem which no amount of educational outreach or enforcement task forces can solve—the lack of authority to take enforce-

ment action against medicines which are labeled as containing tiger or rhino parts. Every year, Service wildlife inspectors all over the country routinely encounter shipments containing wildlife products labeled as containing protected species parts—especially tiger and rhino. These mass-produced products from Asia are destined to be sold as "cure alls" in traditional medicine shops. Investigations in Asia have clearly shown that rhino horn, tiger bone, and other tiger and rhino parts are used in manufacture of some of these medicines.

Once these products reach the United States—even when their labels blatantly claim that the items contain rhino or tiger parts—the burden of proof is still on the Service to demonstrate scientifically whether the products contain what the label says. This is a time-consuming and expensive process. Forensics experts estimate a cost of up to $100,000 to develop a DNA analysis test to identify any particular group of wildlife, such as all rhinos or all tigers, and the process would only work if DNA markers had not been destroyed when the product was manufactured. For example, if a product reported to contain tiger bone has been heated to high temperatures during compounding, a DNA analysis test could not be conclusive. The only substance which could be confirmed is the presence of calcium, an ingredient just as likely to represent cow bone and tiger bone.

Given these results, seized items must often be returned to the importer because no violation of existing U.S. law can be shown. Some ports have chosen not to seize tiger bone products because the burden of proof with respect to content has made enforcement so difficult. As a results products claiming to contain tiger and rhino continue to be readily for sale. Even if some of these products contain no rhino or tiger parts, they serve as a smokescreen for other products which clearly do contain the real thing. As a result, such products continue to stimulate demand and feed a market that ultimately depends on the killing of these critically endangered species.

H.R. 2807, the Rhino and Tiger Product Labeling Act, would close this major gap in our existing laws by adding new criminal prohibitions to the existing Rhino and Tiger Conservation Act. The Administration strongly supports this new measure, which is designed to prohibit the importation and sale of products that claim to contain rhinoceros horn or tiger products. The proposed prohibition on import and export of such products will allow us to seize these illegal substances at U.S. ports of entry and demand their immediate forfeiture, and the prohibition on sale of these products will help keep stockpiles which are already in the country off store shelves. Furthermore, this bill is fully in keeping with an international consensus on the need for such legislation in every country. Recognizing that trade in rhino and tiger medicines is a global problem, the CITES Conference of the Parties has adopted a series of resolutions calling on all countries to adopt new legislation to control this trade. Resolution Conf. 9.13, for example, adopted in Fort Lauderdale in 1994, urges tiger range and consumer countries to prohibit trade in ". . . products labeled as containing parts and derivatives of tiger." Resolution Conf. 10.19, adopted in Harare last year, asks parties to ensure that ". . . their national legislation effectively controls trade in all parts and derivatives of species used for healing purposes and trade in medicinal products containing or purporting to contain them." [Emphasis added] Other countries are also moving forward to implement these CITES recommendations: the United Kingdom, for example, has adopted similar legislation which has enabled it to remove 20,000 items from shelves in traditional medicine shops in London alone.

We note that in passing H.R. 2807 the House adopted amendments recommended by the Administration to include additional authority to seek civil penalties and forfeiture for violations of the prohibitions, definitions of who is subject to the law, and establishing court jurisdiction.

In summary, the Administration is strongly in favor of the adoption of H.R. 2807 as passed by the House. It will help to ensure that commercial trade in rhino and tiger medicines in the United States does not undermine the benefits to range countries from congressional appropriations to the Rhino and Tiger Conservation Fund and compound the cost of conserving these species in the wild. Passage of H.R. 2807 would complement and enhance our ongoing conservation efforts under the Rhino and Tiger Conservation Act, the Pelly Amendment, CITES, and other domestic and international measures. We believe that the Rhino and Tiger Product Labeling Act will help continue the global leadership role of the United States in rhino and tiger conservation.

S. 659, THE GREAT LAKES FISH AND WILDLIFE RESTORATION ACT

Next, I'll address S. 659, a bill to reauthorize the Great Lakes Fish and Wildlife Restoration Act of 1990. The Administration supports S. 659 and its House compan-

ion bill, H.R. 1481, as an important step forward in restoring fish and wildlife resources in the Great Lakes. I would like to extend my appreciation to you and the rest of the committee for your interest in the restoration of the fish and wildlife resources of the Great Lakes Basin.

BACKGROUND ON THE GREAT LAKES BASIN

The Great Lakes Basin is the largest system of fresh water on the planet and home to 10 percent of the U.S. and 25 percent of the Canadian populations. It represents the Nation's fourth largest coastline and provides essential habitat for endangered species and breeding areas for waterfowl, migratory birds, and fish. The Nation relies on the Great Lakes for a myriad of uses including the transportation of goods, hunting, boating and recreational and commercial fishing.

The Great Lakes fish and wildlife resources and their associated habitats are especially important to the region and represent the foundation on which much of the region's economic vitality depends. A multitude of habitat types are found throughout the Great Lakes Basin; from the warmer, lower lakes to the deep, cold waters of Lake Superior. Each habitat type supports an array of species, ranging from lake whitefish, yellow perch, walleye, and lake trout, to countless bird species, both residential and migratory. As a result, outdoor recreation and tourism alone provides 515 billion to the region annually, with almost $7 billion originating from the fishing industry. Much of the region's cultural heritage is also based on the basin's fish and wildlife resources.

Because of the varied uses and values of the Great Lakes and the complexity of problems that often occur, governing bodies have joined together to form some of the Nation's strongest interjurisdictional partnerships. Problems relating to DDT and eutrophication caught the public's attention in the 1960's, leading to the first Great Lakes Water Quality Agreement between Canada and the United States in 1972. With the subsequent 1978 agreement, the Nation witnessed a truly innovative approach to natural resource management; one that looked at the entire basin from an ecosystem perspective.

Decimation of fish stocks due to sea lamprey predation and over-fishing brought forth the Convention on Great Lakes Fisheries and the establishment of the Great Lakes Fishery Commission (Commission). These developments led to an extraordinary effort to control a single nuisance species; an effort that continues successfully today. In 1981, the Joint Strategic Plan for Management of Great Lakes Fisheries was developed and implemented to facilitate the proper management of the fishery resources within the basin.

Other issues ranging from toxic sedimentation, agricultural run-off, aquatic nuisance species invasions, and shore erosion have all required similar joint efforts. They rely not on just one or two government entities, but on all jurisdictions, ranging from Tribes, States, the Federal Government, local municipalities, environmental groups, and industries.

THE GREAT LAKES FISH AND WILDLIFE RESTORATION ACT OF 1990

Recognizing the importance of the basin's fish and wildlife resources, and the need to manage cooperatively, Congress passed the Great Lakes Fish and Wildlife Restoration Act of 1990 to evaluate the status of the basin's fishery resources and to develop appropriate recommendations to address the most pressing needs.

Since 1992, the U.S. Fish and Wildlife Service (Service) in cooperation with many partners in the basin, has made significant progress in implementing provisions in the law. In 1995, the Service submitted the Great Lakes Fishery Resources Restoration Study (Study) to Congress. The Study was developed by the Service's Great Lakes Coordination Office and Fishery Resources Offices in close collaboration with 76 State, Provincial, Tribal and Federal Great Lakes aquatic resource experts, in addition to representatives from academia and nongovernmental organizations. Four incremental drafts were prepared and submitted for review and comment, with improvements made after each review. The result was a broadly supported and widely heralded report containing meaningful and well-crafted recommendations.

The study's 32 recommendations address concerns common to each of the Great Lakes and their watersheds and represent priorities not currently funded through any management agency. Recommendations range from eliminating nonindigenous species invasions to determining the impacts of hydroelectric facilities and dam operations on fish passage. Each recommendation was collaboratively developed and requires the involvement of all Great Lakes Basin partners for implementation.

As directed by the Act, the Service also staffed and equipped Fishery Resources Offices in the Upper and Lower Great Lakes and a Great Lakes Coordination Office

in Michigan. These offices have made great strides in managing the fishery resources of the Great Lakes. Current activities include:

- developing and overseeing implementation of a fish community, predator/prey model for Lake Michigan, Lake Huron and Lake Superior;
- participating with or chairing all Lake Technical Committees that provide critical information to Great Lakes management agencies (e.g. State & Tribal) for the proper management of Great Lakes fishery resources;
- utilizing artificial astro-turf incubators for stocked lake trout eggs to accelerate lake trout restoration;
- serving as technical experts to the Department of the Interior and the courts in the *U.S.* v. *Michigan* case and assisting in conflict resolution for Great Lakes fishery treaty issues in the ceded territories of the Great Lakes;
- leading the development of a protocol to conduct trout and salmon diet studies to help evaluate availability and changes to critical prey species;
- evaluating and constructing fish passage improvements in Lake Superior, Lake Michigan, and Lake Erie to support trust species restoration such as lake sturgeon and Atlantic salmon;
- developing fish population data bases to support multi-agency fisheries management and restoration efforts and maintaining a stocking data base for the Great Lakes Basin as used by all management entities in the United States and Canada;
- providing assistance to the multi-agency Yellow Perch Task Group on Lake Michigan, charged to assess the recent cause of the species' drastic population decline;
- leading a coaster brook trout and lake sturgeon restoration effort, including habitat improvement projects;
- surveying for and controlling invasive species in the Great Lakes Basin, including ruffe, round gobi, and zebra mussel;
- maintaining an effective sea lamprey control program in the Great Lakes and preserving inroads made in the restoration of lake trout; and
- restoring 11,000 acres of wetlands in the Great Lakes Basin, including Metzger Marsh in Ohio, a premier waterfowl area as well as an important spawning and nursery area for Lake Erie walleye and the imperiled lake sturgeon.

COMMENTS ON S. 659

Reauthorizing the Great Lakes Fish and Wildlife Restoration Act represents a move from study to action. Based on the results of the Study, the bill directs the Service to request submission of fish and wildlife restoration proposals from State Directors and Tribes, in cooperation with other interested parties. The Great Lakes Fish and Wildlife Restoration Proposal Review Committee, made up of representatives with management authority in the basin, will then review submitted proposals and recommend priorities for implementation to the Service. Operating under the auspices of the Council of Lake Committees, the Review Committee will take full advantage of an established structure that currently helps manage the Great Lakes. Accepted proposals are 25 percent cost shared by non-Federal partners.

The process of identifying, reviewing, and implementing proposals, as outlined in section 6(b) of the bill, continues the partnerships initiated under the original Act and provides a direct pathway from problem identification to solution. States, Tribes, and the Service working together, who are often in the best position to recognize problems and effect on-the-ground solutions, will receive much needed support to implement study recommendations. The Administration, however, seeks a technical amendment to this section by inserting ", under existing authorities," on page 8, line 11, after "Commission." This would clarify that the Army Corps of Engineers would continue to use its existing authority to work with the Great Lakes Fishery Commission.

The Service supports passage of the bill to reinforce Congress' commitment to implementing the Study recommendations and to enable possible increases in the Service's budget request in the future for fisheries restoration efforts in the Great Lakes.

In closing, Mr. Chairman, the Administration supports S. 659 and believes that it will significantly contribute to the restoration of one of our Nation's most important ecosystems, and in particular, the fish and wildlife resources on which the region depends. Progress made to date under the Act represents the combined efforts of Great Lakes Basin partners, and S. 659 continues this tradition by providing a necessary and timely shift from investigation of needs to on-the-ground action.

S. 2244, THE NATIONAL WILDLIFE REFUGE SYSTEM VOLUNTEER AND PARTNERSHIP ENHANCEMENT ACT

The next bill on the committee's agenda is S. 2244, the National Wildlife Refuge System Volunteer and Partnership Enhancement Act. We would like to thank you, Mr. Chairman, for the personal interest you have taken in drafting legislation on this issue. I know Director Clark has personally conveyed this to you during refuge events in Rhode Island, and she regrets being unable to be here today.

The Administration supports enactment of S. 2244, the National Wildlife Refuge System Volunteer and Partnership Enhancement Act. However, we do have an amendment to suggest.

S. 2244 builds on the recently enacted National Wildlife Refuge System Improvement Act of 1997. As you know, the National Wildlife Refuge System Improvement Act strengthens the legal underpinnings of the System and emphasizes public participation in the operation of the System. The Volunteer bill before the committee today increases that emphasis on public participation and provides direction for the System's volunteers and its partnership organizations.

Opportunities for the use of volunteers are currently available, not only on our National Wildlife Refuges, but on our national fish hatcheries, and in our law enforcement and ecological services field stations, and our regional offices. The Service is authorized to have a volunteer program by the Fish and Wildlife Act of 1956, as amended by the Fish and Wildlife Improvement Act of 1978, which states, in part, "The Secretary of the Interior may recruit, train, and accept the services of individuals without compensation as volunteers for, or in aid of a program conducted by the Secretary through the United States Fish and Wildlife Service." This Act further states that incidental expenses such as transportation, uniforms, lodging, and subsistence of such volunteers are authorized. The Fiscal Year 1992 Interior Appropriations Act also authorized the Service to use appropriated funds to award and recognize volunteers.

Despite recent increases in Refuge System funding sought by the Administration and provided by the Congress, the shortfall in operating and maintenance funds for the National Wildlife Refuge System presents a major challenge to our ability to carry out the Refuge System's unique conservation mission. Reliance on volunteers and private donations can play an important role in addressing these needs, but we must recognize that this is only a partial answer.

The U.S. Fish and Wildlife Service's volunteers play a vital role in helping to fulfill our mission of conserving, protecting and enhancing America's fish and wildlife and their habitats. Public interest in participating in Service programs and visiting our facilities continues to exceed our staff capacity and funding, and it is expected to do so in the future. Volunteers provide essential services that the Fish and Wildlife Service does not have the resources or staff to provide. The number of our volunteers has increased from 4,251 in 1982 to 25,840 volunteers in 1996. Volunteer hours also have increased, from 128,440 hours in 1982 to over one million hours in 1996. Our volunteers work at a variety of tasks ranging from construction and repair projects, to orienting and educating visitors, to assisting with fish and wildlife surveys and habitat improvement projects.

U.S. Fish and Wildlife Service volunteers include unaffiliated individuals, boy scouts, girl scouts, members of the American Association of Retired Persons, local Friends of the individual refuge groups, local Audubon chapters, and school groups, to name a few. The Service also uses volunteers from organizations such as the Student Conservation Association.

Several examples of volunteer efforts include:

- Edwin B. Forsythe NWR volunteers assisted in piping plover nest surveys and population monitoring. Due to staff cutbacks the refuge was unable to continue its weekly waterbird surveys. The refuge's volunteers stepped in and the weekly surveys were done.
- At Ash Meadows NWR two volunteers removed 240 inactive utility poles during April and May. They donated 504 hours and saved the Service $100,000.
- At Bitter Lake NWR the Roswell Job Corps constructed a handicapped-accessible Watchable Wildlife overlook.
- At Kenai Fisheries Resources Office volunteers assisted in a baseline survey to determine the distribution and abundance of northern pike in the Moose River watershed.
- And, at Okefenokee NWR in Georgia 12 trailer pads with hookups were added. These volunteers were involved in lawn and sign maintenance, plumbing, staffing the Visitor Center, leading bird walks, painting, wildlife surveys, and redecking the boardwalks.

The U.S. Fish and Wildlife Service applauds you, Mr. Chairman, and members of your committee for initiating this bill on volunteers. We greatly appreciate having the opportunity to "brag" about the Service's volunteer program and all the good things our volunteers are helping us to accomplish.

S. 2244 will further encourage the use of volunteers to assist the Service in the management of our National Wildlife Refuges; facilitate partnerships between the Service and non-Federal entities to promote public awareness of the resources of the Refuge System and public participation in the conservation of those resources; and encourage donations and other contributions by persons and organizations to individual refuges and the Refuge System.

We are particularly pleased that the bill authorizes support of community partnerships that promote the mission of the National Wildlife Refuge System. These are 501(c)(3) nonprofit groups organized by local citizens to support their local National Wildlife Refuge through grassroots volunteer efforts, fund-raising, outreach, and education. The clear statement of legislative direction found in S. 2244 should boost this increasingly popular form of public/private interaction. These partnerships with outside organizations and individuals are increasingly important elements of our ability to carry out conservation, recreation, and education programs. The Volunteer bill could add considerably to our abilities to interact with the private sector in accomplishing the Refuge System mission.

The bill also affirms our authority for cost share projects, which to date have been authorized in annual appropriation bills. The concept of matching funds is very effective in stimulating the donation of funds or in-kind services to achieve the goal of improving a refuge. A refuge manager with a project initiative will first evaluate their own field station's budget to determine if funding is available. If sufficient funding is not available at the field station, funding support from the regional or national level would then be explored. Permanent authorization and direction could help this program grow beyond its current $3.3 million size, thus leveraging available funds.

S. 2244 would also establish a pilot program to test the effects of locating a volunteer coordinator at between two and 20 selected refuges. This 3-year program would enable us to determine what impact this would have on our ability to recruit and utilize volunteers, work with partner organizations and other non-Federal entities interested in cooperative projects on refuges, and promote cost-sharing projects. After 3 years, we would provide a report and recommendations to the Congress as to the future direction of this effort. We are looking forward to implementing this provision, and believe that the investment involved will pay considerable dividends.

The bill further enhances our volunteer capability by authorizing the establishment of a Senior Volunteer Corps, authorizes us to provide for incidental expenses for the Senior volunteers beyond those otherwise provided to volunteers and to provide for expenses of local volunteers.

The Administration endorses utilizing the talents of Senior volunteers to benefit our National Wildlife Refuges, but believes that establishment of a new Senior Volunteer Corps for the Fish and Wildlife Service, as provided in section 4(c), is unnecessary. The goal of increased utilization of senior citizens in refuge volunteer programs can most effectively be achieved through an interagency agreement between the Service and the Corporation for National Service's National Senior Service Corps (NSSC). The programs and infrastructure of the NSSC have been in existence for over 30 years, and can maximize senior volunteer involvement at the lowest possible administrative cost. We accordingly recommend that the bill be amended to reflect this.

The last major element of S. 2244 is direction on providing refuge educational programs. While the Service already engages in environmental education programs at many refuges, the bill calls for unified program guidance for this activity. This guidance, and the greater attention to refuge education programs that is likely to follow, should lead to both an expansion of our efforts and greater community involvement in those efforts. Both will be extremely beneficial for the refuges and for the communities in which the activities occur.

We again thank you and the committee for the interest shown in the National Wildlife Refuge System and for this legislation on the use of volunteers. Its enactment should provide a major boost for refuge volunteer programs and the many benefits they bring to our National Wildlife Refuges.

S. 263, THE BEAR PROTECTION ACT

Finally, I'll address S. 263, the Bear Protection Act. S. 263 is intended to prevent American Black Bear populations from being harmed as a result of the demand for bear viscera which is used in certain Asian medicinal products. The legislation

would prohibit the import into or export from the United States of bear viscera, or products that contain or claim to contain bear viscera, and it would prohibit the sale, barter, or possession of bear viscera for interstate commerce. The bill would require the Secretary to report to the Congress on the bear viscera trade, and require the Secretary of the Interior and the United States Trade Representative to discuss bear trade issues with the leading countries that import or export bear viscera. Finally, it would impose the same penalties and sanctions as those imposed under the Lacey Act.

Although significant illegal trade in Asiatic species of bear exists primarily to supply the Asian medicinal market, the Fish and Wildlife Service does not have evidence to support the claim that bears in the United States are threatened by the demand for bear viscera. Existing authorities such as the Endangered Species Act, Lacey Act, Marine Mammal Protection Act and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) have been effective tools in addressing the illegal bear trade. With the exception of black bear populations in Florida and Louisiana, black bear populations in the United States and Canada generally are increasing, due in a large part to the effective wildlife management activities of the States. According to our records, there are over 590,000 black bears in the United States and Canada.

The Service currently monitors and investigates illegal commercial wildlife activities related to bear and bear parts under existing authorities. Our current controls have resulted in the detection of an average of 70 illegal shipments of bear and bear parts over the past 5 years. During this time period, the Service has also been effective in conducting successful and productive investigations as demonstrated by the following statistics:

- In 1993, there were 42 criminal cases and 1 civil case, involving bear or bear parts. A total of $154,755 in fines and 1,930 days of jail time was imposed.
- In 1994, there were 46 criminal cases involving bear or bear parts. A total of $25,485 in fines and 169 days of jail time was imposed.
- In 1995, there were 23 criminal cases involving bear or bear parts. A total of $21,547 in fines and 495 days of jail time was imposed.
- In 1996, there were 21 criminal cases involving bear or bear parts. A total of $12,534 in fines and 1,696 days of jail time was imposed.
- In addition, the number of imports/exports refused that contained bear or bear parts increased from 65 shipments in 1993 to 77 shipments in 1996.

The Service has significant concerns with language contained in the bill that would hinder the successful prosecution of cases brought under the Bear Protection Act. The Lacey Act is an umbrella statute used to provide additional protection to fish, wildlife, and plants that were taken, possessed, transported, or sold in violation of State, tribal, foreign, or U.S. law. Literally adopting portions of the Lacey Act into the Bear Protection Act creates technical legal concerns that should be addressed prior to the final passage of this legislation.

One example of this problem can be found in the reference to the Lacey Act penalties and sanctions provisions. These provisions refer specifically to the requirement of a violation of an underlying predicate law. This implies that some other law would have to be violated in order to impose the Bear Protection Act. The Bear Protection Act, as currently drafted, is intended to be a stand-alone statute that is not dependent on a violation of an underlying predicate law. To remedy this problem, specific and clear provisions must be written into the Bear Protection Act that would eliminate this potential legal technicality. There are other references to the Lacey Act throughout the proposed legislation that create similar problems.

Finally, the Service has concerns with the potential increase in responsibilities and impact on its human and financial resources. To date, the Service has successfully utilized undercover investigations and task force operations in its prior investigations and would anticipate that S. 263 would result in an increase in enforcement responsibilities for the Service without a corresponding increase in funding.

In conclusion, Mr. Chairman, the Service believes that bears in the United States have been adequately protected to date and that this legislation addresses an issue which has not been a major resource problem. We have certain concerns about other provisions. If the committee proceeds with S. 263, we would be available to assist staff in drafting technical corrections to address those concerns.

PREPARED STATEMENT OF GINETTE HEMLEY, VICE PRESIDENT FOR SPECIES CONSERVATION, WORLD WILDLIFE FUND

Mr. Chairman and members of the committee, thank you for the opportunity to appear here today. I am Ginette Hemley, vice president for Species Conservation at

World Wildlife Fund. WWF is the largest private conservation organization working internationally to protect wildlife and wildlife habitats. We currently support wildlife conservation efforts in more than 100 countries, including almost all tiger and rhino range nations.

My testimony today will cover a wide range of proposed legislation. Regarding the Rhino and Tiger Product Labeling Act, I will provide WWF's perspective on why this bill is vital to helping law enforcement agencies police the illegal trade in rhino and tiger products, one of the most urgent threats facing these critically endangered species. In addition, I will discuss why it is crucial to reauthorize the Rhino and Tiger Conservation Act as an important source of support for rhino and tiger conservation programs. I also will offer some recommendations on how the proposed Bear Protection Act might be strengthened to help the world's most threatened bear species, and suggest amendments that would improve the Fish and Wildlife Revenue Enhancement Act of 1998. Finally, I will explain why we endorse the proposed Neotropical Migratory Bird Conservation Act of 1998.

The United States has long been a leader in international wildlife conservation. For more than 25 years, the Endangered Species Act has served as model legislation for countries worldwide struggling to protect imperiled species such as tigers and rhinos. By addressing the range of threats—from poaching to illegal trade to habitat loss—the ESA has served as a critical weapon in the global fight to stop species' decline. In recent years, the United States also has taken unprecedented action under other laws such as the Pelly Amendment to the Fisherman's Protective Act to encourage stronger endangered species protection measures in other countries. By imposing wildlife trade sanctions on Taiwan in 1994 for its failure to stop the illegal trade in tiger and rhino products, the United States stimulated much-needed conservation progress, not only in Taiwan but elsewhere in Asia as well. And, through programs administered by the Department of the Interior, U.S. Fish and Wildlife Service, and USAID, the United States has provided critical on-the-ground support for efforts to protect dwindling populations of tigers, rhinos, elephants, and other threatened species.

WHY WE NEED THE RHINO AND TIGER PRODUCT LABELING ACT

This committee is well aware of the crisis facing rhinos and tigers in the wild, and the staggering declines these species have experienced. Ninety-five percent of the world's wild tigers have disappeared since the turn of the century, with losses to poaching accelerating over the past decade. There are probably fewer than 6,000 tigers remaining in the wild today. Similarly, more than 95 percent of Africa's black rhinos have been lost in just three decades. Today there are fewer than 2,500 of these animals in the wild. Asian rhinos face even longer odds—the Javan rhino, for instance, is down to fewer than 70 animals in the wild today.

We know all too well where the blame lies for these dramatic declines. In addition to having lost so much habitat to expanding human populations and uses, tigers and rhinos have been poached nearly out of existence for their highly valued body parts. Poaching represents the most immediate threat to the survival of these species, a problem to a large degree driven by the demand for bone, horn and other parts used in traditional Chinese medicines. In fact, according to international experts, from the mid-1980's to the mid-1990's, as many as one quarter of the world's tigers may have been killed to supply the international black market trade for their body parts, particularly bone. As economies and trade centers grew in East Asia including China, South Korea, Taiwan, and Hong Kong, so did the commerce in tiger, rhino and other species used in traditional medicine, in spite of a 20-year-old ban under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The direct link between international trade and the decline of tiger and rhino populations has become increasingly clear as investigations into the government trade records and confiscations of consumer countries such as South Korea and China revealed a significant volume of tiger bone and rhinoceros horn flowing across their borders in the early part of this decade.

Many people do not realize that, in addition to East Asia, the United States is also a significant market for packaged traditional Chinese medicines containing or claiming to contain tiger bone, rhino horn, and other protected species. In January, World Wildlife Fund released a report produced by its wildlife trade monitoring program, TRAFFIC, highlighting an alarming trend. There are more medicinal products advertised as containing tiger bone in North American markets today than there were 5 years ago. According to TRAFFIC's investigation, which covered seven major cities in the United States and Canada (Atlanta, Los Angeles, New York, San Francisco, Seattle, Toronto and Vancouver), over 40 percent of the nearly 110 traditional medicine shops surveyed had tiger and rhino medicines for sale. Investigators

found 31 different types of tiger and rhino medicines available, the vast majority made in China. Mr. Chairman, I would like to submit a copy of the TRAFFIC report for the record.

Why, in spite of the Endangered Species Act, CITES, the Lacey Act and other laws, are these products readily available for sale on the U.S. market? We see three primary reasons: (1) inadequate enforcement of existing import prohibitions established under the Endangered Species and Lacey Acts; (2) lack of domestic legislation prohibiting the sale of products labeled as containing endangered species; and (3) lack of public awareness about the illegality of such products and the threats to tigers and rhinos in the wild.

Inadequacies in laws regulating domestic tiger and rhino trade have attracted increasing scrutiny in recent years. At each of the past two Conferences of the Parties to CITES in 1994 and 1997, resolutions were passed calling on member governments to strengthen legislation controlling trade in tiger and rhino parts, including the prohibition of internal trade in these species and their derivatives as well as in products labeled as containing their parts or derivatives. Fortunately, China, Taiwan, Hong Kong, and Singapore have strengthened their laws to comply with the CITES recommendations, which has had an important and measurable effect on dampening the illegal trade. Unfortunately, the United States has still to act.

The United States has allowed a fundamental weakness in current trade controls to remain, which makes it relatively risk-free to sell rhino and tiger medicinal products in this country. Although import of and interstate commerce in rhino and tiger medicines are prohibited under both the Endangered Species and Lacey Acts, these laws place the burden of proof that a product actually contains the prohibited wildlife ingredients upon the government. Forensic analysis of these products is costly, time-consuming, and often inconclusive, presenting a powerful disincentive to prosecuting suspected violations. The Rhino and Tiger Product Labeling Act would allow enforcement agencies to take immediate action against anyone caught importing, exporting or selling products claiming to contain tiger or rhino.

Controversy continues over whether products in the U.S. marketplace do in fact contain endangered wildlife ingredients. Their low cost and widespread availability would seem to defy the laws of supply and demand. However, if these products contain even trace amounts of tiger bone or rhino horn—and investigations into the factories in China where these products are made suggest that this could well be the case—the sheer volume of sales of these products represents an imminent threat to the survival of these critically endangered species. Furthermore, even if they contain no rhino or tiger derivatives, the promotion of these products in the marketplace stimulates the demand for real rhino and tiger medicines, and makes consumers less receptive to medicinal substitutes made from non-endangered species.

To address this problem, Congress should pass legislation similar to H.R. 2807, the Rhino and Tiger Product Labeling Act and make it illegal to sell any product that purports to contain rhino or tiger. Next, the U.S. Fish and Wildlife Service should implement a coordinated, national strategy for interdiction of these illegal products. The January 1998 TRAFFIC study helps pinpoint where attention is most needed. Notably, Los Angeles, the one city where the Federal Government has made a concerted effort to enforce the import laws and increase public awareness, ranked as the "cleanest" city for endangered species medicines in the study. Finally, the conservation community and Federal and State agencies responsible for wildlife trade control must work closely with traditional Chinese medicine and Asian communities to raise awareness about both the trade problem and the plight of the endangered species involved. be must work together to find and advocate culturally appropriate substitute medicines.

Since the beginning of this year, WWF has been working with the American College of Traditional Chinese Medicine to build public support for tiger conservation within the Chinese community in San Francisco and reduce demand for tiger and other endangered species medicines. In June, we held a first-of-its-kind conference, attended by 150 participants and bringing together tiger experts, conservationists, wildlife trade specialists, traditional Chinese medicine (TCM) practitioners and retailers, TCM educators and students, Chinese language school teachers, and Chinese American community leaders, to formulate a collaborative strategy to conserve tigers and reduce demand for tiger bone medicines. The conference was productive even beyond expectations and laid the groundwork for meaningful grassroots tiger conservation actions to come. Representatives from the TCM retail association declared their support of the Rhino and Tiger Product Labeling Act and hope to see it enacted without delay.

Mr. Chairman, the House of Representatives passed the Rhino and Tiger Product Labeling Act, H.R. 2807, in April. We urge you, as a matter of priority, to pass legislation similar to H.R. 2807. Every reasonable measure must be undertaken to save

the world's remaining rhinos and tigers, and this legislation is a critical part of our international conservation efforts.

THE RHINOCEROS AND TIGER CONSERVATION REAUTHORIZATION ACT OF 1998

We have all heard the grim statistics about the dire status of tigers and rhinos. Equally deserving of recognition, though, is the heartening progress made in recent years toward halting and reversing these trends. In 1985, a survey of tigers in the Russian Far East reached the alarming conclusion that only about 250 of these animals, the world's largest tigers, remained. In the chaotic aftermath of the breakup of the former Soviet Union in the early 1990's, poaching escalated further. Russian and international conservationists and many governments, including the United States, quickly joined forces—and contributed financial resources—to shore up protection for tigers. A 1996 survey counted as many as 475 tigers in Siberia—strong evidence that the population appears to be rebuilding.

There are rhino success stories as well. In Royal Chitwan National Park in Nepal, a population of greater one-horned rhinos that numbered about one thousand at the beginning of the century had shrunk to a seemingly doomed 60 individuals only two decades ago. Today, this population is estimated at a robust 450 rhinos, thanks to intensive conservation efforts—made possible by steady funding—that have staved off human encroachment and reduced poaching incidents to near zero. In Africa, black rhinos also have benefited from vigorous protection measures that have helped many populations stabilize during this decade after the poaching carnage of the 1970's and 1980's.

