## H.R. 643, H.R. 645 AND H.R. 700

# **LEGISLATIVE HEARING**

BEFORE THE SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS

OF THE

# COMMITTEE ON RESOURCES U.S. HOUSE OF REPRESENTATIVES ONE HUNDRED SEVENTH CONGRESS

FIRST SESSION

Thursday, March 15, 2001

### Serial No. 107-5

Printed for the use of the Committee on Resources



Available via the World Wide Web: http://www.access.gpo.gov/congress/house or Committee address: http://resourcescommittee.house.gov

71-290 DTP

U.S. GOVERNMENT PRINTING OFFICE WASHINGTON : 2001

For sale by the Superintendent of Documents, U.S. Government Printing Office Internet: bookstore.gpo.gov Phone: (202) 512-1800 Fax: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

#### COMMITTEE ON RESOURCES

#### JAMES V. HANSEN, Utah, Chairman NICK J. RAHALL II, West Virginia, Ranking Democrat Member

Don Young, Alaska, Vice Chairman W.J. "Billy" Tauzin, Louisiana Jim Saxton, New Jersey Elton Gallegly, California John J. Duncan, Jr., Tennessee Joel Hefley, Colorado Wayne T. Gilchrest, Maryland Ken Calvert, California Scott McInnis, Colorado Richard W. Pombo, California Barbara Cubin, Wyoming George Radanovich, California Walter B. Jones, Jr., North Carolina Mac Thornberry, Texas Chris Cannon, Utah John E. Peterson, Pennsylvania Bob Schaffer, Colorado Jim Gibbons, Nevada Mark E. Souder, Indiana Greg Walden, Oregon Michael K. Simpson, Idaho Thomas G. Tancredo, Colorado C.L. "Butch" Otter, Idaho Tom Osborne, Nebraska Jeff Flake, Arizona Dennis R. Rehberg, Montana VACANCY

George Miller, California Edward J. Markey, Massachusetts Dale E. Kildee, Michigan Peter A. DeFazio, Oregon Eni F.H. Faleomavaega, American Samoa Neil Abercrombie, Hawaii Solomon P. Ortiz, Texas Frank Pallone, Jr., New Jersey Calvin M. Dooley, California Robert A. Underwood, Guam Adam Smith, Washington Donna M. Christensen, Virgin Islands Ron Kind, Wisconsin Jay Inslee, Washington Grace F. Napolitano, California Tom Udall, New Mexico Mark Udall, Colorado Rush D. Holt, New Jersey James P. McGovern, Massachusetts Anibal Acevedo-Vila, Puerto Rico Hilda L. Solis, California Brad Carson, Oklahoma Betty McCollum, Minnesota

Allen D. Freemyer, Chief of Staff Lisa Pittman, Chief Counsel Michael S. Twinchek, Chief Clerk James H. Zoia, Democrat Staff Director Jeff Petrich, Democrat Chief Counsel

#### SUBCOMMITTE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS

WAYNE T. GILCHREST, Maryland, Chairman ROBERT A. UNDERWOOD, Guam, Ranking Democrat Member

Don Young, Alaska W.J. "Billy" Tauzin, Louisiana Jim Saxton, New Jersey, *Vice Chairman* Richard W. Pombo, California Walter B. Jones, Jr., North Carolina Eni F.H. Faleomavaega, American Samoa Neil Abercrombie, Hawaii Solomon P. Ortiz, Texas Frank Pallone, Jr., New Jersey