The message here is simple: the situation for tigers and rhinos is critical, but it is by no means hopeless. When financial support is available and reliable, the improvements can be rapid and dramatic. We know what needs to be done. We have better data on these species and their habitat, closer international coordination among stakeholders, and a more strategic vision than ever before. An example of research that pinpoints specific places and projects for tiger protection is *A Framework for Identifying High Priority Areas and Actions for the Conservation of Tigers in the Wild,* a joint publication of World Wildlife Fund, the Wildlife Conservation Society, and the National Fish and Wildlife Foundation's Save the Tiger Fund. This report delineates 25 remaining habitat areas where tigers stand the best chance of long-term survival. By concentrating on these 25 areas, we can maintain representation of tigers across their full range. The report also analyzes the viability of existing tiger reserves, pointing out that many are too small to sustain tiger populations, and that many tigers live outside reserve boundaries. Ultimately, each critical tiger habitat area should contain a network of tiger reserves surrounded by buffer zones where limited human activities are permitted and linked by corridors that allow tigers to disperse among once-isolated islands of habitat. Securing such protected area networks—and the tiger's future—hinges upon securing long-term investment from sources like the Rhino and Tiger Conservation Fund.

Working with rhino experts and international partners such as the World Conservation Union (IUCN), WWF has developed a comparable recovery strategy for African rhinos, and will complete a strategy for Asian rhinos later this year. WWF's African Rhino Action Plan identifies key rhino populations—those with the greatest probability of long-term survival and sets out a blueprint for achieving stable rhino populations. Priority projects such as expanding rhino reserves and intensifying anti-poaching efforts require a major commitment of resources at a time when many African countries have scaled back wildlife conservation budgets in response to other pressing development needs. And wildlife management agencies in many Asian countries are no better off financially than those in Africa. Here, too, funding from the Rhino and Tiger Conservation Fund is a critical complement to the support already coming for rhino conservation from other private and public sources.

As with the African Elephant Conservation Fund, widely recognized as a success, the Rhino and Tiger Conservation Fund represents a long-term commitment by the United States government to these threatened species. While the United States supported 31 important projects in fiscal year 1996 and fiscal year 1997, many remained unfunded and the number of proposals to the Fish and Wildlife Service continues to rapidly increase. The fund, which must be shared among tigers in 14 countries and five species of Asian and African rhinos, is spread far too thin. Although the Rhino. and Tiger Conservation Act authorizes up to $10 million a year, only $400,000 per year has been appropriated. We understand that the Senate Appropriations Committee did not approve additional funding in the fiscal year 1999 Interior Appropriations bill (or the Rhino and Tiger Conservation Fund. We strongly urge the members of this committee to support an increased appropriation for this

fund, to at least $1 million for fiscal year 1999. This additional investment will make a significant and measurable difference for these imperiled species.

THE BEAR PROTECTION ACT

World Wildlife Fund greatly appreciates the interest of Senator McConnell and the other cosponsors of S. 263, the Bear Protection Act, in improving the conservation status of the world's eight bear species. We would like to offer the following information and recommendations with the aim of ensuring that any legislation passed by Congress effectively contributes to global bear conservation.

There is little question that most populations of the world's eight bear species have experienced significant declines during this century, particularly in parts of Europe and Asia. Habitat loss has been the major reason for this decline, although overhunting has also been a factor in some cases, especially in Asia. In recent years, the commercial trade of bear body parts, particularly gall bladders, for use in traditional Asian medicines has been implicated as the driving force behind the illegal hunting of some bear populations. Although substantive evidence linking widespread poaching to such trade is scant, analyses by the U.S. Fish and Wildlife Service, TRAFFIC, and other organizations have documented the existence of illicit commercial markets and smuggling rings for bear body parts. While the scope and impact of this trade on bear populations is not known, recent analyses suggest that the consumer market for wild bear body parts may have declined in recent years. However, the relatively high value of wild bear parts, particularly viscera, on the international market warrants that continued action be taken to minimize the threat or potential threat of illegal trade.

Fortunately, bear populations in North America, particularly those of the American black bear, remain among the healthiest in the world. In spite of occasional documented reports of illegal trade in black bear body parts associated with the traditional Asian medicine trade, State wildlife management authorities indicate black bear populations are generally stable or increasing throughout the country, in some cases dramatically. With the exception of the Louisiana and possibly Florida subspecies, the American black bear is not considered threatened or endangered. Further, there is no indication that these populations have been negatively impacted by poaching for commercial trade. While populations of the grizzly bear and polar bear receive Federal protection because of their more precarious status, there is very little evidence of trade in their body parts for Asian medicinal markets and a link between illegal hunting and commercial medicinal trade.

Although specific information on the scope and impact of trade is lacking, the biannual Conference of the Parties to CITES in June 1997 recognized the potential threat of illicit trade in bear parts and adopted a resolution, cosponsored by the United States, urging the 143 CITES member nations to strengthen their enforcement of bear trade controls, eliminate illegal markets for bear products, engage all stakeholders to help reduce illegal trade, and otherwise improve the implementation of CITES bear trade controls. CITES stopped short of advocating a complete ban on the trade of parts from Appendix II-listed bears, but singled out the Asian bear species—most of which are listed on Appendix I—as in particular need of conservation action and funding.

The American black bear is listed on Appendix II of CITES due to similarity of appearance to other listed bear species, and conservation and management of the black bear remains largely in the hands of the States and Canadian provinces. Most States already prohibit the commercial trade in bear parts, but seven (Idaho, Maine, New Hampshire, New York, Vermont, West Virginia, and Wyoming) apparently still allow commercial trade of products from bears taken within their borders. Several other States do not explicitly prohibit the commercial trade in parts from bears taken within the borders of other jurisdictions. Although there is concern that inconsistent State laws may facilitate illegal trade and laundering of bear parts, there is little evidence to indicate that this is a major or widespread problem.

Given the above information, WWF urges the committee to consider the following recommendations in its deliberations over the proposed Bear Protection Act:

Findings. The proposed legislation does not reflect the most up-to-date information on the conservation and legal status of the world's eight bear species, current knowledge of the illegal bear trade, and recent actions undertaken by CITES to address the problem. We recommend that such information be referenced in the Findings section of the bill and be elaborated fully in the legislative report.

Review of the Illegal Bear Trade in the United States. Most information on the illegal trade of bear parts in the United States is based on anecdotal information and there is a clear need to better define the issue. To do this effectively, we believe it is necessary to undertake a broad review of the trade, to accurately assess prob-

lem areas so that enforcement resources can be appropriately applied. We recommend that the proposed Bear Protection Act direct the Department of the Interior to conduct, in cooperation with State fish and wildlife agencies, an assessment of the illegal trade in bear viscera in the United States and its impact on wild bear populations in North America and elsewhere, and examine the links of such activities to the Asian medicinal trade. Such data are essential to responsible trade control and enforcement. The legislation also should authorize the funding needed to undertake such an assessment.

Prohibitions. While we recognize that the Federal Government has an appropriate role to play in controlling the import and export of wildlife products, particularly for CITES or federally listed species, we question the need at this point for broad prohibitions on interstate trade and commercialization of bear products, pending the outcome of a review as outlined above. As noted previously, most States with bear populations have already enacted legislation to control bear trade. We urge Congress to consider providing the Interior Department with the authority to impose broader trade restrictions, but only if further analysis indicates that such action is warranted. A similar approach is embodied in the African Elephant Conservation Act, and was effectively employed by the United States to address the illegal ivory trade in the late 1980's.

Funding for Enforcement. Strengthened enforcement is essential to achieving the long-term aims of the proposed Bear Protection Act, yet the draft legislation does not authorize any funding to ensure that new trade control measures can be adequately implemented. Without additional funding, this legislation will provide little new protection for the world's bears. Should the Bear Protection Act go forward, we urge that moneys for such activities be authorized as a matter of priority.

Funding for Conservation of Endangered Bear Species. The aim of the Bear Protection Act is to ensure the long-term viability of the world's eight bear species and to perpetuate healthy populations of American bears. Yet the proposed legislation does nothing to directly aid conservation of the world's most endangered bear species. We strongly urge the Bear Protection Act to include a provision authorizing specific funding to support priority conservation activities for endangered bears. Such action has been recommended by CITES, and is essential to achieving long-term viability of bear populations globally. In moving to enact stricter trade measures, we believe that the United States also has a responsibility to directly assist other countries in the conservation of the most endangered bear species.

THE FISH AND WILDLIFE REVENUE ENHANCEMENT ACT OF 1998

World Wildlife Fund is well aware that the U.S. Fish and Wildlife Service has accumulated an enormous volume of forfeited and abandoned wildlife products, despite measures to use and distribute such products in educational and scientific programs. We appreciate that the costs of shipping, storing and distributing these products can be substantial, and that the funding required for such activities can compete with funding needed for higher priority activities such as wildlife enforcement and education.

WWF strongly supports and encourages the Service to continue, and where possible expand, educational initiatives that utilize forfeited and abandoned wildlife products, such as the *Suitcase for Survival* and *Cargo for Conservation* programs, with which WWF and the American Zoo and Aquarium Association have collaborated. WWF sees such educational efforts as the best and most appropriate means to dispose of forfeited and abandoned wildlife goods. It is critically important to educate present and future wildlife consumers about the detrimental effects of illegal wildlife trade on endangered and threatened species, and using forfeited wildlife products to deliver this message can be a powerful tool.

Two points remain clear, however. First, these important programs operate successfully only at a substantial cost to the Service, and second, even with such programs, a large surplus of forfeited and abandoned wildlife goods will, unfortunately, likely remain.

WWF sees the potential benefits to the Fish and Wildlife Service of selling certain forfeited and abandoned wildlife products made from non-endangered species, if the proceeds of such sale can be directed back into educational, scientific, and other conservation-related activities. At the same time, we recognize that selling certain forfeited and abandoned wildlife could potentially stimulate a market for such wildlife, which is not in the interest of the Service nor the species concerned. We therefore recommend that Congress direct the Service to use caution and prudence when proceeding with such sales, including evaluating affected species listed under Appendix II of CITES and species which may be legally protected in countries which are part of the natural range.

I want to emphasize, Mr. Chairman, that WWF strongly opposes the sale under any circumstances of any wildlife or wildlife products made from species listed under the Endangered Species Act, the Marine Mammal Protection Act, the Migratory Bird Treaty Act, or Appendix I of the CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). If such sale is not in violation of the strict letter of these laws and agreements, it would clearly undermine their intent, and potentially threaten the survival of the affected species.

Finally, Mr. Chairman, WWF is concerned that, in its current form, the Fish and Wildlife Revenue Enhancement Act of 1998 allows the use of revenue to pay only for conducting wildlife sales and the costs associated with the storage and shipment of forfeited and abandoned wildlife. While we appreciate that this is the main intent of the legislation, we suggest that a provision be made for using any excess revenues above and beyond the costs of sale, storage, and shipping for other related conservation and educational activities.

WWF therefore recommends that the committee consider the following in its deliberations over the proposed legislation:

• We recommend that the Fish and Wildlife Service develop a formal system of evaluating options and setting priorities for disposal of forfeited and abandoned wildlife that takes into account possible uses for educational, scientific, and Native American religious purposes, and encourages such uses as the preferred means of disposal; and which also evaluates on a tax-specific basis the conservation and legal status of affected species in their country of origin. We believe that special scrutiny should be used for species that would generally be allowed legally into U.S. commerce, but which might be subject to certain protections or conservation measures in parts of their range.

• We suggest that language be added that clearly specifies that the sale of species listed on CITES Appendix I, the Endangered Species Act, the Marine Mammal Protection Act or Migratory Bird Treaty Act will not be allowed.

• We recommend that language be added that would allow for the use of any excess revenues generated by an auction for related conservation or educational purposes, perhaps through the creation of a special fund.

THE NEOTROPICAL MIGRATORY BIRD CONSERVATION ACT OF 1998

Populations of neotropical songbirds such as wood warblers, vireos, and orioles continue to decline across North America. Some 90 species are listed endangered or threatened in the United States, while another 124 species are considered to be of high conservation concern. The primary reasons for these declines are habitat loss and degradation. Since neotropical migrants range across numerous international borders, successful conservation depends on protecting them at both ends of the migratory routes—in their wintering grounds in the tropics and subtropics and in their northern breeding habitat areas—as well as at critical stopover sites along the way.

The proposed Neotropical Migratory Bird Conservation Act would provide much-needed support for projects aimed at protecting critical habitat for declining migratory bird species, in an innovative way that promotes conservation partnerships and cost-sharing through joint Federal and non-Federal support mechanisms. Projects funded under the new law would be aimed at enhancing the conservation of migratory bird species in Latin America and the Caribbean, with a special emphasis on reversing habitat loss and degradation. Projects also would include mechanisms to ensure adequate local public participation and consultation with appropriate local government officials and entities. World Wildlife Fund believes these approaches are essential for effective conservation of threatened migratory bird species in both the southern and northern hemispheres.

World Wildlife Fund supports passage of the Neotropical Migratory Bird Conservation Act as an important new tool for establishing protection regimes for crucial habitat areas for migratory bird species in Latin America and the Caribbean. At the same time, we would note that, while loss of wintering habitat in tropical wintering grounds and destruction of feeding and resting sites along migration routes are contributing significantly to the decline of many species, recent studies suggest that a major contributor to the decline of neotropical migrants is the scarcity of habitat where bird populations can breed in sufficient numbers to maintain populations. Over the vast landscapes of eastern North America, for example, only a few sites are large enough to allow bird populations to maintain positive rates of reproduction. The vast majority of land in the region consists of forest blocks that are so small, fragmented, or isolated that most bird nests suffer very high egg and nestling mortality from small predators, or from intensive parasitism by cowbirds. The highest mortality rates are associated with forest edges; only in larger forest blocks is there sufficient core habitat buffered from high predation and parasitism.

Maintaining larger blocks of intact forest as "source pools" for migratory species thus increasingly appears to be an important strategy for conserving migratory songbirds across North America. Key forest blocks acting as significant breeding areas for migratory songbirds need to be identified, the threats to them analyzed, and areas with the potential for habitat restoration and regeneration defined. World Wildlife Fund urges the committee to consider this in deliberations over the Neotropical Migratory Bird Conservation Act, and to allow for habitat protection and research efforts in North America to be supported as part of any new legislative initiative.

Thank you for the opportunity to appear before the committee today. Mr. Chairman, I will be happy to answer any questions.

WHILE SUPPLIES LAST

THE SALE OF TIGER AND OTHER ENDANGERED SPECIES MEDICINES IN NORTH AMERICA 1996–1997

EDITED BY ANDREA L. GASKI

Executive Summary

Rhinos and tigers are among the most critically endangered large mammals in the world and are the focus of extensive global conservation efforts aimed at halting their decline. Consumer demand for and trade in the parts and derivatives of these species supply luxury markets as well as markets for cultural and medicinal needs. One of the most complex and far-reaching of these demands is for use in traditional medicines. Traditional Chinese medicine (TCM) uses these animal derivatives to prepare medications in two forms—as individually prepared prescriptions and as over-the-counter packaged medicines. Most of the latter medicines are manufactured in China and are sold in markets worldwide.

While the illegal trade in raw products of endangered species is an undisputed problem, conservationists have long debated the degree of threat posed by the trade in prepared medicines containing or claiming to contain protected and regulated species. But most conservationists believe that whether or not the medicines always contain these species, the advertising and promotion of such ingredients sustains consumer demand for them and perpetuates the conservation problem. As such, these products should be treated as if they contain these derivatives and their trade should be prohibited or regulated as dictated by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Commercial trade of raw rhino horn and tiger or leopard bone and their derivative products is prohibited by CITES (all species are listed in Appendix I of the Convention), as well as by domestic legislation in several countries, including Canada, the United States, and China. In Canada and the United States, the burden of proving that those products actually contain the species listed rests with the government. Unfortunately, although seizures occur at the port of entry when products are occasionally intercepted, few, if any, prosecutions of those dealing in these medicines have taken place because current forensic techniques are as yet unable to detect many of the derivatives in these products. The offer for sale of these otherwise illegally imported medicines continues because of lack of a strong law enforcement deterrent and, presumably, lack of consumer awareness about the problem. Conservationists believe that the ongoing availability of these products in North America constitutes a violation of CITES and of domestic legislation, is a threat to the species concerned, and should be stopped by wildlife law enforcement agencies.

TRAFFIC North America investigated the display and sale of endangered species products in two Canadian and five U.S. cities beginning in late 1996 through fall of 1997. TRAFFIC focused on North American Chinatowns because of the concentration of shops that presumably sell those products and because these neighborhoods are visited by Chinese and non-Chinese alike. The TRAFFIC investigator posed as a customer but did not make any attempt to deceive any shop owner into offering to sell a product that might not normally have been readily available in the shop.

TRAFFIC gathered information on offers to sell medicines that contained or claimed to contain legally protected species—rhino (Rhinocerotidae spp.), tiger (Panthera tigris) and leopard (P. pardus). TRAFFIC also collected information on medicines that contained or claimed to contain legally regulated species—musk deer (Moschus spp.) and bear (Ursidae spp.). Legally protected species are those that cannot be commercially imported into Canada and the United States for commercial purposes under CITES provisions. Legally regulated species are those that are gov-

erned by CITES and that generally may be imported with a permit from the country of origin or reexport.

Of the 110 shops surveyed, 50 percent offered for sale one or more protected species medicines or medicines or products that contained or claimed to contain the target protected species—tiger, rhinos, and leopard. The medicines most commonly found offered for sale were those that contained or claimed to contain tiger parts and products, although musk deer products were almost as common. The least commonly found medicines were those containing or claiming to contain bear parts and products. At least 31 different types of rhino-or tiger-containing medicines, produced by between 29 and 34 different manufacturers, were found offered for sale during the survey. The cities with the greatest proportion of shops that offered for sale medicines containing protected species which were presumably illegally imported are, in descending order: New York, Vancouver, Seattle, Toronto, Atlanta, San Francisco, and Los Angeles.

TRAFFIC concludes that:

- Protected species medicines are readily available in North America
- Protected species medicines are available because of legal inadequacies
- North America appears to be significant market for these medicines
- Illegal stockpiles of these medicines may exist
- Public outreach must be initiated to eliminate these markets

TRAFFIC recommends that:

- Regional law enforcement must be increased
- Legislation to control internal trade needs to be strengthened
- Stockpiles and manufacturers should be identified and inventoried
- Collaborative North American public outreach efforts are required
- U.S. governmental funding for tiger and rhino conservation and trade control efforts should be increased

In the 12-year Chinese calendar, 1998 is the Year of the Tiger. It is also the 25th anniversary of CITES—the Convention on International Trade in Endangered Species of Wild Fauna and Flora. The coincidence of these two auspicious events, one in Chinese culture and one in wildlife conservation, provides an appropriate backdrop to the release of this report, which is part of a two-part research project on the market for and use of rhinoceros and tiger products in North America. The project was designed to assist the CITES parties, North American governments, and other interested organizations and agencies in reducing and eventually eliminating the demand for wild tiger and rhino parts in North America.

Rhinos and tigers are among the most critically endangered large mammals in the world and are the focus of extensive global conservation efforts to halt their decline. Although habitat loss was and is the primary cause of the decline of these animals, international illegal trade of their parts and derivatives is also of intense concern.Consumer demand for and trade in these parts and derivatives supply luxury markets as well as markets for cultural and medicinal needs. One of the most complex and far-reaching of these demands is for use in traditional medicines. Hundreds of millions of people throughout the world depend on traditional medicine systems that, in turn, depend on wild animal and plant derivatives as ingredients of medicines and tonics. Conservationists believe that uncontrolled demand—particularly of endangered species, such as tigers and rhinos—is a threat to those species' survival. Examples of the species used in traditional medicine along with the disorders and illnesses they are intended to treat appear in Table 1.

Spearheading the international initiative to halt the trade of tiger and rhinoceros parts, the parties to CITES passed two resolutions in 1994 (see appendices 1 and 2) that highlighted ongoing problems with illegal trade of these species. The resolutions requested that the CITES parties and other relevant organizations escalate their law enforcement efforts to halt persistent poaching and illegal trade to eliminate demand for rhino and tiger products, and to consolidate stockpiles of tiger parts and derivatives. In 1997, the CITES parties strengthened the tiger resolution, asking the CITES Standing Committee to periodically provide annual updates on country-by-country progress in law enforcement efforts and legislative amendments to stop the illegal trade. During discussions before the passage of this amended resolution in 1997, many parties affected by the export ban strongly expressed their concern that some countries, particularly developed countries, were not making a sufficient effort to eliminate the trade in products labeled as containing tiger parts or derivatives.

At the same time, CITES parties passed another resolution (see appendix 3) recommending that parties increase collaborative public awareness efforts within the traditional medicine industry and medical systems. The parties determined that these efforts needed to focus on conservation of over exploited wild species, such as

rhinos and tigers. The resolution also recommended that law enforcement be increased, forensics analyses be developed or improved, substitutes or alternatives be sought, and captive-bred or artificially propagated sources of wild specimens be developed. A number of nongovernmental organizations responded to the CITES requests that countries develop public outreach projects and materials and provide technical support. The international TRAFFIC Network, which now consists of 20 offices worldwide, provides governments with up-to-date information on these exploited species to help develop a profile of the trade and to identify those dealing in and consuming the products (Callister and Bythewood 1995; Leader-Williams 1992; Mills 1997; Mills and Jackson 1994; Mulliken and Haywood 1994; Howell et al. 1992; Gaski and Johnson 1994, and others).

Table 1. Traditional Chinese Medicinal Use of Select Wild Animal Parts

Part Used	Indication Treated*
Bear Gall	high fever and convulsions; spasms; hot skin lesions; red, painful, swollen eyes; trauma; sprains; swelling and pain; hemorrhoids
Musk Grains	convulsions; delirium; stupor and fainting; closed disorders; tetanic collapse; phlegm collapse; seizures; swelling and pain; toxic sores; carbuncles; coronary artery disease
Rhino Horn	extreme heat or heat signs; high fever; erythemia; purpura; nosebleed; vomiting of blood; convulsions; delirium; manic behavior
Tiger Bone	migratory joint pain and stiffness; paralysis; weak knees and legs; spasms; stiffness and pain the lower back; pain in bones

Source: Bensky & Gamble, 199,
* TCM evaluates disorders or imbalances in the whole body or system rather than focusing solely on symptoms or indications.

The North American Market for Endangered Species

Long before CITES passed the 1994 and 1997 rhino and tiger resolutions, it was presumed that the demand for rhino and tiger parts and products had been reduced or almost eliminated in the United States. In 1973, when the U.S. Endangered Species Act (ESA) came into effect, the commercial trade of many ESA-designated species, including the tiger and all endangered rhino populations, was prohibited. The ban restricted supplies for the consumer's luxury demand to buy tiger skins for decoration and adornment, and tiger and rhino sport-hunting trophies, but the some demand for tiger and rhino parts and products—as used in traditional East Asian medicine—persists in North America and has yet to be addressed regionally or nationally.

Traditional Chinese medicine (TCM) uses animal and plant derivatives to prepare medications in two forms—as individually prepared prescriptions and as over-the-counter medicines. Unprocessed or partially processed animal and plant parts—"materia medica"—are mixed according to ancient formulas, usually by a traditional practitioner. Just as in so-called modern Western medicine, prescriptions are dispensed after a practitioner has diagnosed the disorder or illness of the patient. The medicines are usually mixed in traditional medicine shops or clinics but may be prepared and consumed at home. These same animal parts may also be mixed according to such formulas but then processed into pills, tablets, or tonics. These medicines are produced in mass quantities and packaged in a factory. The consumer purchases these products the same way as Western over-the-counter medicines, often selecting the medication upon the recommendation of a sales clerk or family member, or using their own judgment. Most of these medicines are manufactured in China and are sold in markets worldwide.

Conservationists have long debated the threat posed by the trade in medicines containing or claiming to contain protected and regulated species. To date, wildlife forensics analyses of these medicines indicate that many do not actually contain the parts or derivatives of the animals identified on the medicines' lists of ingredients. These same tests, however, often cannot detect very low levels of animal parts in medicines nor identify parts or derivatives that have been changed by high temperatures or other processing. Also, some of the tests used are not very specific. For example, the test to verify the presence of tiger bone can determine the presence of bone but cannot identify the species or even recognize the source as cat. Conservationists believe, for the most part, that whether or not the medicines contain these species, the advertising and promoting of these products as containing animal parts sustains consumer demand and perpetuates the conservation problem. Recognizing this and the still growing science of wildlife forensics, the parties to CITES decided (Resolution Conf. 9.6) that these medicines should be treated as if they contain these derivatives or as "readily recognizable" parts and derivatives in CITES lingo.

As such, trade in these medicines should be prohibited or regulated, depending on the species. In the 1994 resolutions on tiger and rhino trade, CITES parties also recommended that all parties eliminate the demand for tiger and rhino products.

Eliminating the demand for a product—especially one that has humanitarian and cultural roots—is a difficult task and one that requires a multidisciplinary approach. Traditional tools, such as better implementation of CITES or increased efforts toward cooperative law enforcement, will not fully stop the illegal trade. Because most of the international trade of tiger parts used in traditional medicine is illegal in countries under CITES and the ESA—as well as in China, where the manufactured medicines are produced—TRAFFIC recognized that before efforts could be undertaken to eliminate the trade (as requested by the resolutions), the market would have to be more defined and consumers identified. By its very nature, the illegality of the market precludes precisely documenting the exact numbers of consumers and products used. By using standard surveying techniques and sociological research, TRAFFIC planned, instead, to identify and assess the behavior of the persons demanding the products, as well as the nature of the demand itself.

To understand the behavior of the person demanding these products, in July 1997, TRAFFIC North America hired a professional market research film. Using East Asian researchers and the appropriate languages, the firm surveyed ethnic Chinese-Americans on their use and knowledge of endangered species derivatives for medicines. Traditional East Asian medicine has used the parts and products of rhinos, tigers, and other animals for centuries. A recent TRAFFIC report highlights the persistent trade in these products among some consumers in spite of legal prohibitions (Mills 1997). Because East Asian traditional medicine has its roots in the more ancient traditional Chinese medicine, TRAFFIC decided to focus on TOM rather than the larger and more broadly defined East Asian medicine market and its demand. Focusing on the roots of the tradition should make the results more applicable. The results of that survey will be released in the near future.

To clearly understand the nature of the demand, TRAFFIC North America investigated the display and sale of endangered species products in Canada and the United States. Initiated in late 1996 and completed in the fall of 1997, the investigation documented the variety and availability of manufactured traditional medicines that contained or claimed to contain parts and products from endangered and regulated wildlife throughout the region. The investigator used for comparison a 1995 TRAFFIC report that documented the types of products containing protected and regulated species sold in the United States (Gaski and Johnson 1994). The 1996–97 survey results also were compared with a similar survey (Mills 1996) that was conducted over a three-year period in mainland China, where most tiger and rhino products are manufactured and may still be, despite a manufacturing and export ban imposed in the mid-199Os. These comparisons helped to gauge the importance and, therefore, the significance of North American markets for these products. This report chronicles the results of that survey.

The Legality of the North American Market

Commercial trade of raw rhino horn and of tiger or leopard bone and their derivative products is prohibited by international treaty (all are listed in Appendix I of CITES) as well as by domestic legislation in several countries, including China (Notice Promulgated by the State Council on the Prohibition of Trade in Rhinoceros Horn and Tiger Bone), the United States (Endangered Species Act [ESA] and the Lacey Act), and Canada (The Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act [WAPPRIITA]).

The ESA prohibits the import of, export of, and interstate commerce in live animals, raw parts, or products of taxa listed as threatened or endangered, including rhinos (except Southern white rhinos) and tigers. Thus, the import and interstate commerce of medicines containing rhino horn and/or tiger bone is a violation of the ESA. The Lacey Act prohibits the import, export, transport, sale, or purchase of fish and wildlife taken or possessed in violation of state, federal, Indian tribal, or foreign laws. Thus, tiger bone or rhino horn medicines possessed in violation of foreign law and subsequently imported to the United States would violate the Lacey Act.

There are, however, two important drawbacks to the current legal situation in the United States. First, although a product may be labeled as containing rhino horn or tiger bone, under the ESA and the Lacey Act, the burden of proving that those products actually contain the species listed rests with the government. As a result, few, if any, prosecutions have occurred involving the illegal importation of manufactured tiger bone and rhino horn medicines because current forensic techniques are as yet unable to identify tiger bone or rhino horn in medicinal products. Second, both the ESA and Lacey Act address the issue of import of, export of, and interstate commerce in rhino and tiger products, but they largely fail to address the sale of

those products within a state. This enforcement area is currently left to state law, though few states have passed legislation to address the sale of foreign endangered species.

In 1993, China issued the Notice Promulgated by the State Council on the Prohibition of Trade in Rhinoceros Horn and Tiger Bone, which prohibited all use of derivatives of rhino horn and tiger bone, including the manufacture and export of commercial products (all production was banned after 29 May 1993 and export after 30 November 1993).

In Canada, WAPPRIITA prohibits commercial import, export, or possession for commercial sale of any part of or product derived from a listed endangered species under WAPPRIITA, which includes all CITES Appendix I species (Anon. 1997). It is also illegal to import any wildlife part or derivative that was obtained or exported in violation of the law of another country. Thus, the import and the interprovincial or interterritorial commerce of medicines containing rhinoceros horn or tiger bone would be a violation of WAPPRIITA. However, Canada has the same problem with enforcement as does the United States because the burden of proof lies with the government and it generally cannot be proven that these medicines contain tiger or other endangered species. As a result, no prosecutions have ever been successful. And while possession for the purpose of sale is federally prohibited, it is generally difficult, if not impossible, to trace the origin of medicines in shops back to their import into Canada.

Despite these legal prohibitions and the efforts of wildlife enforcement agencies (Gaski and Johnson 1994, Chalifour 1996), products containing or claiming to contain rhinoceros horn and tiger bone continue to be available in North America, particularly within Asian communities in large cities such as New York, San Francisco, Toronto, and Vancouver, where these items are used in TCM. Conservationists believe that this ongoing availability constitutes a violation of CITES and of domestic legislation, is a threat to the species concerned, and should be stopped by wildlife law enforcement agencies.

Canadian Efforts to Eliminate the Illegal Market

In mid-1994, a joint investigation by the Royal Canadian Mounted Police and the Canadian Wildlife Service (CWS) uncovered more than 19,000 illegally imported packaged tiger medicines and more than 26,000 other illegally imported packaged wildlife medicines in a British Columbian warehouse (Chalifour 1996). This discovery prompted a crackdown on illegal medicinal wildlife trade in the Pacific and Yukon CWS region of Canada. As part of this crackdown the region has adopted a policy of 100 percent referral by customs officials to CWS for inspection of any shipment declared as containing East Asian medicines (Chalifour pers. comm. 1998). Careful inspection of these shipments by CWS follows. A similar referral system is in effect in the Ontario region of CWS, and other proactive or preventive efforts have also been undertaken in other regions as well. For example, many regional CWS offices work closely with importers of traditional East Asian medicine to ensure that importers are complying with the laws relating to medicines containing endangered species.

In 1996, a search warrant served by Revenue Canada Customs on another British Columbian company resulted in the seizure by CWS of 180 boxes of goods that contained illegally smuggled items such as raw tiger bone, bear gall bladders, and alligator parts (Chalifour 1996). Although there have been many seizures of tiger and rhino parts and products (including some raw parts) in Canada, there have been no successful prosecutions relating to the illegal trade in tiger or rhino parts or products.. Many CWS regions are also training customs agents to screen for and identify CITES goods coming into Canada.

Environment Canada has produced some materials to inform travelers and the traditional Asian medicine community about Canadian wildlife laws. For example, Environment Canada has published a multilingual brochure, poster, and video, "Endangered Species and the Traveler." (The brochure and video are available in English, French, Chinese, Vietnamese, Korean, and Japanese.) Environment Canada also teamed up with WWF-Canada and Karuna Community Services (a community Buddhist group in Toronto) in 1997 to produce a brochure on how WAPPRIITA legislation applies' to medicines that claim to contain wildlife and other ingredients derived from tigers or rhinos. Some CWS regions display CITES exhibits at international airports within their jurisdiction. The Pacific and Yukon CWS region, for instance, has an interactive, multilingual exhibit at the Vancouver airport. In partnership with WWF-Canada, the Ontario CWS office is hoping to place a similar exhibit in the Toronto airport.

Regulating trade in CITES products falls under federal jurisdiction. WAPPRIITA also makes it an offense to transport any wild animal or plant part from one prov-

ince or territory to another if it was taken, possessed, distributed, or transported in violation of a provincial or territorial law, or transported without provincial or territorial permits.

U.S. Efforts to Eliminate the Illegal Market

U.S. efforts to stop illegal trade are comparable to those in Canada, where most law enforcement efforts focus first on regional problems and then become even more focused on problems around urban ports. There does not seem to be a concerted national or even regional effort to address the illegal trade associated with traditional East Asian medicines. However, two interagency task forces, one in Los Angeles and a more recent one in San Francisco, arose from the preliminary law enforcement efforts that required the cooperation, expertise, and authority of a number of federal, state, and city wildlife, judicial, and health agencies. A more comprehensive discussion of these task forces can be found in the Los Angeles and San Francisco sections of this report. The efforts of these two task forces need to be emulated in other urban areas of the United States, particularly in New York City.

The CITES Management Authority of the United States and the U.S. Fish and Wildlife Service (USFWS) Office of Management Authority launched a pilot public outreach project in Los Angeles in 1995. The project is reviewed in the Los Angeles section of this report. While the USFWS has not been able to maintain the intensity of its efforts because of financial limitations, it has maintained contact with the traditional medicine community in Los Angeles and has continued to provide information through its Web site, factsheets and other materials, plus occasional presentations at symposia and traditional medicines meetings, when invited. In addition, the USFWS used materials developed by World Wildlife Fund to collaborate on a project with WWF and the American Zoo and Aquarium Association (AZA) to initiate a public outreach program in the traditional medicine community in Los Angeles. TRAFFIC North America and the World Wildlife Fund undertook this sociological survey of Chinese Americans to identify the demand for and use of medicinal products that use parts of endangered species, the attitudes of Chinese Americans toward the use of such medicines, and the conservation of endangered species. The report of that work is described in the introduction of this publication and will form the basis of an informative education outreach project in Los Angeles. In 1996, a small group of interested teachers attended a training session, and the USFWS provided substitute teachers to take their classes during that period (Anonymous 1997).

This U.S. outreach effort will involve the traditional medicine community in ongoing efforts to eliminate the trade and use of medicines made from illegally imported protected species. As a prelude to that effort, WWF will launch a plan for its "Year for the Tiger" during the Chinese lunar new year that is the "Year of the Tiger." Elements of that plan are to eliminate the trade of tiger products, establish tiger conservation trust funds for habitat protection, increase resources for tiger antipoaching efforts, and help to build public awareness of tiger endangerment around the world.

Other nongovernmental organizations in the United States, such as the Wildlife Conservation Society in New York, will be launching similar initiatives in 1998 for the Year of the Tiger.

HOW DID WE FIND OUT?

TRAFFIC gathered information on offers to sell medicines that contain or claim to contain legally protected species—rhino (Rhinocerotidae spp.) and tiger (Panthera tigris). TRAFFIC also collected information on medicines that contain or claim to contain legally regulated species—musk deer (Moschus spp.) and bear (Ursidae spp.). This compilation was to differentiate between medicines that could never have been legally imported into North America and those that may have been legally imported if certain requirements had been met under Canadian or U.S. law or under CITES provisions. Another legally protected species—leopard (Pantera pardus)—was added as the survey began in response to increasing evidence that leopard is being used in place of tiger in many traditional medicines (Mills 1997; Gaski and Johnson 1995). Table I lists the medicinal uses of the parts and derivatives of those species. For this report, such medicines will be called protected species medicines or regulated species medicines.

Legally protected species are those that cannot be imported into the United States or Canada for commercial purposes under CITES provisions. The parts of all of those animals are prohibited from commercial trade by CITES Appendix I. In addition, the tiger, leopard, and all but one rhino population (the southern white rhino subspecies) are also listed in the United States as endangered under the ESA and cannot be traded commercially. The offer to sell medicines containing or claiming

to contain those species in North America suggests that they were illegally imported.

Legally regulated species are those that are governed by CITES and that generally may be imported with a permit from the country of origin or of reexport. Two taxa in this investigation—musk deer and bears—are identified as regulated, although some populations or species within these taxa are listed in CITES Appendix I or II. Therefore, medicines that contain these taxa may or may not have been legally imported, depending on the species or population used. Six national populations of musk deer are listed in CITES Appendix I, and a few—notably the Chinese population—are listed in Appendix II. The former may not be imported for commercial purposes but the latter may be imported with permits. Most populations or species of bears also are listed in Appendix I, but a few—such as the North American black bear—are listed in Appendix II. Again, the former my not be imported for commercial purposes, and the latter my be imported with permits. So the offer to sell medicines containing or claiming to contain the words "musk" or "bear" does not necessarily suggest that they were illegally imported.

The United States is home to a small population of ethnic-Chinese, some of whom have lived here for many generations and some of whom have recently arrived from mainland China and other countries. The 1990 population of Chinese in the United States was 1.7 million, or about 0.7 percent of the U.S. population. The ethnic-Chinese population of Canada is about a third of the population of the United States, but it represents a larger percentage of the total population of Canada. The 1991 population of ethnic-Chinese in Canada was 587,000, or about 2 percent of Canada's population.

Because tradition and culture are such an intrinsic part of the lives of Chinese people, physical manifestations are evident wherever they live, particularly where they establish and maintain uniquely Chinese neighborhoods, known as Chinatowns in North America. TRAFFIC decided to focus on documenting the availability of tiger and rhino medicines in North American Chinatowns because of the concentration of shops that presumably sell those products. TRAFFIC recognized that Chinatowns were visited by Chinese and non-Chinese alike and that the results of the survey would represent the market throughout North America.

Although the final study covered seven cities, TRAFFIC initially identified two U.S. cities with the largest Chinese populations—New York City and San Francisco—and two cities in Canada—Vancouver and Toronto. TRAFFIC thought Toronto would provide a central regional perspective. TRAFFIC added Atlanta to provide a southern U.S. perspective, plus two U.S. cities on the West Coast—Seattle and Los Angeles—because demographic information suggests that most of the Chinese-North American population lives on the West Coast.

TRAFFIC engaged the services of an independent researcher of Chinese descent (hereinafter referred to as the investigator, who is an expert in conducting such surveys. The investigator spoke fluent Mandarin Chinese. He was chosen for his expertise in traditional Chinese medicine in general and for his knowledge of manufactured TCM products specifically. Although the investigator posed as a customer and did not introduce himself as an investigator for TRAFFIC, there were no attempts to trick any shop owner into offering to sell a product that might not normally have been readily available in the shop. TRAFFIC wished to document products that would be readily available to any customer. However, if information on products not displayed was provided by the shop owner or sales clerk during conversations with the investigator, that information was noted.

TRAFFIC sent the investigator to the Chinatown section of each city to locate East Asian pharmacies and markets (hereinafter referred to as "shops") to be surveyed. The investigator surveyed every shop he encountered for the display of or offer to sell the target medicines. No effort was made to randomize the sample; however, this potential limitation in sampling design was likely offset by the high percentage of shops that were surveyed in each city. In other words, the investigator surveyed most shops in the Chinatowns of each city. TRAFFIC believes that this method strongly suggests that the samples were representative of each city and, therefore, comparable.

The investigator surveyed all open display areas for raw parts of rhino and tiger, as well as for manufactured medicines containing rhino horn and/or tiger bone. Whenever possible, the investigator reviewed the ingredients lists of manufactured medicines in both Chinese and English to see if rhino horn and/or tiger bone were listed. After exiting the shop, all displayed medicines listing rhino hoary, tiger bone, leopard bone, musk, or bear bile were recorded along with the prices and dates of manufacture, if listed (normally, the medicines had no dates). During the course of a conversation, the investigator sometimes asked about the availability of raw rhino horn, tiger-bone wine, or tiger-bone plaster in a number of other shops. No assump-

tions were made regarding the actual ingredients of any commercial-medicine, and only those medicines that listed the ingredients on or within the packaging were listed as protected species or regulated species medicines.

TRAFFIC used the same sampling methodology as that used in a survey conducted over a three year period, from 1993 through 1995 by TRAFFIC East Asia in China (Mills 1997) so that the results could be compared. Overall, TRAFFIC wanted to derive an accurate count of (1) the number of shops offering for sale one or more medicines listing tiger, rhino, leopard, bear, or musk deer as ingredients; (2) the average number of medicines of protected or regulated taxa offered for sale per shop; and (3) the number of different brands or types of medicines offered for sale.

WHAT IS AVAILABLE?

The seven cities selected as targets for the market survey represent a significant percentage of Chinese-North American populations. The five U.S. cities—Atlanta, Los Angeles, New York, San Francisco, and Seattle—included 61 percent of all Chinese-Americans living in the United States (according to the U.S. Bureau of the Census for 1990). The two Canadian cities—Toronto and Vancouver—had 69 percent of the total Chinese-Canadian population (according to Statistics Canada figures for 1991).

The survey results are summarized on a city-by-city basis in this section. Of the 110 shops surveyed, 50 percent (55 shops) offered for sale one or more protected species medicines, or medicines or products that contained or claimed to contain the target protected species—tiger, rhinos, and leopard. Forty-six percent (42 shops) offered for sale one or more regulated species

The cities with the greatest percentage of shops that offer for sale medicines containing protected species are in descending order: New York (83 percent, or 10 of 12 shops); Vancouver (63 percent, or 15 of 24 shops); Seattle (50 percent, or 6 of 12 shops); Toronto (50 percent, or 10 of 20 shops); Atlanta (50 percent, or 3 of 6 shops); San Francisco (42 percent, or 8 of 19 shops); and Los Angeles (18 percent, or 3 of 17 shops).

As shown in Figure 1, the medicines most commonly found offered for sale in North America were those that contained or claimed to contain tiger and musk parts and products. The least commonly found medicines were those containing or claiming to bear parts and products.

Of protected species medicines, raw parts or medicines listing rhinoceros horn or tiger bone as ingredients were found in 55 shops (50 percent).

Raw rhinoceros horn was found in only one shop (less than one percent) in Vancouver. All other items found for sale were manufactured medicines. Tiger-bone plaster was found in 14 shops (13 percent) in six cities. Tiger-bone wine was found in six shops (6 percent), five of which were in Vancouver. Medicines listing leopard bone as an ingredient were found in 18 shops (17 percent).

On a positive note, 40 shops (37 percent) surveyed did not offer to sell any protected or regulated species medicines. Of the total shops surveyed, 12 percent offered to sell regulated species medicines only—bear or musk deer—that may or may not have been legally imported.

At least 31 different types of rhino-or tiger-containing medicines, produced by between 29 and 34 different manufacturers, were found offered for sale during the survey. A precise count of manufacturers is not possible because the names of some manufacturers differed slightly on different labels and might actually represent the same company. For example, Guiyang Chinese Medicine Factory and Guiyang Chinese Medicine Pharmaceutical Factory may or may not be the same manufacturer.

Atlanta

The Chinese-American population in Atlanta, Georgia, was the smallest in all the cities surveyed. Approximately 11,000 Chinese-Americans live in Atlanta, representing about 0.6 percent of the U.S. Chinese-American population (according to the U.S. Bureau of the Census figures for 1990). The six shops surveyed in Atlanta's Chinatown were on New Peach Road and Buford Highway.

To TRAFFIC's knowledge, there have been no focused federal, state, or local law enforcement efforts to eliminate or even control the trade of protected species products in Atlanta. Also, there no outreach efforts appear to be in place to advise or educate Atlanta citizens about this problem.

What's For Sale? The results and percentages shown in Figure 2 (and the discussion that follows) are not cumulative. Most Atlanta shops sold more than one medicine, and some shops sold protected and regulated species medicines. This small

sample size limits the conclusions and comparisons that can be made regarding this city.

Because Atlanta's Chinatown is small, the investigator visited only six shops. As seen in Figure 2, musk was the most common species medicine found in those shops. Protected species medicines—containing or claiming to contain tiger, leopard, or rhino—were offered for sale in three shops (50 percent). One shop (17 percent) had tiger-bone plaster; none had raw rhino horn or tiger-bone wine. Three shops (50 percent) had other medicines that contained or claimed to contain rhino horn or tiger bone, with an average of one such item offered for sale per shop. One shop offered for sale five different types of medicines containing or claiming to contain tiger bone or rhino horn as ingredients. All of the shops sold at least one protected or regulated species medicine.

In two shops, the salespeople told the investigator that tiger bone had been banned a long time ago. A musk medicine was recommended as a substitute for a tiger-bone plaster in one shop

Only 3 of the 14 protected or regulated species medicines available for sale had the date of manufacture on the package—two were dated 1993 and the other 1991. In one shop, the salesperson said the medicine with tiger bone was shipped to the store within the past year. Two of the medicines offered for sale had crudely altered packaging. On one medicine, the tiger bone ingredient was listed but then crossed out with ink. On the other, a completely new list without tiger bone was glued over a list claiming the medicine contained tiger bone.

Los Angeles

The Chinese-American population in Los Angeles, California, is the third largest in all U.S. and North American cities surveyed. About 308,000 people, represent about 19 percent of the U.S. population of Chinese-American population (according to Bureau of the Census figures for 1990). The 17 shops surveyed in Los Angeles were on Broadway, North Spring, New High, and Hill streets.

Los Angeles is the site of major law enforcement and public outreach efforts, among them a law enforcement task force that focuses on traditional medicines. The recently-formed Wildlife Task Force is a multiagency initiative consisting of inspectors and agents from the U.S. Customs Service, U.S. Fish and Wildlife Service, Food and Drug Administration, and U.S. Department of Agriculture. The task force, developed by a team of U.S. Customs import specialists, seeks to address illegal wildlife trade in general and the illegal importation of traditional Chinese medicines specifically. The focus on TCM occurred largely because the rate of consumption of illegally imported endangered species in the Los Angeles area is one of the most significant in North America and there has been little success in combating the illegal trade into the city.

The task force meets regularly to discuss the successes and failures of past interdiction efforts and to make future plans to address the trade. The task force has conducted a number of concerted law enforcement efforts (called "blitzes") by thoroughly inspecting international cargo shipments, passenger flights from target countries, and packages from key countries at the international mail division.

One example of a successful blitz was an inspection of a China Eastern Airlines passenger flight. The agencies involved in the task force inspected the baggage of 223 passengers and found 45 violations, including 18 agriculture violations, 12 fish and wildlife violations, and 15 food and drug violations. Violations ranged from personal shipments of tiger bone plasters and musk deer medicines to a commercial shipment of herbal medicines.

On 28 January 1994, agents from the California Department of Fish and Game, U.S. Fish and Wildlife Service, U.S. Bureau of Alcohol, Tobacco and Firearms, and Los Angeles Police Department broke up a bear parts poaching and smuggling operation. William Jin Tack Lee, a Korean-American businessman, allegedly operated a hunting club that arranged illegal bear hunts for overseas clients. Capping the 1 8-month investigation was the arrest of Joseph Chang, who purchased thousands of dollars worth of bear gallbladders from undercover agents. Chang was allegedly involved in a bear parts trading operation that extended to four western states (Anon. 1994).

In September 1994, Chang Hao An was apprehended at Los Angeles International Airport as he attempted to import a complete Amur tiger (Panthera tigris altaica) skeleton, along with 200 vials of dried bear bile, two large bear gallbladders, and 60 boxes containing rhinoceros horn, saiga antelope, and musk deer pills. U.S. Customs discovered the items in Chang's baggage and detained him. Chang was arrested by U.S. Fish and Wildlife Service agents, prosecuted for smuggling, and sentenced to 21 months in prison (Anon. 1995).

On 6 September 1995, U.S. Customs and U.S. Fish and Wildlife Service officials seized more than five kilos of bear bile at Los Angeles International Airport. Agents also confiscated musk deer glands, rhinoceros horn pills, and tiger bone plasters from the clothes and baggage of four Chinese nationals. The subjects were charged with 10 counts of smuggling, unlawful importation of wildlife, and violations of the U.S. Endangered Species Act. All four defendants pled guilty to a misdemeanor, Two were released with time already served; the other two were sentenced to prison: one for one year and one for eight months (Anon. 1995a).

On 25 September 1995, U.S. Fish and Wildlife Service agents in Alaska seized 60 brown bear (Ursus arctos) gallbladders that were concealed in a shipment of two tons of Russian reindeer (Rangifer tarandus) velvet antler headed for Los Angeles (Anon. 1995b)

On 8 September 1995, U.S. Fish and Wildlife Service authorities at Los Angeles International Airport seized 45 brown bear gallbladders and 20 seal (Callorhinus ursinus) penises smuggled inside a commercial shipment of reindeer antlers from Russia (Anon. 1995c).

On 19 October 1995, the U.S. Fish and Wildlife Service launched a public education pilot program in Los Angeles to inform citizens that certain products for sale in Asian medicine shops may contain parts from endangered species, as well as toxins that may be potentially harmful to human health. The event was a joint effort among federal and state agencies and nongovernmental organizations to provide new information to consumers and to clarify U.S. law enforcement responsibilities for protecting endangered species.

The U.S. Fish and Wildlife Service worked closely with the Los Angeles Unified School District. the Los Angeles Zoo, TRAFFIC, and WWF to develop a TOM educational program that could be offered in middle schools, adult education programs, and workshops. Teachers received training enabling them to explain the health risks associated with the use of some packaged medicines, the laws protecting endangered species, and the reasons that possession and sale of products containing parts of endangered species may be illegal (Anon. 1995d).

The percentages in Figure 3 (and the discussion that follows) are not cumulative because some of the shops offered for sale more than one medicine and some offered for sale both protected and regulated species medicines.

Of the 17 shops in Los Angeles surveyed by the investigator, 13 (76 percent) did not offer for sale any protected or regulated species medicines. Leopard and musk were the most common species medicines offered for sale in the shops. Three shops (18 percent) offered for sale protected species medicines that contained or claimed to contain leopard or tiger, and one of those shops had two different brands. The average number of tiger and rhino items offered for sale per shop was insignificant, since only one shop offered to sell one rhino or tiger medicine. Three shops (18 percent) offered for sale protected species medicines and three offered for sale regulated species medicines.

Sales clerks in 12 of the 17 shops (71 percent) were aware of a ban on selling tiger bone. One clerk indicated that the sale of musk was also prohibited, and another indicated that the Food and Drug Administration prohibits the sale of any medicine containing tiger bone or musk. Another clerk said that tiger bone could not be imported or sold, and yet another said that it cannot be sold anywhere in the world because the tiger is a protected animal.

No medicines were seen with altered packaging and none had dates of manufacture. Coincidentally, Los Angeles was the last city surveyed, and the investigator concluded that Los Angeles was the "cleanest" city he had visited in North America.

New York City

The Chinese-American population in New York City was the second largest in all U.S. and North American cities surveyed. The approximate 321,000 people represent about 19 percent of the U.S. population of Chinese-Americans (according to U.S. Bureau of the Census figures for 1990). The 12 shops visited in New York City were on Canal, Lafayette, Mulberry, Elizabeth, Baxter, Bayard, and Mott streets.

To TRAFFIC's knowledge, there have been no focused federal, state, or local law enforcement efforts to eliminate or even control the trade of protected species products in New York City. However, the Wildlife Conservation Society in New York initiated a pilot strategy for public outreach that focuses on Chinese communities in the Flushing, Queens, and Manhattan Chinatowns, along with an education project that is initially working with school children of 8-10 years of age in the Brooklyn Chinese community (Bolze, pers. communication).

What's for Sale? The percentages in Figure 4 (and the discussion that follows) are not cumulative because some shops offered for sale more than one medicine and some offered for sale both protected and regulated species medicines.

Twelve shops were surveyed in New York City and only two (17 percent) did not offer for sale any protected or regulated species medicines. The most common species medicines offered for sale were those that contained or claimed to contain tiger and musk. Ten shops (83 percent) offered for sale protected species medicines that contained or claimed to contain tiger, leopard, or rhino. Five shops (42 percent) had tiger-bone plaster; none had raw rhino horn or tiger-bone wine. One shop offered up to four rhino or tiger medicines. The average number of rhino and tiger items offered for sale per shop was two.

Six shops (50 percent) offered for sale regulated species medicines that contained or claimed to contain musk or bear bile. One shop offered to sell four different brands of medicines that listed tiger bone, rhino, or a combination of both, as ingredients.

In 3 of the 12 shops (25 percent), sales clerks told the investigator that tiger bone was banned, and one clerk also indicated that musk was banned. Another sales clerk indicated that he was aware that someone in the city had been caught selling rhino horn.

None of the medicines offered for sale had dates of manufacture, and none had altered packaging. The name of one medicine, "Tianqi Shexiang Hugu Zhuifenggao," suggested that it contained tiger bone, but no ingredient list was printed or inserted in the package to confirm this.

San Francisco

The Chinese-American population in San Francisco, California, is the largest of all U.S. and North American cities surveyed. Approximately 332,000 people represent about 20 percent of the U.S. population of Chinese-Americans (according to U.S. Bureau of the Census figures for 1990). The 19 shops visited in San Francisco's Chinatown were on Stockton, Clay, Washington, Pacific, Grant, and Jackson streets.

Two years ago, San Francisco created a multiagency task force similar to the one in Los Angeles to address the illegal wildlife import and export in San Francisco. The task force is headed by a member of the U.S. Attorney's Office and has members from the U.S. Fish and Wildlife Service, National Marine Fisheries Service, U.S. Customs, U.S. Department of Agriculture, Food and Drug Administration, and California Department of Health Services. Given the large Chinese population and the TOM industry in the San Francisco area, the illegal trade in endangered species parts and products is the task force's primary concern.

To TRAFFIC's knowledge, there have been no focused public outreach efforts in San Francisco.

Of the shops surveyed in San Francisco, 8 of 19 (42 percent) did not offer for sale any protected or regulated species medicines. The most common species medicines found in the 19 shops were those that contained or claimed to contain tiger (the most common) and musk. Eight shops (42 percent) offered for sale protected species medicines containing or claiming to contain tiger, leopard, or rhino. Two shops (11 percent) had tiger-bone plaster, but none had raw rhino horn or tiger-bone wine. Eight shops (42 percent) offered for sale other medicines with rhino horn or tiger bone or both. The average number of rhino horn or tiger bone items offered per shop was less than one. One shop offered to sell five different types of medicines that listed tiger bone or rhino horn as an ingredient.

Six shops (32 percent) offered to sell regulated species medicines. Six shops (32 percent) offered to sell medicines listing musk as an ingredient.

In six shops (32 percent), the sales clerks told the investigator that tiger bone was banned. None of the medicines had dates of manufacture. The packaging and ingredients lists of three medicines which were seen for sale elsewhere in the United States and Canada and were known to have tiger bone as an ingredient, did not list it on the package. No packages were altered nor were any ingredients struck off the lists, as seen in other cities.

Seattle

The Chinese-American population in Seattle, Washington, was the second smallest in all the cities surveyed. Approximately 29,000 people represent about two percent of the U.S. population of Chinese-Americans (according to the U.S. Bureau of the Census figures for 1990). The 12 shops surveyed in Seattle's Chinatown were on Maynard, King, and Weller streets, and on Beacon, Seventh, and 128th avenues.

To TRAFFIC's knowledge, there have been no focused federal, state, or local law enforcement efforts to eliminate or even control the trade of protected species products in Seattle. Also, no outreach efforts appear to have advised or educated Seattle citizens about this problem.

The percentages in Figure 6 (and the discussion that follows) are not cumulative because some shops offered for sale more than one medicine and some offered for sale both protected and regulated species medicines.

Of the shops surveyed in Seattle, 4 of 12 (33 percent) did not offer for sale any protected or regulated species medicines. Of the 12, only 10 shops had commercial Asian medicines of any type. Tiger, rhino, and musk were the most common species medicines found in the shops surveyed. Six shops (50 percent) offered to sell protected species medicines. Rhino horn or tiger bone items were offered for sale in six shops (50 percent). The average number of rhino horn or tiger bone items offered for sale per shop was two.

Six shops (50 percent) had regulated species medicines. One shop had 11 different types of medicines listing tiger bone, rhino horn, musk, or leopard bone, or combinations of those, as ingredients.

In six shops (50 percent), sales clerks told the investigator that tiger bone was banned. One clerk said that tiger bone is illegal in the United States but is available in Asia. Another indicated that musk was also banned.

None of the medicines had dates of manufacture. None had altered packaging, although one medicine previously identified as claiming to contain rhino did not have an ingredient list, so it could have contained rhino.

Toronto

The Chinese-Canadian population in Toronto, Ontario, is the largest in any Canadian city and third largest in all North American cities surveyed. Approximately 210,000 people represent about 36 percent of the Chinese-Canadian population (according to Statistics Canada figures for 1991). The 20 shops visited in Toronto's Chinatown were on Dundas, St. Andrews, Huron, and Spadina streets.

Efforts to control trade in protected species in Toronto has been focused largely on importation. The CWS Ontario region recently completed a pilot project wherein they trained two customs officers in Toronto to be CITES specialists. Although successful, such training projects are not yet a permanent policy of the region. The same region also produced a multi-lingual brochure on WAPPRIITA and the trade in medicines containing wildlife ingredients, in cooperation with WWF Canada and Karuna Community Services (Anon. 1997).

To TRAFFIC's knowledge, there has been no comprehensive provincial or local law enforcement efforts to eliminate or even control the trade of protected species in Toronto. The above-mentioned brochure has been distributed and there are plans to have a formal meeting with importers of traditional medicine, however, no overall public awareness effort has been undertaken and no outreach efforts appear to have been initiated to advise or educate Toronto citizens about this problem.

The percentages in Figure 7 (and the discussion that follows) are not cumulative since some shops offered for sale more than one medicine and some offered for sale both protected and regulated species medicines.

Of the shops surveyed in Toronto, 7 of 20 (35 percent) did not offer for sale any protected or regulated species medicines. Tiger and musk were the most common species medicines found in the 20 shops surveyed. Protected species medicines containing or claiming to contain tiger, leopard, and rhino were found in ten shops (50 percent). Rhino horn or tiger bone items were found in seven shops (35 percent). Two shops (10 percent) had tiger-bone plaster; one shop (I percent) claimed to have tiger-bone wine and no shops had raw rhino horn. Five shops (25 percent) had other commercial medicines with rhino horn or tiger bone. One shop offered to sell five rhino or tiger medicines. Eight shops (40 percent) offered regulated species medicines for sale. The average number of items per shop was less than one.

In nine shops (45 percent), the sales clerks told the investigator that tiger bone is banned from sale. One clerk said that tiger bone plasters cannot be found anywhere in the world because tigers are fully protected animals. Another said that rhino horn is barred from sale and that antelope or other horn can be used instead; even if rhino horn could be found in the city, it would be too expensive. Still another clerk said that rhinos are class one protected animals and that anyone caught selling horn can get 15 years in jail. One clerk helpfully offered another tiger bone plaster as an alternative, and another suggested that tiger bone wine may be available for between C$25 and C$125, a bottle depending on the brand, but it is kept in a secret place because of the ban.

None of the medicines had dates of manufacture and none of the packages were altered. Some brands were known from previous shops to have contained or claimed to contain tiger or rhino, but the packages examined did not list those ingredients. Interestingly, one of the medicines listed "African tiger bone" on the package. Because lion bone has been noted on medicine lists that formerly listed tiger bone, it

is not certain if this was lion bone or the result of an effort to bypass prohibitions on "Asian tiger bone."

Vancouver

The Chinese-Canadian population in Vancouver, British Columbia, was the second largest in the two Canadian cities and fourth largest of all North American cities surveyed. Approximately 198,000 people represent about 33 percent of the Chinese-Canadian population (according to Statistics Canada figures for 1991). The 24 shops surveyed in Vancouver's Chinatown were on Main, Pender, Gore, Keefer, and Hasting streets.

The Pacific and Yukon CWS region of Canada has adopted a policy of 100 percent referral by customs officials to CWS for inspection of any shipment declared as containing East Asian medicines (Chalifour pers. comm. 1998). Careful inspection of these shipments by CWS follows. CWS regional staff have also been working closely with the importers of traditional East Asian medicine into the region to ensure that they are aware of WAPPRIITA rules. CWS staff in this region have occasionally gone into shops and seized CITES Appendix I items under WAPPRIITA prohibitions on sale. However, no prosecutions have ensued.

A number of federal cooperative law enforcement efforts have occurred in Vancouver. Reportedly, more than 211,000 items whose ingredients contained or claimed to contain endangered species derivatives were seized at the port of Vancouver in 1995, compared to only 1,200 items seized in 1987 (Anon. 1996).

On 28 June 1996, Canadian Customs inspectors and Canadian Wildlife Service (CWS) officers in Vancouver seized almost 20,000 items of illegally imported Asian medicines containing or claiming to contain parts or derivatives of endangered wildlife. The shipment, sent from Hong Kong, was destined for Canada's growing East Asian communities in Vancouver and Toronto (Anon. 1996).

On 29 March 1997, officers of the Ministry of Environment, Land and Parks along with regional conservation officers assisted by the Royal Canadian Mounted Police, seized 21 bear gallbladders at the Vancouver International Airport from a man traveling from Toronto to Vancouver (Anon. 1997).

On 11 April 1997, officers of the Ministry of Environment, Lands and Parks in Victoria, British Columbia, reported that charges had been filed against Chun Mau Wong for selling bear gallbladders between Seattle, Washington, and Vancouver, British Columbia, to an undercover officer on two occasions (Anon. 1997a). Although most of these cases have received local, national, and even international publicity, the only efforts to advise or educate Vancouver citizens about this problem are the CWS distribution of a joint CWS and WWF brochure on WAPPRIITA, meetings with importers of medicines, and visits to retail shops.

The percentages shown in Figure 8 (and the discussion that follows) are not cumulative because shops offered for sale more than one medicine, and some offered for sale both protected and regulated species medicines.

Of the shops surveyed in Vancouver, 6 of 24 (25 percent) did not offer to sell any protected or regulated species medicines. Musk, tiger, and rhino were the most common species medicines found in the 24 surveyed shops. Protected species medicines were offered for sale in 15 shops (63 percent), with rhino horn or tiger bone items offered for sale in 14 shops (58 percent). Three shops had tiger-bone plaster (13 percent), and five had tiger-bone wine (21 percent). Raw rhino horn was offered for sale in one shop (4 percent). Twelve shops (50 percent) had only regulated species medicines. The average number of rhino and tiger items offered for sale in all shops surveyed was two.

In 14 shops (58 percent), the sales clerks told the investigator that tiger bone, rhino horn, and musk were banned. One clerk told the investigator that rhino horn might be available in the city but that no one would sell to a stranger because someone had been arrested for selling musk or bear bile. Another clerk also indicated that rhino horn might be available. Still another indicated that musk was illegal, but was not certain why.

None of the medicines had dates of manufacture. Two medicines had altered packaging on which the musk, tiger bone, and bear bile were covered by black ink. One medicine, "Huguzhulfeng" plaster, had tiger in its name but did not list tiger as an ingredient. Three medicines were known to have once had tiger bone as an ingredient, but it was no longer listed on the package. One medicine, "Diedazhitonggao," specifically indicated on its package that it "excluded any part of tiger."

How Does North America Compare To Other Markets?

Canada and the United States are not the only non-Asian countries that have an internal market for traditional medicines that contain or claim to contain protected

species such as tiger and rhino. According to an analysis of Chinese CITES data by TRAFFIC International, 16 non-Asian countries—Australia, Belgium, Bulgaria, Canada, Cuba, Denmark, France, Ghana, Italy, Mauritius, the Netherlands, Panama, the former Soviet Union, Togo, the United Arab Emirates, and the United States—were documented destinations for tiger products from China (Mulliken and Haywood 1994). But, as noted in this 1994 analysis, these medicines are found in markets worldwide.