## $\rm C\,O\,N\,T\,E\,N\,T\,S$

Statement of Members:	
Faleomavaega, Hon. Eni F.H., a Delegate to Congress from American Samoa	
Prepared statement on H.R. 643, H.R. 645, and H.R. 700	
Gilchrest, Hon. Wayne, a Representative in Congress from the State of Maryland	
Prepared statement on H.R. 643, H.R. 645, and H.R. 700 Saxton, Hon. Jim, a Representative in Congress from the State of	
New Jersey	
Prepared statement on H.R. 700	
Statement of Witnesses:	
Berry, John, Executive Director, National Fish and Wildlife Foundation Prepared statement on H.R. 645	
Foose, Dr. Thomas J., Program Director, International Rhino Foundation	
Prepared statement on H.R. 643, H.R. 645, and H.R. 700 Hemley, Ginette, Vice President for Species Conservation, World Wildlife Fund	
Fund Prepared statement on H.R. 643, H.R. 645, and H.R. 700	
Jones, Marshall, Acting Director, U.S. Fish and Wildlife Service	
Prepared statement on H.R. 643, H.R. 645, and H.R. 700 Response to questions submitted for the record by The Honorable	
Richard Pombo	
Response to questions submitted for the record by The Honorable Eni Faleomavaega	
Kirtland, John, Executive Director for Animal Stewardship, Feld	
Entertainment, Inc., Ringling Bros, and Barnum & Bailey Circus	
Prepared statement on H.R. 700 Rapp, James L., Executive Director, Salisbury Zoological Park	
Rapp, James L., Executive Director, Salisbury Zoological Park	
Prepared statement on H.R. 643, H.R. 645, and H.R. 700 Robinson, Dr. John G., Senior Vice President and Director, International	
Conservation, Wildlife Conservation Society	
Prepared statement on H.R. 643, H.R. 645, and H.R. 700	
Response to questions submitted by The Honorable Eni Faleomavaega	
Steuer, Karen, Director, Commercial Exploitation and Trade Program,	
International Fund for Animal Welfare	
Prepared statement on H.R. 643, H.R. 645, and H.R. 700	
Response to questions submitted by The Honorable Eni	
Faleomavaega	
Additional materials supplied:	
Text of H.R. 643	
Text of H.R. 645	
Text of H.R. 700	

## HEARING ON H.R. 643, THE AFRICAN ELE-PHANT CONSERVATION REAUTHORIZATION ACT OF 2001; H.R. 645, THE RHINOCEROS AND TIGER CONSERVATION REAUTHORIZA-TION ACT OF 2001; AND H.R. 700, THE ASIAN ELEPHANT CONSERVATION REAUTHORIZA-TION ACT OF 2001

### Thursday, March 15, 2001 House of Representatives Subcommittee on Fisheries Conservation, Wildlife and Oceans Committee on Resources Washington, DC

The Subcommittee met, pursuant to notice, at 10:04 a.m., in Room 1324 Longworth House Office Building, Hon. Wayne T. Gilchrest [Chairman of the Subcommittee] presiding.

#### STATEMENT OF HON. WAYNE T. GILCHREST, A REPRESENTA-TIVE IN CONGRESS FROM THE STATE OF MARYLAND

Mr. GILCHREST. Good morning, everybody. Welcome to the first hearing for Fish, Wildlife and Oceans. We look forward to the hearing today and to the testimony from the witnesses, and I appreciate all the hard work that my colleague, Jim Saxton, did while he was Chairman of this Subcommittee for six years, with the able companionship of Eni Faleomavaega, whose name it took me a while to pronounce, but I am doing a better job now.

We look forward over the next two years to carrying on the tradition that was most ably set by these two men who have a lifelong interest and concern, with strength and compassion, to preserve the world's resources. This hearing today will focus to a great extent on all of that.

I was pleased to introduce legislation to reauthorize the African Elephant and Rhino and Tiger Conservation Funds along with what Jim and Eni have done in the past. In fact, these funds represent the only continuous source of money in the world and they are, to quote the Fish and Wildlife Service, "not a hand-out, but a helping hand." So we will continue in that tradition as well.

During the past 13 years, the Service has approved 251 conservation grants to assist rhinos, tigers, and elephants in a number of range countries. The total expenditure of Federal funds has been \$16.7 million, which has been matched by \$56.9 million in private money. While the list of approved projects is lengthy, it represents less than 50 percent of the total number submitted to the U.S. Fish and Wildlife Service. The need is great and it is essential that these funds are extended for an additional five years. Furthermore, I have cosigned a letter to Secretary Gale Norton supporting a \$1 million appropriation for each of the five accounts under the Multinational Species Conservation Fund. [H.R. 643, H.R. 645, and H.R. 700 follow:]

107th CONGRESS 1st Session

# H.R.643

To reauthorize the African Elephant Conservation Act.

#### IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 14, 2001 Mr. GILCHREST introduced the following bill; which was referred to the Committee on Resources

## A BILL

To reauthorize the African Elephant Conservation Act.