Australian and New Zealand Markets

An investigation by TRAFFIC Oceania in 1995 (Callister and Bythewood 1995) revealed that Australia and New Zealand had small markets and legislative problems that deterred effective implementation of CITES and internal controls. TRAFFIC Oceania visited 144 shops in three cities in Australia and 30 shops in two cities in New Zealand. TRAFFIC found that 3 of 20 shops in Australia and 4 of 20 shops in New Zealand sold tiger medicines, compared to 9 of 20 in Canada and 8 of 20 in the United States. (See Table 2.)

Table 2. Comparison of the Availability in Five Countries of Manufactured Products Claiming to Contain Rhino and Tiger Parts or Derivatives

Country	Number of Shops/Cities Surveyed	Survey Year(s)	Percentage of Surveyed Shops Selling Tiger Products	Percentage of Shops Selling Rhino Products
Australia	144 shops in 3 cities	1995	14 percent	3 percent
Canada	44 shops in 2 cities	1996–1997	45 percent	18 percent
China	280 shops in 7 cities	1993–1995	3 percent	4 percent
New Zealand	30 shops in 2 cities	1995	20 percent	0 percent
United States	66 shops in 5 cities	1996–1997	41 percent	14 percent

Source: Callister and Bythewood 1995, Mills 1997.

The China Market

In mid-1993, China prohibited the internal and external trade and manufacture of tiger and rhino medicines. Following that ban, TRAFFIC East Asia began a three-year survey to determine the continued availability of medicines and of raw rhino and tiger products in China. In total, 13 cities were surveyed in China, however, to better compare the survey results with the North American survey (see Table 3), TRAFFIC North America calculated the results using seven Chinese cities visited in 1995 (see Table 4).

Results from China in 1996 showed that in these select seven cities, 54 of the 280 shops (19 percent) offered for sale rhino or tiger items. Eleven different types of rhino-or-tiger-containing commercial medicines were found that were produced by approximately 13 manufacturers (see Table S). In the seven cities surveyed, 6 of 20 shops sold tiger medicines.

Based upon this information, TRAFFIC North America notes that the current availability of protected or regulated species medicines in these five western countries appears to be even greater than what was found by TRAFFIC East Asia in China in 1995. TRAFFIC East Asia found only a small residual trade of such medicines within China in the years since the complete prohibition on their sale, manufacture, and export. At the same time, however, TRAFFIC East Asia found that a few manufacturers were still willing to ship (and even manufacture) prohibited medicines to potential buyers outside China despite these prohibitions. The North American availability of rhino and tiger medicines manufactured in China suggests that there might be other manufacturers or exporters willing to break the law to export these medicines, or that stockpiles of these medicines remain both within or outside China.

This speculation on illegal manufacture in China, illegal export from China, or stockpiles in other countries is further supported by the fact that TRAFFIC North America identified a total of 31 medicines from at least 29 Chinese manufacturers for sale in North America (see Table 6). If we compare these results to those mentioned above from China, more than twice as many medicines are found in the United States and Canada than those found in China, the manufacturing source of such medicines. The list of medicines sold in the United States and Canada was compared to a list previously compiled by TRAFFIC of the late 1980s through the early 1990s (Gaski and Johnson 1994) documented 73 medicines containing or claiming to contain tiger parts. More information on the manufacturers and their stockpiles, if any, is needed.

Table 3. Summary of Data Collected During the TRAFFIC North America Survey of Asian Pharmacies and Markets in Selected North American Cities, 1996–1997.

	Atlanta	Los Angeles	New York	San Francisco	Seattle	Toronto	Vancouver
No. of Businesses surveyed	6	17	12	19	12	20	24
No. of businesses (%) with at least one RH/TB item [RH/TB item—raw RH, TPB, TBW, or other commercial medicine containing TB, RH, or both]	3 (50.0%)	1 (6.0%)	10 (83.0%)	8 (42.0%)	6 (50.0%)	7 (35.0%)	14 (58.0%)
No. of businesses (%) with raw RH	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (4.17%)
No. of businesses (%) with TBP	1 (16.7%)	1 (5.9%)	5 (41.7%)	2 (10.5%)	0 (0.0%)	2 (10.0%)	3 (12.5%)
No. of businesses (%) with TBW	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.0%)	5 (20.8%)
No. of businesses (%) with other commercial medicines containing TB, RH, or both	3 (50.0%)	0 (0.0%)	9 (75.0%)	7 (36.8%)	6 (60.0%)	5 (25.0%)	11 (45.8%)
Average number (range) of RH/TB items per business [includes only businesses with at least one item]	2.33 (1–4)	1.00 (1)	2.70 (1–4)	2.00 (1–5)	5.17 (2–11)	2.50 (1–5)	2.71 (1–6)
No. of businesses (%) with commercial medicines containing LB [includes plasters and wines]	0 (0.0%)	3 (18.0%)	2 (17.0%)	1 (5.0%)	3 (25.0%)	5 (25.0%)	4 (17.0%)
No. of businesses (%) with commercial medicines containing MK [includes plasters]	5 (83.0%)	3 (18.0%)	6 (50.0%)	6 (32.0%)	6 (50.0%)	8 (40.0%)	12 (50.0%)
No. of businesses (%) with commercial medicines containing BB	0 (0.0%)	0 (0.0%)	2 (17.0%)	0 (0.0%)	2 (17.0%)	1 (5.0%)	3 (13.0%)

Formula: RH = rhinoceros horn; TB = tiger bone; TBP = tigerbone plaster; TBW = tigerbone wine or tigerbone-papaya wine; LB = leopard bone; MK = musk; BB = bear bile

Table 4. Summary of Data Collected During the TRAFFIC Network Survey of Businesses in Selected Cities in the People's Republic of China, 1996

	Beijing	Chengdu	Nanchang	Shanghai	Tianjin	Xi'an	Zhengzhou
Number of businesses surveyed	49	53	33	25	35	50	35
No. businesses (%) with at least one RH/TB item [RH/TB item-raw RH, TBP, TBW, or other commercial medicine containing TB, RH, or both]	11 (22.4%)	1 (1.9%)	6 (18.2%)	2 (8.0%)	23 (65.7%)	4 (8.0%)	7 (20.0%)
No. of businesses with raw RH or RHP	0	1	2	0	1	2	4
No. of businesses with TBP or TBW	0	0	4	0	2	0	1
No. of businesses with other commercial medicines containing TB, RH, or both	11 (22.4%)	0 (0.0%)	0 (0.0%)	2 (8.0%)	22 (62.9%)	2 (4.0%)	2 (5.7%)

Formula: RH = rhinoceros horn; RHP = rhinoceros horn powder; TB = tiger bone; TBP = tigerbone plaster; TBW = tigerbone wine or tigerbone-papaya wine

Table 5. Commercial Medicines and Manufacturers Found During the TRAFFIC Network Survey of Businesses in Selected Cities in the People's Republic of China, 1996

Name of medicine	Manufacturer	Contents
Angongniuhuangwan	Tianjin Darentang Pharmaceutical Factory	RH
Dahuoluodan	Beijing Tongrentang Pharmaceutical Factory	TB
Dahuoluodan	Beijing Tongrentang 2nd Pharmaceutical Factory	RH, TB
Dahuoluodan	Fushun 2nd Chinese Medicine Pharmaceutical Factory	RH
Hugujiu	Beijing Tongrentang Pharmaceutical Factory	TB
Huitianzaizaowan	Harbin 1st Chinese Medicine Factory	TB, LB*
Huitianzaizaowan	Harbin 2nd Chinese Medicine Factory	RH, TB
Huitianzaizaowan	Liaoning Benxi Chinese Medicine Factory	RH, TB
Huitianzaizaowan	Chengelun People's Pharmaceutical Factory	RH, LB
Huitianzaizaowan	Heilongjiang Mudanjiang Pharmaceutical Factory	RH, TB
Huitianzaizaowan	Heilongjiang Mudanjiang Chinese Medicine Pharm. Factory	RH, TB
Jianbuhuqianvan	Tianjin Darentang Pharmaceutical Factory	TB
Jufangzhibaosan	Beijing Tongrentang Pharmaceutical Factory	RH
Jufangzhibaosan	Beijing Tongrentang Pharmaceutical Factory	RH
Niuhuangqingxinwan	Tianjin Darentang Pharmaceutical Factory	RH, AH
Rhino Horn Powder	???	RH
Tiger Bone Plaster	Hubei Suizhou Zutian Pharmaceutical Factory	TB
Tiger Bone Wine	Wuhan Jianmin Pharmaceutical Factory	TB
Tiger Bone Wine	Wuhan Fifth Pharmaceutical Factory	TB
Tiger Bone Wine	Wuhan Zhonglian Pharmaceutical Factory	TB
Tiger Bone Wine	Tianjin 2nd Chinese Medicine Factory	TB

Table 6. Commercial Medicines and Manufacturers Found During the TRAFFIC North America Survey of Asian Pharmacies and Markets in Selected Cities in North America, 1996–1997

Name of Medicine	Manufacturer	Contents
Chinese Chufeng Toukuwan	China Nat'l Chemicals I & E Corp., Kwangtung Branch	TB
Dahuoluodan	Beijing Tongrentang Pharmaceutical Factory	TB
Dahuoluodan	Beijing Tongrentang Pharmaceutical Factory	RH, TB
Dahuoluodan	Foshan 1st Pharmaceutical Factory	TB, RH
Dahuoluodan	Guangzhou Chengliji Pharmaceutical Factory	RH, LB
Dahuoluowan	Lanzhou Foci Pharmaceutical Factory	TB, Musk, RH
Duzhonghuguwan	Huabei Pharmaceutical Factory	TB
Duzhonghuguwan	Guangchang Pharmaceutical Factory (Hong Kong)	TB
.		
(To Chung Fu Quat Pills)	(''Kwong Cheong Medicine Manufactory'').	
Duzhonghuguwan	Guiyang Chinese Medicine Factory	TB
Duzhonghuguwan	Guiyang Chinese Med. Pharmaceutical Factory	TB
Hugubeitongvan	Medicine No. 1 Manufactory of China Guangchow	TB
(Tiger-bone Pain Relieving Pills).		
Hugujiu (Tiger Bone Wine)	Beijing Tongrentang Medical Wine Factory	TB
Hugujiu (Tiger-bone Wine)	Shandong ?? Pharmaceutical Factory	TB
Hugumuguaiu (Tiger-bone Papaya Wine).	Guangxi Wuzhou Longshan Pharmaceutical Factory	TB
Hugumuguajiu (Tiger Bone-Papaya Wine).	Lung Shan Distillery, Wuchow, China	TB
Hugumuguajiu (Tiger-bone Papaya Wine).	Shanghai Chinese Medicine Works	TB
Jianbuhuqianwan	Beijing 5th Pharmaceutical Factory	TB
Jianbubuqianwan	Lanzhou Foci Pharmaceutical Factory	TB
Medicated Plasters of Moschus, Fel Ursi, Os Tigris and Yunnan Baiyao.	''A Product of Yunnan, China''	Musk, BGB, (TB not listed although names says TB)
Niuhuangquinxinwan	Beijing Tongrentang Pharmaceutical Pactory	RH
(Qiangli) Renshenzaizaowan	Foshan Lianhe Pharmaceutical Factory	TB, Musk, RH
Qianglizhuifengtouguwan	Guangzhou Lianhe Pharmaceutical Factory	TB
Rhinoceros Skin and Green Turtle Pills	Guangdong (Lianhe?) Pharmaceutical Factory	RH
Shengronghugwan (Ginseng Antler Tiger-bone Pill).	Fusong Pharmaceutical Factory	TB

Table 6. Commercial Medicines and Manufacturers Found During the TRAFFIC North America Survey of Asian Pharmacies and Markets in Selected Cities in North America, 1996–1997—Continued

Name of Medicine	Manufacturer	Contents
Shenronghuguwan (''Shenyung Huku Wan''; also labelled ''Ginseng Antler Tiger-bone Pills'').	Fu Sung Pharmaceutical Works	TB
Shenyung Huku Wan (Ginseng Antler Tiger-bone Pills).	Fusung Pharmaceutical Works	TB
Shexiangchuifengtouguwan	Guangzhou Medicinal Industry Company	Musk, TB
Shexiangduzhonghuguwan (capsules)	Sichuan Medicines and Health Products Company	''Synthetic'' Musk, ''Synthetic'' TB
Shexianghugugao (Musk and Tiger-bone Plaster).	Shenyang Changqing Pharmaceutical Factory	Musk, TB
Shexianghuguwan (Musk-Tiger Bone Pills).	Chongqing Chinese Medicine Factory	Musk, TB
Shexiangtianqihuguwan (Radix Caulophylli Pill).	Weimin Medicine Manufactory	Musk, TB
Shexiangxiongdanzhuifengwan (Rheumatism Pill).	Jilin Chinese Medicine Manufactory	TB, Musk, BGB
Shexiangzhuifentouguwan	Guangzhou Chinese Medicine No. 1 Pharm. Factory	Musk, TB
Shihuyeguangwan	Shandon Jinan Reinim Pharmaceutical Factory	RH
Tianma Duzhonghuguwan	China Nat'l Native Produce and Animal By-Products	TB
(Tianma Duzhon Tiger-bone Pills)	I & E Corp. Fukien Branch, Chuanchow Office (Qianzhou, Fujian).	TB
Tianmahuguwan	Chengdu 7th Pharmaceutical Factory	TB
Tianmahuguwan	Chengdu Dongfeng (possibly = 7th) Pharm. Factory	TB
Special Strong Tianmahuguwan	Qingdao Pharmaceutical Factory	TB
Tianqihuguwan	Chengdu 7th Pharmaceutical Factory	TB
Tianqihuguwan	Weimein Medicine Factory	TB, Musk
Tiger Bone Pills	Yat Chau Medicine Manufacturing Co. Ltd. (HK)	TB
Tiger Bone Plaster	China Chongqing Traditional Medicine Factory	TB Paste, Musk
TBP	Chongqing Traditional Medicine Factory	Musk, TB
TBP (Musk and Tiger-bone Plaster)	5th Chengdu Pharmaceutical Factory	Musk, TB
TBP	Note: Simplified packaging with no brand name or factory listed; trademark looks like that of ''Emeishan Brand'', therefore likely made by 5th Chengdu Pharm. Fact..	Musk, TB
Tsei Hung Chui Fung Touku Wan	Beijing Tongretang Pharmaceutical Factory	Musk, TB, BGB
Wulongerhujiu (Five-dragon Two-tiger Wine).	Guangxi Wuzhou Longshan Pharmaceutical Factory	TB?
Xianghushefengshiwan (Bear Tiger Snake Rheumatism Pills).	Shangdong ?? Pharmaceutical Factory	TB, BGB
Yenshunzaizaowan (=Renshenzaizaowan).	Foshan Lianhe Pharmaceutical Factory	Musk, TB, RH
Zhenzhuniuhuangxijiaojieduwan	Guangdon ?? Company	RH

WHAT DO WE NOW KNOW?

1. Protected Species Medicines Are Readily Available In North America

Protected species medicines—those containing or claiming to contain tiger, rhino, and leopard—continue to be widely and openly available on the North American market as seen in the graphic below.

This is supported by the results that show that:

- a high percentage of shops (50 percent) offered to sell manufactured medicines listing rhino horn and/or tiger bone as ingredients were identified;
- these protected species medicines were offered for sale in all cities surveyed; and
- a large number and variety of brands of manufactured medicines were offered for sale.

These survey results are especially relevant because they were obtained by an investigator of Chinese descent who was a total stranger to the clerks and shopkeepers surveyed. If a stranger could obtain these results—in a system based strongly on trust and long-standing personal relationships—one might conclude that

many more items, possibly even raw tiger bone or rhino horn, might be available to trusted regular customers.

2. Protected Species Medicines Are Available Because of Legal Inadequacies

The protected species medicines found in the survey are available because legal inadequacies or loopholes allow these medicines to be legally sold since they cannot be proved to be illegally imported. For example, since tiger bone medicines cannot at this time be forensically proved to contain tiger bone, the illegal import of these medicines cannot be proved in a court of law.

Prosecutors for both the Canadian and U.S. governments are required by federal law to show that the products do contain tiger bone. Because of this burden of proof requirement under both countries' federal laws and because most of these medicines are smuggled into both countries, these medicines are "legally sold" throughout the region since their illegality cannot be proved otherwise.

The market flourishes because of the "legal availability" of these medicines and the fact that almost 10 percent of ethnic-Chinese surveyed by TRAFFIC in July 1997 use or have used tiger bone medicines. This market continues even though it has been illegal to commercially import tiger products into the United States since 1972.

Therefore, of the 1.7 million Chinese-American population, at least 153,000 have used tiger medicines at least once. Thus, at least 153,000 individual packages of medicine that contain or claim to contain tiger were purchased or will be purchased by this small group of consumers in the United States. These numbers do not take into account other ethnic East Asian or even non-Asian users of these medicines. Herbal—and therefore traditional—packaged medicines have become popular with people of all ethnic background in Canada and the United States.

3. North America Appears to Be a Significant Market for These Medicines

The openness and effective "legality" of the offer for sale of these products in North America suggests and even promotes the idea that the United States and Canada are significant Western markets for protected species medicines. Virtually all (except one in Hong Kong) of the rhino horn and tiger bone items found in the North American survey were commercially manufactured in China. There is also a greater variety of these medicines in North America than in China—4 1 percent of the shops in North America offered these products for sale as compared to 19 percent in China.

Overall, considerably more brands or types of manufactured medicines, made by more manufacturers, were offered for sale in North America in 1996–1997 than in China in 1996. Is the North American market encouraging the development of new products or sustaining a market for products that have been outlawed in China? The survey found that North America had 31 types of medicine compared to 11 types of medicine in China. Approximately 29 manufacturers were associated with the medicines offered for sale in North America, compared to approximately 13 manufacturers in China.

4. Illegal Stockpiles of These Medicines May Exist

The widespread availability and variety of manufactured medicines in North America three to four years after the Chinese ban went into effect suggests that commercial medicines claiming to contain rhino horn or tiger bone continue to be manufactured in or exported from China. This situation would clearly be a violation of Chinese law as well as U.S. and Canadian laws; therefore, it is important to document whether such manufacture and export is actually taking place. A second possibility for the continuing supply of these medicines is that another county is illegally reexporting stockpiled manufactured medicines that were imported at one time from China. Still another reason may be that one or more North American importers purchased and stockpiled these medicines as the Chinese ban went into effect and those stocks are a source of the trade.

Determining the age of medicines identified in the survey is difficult because very few of the medicines surveyed had a manufacture date on the package, and those that did were dated September 1993. (The Chinese prohibition went into effect in mid-1993.) Illegal imports of these medicines have been documented in the past in a TRAFFIC analysis of U.S. imports of protected and regulated medicines (Gaski and Johnson 1995), and such imports have been intercepted in law enforcement investigations.

5. Public Outreach Must Be Initiated to Eliminate These Markets

A lesson may be learned from the results of this survey. Los Angeles was the "cleanest" of all North American cities. In normal circumstances, the profile of Los Angeles would be very similar to that of San Francisco. Both are in California, both

have large and historic Chinese-American populations, and both harbor a well-established and defined Chinatown. However, Los Angeles has been subjected to intensive, multi-year, cooperative law enforcement efforts by federal, state, and local law enforcement authorities. Subsequent court cases and sentences received extensive press coverage in the city and throughout the region, as well as in East Asia. During Hat time, the U.S. government also initiated a brief pilot project on public outreach on the use of traditional medicines that exploit endangered species.

WHAT CAN BE DONE?

Action 1. Increase Regional Law Enforcement.

Both Canada and the United States have comprehensive laws to implement most of the provisions of CITES and to strongly penalize and deter illegal trade. Both countries also have wildlife legislation—the U.S. Lacey Act and a provision in Canada's WAPPRIITA—that prohibit the import and interstate, interprovincial, or interterritorial commerce of animals taken in violation of the wildlife laws of any country, state, province, or territory. In addition, the combined force of law enforcement personnel in Canada and the United States focusing on wildlife trade issues exceeds the entire wildlife enforcement capacity of some continents. Therefore, although inadequacies exist in both countries' wildlife legislation that impede prosecution of illegal trade in endangered species medicines, these countries are clearly not doing enough on a nation-wide basis to stop illegal imports and eliminate markets and demand.

In addition, a key issue for law enforcement agencies in North America is the ability to determine whether commercially available medicines actually contain the rhino horn or tiger bone listed as ingredients. Forensic testing has thus far failed to detect measurable quantities of rhino horn or tiger bone in any of the many medicines tested. Without a way to definitively prove that parts and derivatives of protected species are actually present in these medicines, the U.S. and Canadian governments appear reluctant to prosecute businesses that sell these medicines.

Recommendation A: The U.S. Fish and Wildlife Service and the Canadian Wildlife Service should develop national strategies to address the issue of illegal trade in medicines advertised as containing endangered species. These strategies should draw upon the expertise and knowledge of federal, state, provincial, and territorial wildlife and other agencies. They should also utilize the legal authority of other government agencies, such as health, food and drug, and customs agencies. These strategies should centralize intelligence and other information related to source countries and importation methods most likely to involve illegal trade in endangered species parts. Since Canada and the United States are major markets for illegal endangered species products, both countries have an obligation to CITES to devote additional resources to wildlife trade controls.

Recommendation B: Individual states within the United States should consider adopting legislation that would prohibit the sale of medicines claiming to contain endangered species and their parts and products.

Recommendation C: U.S. states and Canadian provinces and territories should adopt legislation to prohibit the sale of products whose labels list protected or regulated species, especially medicines that list tiger and rhino as ingredients.

Recommendation D: The U.S. Fish and Wildlife Service's Clark R. Bavin National Forensics Laboratory, working with the Canadian Wildlife Service and other forensics scientists, should continue to promote the development of techniques (including the application of forensic science) for identifying parts and derivatives of endangered and protected species used in traditional medicines, and should assist other countries by sharing this expertise and helping to solicit other external expertise.

Action 2. Strengthen Legislation to Control Internal Trade

At the 1994 CITES meeting held in Ft. Lauderdale, Florida, the parties to CITES specifically recommended that all countries interpret the term "readily recognizable derivative" as "any specimen which appears from an accompanying document, the packing or a marking or label, or from any other circumstances, to be a part or derivative of an animal or plant of a species included in the appendices," unless otherwise exempted. This recommendation was reinforced at the 1997 CITES meeting. As clearly illustrated by the results of the TRAFFIC survey, neither country has responded to this resolution or amended its legislation, regulations, or even national policy with regard to addressing this identification issue.

The lack of detectable quantities does not necessarily mean that rhino horn or tiger bone was not used to manufacture the medicine. Because the Chinese government recognized this problem, China's 1993 ban assumes that any commercial Chi-

nese medicine listing rhino horn or tiger bone as an ingredient actually contains horn or bone. Most protected and regulated species medicines offered for sale in North American shops were manufactured in China.

Recommendation E: The U.S. Congress should pass the Rhino and Tiger Product Labeling Act in either its House or Senate form. The Act would prohibit the import, export, and sale of products labeled to contain certain endangered species. Subsequent to passage of the Act, the U.S. Fish and Wildlife Service, with the assistance and support of other agencies, including U.S. Customs, U.S. Food and Drug Administration, and state agencies, should make a concerted effort to aggressively enforce this legislation by pursuing and prosecuting those who violate its prohibitions.

Recommendation F: Canada should actively pursue the passage of a second regulation to WAPPRIITA or to non-wildlife legislation (such as that regulating customs or food labeling), prohibiting the import, export, and sale of products labeled to contain CITES Appendix I species. The Canadian Wildlife Service should work with other federal, provincial, and territorial agencies to enforce existing legislation, particularly on possession to sell, by aggressively prosecuting those who violate these prohibitions.

Action 3. Identify and Inventory Stockpiles and Manufacturers.

It is not a simple task to determine the dates of manufacture or of importation of commercial medicines. Whereas some of those medicines formerly displayed a production date on the box or ingredients list, very few of the commercial medicines seen in the current North American survey had manufacture dates (and all dates seen were before 29 May 1993). The only way to verify an importation date is to be present when the items are actually imported (as a Customs or wildlife inspector might be).

From the Chinese government's perspective, the only legal medicines now in the United States or Canada would have to come from stockpiles that existed before the ban, because the manufacture of these medicines has been illegal since May 1993. Whether such stockpiles actually exist is impossible to determine because no detailed inventories of manufacturers or importers in China or elsewhere are known to have been conducted at the time of the ban. Research done in 1995 by TRAFFIC East Asia (Mills 1997) suggests that some manufacturers were willing to export prohibited stockpiles to overseas buyers or even to manufacture prohibited medicines if specifically requested. The 1997 CITES tiger resolution specifically asks parties to consolidate and ensure adequate control of stocks of tiger parts and derivatives. China has made positive efforts to respond to CITES requests for such stockpile inventories in the past, and an immediate call for an inventory of any stockpiles by manufacturers or others would assist CITES law enforcement efforts throughout the world.

Recommendation G: The United States and Canadian CITES authorities, with the assistance of the CITES Secretariat, should ask the Chinese government to confirm that the status and security of stockpiles of these products in China and Hong Kong. These authorities should also ask for the same confirmation from other CITES parties, such as Singapore, Malaysia, Korea, Japan, Vietnam, and other countries that have exported similar manufactured medicines (made in China and elsewhere) to the United States and Canada. Both countries should also investigate the potential existence of such stockpiles within North America.

Recommendation H: It is critical to determine if commercial medicines containing or claiming to contain rhino horn or tiger bone continue to be manufactured in China. This knowledge can best be obtained by the Chinese increasing their use of overt monitoring of the manufacturing industry, combined with undercover investigations.

Action 4. Initiate Collaborative North American Public Outreach Efforts.

TRAFFIC believes that the impact of law enforcement initiatives, the subsequent publicity stemming from them, and associated public outreach efforts have changed the patterns of sale and use of protected species medicines in Los Angeles, although there are no baseline data to support this conclusion. Undoubtedly, when local—or, even better—nationwide or regionwide law enforcement efforts work in concert with focused public outreach initiatives, then shop owners and consumers will learn that trade in these medicines constitutes a law enforcement violation and a conservation problem and people will no longer offer them for sale or purchase them. This conclusion is supported by the anecdotal information collected during the survey of sales clerks' knowledge of local law enforcement efforts.

Recommendation I: Interested federal, state, provincial, and territorial government agencies, nongovernmental organizations, and traditional medicine communities and practitioners in North America should work together to initiate new out-

reach and education efforts in key consumer areas within the United States and Canada These efforts should focus on the following:

- create an awareness of the plight of endangered species;
- establish a causal link between the decline of endangered species and the use of TCM;
- highlight effective alternatives and sustainable substitutes to these medicines;
- ensure that the message is not pointed solely at TCM use, which only villainizes TCM users. Present a clear message that TCM is only one element in a larger problem of habitat loss, human encroachment, poaching, and other pressures on wildlife.

Action 5. Increase U.S. Governmental Funding for Tiger Conservation and Trade Control.

The United States is one of the richest nations on earth and can provide, under the U.S. Rhino and Tiger Conservation Act and other programs, funds to organizations and governments to undertake research projects related to rhino and tiger conservation. It should especially direct those funds to projects intended to stop the chronic and extremely detrimental illegal trade in endangered species.

Recommendation J: The U.S. Congress should at least double the Finding appropriated under the Rhino and Tiger Conservation Act as a response to the efforts of CITES parties to help tiger range states "demonstrably reduce the illegal trade in tiger parts and derivatives by the 11th meeting of the Conference of the Parties to CITES" (See appendix 1).

Recommendation K: The United States should pro-actively encourage governments of tiger range and consuming countries to apply for this funding and also to provide support to pursue effective alternatives and sustainable substitutes for protected or endangered species medicines, especially with regard to tiger bone and rhino horn.

REFERENCES

Anon. 1997. Understanding Canada's Wildlife Trade Law and How it Applies to Animals and Plants in Medicines. Informational Brochure. World Wildlife Fund Canada, Toronto, Canada; Environment Canada, Ottawa, Ontario, Canada; Karuna Community Service.

Anon. 1994. California Department of Fish and Game press release, February 1994; The Daily Sentinel, 25 June 1994.

Anon. 1995. U.S. Attorney's Office news release, Central District of California; Associated Press, 4 April 1995.

Anon. 1995a. U.S. Attorney's Office press release, Los Angeles, California; U.S. Fish and Wildlife Service.

Anon. 1995b. Anchorage Daily News, 25 September 1995.

Anon. 1995c. pers. comm., 11 November 1997.

Anon. 1995d. U.S. Fish and Wildlife Service press release, 19 October 1995.

Anon. 1996. Agence France Presse [AFP], 28 June 1996.

Anon. 1997. Ministry of Environment, Lands and Parks, 4 April 1997

Anon. 1997a. Ministry of Environment, Lands and Parks, 11 April 1997.

Bensky, D. and A. Gamble. 1993. Chinese Herbal Medicine Materia Medica Eastland Press, Seattle, Washington, USA.

Callister, D.J. and T. Bythewood. 1995. Of Tiger Treatments and Rhino Remedies: Trade in Endangered Species Medicines in Australia and New Zealand. TRAFFIC Oceania, Sydney, New South Wales, Australia.

Chalifour, N. 1996. Canada's Role in the Tiger Trade: Recommendations for a Tiger Safe Nation. World Wildlife Fund-Canada, Toronto, Canada.

Gaski, A.L. and K.A. Johnson. 1994. Prescription For Extinction: Endangered Species and Patented Oriental Medicinals in Trade. TRAFFIC USA, Washington, D.C.

Leader-Williams, N. 1992. The World Trade in Rhino Horn: A Review. TRAFFIC International, Cambridge, United Kingdom.

Mainka, S. 1998. Rhino Progress: The Response to CITES Resolution Cony: 9.14. TRAFFIC International, Cambridge, United Kingdom.

Mainka, S. 1997. Tiger Progress: The Response to CITES Resolution Conf. 9.13. TRAFFIC International, Cambridge, United Kingdom.

Mills, J.A., Ed. 1997. Rhinoceros Horn and Tiger Bone in China: An Investigation of Trade Since the 1993 Ban. TRAFFIC International, Cambridge, United Kingdom.

Mills, J.A. 1993. Market Under Cover: The Rhinoceros Horn Trade in South Korea. TRAFFIC International, Cambridge, United Kingdom.

Mills, J.A. and P. Jackson. 1994. Killed For A Cure: A Review of Worldwide Trade in Tiger Bone. TRAFFIC International, Cambridge, United Kingdom

Mulliken, T. and M. Haywood. 1994. Recent data on trade in rhino and tiger products, 1988–1992. TRAFFIC Bulletin 14(3):99–106.

Nowell, K., Chyi Wei-Lien and Pei Chia-Jai. 1991–1992. Horns of a Dilemma: The Market for Rhino Horn in Taiwan. TRAFFIC International, Cambridge, United Kingdom.

PREPARED STATEMENT OF WAYNE PACELLE, SENIOR VICE PRESIDENT, COMMUNICATIONS AND GOVERNMENT AFFAIRS, THE HUMANE SOCIETY OF THE UNITED STATES

I am Wayne Pacelle, senior vice president for Communications and Government Affairs for the Humane Society of the United States (HSUS), this Nation's largest animal protection organization, with more than 6.2 million members and constituents.

Mr. Chairman, the bills under discussion today each focus on the need to stem the tide of illegal trade in wildlife. The bill relating to the disposal of stockpiles of parts and products of endangered and threatened animals demonstrates the enormous magnitude of the illegal wildlife trade in this country. The bills relating to the conservation of rhinos and tigers, and the trade in products made from them and other threatened and endangered species, are the latest in a series of domestic and international steps to stop the illegal trade in products of these animals, which have been driven to the brink of extinction by this trade. The bill relating to the bear parts trade seeks to stem the precipitous decline of Asian bear species, whose parts are traded globally; the bill also proactively seeks to protect America's bears from the same strong markets that have nearly wiped out Asian bear populations.

THE BEAR PROTECTION ACT (S. 263)

Mr. Chairman, on behalf of the millions of members and constituents of the HSUS and the 127 undersigned organizations, including organizations from every State represented by members of this committee, I wish to state our strong support for the Bear Protection Act.

This anti-poaching legislation introduced by Senator Mitch McConnell is an effort to eliminate the incentive to kill bears illegally and profit by the sale of their internal organs, particularly the gallbladder and bile. S. 263 represents a thoughtful, pro-active approach to wildlife protection that will contribute to the long-term conservation of the world's remaining bear species.

As the committee surely knows, the Bear Protection Act has a remarkable base of support in both the Senate and the House, reflected not only in sheer numbers, but also in the bipartisan nature of cosponsorship. In addition to lead sponsor Senator McConnell, 24 Republicans and 29 Democrats have cosponsored the bill—a total of 54 Senators representing a majority of the Senate. Specifically, six Republicans and seven Democrats, two-thirds of this committee, have cosponsored the bill. Companion legislation in the House introduced by Congressman John Porter (R–IL) has amassed 135 cosponsors thus far on a similar bipartisan basis.

The Bear Protection Act creates sound national policy against the trade in bear gallbladders and bile. The absence of Federal legislation prohibiting trade in bear parts allows an interstate and international illegal trade to flourish. It is wrong for this Nation to allow poachers and smugglers to exploit the current inconsistencies in State laws and profit from the sale of bear parts. The Bear Protection Act will assist State and Federal wildlife enforcement efforts. If enacted, the legislation would:

- protect endangered Asian bears from international markets for their organs;
- protect American bears from being poached to supply foreign demand for their parts; and
- protect American bears from domestic markets in bear parts.

The United States has an especially important role to play in bear conservation since it is both a bear range State and a Nation whose citizens unfortunately consume bear parts. Senator McConnell has wisely drafted a bill that focuses narrowly on a specific problem in global bear conservation: the spreading, highly lucrative trade in bear viscera such as the gallbladders and bile. The demand for bear parts and derivatives in traditional medicine and, increasingly, luxury cosmetic items, continues to put enormous pressure on endangered Asian bear populations. In an effort to supply this huge market, traders now are also targeting America's bear populations.

Although it is difficult to accurately quantify levels of the trade in bear parts, especially since it is an illegal enterprise in most States, there is a clear indication that bear poaching and the trade in bear gallbladders and bile are widespread. In 1994, Christopher Servheen, representing the U.S. Fish and Wildlife Service and the IUCN/SSC Bear Specialist Group, noted "There is a serious impact on global bear populations from the trade in bear parts" (*Proceedings of the International Symposium on the Trade of Bear Parts for Medicinal Use,* Washington, 1994). He

also noted in a 1995 statement that, "As Asian bear populations decline and wild bear bile and other bear parts become more difficult to obtain, sources of bear parts outside Asia will be developed by traders and others willing to make significant profits." Dr. Ed Espinoza, deputy director of the U.S. Fish and Wildlife Forensics Laboratory in Oregon contends, "Right now the bear population is healthy. . . . But the possibility exists that, if we don't control the trade in bear parts, we could lose the entire population" (*The Idaho Statesman*, September 17, 1995).

The 1995 World Wildlife Fund annual report echoes these warnings: "A recent TRAFFIC study reported that American black bear populations are targets of illegal traders in bear parts. The booming medicinal market for these parts, where a single bear gallbladder can be sold for as much as $11,000 in some Far Eastern markets, has already sent Asian bear populations into decline and is causing traders to turn increasingly to American black bears. A complex patchwork of State laws in the United States makes it almost impossible to regulate the trade."

All eight extant bear species are listed under the Appendices to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The spectacled bear (*Tremarctos ornatus*), Asiatic black bear (*Ursus thibetanus*), sun bear (*Helarctos malayanus*), sloth bear (*Melursus ursinus*), giant panda (*Ailuripoda melanoleuca*) and some subspecies of brown bear (*Ursus arctos*) are listed on CITES Appendix I, thus prohibiting international commercial trade in their parts and products. Other species, including the polar bear (*Ursus maritimus*) and the American black bear (*Ursus americanus*), are listed on Appendix II which means some international trade in their parts and derivatives can occur, under very specific regulations.

The primary reason for the 1992 CITES listing of the American black bear was the "look-alike" problem—it is impossible to visually distinguish the gallbladder of, for example, an endangered Asiatic black bear from an American black bear. The Trip Report from a December 1997 U.S. Fish and Wildlife Service delegation that visited Korea, states, ". . . according to the Service's National Forensics Laboratory, it is still technically impossible to determine the species of bear from a sample of gallbladder. Such purported results would not hold up in court." This creates a significant enforcement loophole which facilitates the illegal trade in bear parts and products. The Bear Protection Act would close this loophole and assist State and foreign bear conservation enforcement efforts.

STATE SUPPORT AND THE NEED FOR A FEDERAL LAW

That "complex patchwork of State laws in the United States" addressing the bears parts trade, to which the WWF report referred, is a major factor complicating enforcement. Thirty-two States ban the commercialization of bear parts, nine States allow trade only of gallbladders taken from outside the State, seven States allow commerce regardless of origin, and two States without bear populations have no regulations at all. This current system allows poachers to kill bears (illegally) in one State where the sale of bear parts is prohibited, and to sell the parts "legally" in another State—or ship them out of the country—completely circumventing the first State's prohibition on sale of bear parts. State wildlife agencies and district attorneys' offices are hindered in investigating and prosecuting bear poaching and gallbladder trade cases by this State-to-State inconsistency.

In 1995 and 1996, conservation organizations inquired of all 50 State wildlife departments whether they considered the current patchwork of State laws regarding the trade in bear parts to be a problem and whether they would support the pending Federal legislation. Over 30 State wildlife agency representatives and/or wildlife law enforcement personnel responded that this legal disparity makes wildlife law enforcement difficult and endorsed a uniform legal framework to prohibit the trade in bear viscera.

The responses were incorporated into a report in April 1996, by the HSUS entitled *The American Bear Parts Trade: A State-by-State Analysis.* Captain Dave Tyler, Division of Enforcement, Rhode Island Department of Environmental Management, for instance, replied that an interstate ban on bear viscera trade "would help because it is hard if trade is legal in one State and illegal in another." James Timmerman, Jr. Ph.D., Director of the South Carolina Department of Natural Resources concurred: "The South Carolina Department of Natural Resources would certainly support national legislation that protects the American black bear from the gallbladder trade. A Federal law prohibiting the commercial sale, import and export of bear gallbladders would be most helpful in protecting the American bear population from this illegal activity. . . . I support this initiative and am very supportive of anything that can improve enforcement in all areas."

Even representatives in those States without existing State legislation to control the trade in bear parts acknowledge the problem of legal inconsistency. Ray Lyon, Enforcement Assistant Chief, Special Operations with Idaho Fish & Game noted in a 1995 letter, "We realize that there is some illegal killing of bears promoted by our laws." In fact, a 1992 Alaska court case shows exactly how the current legal inconsistency makes wildlife enforcement difficult, if not impossible, and interferes with other States' efforts to manage their wildlife. An individual in Alaska, where State regulation 5 AAC 92.200 prohibits purchase of any part of a bear, was offered bear parts by a man in Idaho where commerce is legal. She agreed to buy them, sent payment, and was arrested when she went to the airport to collect her purchase. Although all of the Alaska resident's actions related to this unlawful purchase were committed within the State, the case was ultimately dismissed because the "legal site" of the purchase is not defined.

The Alaska Attorney General's office concluded that this decision "will lead to the inevitable result of encouraging individuals to unlawfully take bears in Alaska, take them outside to places like Idaho where the sale of bear parts is still legal, and sell them to purchasers in Alaska through out-of-state strawmen. This is the very kind of conduct the legislature and Board of Game intended to prevent. . . . This does not further the administration of justice."

This case in Alaska is not an isolated incident, although statewide investigations and prosecutions have varying levels of success. Additional bear poaching and gallbladder trading operations have been uncovered nationwide. Bears are being targeted and killed specifically for their parts and no additional, expensive, government-funded studies are necessary to see that this is a problem. The following examples provide illustration of bear poaching and gallbladder trade cases across the country:

- Investigations in California resulted in arrests in 1994 and in February of this year. In these cases, individuals, including Korean-Americans, arranged illegal bear hunts and sale of bear parts both in the United States and South Korea.
- In Senator Lautenberg's home State the Star-Ledger newspaper reported in 1996 that "wildlife officers found the carcass of a black bear in West Milford. It was missing its gallbladders, paws, tongue and teeth. . . ." New Jersey Wildlife Law Enforcement deputy chief Greg Huljack noted, "It doesn't happen often; but when it does it's one too many."
- An article in The Idaho Statesman (September 17, 1995) quotes U.S. Fish and Wildlife Service special agent Paul Weyland: "Bears are being poached just for their gall bladders . . . We even have intelligence of people poaching bears in other States and laundering them in Idaho." Weyland continues: "Poaching is widespread, there's no question. . . . Idaho Fish and Game biologists are wondering what's happening to our bears. I can tell you what's happening to them: They're being poached."
- In Utah, State Division of Wildlife Resources agents learned of a Salt Lake man who in 1996 was purchasing bear galls and "moving them to South Korea." According to The Salt Lake Tribune (January 28,1998) he allegedly told agents, "In my mind I won't get caught." In a separate, yet unsolved case, State DWR investigator William Woody found two bears in Moab in 1997 with only the paws and galls removed.

Passage of the BPA will create a uniform legal framework that closes the loophole of disparate State laws, thereby contributing to a reduction in the number of bears poached globally to supply the trade, and facilitating the wildlife enforcement efforts of dedicated State fish and game personnel.

THE BEAR PROTECTION ACT WOULD HAVE A POSITIVE INTERNATIONAL IMPACT

Of course, the illegal bear parts trade is a global problem with the most serious potential impact facing endangered bear populations outside the United States. The confusion caused by, and easy circumvention of, State laws, provide cover for continued illegal commerce in the gallbladders of Asian bears whose populations have nearly disappeared. The enforcement complications of the legal status quo also allow traders outside the United States to sell endangered bear parts under the guise that they are from legally taken North American bears. By prohibiting the import and export of bear parts and derivatives, Senator McConnell's legislation will help conserve these endangered Asian bear populations.

For example, Mr. Sang Do Lee, Director and Senior Prosecutor with the South Korean Environmental Crime Division, told a U.S. Fish and Wildlife Service delegation that prosecutors "assume that the bear galls [entering the Republic of Korea] from the United States come from legally hunted bears." Since 1991, the U.S. Fish and Wildlife Service has issued 19 permits for export of bear gallbladders and bile.

Only 1 permit (for a single gallbladder to Japan) was not for forensic analysis, scientific research, or return of parts used as evidence in wildlife cases. The FWS 1997 Korea Trip report adds: "Mr. Lee wishes the U.S. Government would put tougher controls on smuggling out of the United States. . . . Lee knows of no other species where there is an illegal trade problem comparable to that of bear gall; bear gall is small, profitable, and easy to smuggle."

Enactment of the Bear Protection Act will prevent those attempting to sell endangered Asian bear parts in other countries such as China, Taiwan, Japan, South Korea and elsewhere from falsely claiming they are from legally taken American bears. The fact that no gallbladders, bile, or derivatives will be able to leave the United States legally will facilitate the successful prosecution of such individuals.

Passage will also send a strong message to poachers and profiteers that the United States intends to continue its leadership role in global species conservation, including our international obligations under CITES. At the 10th meeting of the Conference of the Parties last summer in Zimbabwe, the United States co-authored a Resolution on "Conservation of and Trade in Bears." The Resolution, passed unanimously, begins by:

> "NOTING that the continued illegal trade in parts and derivatives of bear species undermines the effectiveness of the Convention and that if CITES Parties and States non-party do not take action to eliminate such trade, poaching may cause declines of wild bears that could lead to the extirpation of certain populations or even species."

The resolution then:

> "URGES all Parties, particularly bear range and consuming countries, to take immediate action in order to demonstrably reduce the illegal trade in bear parts and derivatives by the 11th Meeting of the Conference of the Parties, by: a) confirming, adopting or improving their national legislation to control the import and export of bear parts and derivatives, ensuring that the penalties for violations are sufficient to deter illegal trade."

The Bear Protection Act is national legislation that meets this international goal.

The Bear Protection Act has severe impacts only for poachers and smugglers. It will not affect a State's ability to decide whether bear hunting can occur within the State, how long the hunt season can last, what the bag limit for the season will be, or by what methods bear hunting can take place. Nothing in the bill compromises a lawful hunter's ability to kill bears in accordance with these State regulations. In fact, of the 27 States that have bear hunting seasons, over two-thirds of them, 19 States, also ban bear gallbladder commercialization with no conflict.

Nor should it hinder those who practice traditional medicine. According to both the EarthCare Society and Association of Chinese Medicine (two prominent Hong-Kong non-governmental organizations), there are at least 54 herbal alternatives to bear bile in its various medicinal applications. There are also synthetic alternative remedies. Word Fei-Cheung, Assistant Manager of the London-based Institute of Chinese Medicine told the CITES Standing Committee meeting in Rome in 1996, "We are as aware as anybody else of the threat to endangered species caused by the unscrupulous people who trade in the products of species such as the tiger, the bear and the rhinoceros. Indeed, we condemn these practices just as strong as the international conservation community . . . It is vital that the trade in these products is stopped forever, if we are to save these species."

The 105th Congress has an historic opportunity to enact legislation that will contribute to ensuring a stable future for these species across the globe. Anyone who is strongly opposed to the illegal poaching of bears should support S. 263. The world sadly watched for decades as the trade in rhino horn and tiger bone, along with habitat destruction, nearly wiped out these species throughout their range. Now, bear habitat is being destroyed and smugglers are trading in their gallbladders. There is no reason for the world's bears to risk a similar fate as rhinos and tigers. There is no reason to wait until all eight species are in complete peril to ban the commercialization of bear viscera.

THE FISH AND WILDLIFE REVENUE ENHANCEMENT ACT OF 1998 (S. 2094)

The HSUS strongly supports the U.S. Fish and Wildlife Service's Division of Law Enforcement and regularly asks Congress to appropriate more funds toward the Division's activities. The HSUS supports the mission of the National Wildlife Property Repository to include forfeited and abandoned wildlife parts and products as part of a wildlife trade education kit distributed to museums, schools and other organiza-

tions. We also support the mission of the National Eagle Repository to distribute eagle carcasses to Native Americans for religious and ceremonial purposes.

We commend Senator Allard for seeking ways by which to enhance the flow of funds to the U.S. Fish and Wildlife Service's Division of Law Enforcement. However, The HSUS has the following concerns about the proposed amendments to the Fish and Wildlife Improvement Act (S. 2094):

• *The HSUS does not support the U.S. Government engaging in the trade in wildlife parts and products.* The Fish and Wildlife Improvement Act authorizes the Secretary of the Interior or the Secretary of Commerce to dispose of abandoned and forfeited fish and wildlife "in such a manner as he deems appropriate (including, but not limited to, loan, gift, sale, or destruction)." Sale is only one option that should be considered and it is an option that the HSUS does not support. The Service should limit its role to regulating the trade in wildlife, rather than promoting or engaging in trade as a supplier. One reason the Repository has never sold forfeited or abandoned fish or wildlife is that the Repository would not have benefited from such a sale. *S. 2094 would allow the Repository to benefit from the sale and, if passed, S. 2094 would encourage the Secretaries of Interior and Commerce to favor sale instead of destruction or other methods of disposition preferred by the HSUS.* Since the HSUS opposes the sale of forfeited and abandoned wildlife by the Service, we also oppose S. 2094 because it would encourage such sale.

• *The precedent-setting sale of 200,000 wildlife parts and products at auction may generate considerable press attention that would seriously undermine the Repository's efforts to educate the public about the harm caused by the wildlife trade.* Most members of the American public do not distinguish between luxury products made from endangered, threatened or CITES Appendix I species and luxury products made from other wildlife. Certainly, to the HSUS' six million members and constituents, the inhumane treatment suffered by animals killed to supply the wildlife parts and products trade is the same regardless of the conservation status of the species. For example, although kangaroos are not protected under CITES or the Endangered Species Act, five million are killed in cruel ways each year to supply the international trade in kangaroo skin, which is made into shoes, luggage, belts, wallets and gloves. Many Americans are sure to be appalled by the Service's promotion of and participation in the trade in such items. In contrast, the educational message that could be generated by a public event involving the 200,000 sellable items plus the old and deteriorating items made from endangered, threatened, and Appendix I species would be very meaningful. Kenya and Nepal have made headlines in newspapers around the world by publicly burning such items.

• *There are other ways of meeting the financial needs of the Repository without the Service engaging in the wildlife trade business.* The Repository has stated that it would use the proceeds from the sale to send out more wildlife trade education kits, more eagles, and to maintain items in the Repository. In this regard, the HSUS was surprised to discover that the Service pays shipping and handling costs for the educational kits and eagles. Under these circumstances, it is no wonder that these "free" services generate more requests than the Repository can fill. The HSUS supports a "users pay" approach toward distribution of the education kits: those requesting the educational kits should pay the $50 shipping and handling charge. This measure, which could be adopted administratively, would save the Service $20,000 or more per year. Second, the Repository has stored far more items than are required for its educational outreach program, at considerable expense. According to information prepared by the Repository, just over 7000 items were used for education kits between July 1995 and December 1997, yet the Repository stored and maintained 450,000 items. The cost of maintaining 440,000 items that the Repository will never use represents a considerable waste of money and staff time that could be avoided in the future by cutting back significantly on the number of items stored in the Repository.

Rather than pursue this legislation, the HSUS urges the Repository to adopt a "users pay" approach to the distribution of the education kits, to cut back significantly on the number of items stored in the Repository, and to hold a public event to destroy all surplus items in order to educate the public about the harm caused by the wildlife trade.

That said, with the legislation expected to advance, we suggest that the following changes to S. 2094 would improve the bill considerably:

• The bill should explicitly state that none of the items sold will be of species listed as endangered or threatened under the Endangered Species Act, on Appendix I of CITES, or protected by the Marine Mammal Protection Act.

• The bill should explicitly state that none of the items sold will be on Appendix II of CITES unless they were accompanied by a legitimate CITES export permit from the country of origin and that none of the items sold will be on Appendix III

of CITES unless they were accompanied by a legitimate CITES export permit or a "certificate of origin."

Explanation: When species listed on CITES Appendix II are imported without legitimate CITES export permits from the country of origin it means that the State of export has not verified that the export is in conformance with CITES Article IV, that is: (1) it means that the export of the wildlife could have been detrimental to the survival of the species; and (2) it means that the specimen could have been obtained in contravention of the laws of that State for the protection of fauna and flora. The Service should not promote or engage in the sale of such wildlife specimens, which could be detrimental to wild populations of the species concerned and which could undermine wildlife protection laws of other countries.

When specimens of a species listed on CITES Appendix III are imported without a legitimate CITES export permit or "certificate of origin," it means that the State of export has not verified that the export is in conformance with CITES Article V, that is, it means that the export of the wildlife could have been in contravention of the laws of that State for the protection of wild fauna and flora.

• The bill should explicitly state that none of the items sold will be species that were obtained in contravention of the laws of the exporting State for the protection of fauna and flora.

Explanation: The export of a species not listed on the CITES Appendices or the Endangered Species Act (such as kangaroos and most reptiles) is often nonetheless regulated by national conservation laws of the exporting State; these regulations are often designed to ensure that export is not detrimental the survival of the species concerned. Exports conducted in accordance with such laws are often accompanied by an export permit from the country of origin. The Service should not promote or engage in wildlife trade that is harmful to wildlife populations or that undermines the wildlife protection laws of other countries.

THE RHINOCEROS AND TIGER CONSERVATION REAUTHORIZATION ACT OF 1998 (H.R. 3113)

The HSUS supports reauthorization of the Rhinoceros and Tiger Conservation Act which directs funds toward valuable in-situ rhino and tiger conservation projects. The HSUS recommends that Congress appropriate $1 million for the Rhinoceros and Tiger Conservation Fund in FY99.

THE RHINO AND TIGER PRODUCT LABELING ACTS (S. 361 AND H.R. 2807)

The HSUS wishes to thank Senator Jeffords for his leadership on this effort to enact legislation that would prohibit the import and export of any product labeled as containing endangered species or species listed on CITES Appendix I. One needs only to walk into an Asian market in any large city in the United States to view the many products offered for sale that claim to contain such species. The HSUS is often asked by our members and constituents how such items can be offered for sale in the United States. The response is, unfortunately, that the burden of proof that the items actually contain these species rests on the over-worked and underfunded U.S. Fish and Wildlife Service Law Enforcement Division. And furthermore that, even when examined by forensic experts, it is often difficult to detect the species in these products because they are present in such minute quantities.

S. 361 would amend the Endangered Species Act (ESA) in order to achieve the aforementioned goals. In contrast, H.R. 2807 has a narrower focus and would not amend the ESA; instead, it would amend the Rhino and Tiger Conservation Act to prohibit the import, export and sale of any product labeled as containing any substance derived from any species of rhinoceros or tiger.

The HSUS supports the intent of both bills. S. 361 is the ideal approach because it addresses trade in all endangered and CITES Appendix I species, not just rhinos and tigers as does H.R. 2807. However, H.R. 2807 is also appealing because it would prohibit sale of products claiming to contain these species (it is far easier for enforcement officers to observe these products being offered for sale than to observe them being imported or exported); S. 361 does not address sale. In conclusion, the HSUS recommends that the committee to work with Senator Jeffords and Congressmen Saxton and Miller to ensure enactment of a Labeling Law by the end of this legislative year.

Thank you, Mr. Chairman and members of the committee, for this opportunity to share our views about these bills.

ORGANIZATIONS THAT SUPPORT HSUS' TESTIMONY ON THE BEAR PROTECTION ACT

Action for Animals Network (VA)
Adopt a Pet/Save a Life (AL)
Alliance for the Wild Rockies (ID)

American Humane Association (CO)
American Lands
American Society for the Prevention of Cruelty to Animals
American Wildlands (MT)
Animal Allies (NH)
Animal Allies (VA)
Animal Care and Welfare/SPCA (PA)
Animal Protection Institute (CA)
Animal Protective Association of Missouri (MO)
Animal Rights America (NJ)
Animal Rights Foundation of Florida (FL)
Animal Rights International (NY)
The Animal Shelter (AL)
Animals Asia Foundation (Hong Kong)
Ardmore Animal Care, Inc. (OK)
The Ark Trust (CA)
Arkansans for Animals, Inc. (AR)
Association of Veterinarians for Animal Rights (CA)
Beauty Without Cruelty (NY)
Boulder-White Clouds Council (ID)
Canyon County Animal Shelter (ID)
Carson/Eagle Valley Humane Society (NV)
Cayuga County SPCA (NY)
Chatauga County SPCA (NY)
Chilton County Humane Society (AL)
Closter Animal Welfare Society (NJ)
Committee for Idaho's High Desert (ID)
Committee for Rational Predator Management (ID)
Cumberland Animal Control (RI)
Defenders of Animals Inc. (CT)
Defenders of Wildlife
Deutsches Tierhilfswerk (Germany)
Doris Day Animal League
Dutchess County SPCA (NY)
Earth Island Institute (CA)
Earthtrust
The Ecology Center (MT)
Environmental Advocates (NY)
Environmental Investigation Agency
Europaisches Tierhilfswerk
Farm Sanctuary (NY)
Franklin County Humane Society (MO)
Franklin County Humane Society (FL)
Free The Bears Fund, Inc. (Australia)
The Foundation for Animal Protection, Inc. (CT)
Friends of Animals (CT)
Friends of the Bitterroot (MT)
Friends of the West (ID)
Friends for Animal Welfare of Randolph County, Inc. (AL)
Friends of the Wild Swan (MT)
Fund For Animals
Gallatin Valley Humane Society (MT)
Global Survival Network
Greater Yellowstone Coalition (ID)
Greenpeace Foundation (HI)
Hells Canyon Preservation Council (OR)
Humane Farming Association (CA)
Humane Federation of Wyoming (WY)
Humane Society International
Humane Society of Central Oregon/SPCA (OR)
Humane Society of Collier County (FL)
Humane Society of Etowach County (AL)
Humane Society of Fairfax County (VA)
Humane Society of North Pinellas (FL)
Humane Society of the Palouse, Inc. (ID)
Humane Society of Tampa Bay, Inc
Hunterdon County SPCA, Inc. (NJ)
I CARE (FL)

Idaho Animal Advocates (ID)
Idaho Coalition United For Bears (ID)
Idaho Conservation League (ID)
Idaho Sportsmen for Fair Hunting (ID)
IdahoWatersheds Project (ID)
International Primate Protection League
Kootenai Environmental Alliance (ID)
Lands Council (WA)
Last Chance for Animals
Laurel Animal Welfare League (MT)
Marion County Humane Society (FL)
Monmouth County SPCA (NJ)
Montana Ecosystem Defense Council (MT)
Montana Ecosystem Defense Council (MT)
Montgomery County Humane Society (AL)
National Humane Education Society (VA)
New Hampshire Animal Rights League (NH)
New Jersey Animal Rights Alliance (NJ)
New Jersey Coalition for Animals (NJ)
North American Wolf Association
Northeastern Oklahoma Animal Helpers (OK)
Northern Rockies Preservation Project (ID)
Oklahoma SPCA (OK)
Pacific Environment and Resources Center
Performing Animal Welfare Society (CA)
Pet Partners of Victor Valley (CA)
Ponca City Humane Society (OK)
Predator Defense Institute (OR)
Predator Project (MT)
Putnam County Humane Society (FL)
Rancho Coastal Humane Society (CA)
Recognition of Animal Rights (NY)
Rocky Mountain Animal Defense (CO)
Rhode Island Animal Rights Coalition (RI)
Safe Haven Humane Society (OR)
Sawtooth Wildlife Council (ID)
Shambala Preserve (CA)
Shawnee Animal Shelter (OK)
Society for Animal Protective Legislation
South Lake Animal League (FL)
SPCA Josephine County (OR)
Swan View Coalition (MT)
T-Town People for Animal Welfare and Safety (AL)
Urban Wildlife Crisis Center (CT)
Walker County Humane Society (AL)
Washington Humane Society (DC)
Wayne County Humane Society (NY)
West Orange Animal Welfare League, Inc. (NJ)
West Volusia Humane Society (FL)
Wild Wildemess (OR)
Wildcare Foundation (OK)
Wildlife Watch (NY)
Wiregrass Humane Society (AL)
Wise County Humane Society (VA)
World Society for the Protection of Animals (MA)
Wyoming Advocates for Animals (WY)

PREPARED STATEMENT OF KRISTIN L. VEHRS, DEPUTY DIRECTOR, AMERICAN ZOO AND AQUARIUM ASSOCIATION

Mr. Chairman and members of the committee: My name is Kristin Vehrs. I am the deputy director of the American Zoo and Aquarium Association (AZA), and director of the Government Affairs Department. I have over 19 years of experience working for the public display community.

The AZA is a professional organization representing 184 accredited zoological parks, aquariums, oceanariums, and wild animal parks in North America. The majority of our institutional members are located in the United States. In addition,

AZA represents 4800 individuals, most of whom are employed by our zoo and aquarium members. In 1997, over 122 million people visited AZA member zoos and aquariums—more than those who attended professional baseball, basketball, football and hockey games combined.

The AZA appreciates the opportunity to testify before the committee on four bills: S. 2094, the Fish and Wildlife Revenue Enhancement Act of 1998; S. 361, the Rhino and Tiger Product Labeling Act; H.R. 3113, the Rhinoceros and Tiger Conservation Reauthorization Act; and S. 263, Bear Protection Act.

I would like to thank this committee for its leadership and the concern it has shown for the conservation of endangered and threatened species, in particular African and Asian elephants, tigers and rhinos. I especially thank you, Mr. Chairman, Mr. Kempthorne, and other members of the committee for approving the reauthorization of the African Elephant Conservation Act in June, and the Asian Elephant Conservation Act last fall.

S. 2094, THE FISH AND WILDLIFE REVENUE ENHANCEMENT ACT OF 1998

AZA understands that S. 2094 does not change any FWS authority related to the current practices of the National Wildlife Property Repository—to dispose of appropriate products through "loan, gift, sale or destruction." S. 2094 would allow the FWS to retain all proceeds from already-authorized and future sales of eligible wildlife materials it obtains in the course of implementing existing laws for the costs of handling and disposing of the materials (e.g. shipping, storage, appraisals, auction expenses), as well as for other already-authorized purposes such as processing and shipping eagle feathers to Native Americans for religious purposes. Currently, FWS may use proceeds from sales of wildlife items for rewards and for some storage costs, but not for defraying the costs of the sales themselves.

While AZA has not formally endorsed S. 2094, our organization and our membership strongly support the continued availability of fish-and wildlife-related items from the Repository for educational programs. The AZA, FWS, World Wildlife Fund (WWF), National Fish and Wildlife Foundation, and Samsonite have a cooperative educational effort entitled Suitcase for Survival. It is an extremely popular educational tool for our member zoos and aquariums. Since its inception in 1991, the Suitcase for Survival Program has reached millions of school children throughout North America, and, as of 1997, there were 187 suitcases in circulation with a long waiting list for more suitcases.

"Suitcase for Survival" is designed to teach school children how the illegal trade in endangered animal products has contributed to bringing many species close to the edge of extinction. AZA-accredited zoos and aquariums loan the suitcases, packed with confiscated wildlife products and educational materials, to teachers who have completed a special training course. This program gives AZA, its members, and schools throughout the country the opportunity to teach a whole new generation about the choices they make, and the effects their choices have on the world around them. We want them to understand that their consumer decisions give them the power to impact the future of an entire species.

The AZA believes it is very important that FWS continue to make these items available to museums, zoos, and schools for scientific and educational purposes.

S. 361, THE RHINO AND TIGER PRODUCT LABELING ACT

As this committee is well aware, the situation facing all species of tigers and rhinos in the wild has reached crisis levels. Since the 1940's, three tiger subspecies—the Caspian, Bali, and Javan—have become extinct, and the South China tiger is now among the most highly endangered mammals on earth. Ninety-five percent of the tiger population has disappeared since the beginning of the 20th century. At that time, an estimated 100,000 tigers roamed India, Indochina, and other parts of Asia. Today, fewer than 7,000 tigers are left in the wild, and those numbers continue to drop. While pressure from an expanding human population and the development of natural resources to supply booming economies have attributed to a decline in worldwide tiger populations, poaching has clearly taken center stage since the 1980's as the primary reason for the decline of these magnificent animals.

According to Joshua Ginsberg of the Bronx Zoo/Wildlife Conservation Society, the collapse of the Soviet Union opened the illegal market for the Siberian tiger which, combined with an improved standard of living for millions of Asian consumers, has increased the demand for expensive tiger products. However, recognizing the problem and solving it are two very different things, as many of my colleagues have come to realize. In the past decade alone, one-quarter of the world's wild tiger population may have been killed to supply the international black market for tiger parts,

despite a 20-year ban under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

The situation facing the three Asian and two African rhino species is also very serious. Populations were abundant and rather widely distributed in Asia through the middle of the 19th century. Today, fewer than 500 Sumatran rhinos and 100 Java rhinos remain in the wild. In Africa, black rhino populations have declined by 96 percent over the past two decades due to poaching for the trade in traditional medicines and dagger handles. Approximately 13,000 rhinoceros of all species are left in the wild, and these numbers are far from stable. Conservation biologists believe a population of at least 2,000–3,000 of each species is necessary for long-term viability. Most rhino species are far below this viability level. While poaching for the horn is the major threat for all five species, habitat degradation is also a significant threat for the Asian species due to unsustainable exploitation of timber and conversion of land for agriculture and other human uses.

Stopping the demand for rhinoceros horn and tiger parts in light of 1000 years of proven traditional Asian medicinal practices, and a strong cultural affinity for tiger bone and rhino horn, is extremely difficult. For far too long, the United States has allowed a weakness in current trade controls that makes it relatively easy to sell rhino and tiger products in the United States.

The AZA strongly believes solving this serious problem requires a two-pronged attack. We would like a bill to be passed to prohibit the import into or export from the United States of any product labeled as or actually containing any species of tiger or rhinoceros. While such a bill would not affect the market within Asia, it would stop the significant importation of rhino and tiger products into the United States. According to recent reports by the World Wildlife Fund and the Wildlife Conservation Society, more than 50 percent of all retail stores in North America Chinatowns continue to sell illegal endangered species products despite the twenty-year ban. This approach also would eliminate the expensive and time-consuming laboratory testing necessary to determine if a confiscated product contains ingredients originating from rhinos or tigers.

AZA believes a Rhino and Tiger Product Labeling Bill will reinforce the historical role the United States has played in combating the illegal trade of animals and animal parts. Combining such a bill with the tools available in the Endangered Species Act, the Lacey Act, and the actions the United States took against China and Taiwan in 1994 under the Pelly Amendment to the Fishermen's Protective Act for engaging in trade of tiger parts and rhino horn will tighten the grip around the worldwide illegal trade of rhinoceros horn and tiger parts.

Turning to the specific bills before the committee, we would like to see a new version combining the preferable parts of both bills. Although we inherently prefer the broader approach taken by S. 361 to prohibit the importation of any product labeled as containing any species of fish or wildlife listed in Appendix I of CITES, we understand that the narrower language contained in H.R. 2807 is the more saleable for now. Since there are specific problems that can be cited with importation of tiger and rhino parts, we can support the narrower language.

We believe the best vehicle for a Rhino and Tiger product Labeling Act is to amend the Rhino and Tiger Conservation Act as is proposed in H.R. 2807.

Finally, regarding the penalties proposed in H.R. 2807, AZA realizes that some members of the committee are concerned the enforcement language is too extreme, in particular, authorizing seizure of equipment, vessels, vehicles, etc. The AZA would be willing to work with you and the committee to resolve this issue.

Mr. Chairman, AZA believes it is critical that a bill move forward to the Senate floor this session. The World Wildlife Fund/Wildlife Conservation Society document referenced above clearly illustrates that Congress needs to give FWS the tools necessary to prevent further illegal products from entering this country.

I'd like to outline some of the activities AZA members undertake in educating the public about the harmful effects of purchasing rhino and tiger products. On a daily basis, our members educate millions of visitors about the devastating effects of development on the critical habitat for these two highly endangered species, and the long-term consequences of purchasing products that claim to contain rhino or tiger parts. Educating the public about its individual actions is an essential part of stopping the existing illegal trade, and of keeping tigers and rhinoceros from going the way of the Dodo bird.

Last year, AZA unveiled a new traveling exhibit designed to promote the survival of the tiger. The AZA "Save The Tiger Traveling Exhibit: Tigers in Crisis" is designed to educate people about tigers, the problems they face as an endangered species, and the efforts zoos and other organizations are making to conserve them. Funded by the Exxon Save the Tiger Fund Program of the National Fish and Wildlife Foundation, the display consists of five freestanding kiosks attached to dramatic

life-size tiger cut-outs. Highlighted with magnificent photography and hands-on interactive elements, each kiosk tells a different chapter in the life story of tigers, relates what's being done to help them, and offers the public opportunities to get involved in tiger conservation. Between January 1998 and September 2000, the exhibit will have visited nine AZA zoos across the country, allowing millions of visitors to become better educated on the plight of tigers.

The zoos and aquariums of AZA also have greatly expanded their conservation responsibilities well beyond their gates. AZA members are involved in field conservation programs on every continent, including rhinoceros and tiger field conservation programs in Asia and Africa. For example, the AZA Sumatran Tiger Species Survival Plan (SSP) works continuously with Indonesian wildlife authorities in developing their Center for the Reproduction of Endangered Species, benefiting both native rhinoceros and tigers. The Minnesota Zoological Garden has adopted the Ujung Kulon National Park, on the island of Java in Indonesia, to protect the last stronghold of the Javan rhino. A number of AZA institutions have combined their efforts with the International Rhino Foundation in Zimbabwe on several conservation projects to protect the southern black rhinoceros.

For many years, AZA institutions also have had the good fortune to maintain a number of endangered species in their care, giving them the opportunity to develop successful techniques in veterinary care, reproductive technology, genetic analysis, population management, disease control, and tracking animals' movements using technology such as radio or satellite telemetry that have been transferred to use in the field. In essence, AZA zoos and aquariums have become the classrooms for field conservation.

H.R. 3113, THE RHINOCEROS AND TIGER CONSERVATION REAUTHORIZATION ACT

The AZA strongly supports the reauthorization of the Rhinoceros and Tiger Conservation Act. The AZA believes the Rhinoceros and Tiger Fund has already proven itself effective for critical conservation programs in Africa for the highly endangered northern white and southern black rhinoceros, and for developing workshops in India and Indonesia for improving enforcement programs. Like the African Elephant Conservation Fund—a recognized successful public-private partnership—this fund is designed to deliver immediate results by assisting conservation organizations on the front lines in saving animals from extinction through critical field conservation work and anti-poaching efforts. These funds, which must be shared among tiger programs in over ten countries and programs for five species of rhinos, have kept, and will continue to keep, several important conservation efforts moving forward.

AZA believes its ability to educate 122 million visitors annually—including 10 million students as part of their classroom and summer camp activities—with our expanding field conservation programs, has placed us in the forefront of wildlife conservation education. AZA and its member institutions will continue to work with the FWS and Congress in combating the senseless destruction of these magnificent animals.

S. 263, BEAR PROTECTION ACT

Most populations of the world's eight bear species have experienced significant declines during this century. Habitat loss and overhunting has played a critical role in the demise of Asian bear populations in particular. An international market in bear parts for traditional Asian medicines also exists. While the scope and impact of this trade on bear populations is not clearly known, the relatively high market value of bear parts, particularly gall bladder and bile, warrants that action be taken to minimize the threat or potential threat of illegal trade. In spite of this, black bear populations in the United States remain among the healthiest in the world.

It is in the context of the U.S. black bear populations that AZA has concerns with S. 263. While we support the broad intent of S. 263 to conserve bear species, we are reluctant to fully support the bill because we believe we do not yet understand the problems facing bears in the United States and the connections to global bear conservation. Although the illegal Asian medicinal market poses a threat to Asiatic bear species, we have not seen evidence to support the claim that bears in the United States are also threatened by the demand for bear viscera.

The American black bear is already listed in Appendix II of CITES, and most States already prohibit the commercial trade in bear parts (29). While there are seven States that allow commercial trade of products from bears taken within their borders, most of these bear populations are stable and in some cases may even be increasing. The exception is the Louisiana and Florida subspecies. Although inconsistent State laws may facilitate illegal trade in bear parts, there is not enough convincing evidence to indicate this is a widespread problem.

The AZA, WWF, and National Wildlife Federation share the same concerns and expressed those in a 23 June letter to Chairman Chafee, Senator Kempthorne, Senator McConnell, and Congressman Porter. Our specific recommendations for S. 263 are as follows:

(1) Amend the legislation to allow for a broad review of the trade—directed by the Department of Interior and with the assistance of State fish and wildlife agencies—to accurately assess problem areas so that enforcement resources can be appropriately applied. This would involve an assessment of the illegal trade in bear viscera in the United States and its impact on wild bear populations in North America and elsewhere, and an examination of the links of such activities to the Asian medicinal trade. Specific authorization for funding should be included with a tight deadline in which to conduct such a review.

(2) Provide the Department of Interior with greater authority to impose broader trade restrictions, pending the outcome of the trade review conducted. A similar approach is embodied in the African Elephant Conservation Act, and was effectively employed by the United States during the 1980's to combat the ivory trade.

(3) Include authorization language for funding to strengthen long-term enforcement goals of the Bear Protection Act.

(4) Include a provision in the legislation authorizing specific funding to support conservation programs for endangered bears. This will help ensure long-term viability of the world's eight bear species and the continuation of the American black bear population.

AZA would be pleased to work with the committee in developing legislation to contribute to global bear conservation.

Thank you for allowing me to testify on these four important wildlife bills.

PREPARED STATEMENT OF MOLLY KRIVAL, PH.D., VOLUNTEER AND BOARD MEMBER OF THE "DING" DARLING WILDLIFE SOCIETY (DDWS), J. N. "DING" DARLING NATIONAL WILDLIFE REFUGE, SANIBEL, FL

INTRODUCTION

My name is Molly Krival. I come to you as the archetypical little old lady in tennis shoes—one of many little old ladies and younger people—who volunteer at a national wildlife refuge.

When my husband and I retired from the U. of Wisconsin System, we moved to Sanibel—off the SW coast of Florida—because of the refuge there and because of the conservation ethic of that city. As soon as our boxes were stowed away, we went to the visitor center to apply to become volunteers. That was 10 years ago.

We were trained to provide information to the public first in the visitor center and later on Wildlife Drive where we focus our spotting scope on some of the wonderful wildlife in view. We joined the refuge's cooperating association, the "Ding" Darling Wildlife Society and, in time, were elected to the board where I have served as President. Our 150–160 volunteers are funded primarily by Society income and are trained and organized by a volunteer coordinator from the refuge staff.

A few years ago, the Society offered training to Managers of other refuges—and now National Parks also—to help them organize Friends groups of their own, training that has been repeated by the National Conservation Training Center each year since. And I am a member of a mentor team which visits refuges nationwide who are ready to start a Friends group.

This year I was selected as the Volunteer of the Year for the refuge system—a great honor. Another board member and I have given 5,000 hours to the refuge. It is this background that enables me to speak for this Refuge System Volunteer and Partnership bill. I will direct my remarks to three of its provisions.

REASONS FOR SUPPORT OF SB 2244

1. It encourages the use of volunteers, facilitates partnerships and encourages donations.

On many refuges, the most likely people seen by visitors are volunteers. Refuge staffing is often at a bare minimum and they are deeply involved in managing the resource for wildlife. When they train volunteers, the staff multiplies its productivity. You can imagine a flow chart in which volunteers, partners and staff contribute to the amount of work done on a refuge.

Partnerships often provide a refuge with cooperative funding for needed projects not covered by Federal appropriations. Civilian Friends groups, such as the "Ding" Darling Wildlife Society, also do that. So do partnerships with gateway cities like the city of Sanibel, and private groups like the Sanibel-Captiva Conservation Foun-

dation. Grant providing institutions recognize the value of funding partnership projects which tend to do more for the dollar.

2. Section 3 of this bill allows gifts and donations to be made to individual refuges and creates a new matching grants program to encourage donations.

During my first week as a volunteer, an elderly woman who had known "Ding" Darling came to the visitor center with a drawing he had given her. She wanted to give the drawing to the refuge. The staff member I consulted looked frustrated. The refuge couldn't keep donations. The Society could. The word circulated that the Society could accept donations and we have received many. Since not all refuges have a Friends group to receive donations, gifts have either been refused or sent to some mysterious agency reservoir never to be seen again.

As I travel to refuges all over the country, I find that local people form an allegiance to their own local refuge first and want to support it. That conviction of the heart leads to donations of time and other gifts in kind as well as money. Being sure our donations will stay "at home" is very important to us. I find that local people are far less likely to make donations if those gifts go to some distant agency.

Lately our Society decided to raise $2 million in private funds to build a new Center for Education. This is a first effort of its kind in the refuge system. So far, we have raised about one million four hundred thousand dollars. We expect to complete our drive with only a small portion coming from government associated grants. But other refuges with high visitation rates and strong Friends groups have goals that outstrip their fund raising capabilities; such as

- to build their first visitor center and/or increase office space;
- to purchase big and small items to help manage the wildlife habitat;
- to upgrade environmental education in their community and/or schools.

They need money. Almost always they can raise a portion themselves, but the option for a matching grant would be very encouraging to them. That provision in this bill would light a lot of fires that we wouldn't need to put out.

3. SB 2244 allows the Department of Interior to start a regional pilot project that includes providing a volunteer coordinator to organize and oversee volunteer programs.

Volunteers are a resource of people with all sorts of skills who want to help the refuge. We continue volunteering when we are well-trained, well-organized, and recognized for our contributions.

There are many refuges where a few volunteers simply work with the staff. Where public visitation runs into the hundreds of thousands annually—visitation is rising everywhere—volunteer numbers increase. Those refuges need a volunteer coordinator to do the job right.

SUMMARY AND CONCLUSION

All of the provisions of SB 2244 encourage people living near—or who have an attachment to—one of the over 500 national wildlife refuges

- to take an active role in helping meet its mission,
- to volunteer,
- to form a private nonprofit 501(c)3 in support of the refuge and other partnerships and
- to donate and encourage donations to their local refuge.

I believe our political system works best when people freely associate themselves with it. Many of us, when we grow older, find enormous satisfaction in helping conserve the best of what we have for future generations. Many of us suddenly have time to see a bird, an alligator, a flowering plant for the miracle of nature it is. Our hearts leap up.

I thank Senator Chafee and the 14 co-signers for selecting this means of helping the largest land management system in the world, the National Wildlife Refuges. And I thank this committee for the privilege of addressing you.

PREPARED STATEMENT OF GARY J. TAYLOR, LEGISLATIVE DIRECTOR, INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES

Thank you, Mr. Chairman. I am Gary Taylor, legislative director of the International Association of Fish and Wildlife Agencies, and I appreciate the opportunity to share with you the Association's perspectives on several fish and wildlife bills before the committee. You have asked particularly for our comments on the Bear Protection Act; the Great Lakes Fish and Wildlife Restoration Act; and the Neotropical Migratory Bird Conservation Act.

The International Association of Fish and Wildlife Agencies, founded in 1902, is a quasi governmental organization of public agencies charged with the protection

and management of North America's fish and wildlife resources. The Association's governmental members include the fish and wildlife agencies of the States, provinces, and Federal Governments of the United States, Canada, and Mexico. All 50 States are members. The Association has been a key organization in promoting sound resource management and strengthening Federal, State, and private cooperation in protecting and managing fish and wildlife and their habitats in the public interest.

Let me begin, Mr. Chairman, with our comments on S. 263, the Bear Protection Act. The Association cannot support S. 263 as introduced. We understand that the intent of the bill sponsors is to help address the poaching of Asian bear species for their gall. However, the bill as currently drafted focuses its application largely on the regulation of trade of bear viscera in the United States based on the premise that domestic poaching of U.S. indigenous bear species is contributing to the market demand for bear gall and is having (or could in the future have) a significant negative impact on U.S. bear populations. Mr. Chairman, there is no substantiation to support either of these premises, and the Association therefore concludes that as drafted S. 263 is neither necessary nor helpful in addressing the decline of foreign bear species. Let me offer right up front, Mr. Chairman, that the Association is certainly willing to work with the bill sponsors and the USFWS on a more appropriately focused import-export bill that would address any existing regulatory deficiencies under the Convention on International Trade in Endangered Species of Fauna and Flora (CITES). However, S. 263 as introduced, does not do that.

Mr. Chairman, as you are likely aware, bear populations throughout the United States are robust and generally increasing. Also, as you are likely aware, the statutory responsibility for the conservation and management of bear species in the United States lies largely with the State fish and wildlife agencies, except for the polar bear, grizzly bear and Louisiana black bear where the USFWS shares jurisdiction for these species with the States.

Regulation of bear harvest and allowable use of any parts or products (fur, claws, gall, etc.) is thus closely regulated by the State Fish and Wildlife agency including through the application and enforcement of the Lacey Act by State and Federal wildlife officers. As you are aware, the Lacey Act already makes it a Federal violation to transport or sell across State lines any wildlife that is illegally taken in the State of origin. As recently as May, 1997, our Association surveyed all 38 bear range States regarding illegal harvest and population impact. The information from the States clearly substantiates that while incidental illegal harvest occurs, there is no significant population impact from illegal harvest in any bear range State. If there were, Mr. Chairman, I can assure you that our State fish and wildlife agencies would take appropriate action to address it. This conclusion is also corroborated by the USFWS in a paper delivered last year at the 2d International Symposium on the Trade of Bear Parts, in which Dr. Gnam and Dr. Lieberman of the Office of Management Authority conclude that the FWS ". . . Division of Law Enforcement has determined that the poaching of American black bear for their gall bladders and other parts to supply the demands of the Asian market for these products is not a significant problem and does not occur on any large scale."

The Association believes, therefore, that the application of the Lacey Act to all U.S. domestic commerce in bear viscera, whether it is legal in a State or not, as proposed in S. 263 is unnecessary for bear resource protection, and is an inappropriate Federal intrusion into State management authorities and prerogatives. If enacted, enforcement of this law would divert wildlife law enforcement conservation efforts away from higher priority issues as commercial trade and trafficking of wildlife, particularly foreign species. Mr. Chairman, it is not as easy to poach bear unobtrusively as it is to take a few squirrels or rabbits out of season. The States spend tens of millions of dollars each year in wildlife law enforcement and I assure you would be aware of any significant poaching of domestic bear populations. The several States' record on conservation law enforcement speaks for itself and there is no substantiated evidence that would compel Federal intervention. The State fish and wildlife agencies are prepared to respond to any increase in poaching of bears.

Mr. Chairman, our State-based system of fish and wildlife conservation in the United States is justifiably the envy of the rest of the world. Let me suggest that, rather than the creation of additional Federal statutory authority as contemplated in S. 263, especially where it preempts State management prerogatives, the provision of additional resources to the USFWS—Division of Law Enforcement would be a more appropriate and effective means of affecting Asian bear populations by the regulation of illegal trade in their parts or products. As I indicated earlier, there is little data to substantiate if U.S. bear gall is contributing to a market demand for Asian bear gall and thus affecting the Asian bear parts trade, and consequently, the Asian bear population. The Association would thus encourage additional support

to the USFWS–LE to answer this question also. Finally, as I indicated earlier, we would be happy to work with the bill sponsors and USFWS on a more narrowly focused import-export bill that could address some legal deficiencies in CITES that might exist now.

However, the Association believes S. 263 as introduced is both unnecessary and inappropriately expansive in its reach to domestic bear species, and unnecessarily intrudes into State conservation and management prerogatives for wildlife. We therefore cannot support S. 263 as introduced.

Let me now turn to S. 659, the Great Lakes Fish and Wildlife Conservation Act. In general while the Association can support the bill from a perspective that it could facilitate more effective cooperation between the Federal, State and tribal entities relative to fisheries restoration, we would question whether this legislation is necessary to accomplish that objective. Further, we wish to express our interest in the use of the authorized money for on-the-ground fisheries conservation and restoration efforts, rather than for USFWS facilities and administrative infrastructure.

Mr. Chairman, we certainly recognize the ecological value of the Great Lakes and the need for close cooperation among the many jurisdictional entities in restoration of this system to its former health. Our State fish and wildlife agencies work closely with our Federal U.S. and Canadian partners, provincial partners, and tribal partners toward this objective. The role of the Great Lakes Commission and the Great Lake Fishery Commission have also been instrumental in focusing and facilitating coordinated efforts to meeting this objective of restored health to the Great Lakes ecosystem. And there is no question that we are making significant progress toward that objective. However, while we don't want to minimize the importance of congressional direction toward this effort as reflected in S. 659, we question whether this legislative action is necessary. The FWS already has the necessary authority to implement its role in carrying out the recommendations of the Great Lakes Fishery Restoration Study, and this bill appropriately gives them no additional authority. Whether or not the statutory establishment of another committee is necessary to consider funding for proposals to implement the study is also subject to question. The Association also believes that the FWS can and should (if appropriate) increase its budget request to fulfill its role and obligations in the Great Lakes fishery efforts regardless of whether S. 659 is enacted into law. As I mentioned earlier, we are also interested in ensuring that any additional authorization under S. 659 is directed at on the ground efforts in fishery restoration, and not toward furthering USFWS offices, facilities or administrative infrastructure. We realize that the Appropriations Committee may be the more germane focus of our concerns, but we also wanted you to be aware of these concerns. Having said all of this, I can share with you the support of the Association for S. 659, but should also let you know that the enthusiasm of this support among the eight Great Lakes State fish and wildlife agencies varies widely.

Finally, Mr. Chairman, let me briefly comment on S. 1970, the Neotropical Migratory Bird Conservation Act. The Association has long played an active role in migratory bird conservation, from the negotiation and ratification of the Migratory Bird Treaty in 1916 and passage of the MBTA in 1918, to the North American Wetlands Conservation Act, currently before this Congress for reauthorization. The Association has also given the highest priority to securing the necessary funding to enable our State fish and wildlife agencies to address the conservation needs of the so-called nongame wildlife species (such as Neotropical migratory birds) and their habitats before they reach a point where the application of the Endangered Species Act is necessary. I know that you are familiar with our "Teaming with Wildlife" proposal, Mr. Chairman, to accomplish that objective. The Association and our member State fish and wildlife agencies are also very active in Partners-in-Flight, the Western Hemisphere Shorebird Reserve Program, the North American Waterfowl Management Plan, and other international endeavors to conserve migratory birds throughout their range. The Association therefore supports S. 1970 as another measure to facilitate the conservation of migratory birds, particularly in Latin America and the Caribbean.

Most of our member State fish and wildlife agencies participating in the North American Waterfowl Management Plan are currently sending matching funds to both Canada and Mexico to facilitate the conservation objectives of this plan. Our agencies in the border States of California, Arizona and Texas are already engaged in conservation efforts in Mexico and other Latin American countries to restore indigenous fauna. We anticipate that our State fish and wildlife agencies would likewise participate in the matching fund protocol that S. 1970 would establish for neotropical migratory bird species conservation in Latin America and the Caribbean.

Mr. Chairman, as you are well aware, our habitat conservation efforts in the United States encompassing the breeding range of these species will be successful

only if the habitat in their winter range is likewise secured. The Association believes that S. 1970 establishes a protocol to facilitate that, and therefore supports this measure.

Thank you for the opportunity to share the Association's perspectives of these bills, and I would be pleased to answer any questions.

PREPARED STATEMENT OF THOMAS CRANE, PROGRAM MANAGER, RESOURCE MANAGEMENT AND ENVIRONMENTAL QUALITY, GREAT LAKES COMMISSION

INTRODUCTION

On behalf of the eight member States of the Great Lakes Commission, I am pleased to speak in support of S. 659, reauthorization of the Great Lakes Fish and Wildlife Restoration Act. Passage implementation of the original Act provided the Great Lake States—and the entire Great Lakes governance infrastructure-with a framework for the cooperative conservation, restoration and management of fish and wildlife resources. Reauthorization of the Act will ensure that present progress is maintained and new initiatives are pursued, including implementation of Great Lakes Fishery Resources Restoration Study recommendations.

The Great Lakes Commission embraces the notion of resource management by interjurisdictional cooperation and intergovernmental partnership. These philosophies are embodied in the Act and, consequently, prompted the eight member States of the Great Lakes Commission to unanimously endorse S. 659 by formal resolution on April 3, 1998.

We in the Great Lakes Basin maintain a tradition of multi-jurisdictional cooperation that dates back to the early years of the 20th century. We recognize that the environmental and economic significance of this Basin and its resources transcends our own political boundaries and spans this Nation, North America and the entire globe. These resources, which include the largest system of fresh surface water on earth, have a national and global significance that demands the interest and support of citizens and members of Congress from coast to coast. The Great Lakes system is the world's largest freshwater laboratory; it is a bellwether of scientific investigation. It is also the world's largest freshwater laboratory for institutional experimentation. What we learn here—from both our successes and failures—can form the basis of knowledge for future actions and management efforts elsewhere.

We in the Great Lakes Basin have also long recognized the benefits of a hydrologic, or watershed-based approach to resource management and environmental protection. Transcending the artificiality of political boundaries to manage resources and human behaviors on a watershed basis is a fundamental requirement of an ecosystem approach to Great Lakes management, or to management in any other region of North America and beyond.

In my testimony today, I will briefly describe the purpose and programs of the Great Lakes Commission, the ecologic and economic significance of the Great Lakes fishery, and the past and projected benefits of the Great Lakes Fish and Wildlife Restoration Act. I will argue that intergovernmental partnership and, particularly Federal/State partnership, is perhaps the single most important element of resource management efforts in the Great Lakes Basin. I will conclude with several specific comments on the legislation.

THE GREAT LAKES COMMISSION

While each of you are undoubtedly acquainted with the purpose and programs of the Great Lakes Commission, I do wish to begin my testimony with a brief background statement to provide a context for the items that follow.

The Great Lakes Commission is an interstate compact agency with a legislative mandate to represent the collective views of the eight Great Lakes States before the Congress and the Federal Government. The Commission was established in 1955 under State statutes and granted congressional consent in 1968 via P.L. 90–419, The Great Lakes Basin Compact. The Compact directs the Commission to "promote the orderly, integrated, and comprehensive development, use and conservation of the water resources of the Great Lakes basin."

The Commission is comprised of Governors' appointees, State officials and legislators from its member States (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin). It is supported in part through annual State dues, and stands ready to assist and represent its membership on issues and opportunities of shared interest. The Great Lakes Commission also maintains a strong and active Observer program, which provides for (non-voting) participation by U.S.

and Canadian Federal agencies, provincial governments, tribal authorities, regional organizations and selected other public entities.

We at the Great Lakes Commission share a resource management philosophy that influences every aspect of our work. To summarize, we recognize that:

• Regional economic development and environmental goals are not mutually exclusive. They are inseparable and must be pursued in concert to achieve the region's full potential.

• The eight Great Lakes States, acting collectively through the Great Lakes Commission, have a principal stewardship responsibility for the precious and irreplaceable resources of the Great Lakes region.

• Management of the Great Lakes is of both national and regional interest; it is neither the exclusive responsibility of the States nor the Federal Government. Rather, a Federal/State partnership must be sustained and nurtured.

• The Great Lakes, despite their vastness and resilience, are a finite and fragile resource. Maintaining their integrity is a sound and necessary investment in the region's economy and environment, as well as the health, welfare and quality of life of its citizens.

The Commission pursues its mandate via three functions: information sharing among its member States, coordination of State positions on regional issues, and advocacy of those positions on which the States agree. A wide range of environmental, resource management, transportation and economic development issues is addressed. In so doing, the Commission works closely with Governors and State legislators; members of the Great Lakes Congressional Delegation; municipal, State, provincial and Federal agencies; interstate organizations; private sector firms and associations; universities; colleges and individual citizens.

The Great Lakes Commission's role in addressing issues of resource management is found in the provisions of the Great Lakes Basin Compact. Article VI empowers the Commission to "Consider means of improving and maintaining the fisheries of the Basin or any portion thereof." Article VII further calls upon the Commission to initiate "cooperative action to eradicate destruction and parasitical forces endangering the fisheries, wildlife and other water resources." In carrying out its responsibilities, the Great Lakes Commission is explicitly charged with the responsibility of recommending "uniform or other laws, ordinances and regulations." It is under this authority that the Great Lakes Commission endorses S. 659, reauthorization of the Great Lakes Fish and Wildlife Restoration Act.

THE GREAT LAKES FISHERY AND ITS MANAGEMENT FRAMEWORK

The Great Lakes boast a world-class fishery of fundamental importance to the ecological health and economic well being of the Basin and its residents. The fishery, valued at more than $4.0 billion annually in direct and indirect benefits, supports almost 80,000 jobs. On the Great Lakes proper, 3.77 million anglers devote 46.4 million angler days to the sport annually. U.S. Fish and Wildlife Service data (1985) also indicate that Great Lakes trip expenditures annually include $265 million for food, $65 million for lodging, $202 million for transportation, $143 million for equipment purchases, and almost $27 million for licenses, stamps and permits. Four of the Great Lakes States are among the top ten States nationally in resident fishing license sales. Statistics for Ontario are equally impressive: in 1985 almost 2.2 million adults were active anglers, accounting for 34.4 million fishing days.

The history of the Great Lakes fishery is a study in sound science, innovative management and interjurisdictional cooperation characterized by Federal/State/tribal partnership and U.S./Canada collaboration. The collaborative management framework if defined and shaped by two landmark agreements that transcend the parochialism of individual jurisdictions in favor of a Basinwide, ecosystem-based management approach. Signed by the governments of the United States and Canada in 1955, the Convention on Great Lakes Fisheries—and its implementing body, the Great Lakes Fishery Commission—are directed at achieving an improved and sustainable future for the fishery by establishing and coordinating a research program, and by implementing a joint program for sea lamprey control.

Complementing the Convention is the Joint Strategic Plan for Management of Great Lakes Fisheries, signed in 1981 (and most recently revised in 1997) by State, tribal, provincial and Federal agencies with Great Lakes fishery management authority. The Joint Strategic Plan enables signatories to coordinate activities and collaborate on joint programs and assessment efforts. Noted success in sea lamprey control, a revitalized sport fishery and other restoration efforts speak to the value of the Joint Strategic Plan.

Effective implementation of the Joint Strategic Plan demands a strong legislative framework at the State, provincial and Federal levels. Since 1990, the U.S. Federal

Great Lakes Fish and Wildlife Restoration Act has played a critically important role in collaborative management. Among others, it has vested the U.S. Fish and Wildlife Service with the authority and resources to provide technical assistance to partners; establish regional offices to promote coordination, information dissemination and public awareness; and undertake a Great Lakes Fishery Resources Restoration Study yielding recommendations for the future of the fishery. Reauthorization of the Act will ensure that past investments in the fishery are safeguarded and new initiatives are undertaken to build upon those investments.

COMNMENTS ON S. 659: A BILL TO REAUTHORIZE THE GREAT LAKES FISH AND WILDLIFE RESTORATION ACT

On behalf of its eight member States, the Great Lakes Commission is pleased to endorse S. 659, reauthorization of the Great Lakes Fish and Wildlife Restoration Act. Endorsement was provided by unanimous action on April 3,1998, when the Commission membership adopted its Legislative and Appropriations Priorities for the Second Session of the 105th Congress.

Great Lakes Commission support for S. 659 is based upon the following four observations:

• *Management Philosophy Embodied in the Act:* The Act both reflects and furthers evolving resource management philosophies that have been embraced by the Great Lakes Commission. The Act emphasizes management by ecosystem as opposed to geo-political boundaries. It features interjurisdictional partnerships among Federal, State and tribal governments. It builds on existing authorities (e.g., Joint Strategic Plan) and existing institutional mechanisms (e.g., Council of Lake Committees, Great Lakes Fishery Commission) as opposed to creating new bureaucracy. It provides the States and tribal authorities, via the Great Lakes Fish and Wildlife Restoration Proposal Review Committee, with recommendatory authority over allocation of grant moneys. And, it positions the Federal Government to provide services that are well-suited to inter-governmental partnership: technical assistance, coordination, research and financial support.

• *Accomplishments of the Original Act:* The U.S. Fish and Wildlife Service is a valued Observer agency within the Great Lakes Commission family. In this role, the Service is fully involved in all Commission deliberations and actions with the exception of voting—an authority that is limited to State members by provision in the Great Lakes Basin Compact. A strong U.S. Fish and Wildlife Service/Great Lakes Commission partnership has evolved on the strength of the original Act. Fishery Resource Offices in Michigan, Wisconsin and New York have provided the Great Lakes Commission with a first point of contact on fisheries issues that affect the States individually and collectively. And, beyond a number of resource-related accomplishments, the Act provided for the Great Lakes Fishery Resources Restoration Study and its 32 recommendations that warrant serious consideration and action.

• *Prospective Benefits of Study Implementation:* The Great Lakes Commission concurs with the recommendations of the Great Lakes Fishery Resources Restoration Study, and views reauthorization and adequate funding of the Act as key to their implementation. Viewed collectively, the 32 recommendations are focused on five areas that are highly consistent with the management philosophy and associated extant policies of the Commission. These include: (1) coordinating and harmonizing programs across disciplines and Basin jurisdictions; (2) building upon and supporting existing programs and institutional arrangements; (3) strengthening the Basin's decision-support system by promoting research, monitoring, assessment, evaluation, data base enhancement and associated functions; (4) calling for the development, funding and implementation of action plans and various new initiatives; and (5) promoting public information and education.

• *Support from the Great Lakes Community:* The Great Lakes Commission recognizes that the reauthorization bill is supported within the Great Lakes community and addresses a number of State concerns with the original legislation. A Memorandum of Understanding between the U.S Fish and Wildlife Service and the Great Lakes States, Great Lakes Fishery Commission and several tribal authorities has helped ensure effective implementation of the Act.

From a broader, Basin-wide perspective, we note that the bill is consistent with principles of the Ecosystem Charter for the Great Lakes-St. Lawrence Basin. The Charter, a non-binding "good faith" agreement coordinated by the Great Lakes Commission, presents principles, findings and strategic actions to guide the "ecosystem approach" to Great Lakes management. Approximately 170 agencies and organizations—representing government, the private sector, academic and citizen interests—have endorsed the Charter to date. Principle V of the Charter states the following: "An ecosystem approach to management that involves rehabilitating and protecting

ecological processes and resources of the Basin Ecosystem shall be fully and widely adopted, based on the understanding that human activities, natural resources and ecological processes are interdependent and parts of a unified whole." A reauthorized Act will ensure continued progress in addressing this principle.

With regard to specific provisions in S. 659, the Great Lakes Commission endorses the legislative language as presented. In particular, we applaud section 6 language that establishes a State/tribal review committee (under the auspices of the Great Lakes Fishery Commission's Council of Lake Committees) that will review and offer recommendations to the U.S. Fish and Wildlife Service on fish and wildlife restoration proposals based on the results of the study. Further, the Great Lakes Commission concurs with changes in the reauthorization language that provide for enhanced focus on project implementation, and for a reduction in the annual authorization from $10 million to $5 million, with $3.5 million of the latter to be made available to State and tribal partners. We emphasize, however, that appropriation of the authorized amount will be essential if the goals of the Act are to be fully realized.

The Great Lakes Commission emphasizes that reauthorizing the Act—rather than solely relying on existing U.S. Fish and Wildlife Service authorities—is necessary to maintain and enhance progress under the original Act. Reauthorization will ensure that (1) recommendations from the Great Lakes Fishery Resources Restoration Study will be implemented; (2) the existing network of regional offices will be maintained; (3) restoration proposals and resultant projects will be properly targeted; (4) existing institutional arrangements will be used to the extent possible; and (5) authorization levels will be set and targeted with an emphasis on project implementation.

CONCLUSION

The Great Lakes Commission, on behalf of its eight member States, endorses S. 659, reauthorization of the Great Lakes Fish and Wildlife Restoration Act. The Act provides a much-needed vehicle for the U.S. Fish and Wildlife Service to provide technical, coordination, research, funding and related support to the collective Great Lakes fishery management effort. The Act builds upon existing agreements and institutional arrangements, provides for a Federal/State/tribal partnership, is action oriented, and offers a mechanism for implementing recommendations of the Great Lakes Fishery Resources Restoration Study. The Great Lakes Commission therefore urges the Congress to support the legislation.

PREPARED STATEMENT OF DAN BEARD, SENIOR VICE PRESIDENT OF PUBLIC POLICY, NATIONAL AUDUBON SOCIETY

Mr. Chairman, thank you for the opportunity to provide our views on S. 2244, the National Wildlife Refuge System Volunteer And Partnership Enhancement Act of 1998. The mission of the National Audubon Society, representing more than one million members and supporters nationwide, is to conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity. We appreciate the committee's continuing interest in the National Wildlife Refuge System, our Nation's premier Federal lands for the conservation of birds and wildlife, and applaud Senator Chafee for introducing this important legislation. We believe that institutionalizing the value of volunteering and community participation in connection with wildlife refuges is a vital step as we work to build public appreciation for these special places.

The National Audubon Society has been an advocate of the Refuge System since its inception. When the first refuge was established by President Teddy Roosevelt, Audubon stepped in and hired the first refuge manager. Nearly 100 years later, we are still proud to support these special places. Over the past 15 years, Audubon has worked to more formally institutionalize volunteering on refuges first by encouraging Audubon Chapters to "adopt" refuges and, most recently, by initiating the Audubon Refuge Keepers (ARK) program. The ARK program seeks to build local support for refuges through volunteering and community education. Presently, there are more than 50 ARK groups that have formed partnerships with national wildlife refuges. In addition, we estimate that approximately 150 Audubon chapters regularly volunteer at wildlife refuges throughout the year. Following are several examples of how Auduboners are assisting local refuges meet their needs:

- Last year, the West Volusia Audubon Society raised $10,000 to construct a viewing tower on at Lake Woodruff NWR in Florida.

• The Anchorage Audubon Society has undertaken a collaborative project with the Alaska Maritime NWR to produce a brochure on shorebird viewing and protection.

• The Altacal Audubon Society conducted a bird-a-thon to raise money for the purchase of spotting scopes for the Sacramento NWR. These spotting scopes will be available for a variety of uses, including assisting schoolchildren in wildlife viewing.

• The North Carolina Audubon Council is working on an initial project to develop an outreach and strategy plan for the Pee Dee Environmental Education Center at Pee Dee NWR.

• In Texas, the Travis Audubon Society is working on a project to enhance public viewing of the endangered black-capped vireo at Blacones Canyonlands NWR, which is recognized as an Important Bird Area.

• The Monterey Peninsula Audubon Society has prepared bird lists, guided wildlife interpretive tours and provided photographs for refuge files and publications at Salinas River NWR in California.

• The Morro Coast Audubon Society is rehabilitating a fire tower for the Hopper Mountain National Wildlife Refuge. The tower will be used to monitor the reintroduced California Condor.

The National Audubon Society is proud to be a leader in providing local support for wildlife refuges, but we believe there is a distinct need for broader community involvement. In this regard, we applaud the U.S. Fish and Wildlife Service, Division of Refuges for its efforts to reach a wider constituency as part of their "Friends Initiatives." By promoting the establishment of citizen support groups around refuges, S. 2244 will enable the Fish and Wildlife Service to harness the incredible energy of volunteers and average citizens to protect and enhance the Refuge System. Currently, volunteers contribute more than 1.4 million hours a year to refuges. This translates into well over tens of millions of dollars in services to the refuge system. There is a vast, untapped source of labor and love for wildlife and the special places we call "refuges." In this regard, S. 2244's promotion of volunteerism among seniors is a great start toward tapping a significant source of volunteers.

Despite the tremendous value of volunteering and building local support for wildlife refuges, National Audubon does not expect volunteering to supplant sufficient operations and maintenance (O&M) funding for refuges. The system has a current backlog of nearly a billion dollars. Nevertheless, increased volunteering on refuges and partnering with local communities will have lasting value for refuges. In particular, we believe that increased community participation on refuges will lead to a greater appreciation for the important role refuges play with respect to species and habitat conservation.

Another important provision of S. 2244 is the simplification of procedures by which local groups can make donations to particular refuges or refuge complexes. We are aware of several instances where local groups have sought to provide money to refuges in their area, but have been turned away because of administrative red-tape. We believe that fundraising efforts on behalf of local refuges should be promoted rather than hindered. S. 2244 resolves this problem and will promote increased private fundraising efforts on behalf of refuges.

We are pleased that education is recognized and promoted in S. 2244. Audubon chapters have long recognized the value of refuges as outdoor classrooms for local schools. In collaboration with the U.S. Fish and Wildlife Service and the National Fish and Wildlife Foundation, National Audubon is working to expand the "Earth Stewards" program which will help refuges meet their tremendous potential for outdoor education. We are eager to see more teachers and students take advantage of the many learning opportunities refuges have to offer.

S. 2244 is an important bill which will do much to promote community involvement in our National Wildlife Refuges. We again congratulate Senator Chafee and his staff for their hard work on this legislation. The National Audubon Society looks forward to working with the committee as we move toward building citizen support for our National Wildlife Refuges in the coming years.

PREPARED STATEMENT OF DAVID R. MILLS, CHAIRMAN OF THE BOARD OF COUNTY COMMISSIONERS OF SARASOTA COUNTY, FLORIDA

Mr Chairman, I want to thank you and all the members of the committee for giving me the opportunity to offer testimony on the status and future of the National Estuary Program in general and the Sarasota Bay National Estuary Program in particular.

Estuaries are very important in both environmental and economic terms. They provide habitat for fish, birds and other wildlife. Seventy-five percent of the U.S.

commercial fish catch depends on estuaries during at least some stage of their life. The fishing industry provides $111 billion to the Nation's economy annually and supports 1.5 million jobs. Because of their beauty and intriguing biodiversity, estuaries are also an asset to the Nation's tourism industry.

Ironically, some of the things that make estuaries so precious are the very reasons they have become threatened. Due to their natural beauty and hence their popularity, the overall capacity of our Nation's estuaries as healthy and productive ecosystems is declining. Increased land development and activity associated with increased population in these areas has, in turn, caused increased stormwater runoff and other discharges that contribute to siltation, increased nutrients and other contamination.

In 1987, Congress recognized the threats to these important coastal areas and included the National Estuary Program in amendments to the Clean Water Act. The purpose of the program is to facilitate State and local governments' preparation of comprehensive conservation and management plans, or CCMPs, for estuaries covered under the program. To date, 28 estuaries have been designated. Section 320 of the Clean Water Act authorized the EPA to make grants to States to develop their plans. However, the law does not provide for resources to facilitate implementation of the plans and 17 of these 28 plans are already complete.

One of the plans that has been completed is for Sarasota Bay in Sarasota County, Florida, the county I serve. While each of the estuaries in the National Estuary Program is unique in terms of their physical attributes and their diverse inhabitants, they are equally unique in the varying threats that are posed to them. A common estuary pollutant in Sarasota Bay is nitrogen, an overabundance of which causes increased growth of algae. The algae reduces light penetration to the other organisms in the water and, through chemical and biological processes, depletes the water of oxygen. It has been determined that the amount of nitrogen in Sarasota Bay has tripled since intensive development began. The source of the increased levels of nitrogen in the Bay has been both small and large wastewater treatment plants, groundwater contaminated by septic systems and fertilizers used in lawn care and agriculture. Without remedial action, the EPA claims that the nitrogen level would increase 16 percent in the next 20 years when the area is fully developed according to existing plans. However, by implementing the restoration plan for Sarasota Bay, these levels of nitrogen can be 23 percent lower than they are today.

In addition to the introduction of nitrogen into estuaries, surrounding development has also introduced an array of viruses, bacteria and parasites that can pose a threat to swimmers, surfers, divers and seafood consumers. Sources of these microbial contaminants include leaky septic tanks, boat and marina waste, recreational vehicles and campers, animal droppings, combined sewer overflows and urban and agricultural runoff. Fish and filter feeding organisms such as shellfish can concentrate these pathogens in their tissues and can cause illness to people who consume them. As a result, shellfishing areas and bathing beaches are often closed. Several estuaries are experiencing contamination problems that require extensive research into their origins and effects, such as the toxic microbe *Pfiesteria piscicida,* which has broken out in rivers that drain into estuaries in Maryland and Virginia.

Phillippi Creek, which feeds into Sarasota Bay, is posted with warning signs of the potential health risks associated with exposure to its waters. Scientific studies done on Phillippi Creek have shown the presence of fecal coliform and human viruses. There are 7,500 septic tanks along Phillippi Creek that will have to be replaced with a central wastewater treatment system in accord with the proposed plan at a cost of some $100 million.

The plan that has been developed for the Sarasota Bay Estuary is an integral one that seeks to stem environmental impacts and enhance natural systems. Most past environmental regulatory efforts in Florida have concentrated on the larger, regional wastewater treatment plants. While these programs have been successful in reducing nitrogen loads from those facilities, the 45,000 septic tanks and the 55 small wastewater treatment plants in the Sarasota County area contribute nearly twice as much pollutant as the regional facilities, despite handling less than half of the volume. Since the focus has not historically been on septic tanks and smaller facilities, that is where the biggest problem lies, especially for Sarasota Bay. The Sarasota Bay NEP's overall recommendation for this problem is the aforementioned replacement of a significant number of these tanks with a central wastewater treatment system along Phillippi Creek as well as other small treatment plants.

Additionally, the Sarasota Bay CCMP calls for revised regulation of septic tanks and small wastewater treatment plants, programs to reduce the use of fertilizers and pesticides in the area, using artificial reefs as fisheries to replenish marine populations and restoring the intertidal wetlands. Effectively managed recreational use

of the Bay is also recommended, as it will foster a sense of stewardship for the estuary with both tourists and residents alike.

S. 1321 will take the next step by giving EPA the authority to make grants for plan implementation and authorizing annual appropriations of $50 million. There is also language in this bill that emphasizes and insures that the program remain a partnership with a matching requirement so that the funds will be available to upgrade sewage treatment plants, fix combined sewer overflows, control urban stormwater discharges and reduce polluted runoff into estuarine areas. We in Sarasota are committed to this partnership. Last November, a 1 percent sales tax levy was passed to generate funds and we already have preliminary engineering work underway for this project. In other words, we come to Washington ready, willing and able to shoulder our share of the partnership envisioned by S. 1321.

In closing, Mr. Chairman, I respectfully request your assistance and that of all the members of this committee to ensure the preservation of our Nation's estuarine areas not only as a natural wonder, but also as an environmental and economic asset to the regions in which they exist. Thank you again for the opportunity to submit our views on this important issue.

II

105TH CONGRESS
1ST SESSION

S. 263

To prohibit the import, export, sale, purchase, possession, transportation, acquisition, and receipt of bear viscera or products that contain or claim to contain bear viscera, and for other purposes.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 5, 1997

Mr. MCCONNELL (for himself, Mr. SMITH of New Hampshire, Mr. COCHRAN, Mr. INHOFE, Mr. WARNER, Mr. D'AMATO, Mr. ALLARD, Mr. KYL, Mr. JEFFORDS, Mr. DEWINE, Mr. LUGAR, Mr. LEAHY, Mr. MOYNIHAN, Mr. CRAIG, Mr. REID, Mr. BUMPERS, Mr. WYDEN, Mr. KENNEDY, Mrs. BOXER, Mrs. FEINSTEIN, Mr. KERRY, and Mr. INOUYE) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To prohibit the import, export, sale, purchase, possession, transportation, acquisition, and receipt of bear viscera or products that contain or claim to contain bear viscera, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Bear Protection Act".

SEC. 2. FINDINGS.

Congress finds that—

(1) there are eight extant species of bear: Asian black bear, brown bear, polar bear, American black bear, spectacled bear, giant panda, sun bear, and sloth bear;

(2) the Asian black bear populations have been decimated in recent years by illegal trade to supply the growing demand for medicines and cosmetics containing valuable bear viscera;

(3) without immediate action to end United States involvement in the lucrative black market trade in bear viscera, American bear populations may suffer the same devastating losses as Asian bear populations;

(4) increasingly, undercover operations have discovered that poachers are establishing extensive smuggling networks to illegally commercialize American bears;

(5) because it is practically impossible to distinguish the viscera of CITES appendix I bears from the viscera of other bear species, there is an urgent need to eliminate the trade in the viscera of all bear species;

(6) as a party to CITES, a world leader in wildlife conservation, and a large market for and supplier of bear viscera and products, the United

States shares responsibility for supporting and implementing measures to stop the illegal trade in CITES appendix I Asian black bears and CITES appendix II American black bears;

(7) inconsistency in State prohibition of commercialization of bear gall and inadequate Federal regulation of such commercialization make law enforcement difficult; and

(8) individual States, which have the right to set, maintain, and enforce quotas for the legal hunting of black bears, will be assisted in their management efforts by the enactment of a Federal law banning the import of, export of, and interstate commerce in bear viscera.

SEC. 3. PURPOSE.

The purpose of this Act is to ensure the long-term viability of the world's eight bear species and specifically to perpetuate healthy populations of American bears.

SEC. 4. STATEMENT OF POLICY.

It is the policy of the United States that effective long-term conservation of the world's bear species, including North American bears, depends in part on the prohibition of the lucrative trade in bear viscera.

SEC. 5. DEFINITIONS.

In this Act:

(1) BEAR VISCERA.—The term "bear viscera" means the body fluids or internal organs (including the gallbladder) of a species of bear.

(2) CITES.—The term "CITES" means the Convention on International Trade in Endangered Species of Wild Fauna and Flora, done at Washington on March 3, 1973 (27 UST 1087; TIAS 8249).

(3) OTHER TERMS.—The terms "import", "person", "State", and "transport" have the meanings provided in section 2 of the Lacey Act Amendments of 1981 (16 U.S.C. 3371).

SEC. 6. PROHIBITED ACTS.

A person who—

(1) imports into the United States, or exports from the United States, bear viscera or products that contain or claim to contain bear viscera; or

(2) sells, barters, offers to sell or barter, purchases, possesses with intent to sell or barter, transports, acquires, or receives in interstate or foreign commerce, bear viscera or products that contain or claim to contain bear viscera;

shall be subject to section 7(a).

SEC. 7. PENALTIES AND ENFORCEMENT.

(a) IN GENERAL.—A person who engages in conduct described in section 6 shall be subject to the penalties and

1 sanctions provided in sections 4 and 5 of the Lacey Act
2 Amendments of 1981 (16 U.S.C. 3373 and 3374).
3 (b) ENFORCEMENT.—
4 (1) IN GENERAL.—This Act shall be enforced in
5 the manner provided in subsections (a), (b), and (c)
6 of section 6 of the Lacey Act Amendments of 1981
7 (16 U.S.C. 3375).
8 (2) USE OF PENALTY AMOUNTS FOR REWARDS
9 AND INCIDENTAL EXPENSES.—Amounts received as
10 penalties, fines, or forfeiture of property under sub-
11 section (a) shall be used in accordance with section
12 6(d) of the Lacey Act Amendments of 1981 (16
13 U.S.C. 3375(d)).
14 **SEC. 8. DISCUSSIONS CONCERNING TRADE PRACTICES.**
15 (a) IN GENERAL.—The Secretary of the Interior and
16 the United States Trade Representative shall—
17 (1) discuss issues involving trade in bear viscera
18 with the appropriate representatives of such coun-
19 tries trading with the United States as are deter-
20 mined jointly by the Secretary of the Interior and
21 the Secretary of Commerce to be the leading import-
22 ers, exporters, or consumers of bear viscera; and
23 (2) attempt to establish coordinated efforts with
24 the countries to protect bears.

1 (b) REPORT.—Not later than 5 years after the date
2 of enactment of this Act, the Secretary of the Interior
3 shall submit to Congress a report describing the progress
4 of efforts to end illegal trade in bear viscera.

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II

105TH CONGRESS
1ST SESSION

S. 361

To amend the Endangered Species Act of 1973 to prohibit the sale, import, and export of products labeled as containing endangered species, and for other purposes.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 26, 1997

Mr. JEFFORDS introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To amend the Endangered Species Act of 1973 to prohibit the sale, import, and export of products labeled as containing endangered species, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Rhino and Tiger Product Labeling Act".

SEC. 2. PROHIBITION ON SALE, IMPORT, AND EXPORT OF PRODUCTS LABELED AS CONTAINING ENDANGERED SPECIES.

(a) FINDINGS.—Congress finds that—

(1) the populations of several magnificent and unique endangered species, such as the Indian rhinoceros, the Javan rhinoceros, the African black rhinoceros, and all of the tiger subspecies, are declining;

(2) growing demand throughout the world for wildlife and wildlife parts and products has created a market in which commercial exploitation has threatened certain wildlife populations;

(3) there are insufficient legal mechanisms enabling the United States Fish and Wildlife Service to forcefully interdict products that are labeled as containing endangered species and prosecute the merchandisers for sale or display of the products; and

(4)(A) although approximately 77,000 import and export shipments occur annually in the United States, the United States Fish and Wildlife Service is able to maintain only 92 wildlife inspectors at 30 ports of entry, including 13 designated ports, to monitor the shipments; and

(B) wildlife inspectors are able to physically inspect an estimated 5 to 10 percent of all shipments, making the detection rate of contraband wildlife products extremely low.

(b) PROHIBITION.—Section 9(a) of the Endangered Species Act of 1973 (16 U.S.C. 1538(a)) is amended—

(1) in paragraph (1)—

(A) in subparagraph (A)—

(i) by striking "(A)" and inserting "(A)(i)";

(ii) by adding "or" at the end; and

(iii) by adding at the end the following:

"(ii) import any product labeled as containing any such species or any species of fish or wildlife listed in Appendix I to the Convention into, or export any such product from, the United States;"; and

(B) in subparagraph (F), by inserting before the semicolon the following: "or any product labeled as containing any such species"; and

(2) in paragraph (2)—

(A) in subparagraph (A)—

(i) by striking "(A)" and inserting "(A)(i)";

(ii) by adding "or" at the end; and

(iii) by adding at the end the following:

"(ii) import any product labeled as containing any such species or any species of plant listed in Appendix I to the Convention into, or export any such product from, the United States;"; and

(B) in subparagraph (D), by inserting before the semicolon the following: "or any product labeled as containing any such species".

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II

105TH CONGRESS
2D SESSION

S. 1970

To require the Secretary of the Interior to establish a program to provide assistance in the conservation of neotropical migratory birds.

IN THE SENATE OF THE UNITED STATES

APRIL 22, 1998

Mr. ABRAHAM introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To require the Secretary of the Interior to establish a program to provide assistance in the conservation of neotropical migratory birds.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Neotropical Migratory Bird Conservation Act".

SEC. 2. FINDINGS.

Congress finds that—

(1)(A) birds constitute one of the most widely recognized and appreciated components of North American wildlife;

(B) approximately 25,000,000 Americans travel to observe birds; and

(C) more than 60,000,000 adult Americans watch and feed birds at home;

(2) birds—

(A) are key indicators of environmental health;

(B) play important roles in plant pollination and seed dispersal;

(C) serve as critical links in the food web; and

(D) maintain the health of the environment.

(3)(A) healthy bird populations provide important economic benefits, such as control of noxious insects on agricultural crops, thereby preventing hundreds of millions of dollars in economic losses each year to farming and timber interests; and

(B) more than $20,000,000,000 is spent in the United States each year on watching and feeding birds;

(4)(A) despite their irreplaceable value, many North American bird species, once considered common, are in decline;

(B) 90 North American bird species are listed as endangered or threatened in the United States;

(C) another 124 North American bird species are of high conservation concern; and

(D) Mexico's Secretariat of Environment, Natural Resources and Fisheries lists approximately 390 bird species as being endangered, threatened, vulnerable, or rare;

(5)(A) of the nearly 800 bird species known to occur in the United States, approximately 500 migrate among nations;

(B) the large majority of those species, the neotropical migrants, winter in Latin America and the Caribbean; and

(C) neotropical migrants in particular have received much attention because of their population declines;

(6)(A) the primary reason for the declines is habitat loss and degradation (including pollution and contamination);

(B) because neotropical migrants range across numerous international borders each year, their conservation requires that safeguards be established at both ends of the migration routes, as well as at critical stopover areas along the way; and

(C) establishing such safeguards necessitates the joint commitment and effort of all nations that support those species, as well as all levels of society; and

(7) this Act constitutes an effort on the part of the United States to adopt appropriate measures for the protection of migratory birds in collaboration with—

(A) neighboring nations that are parties to the Convention Respecting Nature Protection and Wildlife Preservation in the Western Hemisphere, done at the Pan American Union, Washington, October 12, 1940 (56 Stat. 1354); and

(B) States, conservation organizations, corporations and business interests, and other private entities.

SEC. 3. PURPOSES.

The purposes of this Act are—

(1) to assist in the conservation of neotropical migratory birds by supporting neotropical migratory bird conservation programs in Latin America and the Caribbean with a focus on reversing habitat loss and degradation;

(2) to promote partnerships between Federal, State, and nongovernmental entities in the United States in the conservation of neotropical migratory birds;

(3) to foster active governmental and nongovernmental participation in neotropical migratory bird conservation by cooperating countries throughout Latin America and the Caribbean;

(4) to promote circumstances under which the conservation of neotropical migratory birds in Latin America and the Caribbean may be carried out entirely by local entities;

(5) to provide financial resources for projects that support neotropical migratory bird conservation; and

(6) to promote the effective conservation of neotropical migratory birds in the Western Hemisphere through collaboration at all levels of society.

SEC. 4. CONSERVATION ASSISTANCE.

(a) IN GENERAL.—The Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service (referred to in this Act as the "Secretary"), shall establish a program to provide financial assistance for projects to promote the conservation of neotropical migratory birds.

(b) PROJECT APPLICANTS.—An entity that is eligible to receive financial assistance for a project under this Act is an entity that—

(1) is—

(A) a Federal, State, or local governmental entity of the United States;

(B) a United States nongovernmental organization, corporation or business interest, or other private entity;

(C) a governmental or nongovernmental organization, corporation or business interest, or other private entity in Latin America or the Caribbean; or

(D) an international organization that is dedicated to achieving the purposes of this Act; and

(2) submits a project proposal to the Secretary.

(c) PROJECT PROPOSALS.—Each project proposal shall—

(1) demonstrate that the project will enhance the conservation of neotropical migratory birds in Latin America or the Caribbean by focusing on reversing habitat loss and degradation;

(2) include mechanisms to ensure adequate local public participation in project development and implementation;

(3) contain assurances that the project will be implemented in consultation with appropriate local and other government officials with jurisdiction over the resources addressed by the project;

(4) demonstrate sensitivity to local historic and cultural resources and comply with applicable laws; and

(5) provide any other information that the Secretary considers to be necessary for evaluating the proposal.

(d) PROJECT SUSTAINABILITY.—To the maximum extent practicable, each project shall aim to support or establish such structures as are necessary to ensure achievement of conservation objectives specified in this Act, including the long-term operation and maintenance of the project by local entities in the country in which the project is carried out.

(e) COST SHARING.—

(1) FEDERAL SHARE.—The Federal share of the cost of each project shall be not greater than 33 percent.

(2) NON-FEDERAL SHARE.—

1 (A) PAYMENT BY UNITED STATES AND
2 INTERNATIONAL ENTITIES.—Not less than 50
3 percent of the non-Federal share required to be
4 paid for each project shall be paid, in cash,
5 by—
6 (i) United States nongovernmental or-
7 ganizations;
8 (ii) international nongovernmental or-
9 ganizations;
10 (iii) States of the United States and
11 other United States non-Federal entities;
12 and
13 (iv) corporations, business interests,
14 and other private entities.
15 (B) PAYMENT BY LOCAL ENTITIES.—In
16 addition to funds paid under subparagraph (A),
17 the entity submitting the proposal for a project
18 to be assisted under this Act shall seek match-
19 ing funds, in the form of cash or in-kind con-
20 tributions, from local entities in the country in
21 which the project is carried out, including cor-
22 porations and business interests.

SEC. 5. NEOTROPICAL MIGRATORY BIRD ADVISORY COMMITTEE.

(a) ESTABLISHMENT.—There is established a Neotropical Migratory Bird Advisory Committee (referred to in this Act as the "Committee") to assist in carrying out this Act.

(b) MEMBERSHIP.—

(1) PERMANENT MEMBERS.—The 4 permanent members of the Committee shall be—

(A) 2 representatives of the United States Fish and Wildlife Service, 1 of whom shall chair the Committee;

(B) 1 representative appointed by the International Association of Fish and Wildlife Agencies, who shall not be required to be an officer or employee of the Association; and

(C) 1 representative appointed by the National Fish and Wildlife Foundation established by the National Fish and Wildlife Foundation Establishment Act (16 U.S.C. 3701 et seq.), who shall not be required to be an officer or employee of the Foundation.

(2) NONVOTING MEMBER.—

(A) IN GENERAL.—The Committee shall include 1 nonvoting member who—

(i) is a native and resident of Latin America or the Caribbean; and

(ii) is actively involved in local conservation efforts in Latin America or the Caribbean.

(B) CONDITIONS OF SERVICE AS MEMBER.—The member described in subparagraph (A) shall serve in an advisory capacity and for a 2-year term.

(c) DUTIES.—The Committee shall—

(1) assist in the development of guidelines for the solicitation of proposals for projects eligible for financial assistance under section 4;

(2) promote participation in the program established under section 4 by public and private non-Federal entities; and

(3) review and recommend to the Secretary proposals for financial assistance that meet the requirements specified in section 4 and any other criteria established by the Committee.

(d) MEETINGS.—The Committee shall hold such meetings as are necessary to carry out the duties of the Committee.

(e) COMPENSATION.—

(1) IN GENERAL.—Subject to paragraph (2), a member of the Committee shall not receive any compensation for the service of the member on the Committee.

(2) TRAVEL EXPENSES.—A member of the Committee shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for employees of agencies under subchapter I of chapter 57 of title 5, United States Code, while away from the home or regular place of business of the member in the performance of services for the Committee.

(f) ELIGIBILITY FOR FINANCIAL ASSISTANCE.—An entity represented by a member of the Committee shall not be eligible to receive financial assistance under this Act.

SEC. 6. DUTIES OF SECRETARY.

(a) ASSISTANCE TO COMMITTEE.—The Secretary shall facilitate consideration of projects described in section 4(a) by the Committee and otherwise assist the Committee in carrying out its duties under this Act.

(b) OTHER DUTIES.—In carrying out this Act, the Secretary shall—

(1) develop and oversee agreements to provide financial assistance under section 4;

(2) seek cooperators described in section 7;

(3) translate documents into Spanish as necessary; and

(4) generally manage implementation of this Act.

(c) FUNDING.—The Secretary may use funds described in section 9(b) to carry out this section.

SEC. 7. COOPERATION.

In carrying out this Act, the Secretary shall cooperate with appropriate entities, including—

(1) appropriate officials in countries where projects authorized by this Act are proposed to be carried out or are being carried out;

(2) the heads of other Federal agencies; and

(3) entities carrying out, as of the date of enactment of this Act, initiatives that support bird conservation in Latin America and the Caribbean, such as Partners in Flight, the North American Waterfowl Management Plan, the Western Hemisphere Shorebird Reserve Network, Winged Ambassadors, the Latin America small grants program of the American Bird Conservancy, and Wings of the Americas.

SEC. 8. REPORT TO CONGRESS.

Not later than December 31, 2002, the Secretary shall submit to Congress a report on the results and effectiveness of the program carried out under this Act, including recommendations concerning how the Act might be improved and whether the program should be continued.

SEC. 9. AUTHORIZATION OF APPROPRIATIONS.

(a) IN GENERAL.—There is authorized to be appropriated to carry out this Act $4,000,000 for each of fiscal years 1999 through 2001, to remain available until expended.

(b) ADMINISTRATIVE EXPENSES.—For each fiscal year, of the amounts made available to carry out this Act under subsection (a), the Secretary may use not more than 10 percent to pay administrative expenses incurred in carrying out this Act.

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II

105TH CONGRESS
2D SESSION

S. 2094

To amend the Fish and Wildlife Improvement Act of 1978 to enable the Secretary of the Interior to more effectively use the proceeds of sales of certain items.

IN THE SENATE OF THE UNITED STATES

MAY 20, 1998

Mr. ALLARD (for himself and Mr. CHAFEE) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To amend the Fish and Wildlife Improvement Act of 1978 to enable the Secretary of the Interior to more effectively use the proceeds of sales of certain items.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Fish and Wildlife Revenue Enhancement Act of 1998".

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—Congress finds that—

(1) the United States Fish and Wildlife Service (referred to in this Act as the "Service")—

(A) is responsible for storage and disposal of items derived from fish, wildlife, and plants, including eagles and eagle parts, and other items that have become the property of the United States through abandonment or forfeiture under applicable laws relating to fish, wildlife, or plants;

(B) distributes many of those items for educational and scientific uses and for religious purposes of Native Americans; and

(C) unless otherwise prohibited by law, may dispose of some of those items by sale, except items derived from endangered or threatened species, marine mammals, and migratory birds;

(2) under law in effect on the date of enactment of this Act, the revenue from sale of abandoned items is not available to the Service, although approximately 90 percent of the items in possession of the Service have been abandoned; and

(3) making revenue from the sale of abandoned items available to the Service will enable the Service—

(A) to cover costs incurred in shipping, storing, and disposing of items derived from fish, wildlife, and plants; and

(B) to make more extensive distributions of those items for educational, scientific, and Native American religious purposes.

(b) PURPOSES.—The purposes of this Act are to make proceeds from sales of abandoned items derived from fish, wildlife, and plants available to the Service and to authorize the use of those proceeds to cover costs incurred in shipping, storing, and disposing of those items.

SEC. 3. USE OF PROCEEDS OF CERTAIN SALES.

Section 3(c) of the Fish and Wildlife Improvement Act of 1978 (16 U.S.C. 742*l*(c)) is amended—

(1) by striking "Notwithstanding" and inserting the following:

"(1) IN GENERAL.—Notwithstanding"; and

(2) by adding at the end the following:

"(2) USE OF REVENUES.—The Secretary of the Interior and the Secretary of Commerce may each expend any revenues received from the disposal of items under paragraph (1), and all sums referred to in the first sentence of section 11(d) of the Endangered Species Act of 1973 (16 U.S.C. 1540(d)) and

the first sentence of section 6(d) of the Lacey Act Amendments of 1981 (16 U.S.C. 3375(d))—

"(A) to make payments in accordance with those sections; and

"(B) to pay costs associated with—

"(i) shipping items referred to in paragraph (1) to and from the place of storage, sale, or temporary or final disposal, including temporary or permanent loan;

"(ii) storage of the items, including inventory of, and security for, the items;

"(iii) appraisal of the items;

"(iv) sale or other disposal of the items in accordance with applicable law, including auctioneer commissions and related expenses;

"(v) payment of any valid liens or other encumbrances on the items and payment for other measures required to clear title to the items; and

"(vi) in the case of the Secretary of the Interior only, processing and shipping of eagles and other migratory birds, and

1 parts of migratory birds, for Native Amer-
2 ican religious purposes.''.

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IIA

105TH CONGRESS
2D SESSION

H. R. 2807

IN THE SENATE OF THE UNITED STATES

APRIL 29, 1998
Received

MAY 21, 1998
Read twice and referred to the Committee on Environment and Public Works

AN ACT

To amend the Rhinoceros and Tiger Conservation Act of 1994 to prohibit the sale, importation, and exportation of products labeled as containing substances derived from rhinoceros or tiger.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE.

This Act may be cited as the "Rhino and Tiger Product Labeling Act".

SEC. 2. PROHIBITION ON SALE, IMPORTATION, AND EXPORTATION OF PRODUCTS LABELED AS CONTAINING A SUBSTANCE DERIVED FROM RHINOCEROS OR TIGER.

(a) FINDINGS.—The Congress finds the following:

(1) The populations of several magnificent and unique endangered species of rhinoceros and tigers, such as the Indian rhinoceros, the Javan rhinoceros, the African black rhinoceros, and all of the tiger subspecies, continue to decline.

(2) Growing demand throughout the world for wildlife and wildlife parts and products has created a market in which commercial exploitation has threatened certain rhinoceros and tiger populations.

(3) There are insufficient legal mechanisms enabling the United States Fish and Wildlife Service to forcefully interdict products that are labeled as containing substances derived from rhinoceros or tiger species and prosecute the merchandisers for sale or display of those products.

(4) Although approximately 77,000 import and export shipments occur annually in the United States, the United States Fish and Wildlife Service

is able to maintain only 92 wildlife inspectors at 30 ports of entry, including 13 designated ports, to monitor the shipments.

(5) Wildlife inspectors are able to physically inspect only an estimated 5 to 10 percent of all import and export shipments, making the rate of detection of contraband wildlife products extremely low.

(6) Alternatives are available to the traditional medicinal products that contain substances derived from rhinoceros and tiger species.

(7) Public education initiatives directed toward traditional user groups on the endangered status of rhinoceros and tiger species and on the availability of alternative products in traditional medicine have proven useful in reducing the demand for products labeled as containing substances derived from rhinoceros and tiger species, and should be encouraged.

(b) PROHIBITION, PENALTIES, AND ENFORCEMENT.—The Rhinoceros and Tiger Conservation Act of 1994 (16 U.S.C. 5301 et seq.) is amended by redesignating section 7 as section 8, and by inserting after section 6 the following:

1 **"SEC. 7. PROHIBITION RELATING TO PRODUCTS CONTAIN-**
2 **ING OR PURPORTING TO CONTAIN ANY SUB-**
3 **STANCE DERIVED FROM A RHINOCEROS OR**
4 **TIGER SPECIES.**

5 "(a) PROHIBITION.—No person shall sell, import, or
6 export, or attempt to sell, import, or export any product,
7 item, or substance intended for human consumption con-
8 taining or purporting to contain any substance derived
9 from any species of rhinoceros or tiger.

10 "(b) PENALTIES.—

11 "(1) CRIMINAL PENALTY.—Any person who
12 knowingly violates subsection (a) shall be fined
13 under title 18, United States Code, imprisoned for
14 not more than 1 year, or both.

15 "(2) CIVIL PENALTIES.—Any person who know-
16 ingly violates, and any person engaged in business as
17 an importer, distributor, or retailer of products,
18 items, or substances purporting to contain sub-
19 stances derived from any species of rhinoceros or
20 tiger who violates subsection (a) may be assessed a
21 civil penalty by the Secretary of not more than
22 $25,000 for each violation. A civil penalty under this
23 paragraph shall be assessed, and may be collected,
24 in the manner in which a civil penalty under the En-
25 dangered Species Act of 1973 may be assessed and

1 collected under section 11(a) of that Act (16 U.S.C.
2 1540(a)).
3 "(c) FORFEITURES.—Any product, item, or sub-
4 stance sold, imported, or exported, or attempted to be
5 sold, imported, or exported, contrary to the provisions of
6 this Act or any regulation made pursuant thereto shall be
7 seized and forfeited to the United States. All equipment,
8 vessels, vehicles, aircraft, and other means of transpor-
9 tation used to aid the selling, exporting, or importing, or
10 an attempt to sell, export, or import, of any product, item,
11 or substance in violation of this Act or any regulation
12 issued pursuant to this Act, may be seized and forfeited
13 to the United States. All laws relating to the seizure, for-
14 feiture, and condemnation of a vessel for violation of the
15 customs laws, the disposition of such vessel or the pro-
16 ceeds from the sale thereof, and the remission or mitiga-
17 tion of such forfeiture, shall apply to the seizures and for-
18 feitures incurred under this Act, insofar as those laws are
19 applicable and not inconsistent with this Act.
20 "(d) REGULATIONS.—The Secretary, after consulta-
21 tion with the Secretary of the Treasury, the Secretary of
22 Health and Human Services, and the United States Trade
23 Representative, shall prescribe regulations that are nec-
24 essary and appropriate to carry out the purposes of this
25 Act.

"(e) ENFORCEMENT.—The Secretary, the Secretary of the Treasury, and the Secretary of the department in which the Coast Guard is operating shall enforce this Act in the same manner such Secretaries carry out enforcement activities under section 11(e) of the Endangered Species Act of 1973 (16 U.S.C. 1540(e)).".

(c) DEFINITION OF PERSON.—Section 4 of the Rhinoceros and Tiger Conservation Act of 1994 (16 U.S.C. 5301 et seq.) is amended by—

(1) striking "and" at the end of paragraph (4);

(2) striking the period at the end of paragraph (5) and inserting "; and"; and

(3) adding at the end the following:

"(6) 'person' means—

"(A) an individual, corporation, partnership, trust, association, or other private entity;

"(B) an 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;

"(C) a State, municipality, or political subdivision of a State; or

1 "(D) any other entity subject to the juris-
2 diction of the United States.".

Passed the House of Representatives April 28, 1998.

Attest: ROBIN H. CARLE,
Clerk.

IIA

105TH CONGRESS
2D SESSION

H. R. 3113

IN THE SENATE OF THE UNITED STATES

MARCH 31, 1998

Received; read twice and referred to the Committee on Environment and Public Works

AN ACT

To reauthorize the Rhinoceros and Tiger Conservation Act of 1994.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE.

This Act may be cited as the "Rhinoceros and Tiger Conservation Reauthorization Act of 1998".

SEC. 2. REAUTHORIZATION OF RHINOCEROS AND TIGER CONSERVATION ACT.

Section 7 of the Rhinoceros and Tiger Conservation Act of 1994 (16 U.S.C. 5306), is amended by striking "fiscal years" and all that follows through "2000" and inserting "fiscal years 1998, 1999, 2000, 2001, 2002, 2003, and 2004".

Passed the House of Representatives March 30, 1998.

Attest: ROBIN H. CARLE,

Clerk.

II

105TH CONGRESS
1ST SESSION

S. 659

To amend the Great Lakes Fish and Wildlife Restoration Act of 1990 to provide for implementation of recommendations of the United States Fish and Wildlife Service contained in the Great Lakes Fishery Restoration Study Report.

IN THE SENATE OF THE UNITED STATES

APRIL 25, 1997

Mr. GLENN (for himself, Mr. LEVIN, Mr. MOYNIHAN, Mr. DEWINE, Ms. MOSELEY-BRAUN, and Mr. KOHL) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To amend the Great Lakes Fish and Wildlife Restoration Act of 1990 to provide for implementation of recommendations of the United States Fish and Wildlife Service contained in the Great Lakes Fishery Restoration Study Report.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Great Lakes Fish and Wildlife Restoration Act of 1997".

SEC. 2. FINDINGS.

The Congress finds the following:

(1) The Great Lakes Fishery Resources Restoration Study, for which a report was submitted to the Congress in 1995, was a comprehensive study of the status, assessment, management, and restoration needs of the fishery resources of the Great Lakes Basin, and was conducted through the joint effort of the United States Fish and Wildlife Service, State fish and wildlife resource management agencies, Indian tribes, and the Great Lakes Fishery Commission.

(2) This study found the following:

(A) Physical changes to the Great Lakes through dredging, construction of hydroelectric and other dams, stone revetment projects, clearing of shoreline vegetation, and increased agriculture have altered habitats, fish spawning mortality, erosion, sedimentation, oxygen levels, contaminant transport, nutrient loading, and aesthetic character. Combined effects of overexploitation, habitat impairment, and destabilizing effects of nonindigenous species are responsible for most of the decline of native fishes in the Great Lakes. Physical changes to the nearshore environments, riverine tributaries, and

wetlands by development projects have affected those species relying on these habitats for critical phases of their life histories. Monitoring of contaminants and analysis of their effects should be coordinated and expanded.

(B) Significant habitats necessary for self-sustaining populations of fish and wildlife are threatened or impaired. Actions should include identifying and protecting habitats that are used by fish and wildlife for spawning, breeding, nesting, rearing and feeding, and rehabilitating degraded habitats to be utilized by a diverse community.

(C) Working under the cooperatively developed guidance of the Strategic Plan for Management of the Great Lakes Fisheries, published by the Great Lakes Fishery Commission in 1980, and the Great Lakes Water Quality Agreement, State, Provincial, Native American tribal, and Federal agencies bordering the Great Lakes have made significant progress toward the goal of restoring a healthy fish community to the Great Lakes. Differences in mandate, perception of priorities, and style of management create major institutional impediments

to systematic and comprehensive coordination of ecosystem management. Many of the current problems are, in fact, the unintended consequences of uncoordinated management of water quality, fisheries, shipping, and human developments in the Great Lakes Basin. Concepts of responsible resource use and management and biological conservation should not be at odds, but should be integrated via partnerships to meet future needs. Information exchange and cross-program forums should be established to encourage management. Setting of specific management goals is central to the coordination of management efforts. Fishery managers should increase their involvement with the Binational Program, Remedial Action Plans, Lake-Wide Management Plans, and the Environmental Monitoring and Assessment Program planning process.

SEC. 3. REFERENCE.

Whenever in this Act an amendment is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to that section or other provision of the Great Lakes Fish

and Wildlife Restoration Act of 1990 (16 U.S.C. 941 et seq.), as set forth in title I of Public Law 101–573.

SEC. 4. PURPOSES.

Section 1003 (16 U.S.C. 941a) is amended—

(1) in the matter preceding paragraph (1), by striking "this Act" and inserting "this title";

(2) by striking paragraph (1);

(3) by redesignating paragraphs (2) and (3) in order as paragraphs (1) and (2);

(4) by amending paragraph (1), as so redesignated, to read as follows:

"(1) to develop and implement proposals for the restoration of fish and wildlife resources in the Great Lakes Basin; and"; and

(5) in paragraph (2), as so redesignated, by striking "habitat of" and inserting "habitat in".

SEC. 5. DEFINITIONS.

Section 1004 (16 U.S.C. 941b) is amended—

(1) in the matter preceding paragraph (1), by striking "this Act" and inserting "this title";

(2) in paragraph (8) by striking "plant or animal" and inserting "plant, animal, or microorganism";

(3) in paragraph (9) by striking "and" after the semicolon at the end, in paragraph (10) by strik-

ing the period at the end and inserting a semicolon, and by redesignating paragraphs (9) and (10) as paragraphs (10) and (11), respectively;

(4) by inserting after paragraph (8) the following new paragraph:

"(9) the term 'restoration' means to rehabilitate and maintain the structure, function, diversity, and dynamics of a biological system, including, but not limited to, the reestablishment of self-sustaining populations of fish and wildlife;"; and

(5) by adding at the end the following new paragraphs:

"(12) the term 'Report' means the United States Fish and Wildlife Service report entitled 'Great Lakes Fishery Resources Restoration Study', as submitted to the President of the Senate and the Speaker of the House of Representatives on September 13, 1995;

"(13) the term 'Committee' means the Great Lakes Fish and Wildlife Restoration Proposal Review Committee established by section 1005(c); and

"(14) the term 'non-Federal source' includes State government, local governments, Indian Tribes, other governmental entities, private entities, and individuals.".

SEC. 6. IDENTIFICATION, REVIEW, AND IMPLEMENTATION OF PROPOSALS.

Section 1005 (16 U.S.C. 941c) is amended to read as follows:

"SEC. 1005. IDENTIFICATION, REVIEW, AND IMPLEMENTATION OF PROPOSALS.

"(a) IN GENERAL.—The Director, in consultation with the Committee, shall ensure that proposals resulting from recommendations of the Study or identified through an annual request to State and Tribal entities described in subsection (b) are developed and, within available appropriations, the highest priority proposals are implemented.

"(b) IDENTIFICATION OF PROPOSALS.—The Director shall annually request that State Directors and Indian Tribes, in cooperation or partnership with other interested entities, submit fish and wildlife resources restoration proposals based on the results of the Study or other sources such as recommendations of the Council of Lake Committees sponsored by the Great Lakes Fishery Commission. These proposals shall be submitted in the manner and form prescribed by the Director. The proposals shall be consistent with the goals of the Great Lakes Water Quality Agreement, as revised in 1987, the 1954 Convention on Great Lakes Fisheries, State and Tribal fishery management jurisdiction, the Joint Strategic Plan for the

1 Management of Great Lakes Fisheries, the Nonindigenous
2 Aquatic Nuisance Prevention and Control Act of 1990, the
3 North American Waterfowl Management Plan, and var-
4 ious joint ventures established under that plan. Notwith-
5 standing any other provision of law, the Great Lakes Fish-
6 ery Commission shall retain authority and responsibility
7 for formulation and implementation of a comprehensive
8 program for eradicating or minimizing sea lamprey popu-
9 lations in the Great Lakes Basin. The Secretary of the
10 Army may, upon request of the Great Lakes Fishery Com-
11 mission, construct and improve water resources projects
12 related to sea lamprey management that improve the qual-
13 ity of the environment in the public trust, at any location
14 within the Great Lakes or their tributaries or connecting
15 waters.

16 "(c) REVIEW OF PROPOSALS.—

17 "(1) ESTABLISHMENT OF COMMITTEE.—There
18 is established the Great Lakes Fish and Wildlife
19 Restoration Proposal Review Committee.

20 "(2) MEMBERSHIP AND APPOINTMENT.—The
21 Committee shall operate under the auspices of the
22 Council of Lake Committees, and consist of rep-
23 resentatives of all State Directors and federally rec-
24 ognized Indian Tribes with Great Lakes fish and
25 wildlife management authority in the Basin. State

1 Directors and Tribal Chairs shall appoint their rep-
2 resentatives, who shall serve at the pleasure of the
3 appointing authority. The Great Lakes Coordinator
4 of the United States Fish and Wildlife Service shall
5 participate as an observer of the Committee.
6 "(3) FUNCTIONS.—The Committee shall annu-
7 ally review proposals developed under the process es-
8 tablished by subsection (b) to assess their effective-
9 ness and appropriateness in fulfilling the purposes of
10 this title and recommend to the Director priorities
11 for implementing the proposals.
12 "(d) IMPLEMENTATION OF PROPOSALS.—Consider-
13 ing the Committee's recommendations and the goals stat-
14 ed in section 1006, the Director shall select proposals to
15 be implemented and, within available appropriations, shall
16 fund their implementation.
17 "(e) COST-SHARING.—
18 "(1) IN GENERAL.—The Director shall require
19 that 25 percent of the cost of implementing any pro-
20 posal selected under subsection (d), other than those
21 involving the establishment of sea lamprey barriers,
22 must be paid by non-Federal sources on a basis con-
23 sidered by the Director to be timely and appropriate.
24 "(2) IN-KIND CONTRIBUTIONS.—In addition to
25 cash outlays, the Director shall consider as financial

contributions by a non-Federal source the value of in-kind contributions provided for the purpose of implementing a proposal. In-kind contributions may consist of, but are not required to be limited to, real or personal property or personal services necessary to implement a proposal that are rendered by volunteers. The Director shall establish the standards under which the value of in-kind contributions shall be determined. Valuations made by the Director under this paragraph are final and not subject to judicial review.

"(3) EXCLUSION OF FEDERAL FUNDS FROM NON-FEDERAL SHARE.—The Director may not consider the expenditure, either directly or indirectly, of Federal funds received by a State or local government to be a contribution by a non-Federal source for purposes of this section.".

SEC. 7. MAINTENANCE OF OFFICES.

Section 1007 (16 U.S.C. 941e) is amended—

(1) by amending the section heading to read as follows:

"SEC. 1007. MAINTENANCE OF OFFICES.";

(2) in subsection (a) by striking the first sentence and inserting the following: "The Director shall maintain the functions of the Great Lakes Co-

ordination Office in East Lansing, Michigan, for the purpose of coordinating all United States Fish and Wildlife Service activities in the Great Lakes Basin.";

(3) by amending subsection (b) to read as follows:

"(b) GREAT LAKES FISHERY RESOURCES OFFICES.—The Director shall maintain the Upper Great Lakes Fishery Resources Office and the Lower Great Lakes Fishery Resources Office. The Director shall provide each of these offices the necessary administrative and technical support services to carry out all United States Fish and Wildlife Service operational activities related to fishery resource protection, restoration, maintenance, and enhancement in their respective regions."; and

(4) by striking subsection (c).

SEC. 8. REPORTS TO CONGRESS.

Section 1008 (16 U.S.C. 941f) is amended to read as follows:

"SEC. 1008. REPORTS TO CONGRESS.

"The Director shall submit a report within 6 months after the end of every second fiscal year to the Committee on Resources of the House of Representatives and the Committee on Environment and Public Works of the Sen-

ate. The first such biennial report shall be submitted by April 1, 1998. Each such report shall describe—

"(1) actions taken to implement the process established by section 1005;

"(2) the results of proposals implemented under section 1005; and

"(3) activities undertaken and progress toward the accomplishment of the goals stated in section 1006.".

SEC. 9. AUTHORIZATIONS OF APPROPRIATIONS.

Section 1009 (16 U.S.C. 941g) is amended to read as follows:

"SEC. 1009. AUTHORIZATION OF APPROPRIATIONS.

"There are authorized to be appropriated to the Director—

"(1) for the operation of the Great Lakes Coordination Office, the Upper Great Lakes Fishery Resources Office, and the Lower Great Lakes Fishery Resources Office under section 1007, $1,500,000 for each of fiscal years 1998 through 2002; and

"(2) for implementation of fish and wildlife restoration proposals under section 1005(c), $3,500,000 for each of fiscal years 1998 through 2002.".

1 **SEC. 10. TECHNICAL CORRECTION.**

2 Title II of Public Law 101–646 (104 Stat. 4773) is

3 repealed.

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II

105TH CONGRESS
2D SESSION

S. 2244

To amend the Fish and Wildlife Act of 1956 to promote volunteer programs and community partnerships for the benefit of national wildlife refuges, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JUNE 26, 1998

Mr. CHAFEE (for himself, Mr. KEMPTHORNE, Mr. BAUCUS, Mr. ALLARD, Mr. DASCHLE, Ms. COLLINS, Mr. GRAHAM, Mrs. FEINSTEIN, Mr. JEFFORDS, Mr. SMITH of Oregon, Mr. D'AMATO, Mr. FAIRCLOTH, Mr. BOND, Mr. DEWINE, and Mr. SMITH of New Hampshire) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To amend the Fish and Wildlife Act of 1956 to promote volunteer programs and community partnerships for the benefit of national wildlife refuges, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "National Wildlife Refuge System Volunteer and Partnership Enhancement Act of 1998".

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—Congress finds that—

(1) the National Wildlife Refuge System (referred to in this Act as the "System"), consisting of more than 500 refuges and 93,000,000 acres, plays an integral role in the protection of the natural resources of the United States;

(2) the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105–57; 111 Stat. 1252) significantly improved the law governing the System, although the financial resources for implementing this law and managing the System remain limited;

(3) by encouraging volunteer programs and donations, and facilitating non-Federal partnerships with refuges, Federal funding for the refuges can be supplemented and the System can fully benefit from the amendments made by the National Wildlife Refuge System Improvement Act of 1997; and

(4) by encouraging refuge educational programs, public awareness of the resources of the System and public participation in the conservation of those resources can be promoted.

(b) PURPOSES.—The purposes of this Act are—

(1) to encourage the use of volunteers to assist the United States Fish and Wildlife Service in the management of refuges within the System;

(2) to facilitate partnerships between the System and non-Federal entities to promote public awareness of the resources of the System and public participation in the conservation of those resources; and

(3) to encourage donations and other contributions by persons and organizations to the System.

SEC. 3. GIFTS TO PARTICULAR NATIONAL WILDLIFE REFUGES.

Section 7(b)(2) of the Fish and Wildlife Act of 1956 (16 U.S.C. 742f(b)(2)) is amended—

(1) by striking "(2) Any" and inserting the following:

"(2) USE OF GIFTS, DEVISES, AND BEQUESTS.—

"(A) IN GENERAL.—Any"; and

(2) by adding at the end the following:

"(B) GIFTS, DEVISES, AND BEQUESTS TO PARTICULAR REFUGES.—

"(i) DISBURSAL.—Any gift, devise, or bequest made for the benefit of a particular national wildlife refuge or complex of

geographically related refuges shall be disbursed only for the benefit of that refuge or complex of refuges and without further appropriations.

"(ii) MATCHING.—Subject to the availability of appropriations and the requirements of the National Wildlife Refuge Administration Act of 1966 (16 U.S.C. 668dd et seq.) and other applicable law, the Secretary may provide funds to match gifts, devises, and bequests made for the benefit of a particular national wildlife refuge or complex of geographically related refuges. With respect to each gift, devise, or bequest, the amount of Federal funds may not exceed the amount (or, in the case of property or in-kind services, the fair market value) of the gift, devise, or bequest.".

SEC. 4. VOLUNTEER ENHANCEMENT.

(a) PILOT PROJECTS.—

(1) IN GENERAL.—Subject to the availability of appropriations, the Secretary of the Interior shall carry out a pilot project at 2 or more national wildlife refuges or complex of geographically related ref-

1 uges in each United States Fish and Wildlife Service
2 region, but not more than 20 pilot projects nation-
3 wide.

4 (2) VOLUNTEER COORDINATOR.—Each pilot
5 project shall provide for the employment of a full-
6 time volunteer coordinator for the refuge or complex
7 of geographically related refuges. The volunteer co-
8 ordinator shall be responsible for recruiting, training
9 and supervising volunteers. The volunteer coordina-
10 tor may be responsible for assisting partner organi-
11 zations in developing projects and programs under
12 cooperative agreements under section 7(d) of the
13 Fish and Wildlife Act of 1956 (as added by section
14 5) and coordinating volunteer activities with partner
15 organizations to carry out the projects and pro-
16 grams.

17 (3) REPORT.—Not later than 3 years after the
18 date of enactment of this Act, the Secretary of the
19 Interior shall submit a report to the Committee on
20 Resources of the House of Representatives and the
21 Committee on Environment and Public Works of the
22 Senate evaluating and making recommendations re-
23 garding the pilot projects.

24 (4) AUTHORIZATION OF APPROPRIATIONS.—
25 There is authorized to be appropriated to carry out

this subsection $2,000,000 for each of fiscal years 1999 through 2002.

(b) AWARDS AND RECOGNITION FOR VOLUNTEERS.—Section 7(c)(2) of the Fish and Wildlife Act of 1956 (16 U.S.C. 742f(c)(2)) is amended—

(1) by inserting "awards (including nominal cash awards) and recognition," after "lodging,"; and

(2) by inserting "without regard to their places of residence" after "volunteers".

(c) SENIOR VOLUNTEER CORPS.—Section 7(c) of the Fish and Wildlife Act of 1956 (16 U.S.C. 742f(c)) is amended by striking paragraph (6) and inserting the following:

"(6) SENIOR VOLUNTEER CORPS.—The Secretary of the Interior may establish a Senior Volunteer Corps, consisting of volunteers over the age of 50. To assist in the recruitment and retention of the volunteers, the Secretary may provide for additional incidental expenses to members of the Corps beyond the incidental expenses otherwise provided to volunteers under this subsection. The members of the Corps shall be subject to the other provisions of this subsection.".

SEC. 5. COMMUNITY PARTNERSHIP ENHANCEMENT.

Section 7 of the Fish and Wildlife Act of 1956 (16 U.S.C. 742f) is amended by adding at the end the following:

"(d) COMMUNITY PARTNERSHIP ENHANCEMENT.—

"(1) DEFINITION OF PARTNER ORGANIZATION.—In this subsection, the term 'partner organization' means an organization that—

"(A) draws its membership from private individuals, organizations, corporations, academic institutions, or State or local governments;

"(B) is established to promote the understanding of, education relating to, and the conservation of the fish, wildlife, plants, and cultural and historical resources of a particular refuge or complex of geographically related refuges; and

"(C) is described in section 501(c)(3) of the Internal Revenue Code of 1986 and is exempt from taxation under section 501(a) of that Code.

"(2) COOPERATIVE AGREEMENTS.—

"(A) IN GENERAL.—The Secretary of the Interior may enter into a cooperative agreement (within the meaning of chapter 63 of title 31,

United States Code) with any partner organization, academic institution, or State or local government agency to carry out 1 or more projects or programs for a refuge or complex of geographically related refuges in accordance with this subsection.

"(B) PROJECTS AND PROGRAMS.—Subject to the requirements of the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd et seq.) and other applicable law, and such terms and conditions as the Secretary determines to be appropriate, the Secretary may approve projects and programs for a refuge or complex of geographically related refuges that—

"(i) promote the stewardship of resources of the refuge through habitat maintenance, restoration, and improvement, biological monitoring, or research;

"(ii) support the operation and maintenance of the refuge through constructing, operating, maintaining, or improving the facilities and services of the refuge;

"(iii) increase awareness and understanding of the refuge and the National

1 Wildlife Refuge System through the devel-
2 opment, publication, or distribution of edu-
3 cational materials and products;
4 "(iv) advance education concerning
5 the purpose of the refuge and the mission
6 of the System through the use of the ref-
7 uge as an outdoor classroom and develop-
8 ment of other educational programs; or
9 "(v) contribute financial resources to
10 the refuge, under terms that require that
11 the net revenues be used exclusively for the
12 benefit of the refuge, through donation of
13 net revenues from the sale of educational
14 materials and products and through en-
15 couragement of gifts, devises, and be-
16 quests.
17 "(C) FEDERAL FUNDING AND OWNER-
18 SHIP.—
19 "(i) MATCHING.—Subject to the avail-
20 ability of appropriations and the require-
21 ments of the National Wildlife Refuge Ad-
22 ministration Act of 1966 (16 U.S.C. 668dd
23 et seq.) and other applicable law, the Sec-
24 retary may provide funds to match non-
25 Federal funds donated under a cooperative

1 agreement under this paragraph. With re-
2 spect to each project or program, the
3 amount of funds provided by the Secretary
4 may not exceed the amount of the non-
5 Federal funds donated through the project
6 or program.

7 "(ii) USE OF FEDERAL FUNDS.—Any
8 Federal funds used to fund a project or
9 program under a cooperative agreement
10 may be used only for expenses directly re-
11 lated to the project or program and may
12 not be used for operation or administration
13 of any non-Federal entity.

14 "(iii) OWNERSHIP OF FACILITIES.—
15 Any new facility, improvement to an exist-
16 ing facility, or other permanent improve-
17 ment to a refuge constructed under this
18 subsection shall be the property of the
19 United States Government.

20 "(D) TREASURY ACCOUNT.—Amounts re-
21 ceived by the Secretary of the Interior as a re-
22 sult of projects and programs under subpara-
23 graph (B) shall be deposited in a separate ac-
24 count in the Treasury. Amounts in the account
25 that are attributable to activities at a particular

refuge or complex of geographically related refuges shall be available to the Secretary of the Interior, without further appropriation, to pay the costs of incidental expenses related to volunteer activities, and to carry out cooperative agreements for the refuge or complex of refuges.''.

SEC. 6. REFUGE EDUCATION PROGRAM DEVELOPMENT.

Section 7 of the Fish and Wildlife Act of 1956 (16 U.S.C. 742f) (as amended by section 5) is amended by adding at the end the following:

''(e) REFUGE EDUCATION PROGRAM ENHANCEMENT.—

''(1) GUIDANCE.—Not later than 1 year after the date of enactment of this subsection, the Secretary of the Interior shall develop guidance for refuge education programs to further the mission of the National Wildlife Refuge System and the purposes of individual refuges through—

''(A) providing outdoor classroom opportunities for students on national wildlife refuges that combine educational curricula with the personal experiences of students relating to fish, wildlife, and plants and their habitat and to the cultural and historical resources of the refuges;

"(B) promoting understanding and conservation of fish, wildlife, and plants and cultural and historical resources of the refuges; and

"(C) improving scientific literacy in conjunction with both formal and nonformal education programs.

"(2) REFUGE PROGRAMS.—Based on the guidance developed under paragraph (1), the Secretary of the Interior may develop or enhance refuge education programs as appropriate, based on the resources of individual refuges and the opportunities available for such programs in State, local, and private schools. In developing and implementing each program, the Secretary should cooperate with State and local education authorities, and may cooperate with partner organizations in accordance with subsection (d).".

SEC. 7. AUTHORIZATION OF APPROPRIATIONS.

Section 7 of the Fish and Wildlife Act of 1956 (16 U.S.C. 742f) (as amended by section 6) is amended by adding at the end the following:

"(f) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary of the

1 Interior to carry out subsections (b), (c), (d) and (e),
2 $2,000,000 for each of fiscal years 1999 through 2004.".

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