1 Be it enacted by the Senate and House of Representa-

2 tives of the United States of America in Congress assembled,

**3 SECTION 1. SHORT TITLE.** 

4 This Act may be cited as the "African Elephant Con-5 servation Reauthorization Act of 2001".

6 SEC. 2. REAUTHORIZATION OF AFRICAN ELEPHANT CON-7 SERVATION ACT.

8 Section 2306 of the African Elephant Conservation
9 Act (16 U.S.C. 4245) is amended by striking "1997" and
10 all that follows through "2002" and inserting "2001,
11 2002, 2003, 2004, 2005, 2006, and 2007".

I

1	SEC. 3. LIMITATION ON ADMINISTRATIVE EXPENSES.
2	Part I of the African Elephant Conservation Act (16
3	U.S.C. 4211 et seq.) is amended by adding at the end
4	the following:
5	"SEC. 2104. LIMITATION ON ADMINISTRATIVE EXPENSES.
6	"Of amounts hereafter appropriated to carry out this
7	part each fiscal year, not more than 6 percent, or \$80,000,
8	whichever is less, may be used to administer this part.".
9	SEC. 4. TECHNICAL AND CONFORMING AMENDMENTS.
10	(a) Conforming and Clerical Amendments.—
11	The African Elephant Conservation Act is amended as fol-
12	lows:
13	(1) Section 2101(a) (16 U.S.C. 4211(a)) is
14	amended by striking "African Elephant Conserva-
15	tion".
16	(2) Section 2102 (16 U.S.C. 4212) is amended
17	by striking the section heading and all that follows
18	through "(d) Acceptance and Use of Dona-
19	TIONS.—" and inserting the following:
20	"SEC. 2102. ACCEPTANCE AND USE OF DONATIONS.".
21	(3) Section 2304 (16 U.S.C. 4243) is repealed.
22	(4) Section $2305(4)$ (16 U.S.C. $4244(4)$ ) is
23	amended by striking "the African Elephant Con-
24	servation Fund established by section 2102" and in-
25	serting "the account established by division A, sec-
26	tion 101(e), title I of Public Law 105–277 under the
	•HR 643 IH

4

 $\mathbf{2}$ 

heading 'MULTINATIONAL SPECIES CONSERVATION
 FUND'".
 (b) TECHNICAL CORRECTION.—Title I of section
 4 101(e) of division A of Public Law 105–277 (112
 Stat.2681–237) is amended under the heading 'MULTI NATIONAL SPECIES CONSERVATION FUND'" by striking
 "Rhinoceros and Tiger Conservation Act, subchapter I"
 and inserting "Rhinoceros and Tiger Conservation Act of
 1994, part I".

 $\bigcirc$ 

•HR 643 IH

107th CONGRESS 1st Session

# H.R.645

To reauthorize the Rhinoceros and Tiger Conservation Act of 1994.

6

#### IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 14, 2001 Mr. GILCHREST introduced the following bill; which was referred to the Committee on Resources

## **A BILL**

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,

**3** SECTION 1. SHORT TITLE.

4 This Act may be cited as the "Rhinoceros and Tiger5 Conservation Reauthorization Act of 2001".

6 SEC. 2. REAUTHORIZATION OF RHINOCEROS AND TIGER
7 CONSERVATION ACT OF 1994.

8 Section 9 of the Rhinoceros and Tiger Conservation
9 Act of 1994 (16 U.S.C. 5306) is amended by striking
10 "1996 through 2002" and inserting "2001, 2002, 2003,
11 2004, 2005, 2006, and 2007".

1

I

1	2 SEC. 3. LIMITATION ON ADMINISTRATIVE EXPENSES.
2	Section 9 of the Rhinoceros and Tiger Conservation
3	Act of 1994 (16 U.S.C. 5306) is further amended by in-
4	serting "(a) IN GENERAL.—" before "There are author-
5	ized", and by adding at the end the following:
6	"(b) Limitation on Administrative Expenses.—
7	Of amounts hereafter appropriated to carry out this Act
8	each fiscal year, not more than 6 percent, or \$80,000,
9	whichever is less, may be used to administer this Act.".
10	SEC. 4. TECHNICAL AND CONFORMING AMENDMENTS.
11	(a) Conforming Amendments.—The Rhinoceros
12	and Tiger Conservation Act of 1994 is amended as follows:
13	(1) Section 4(3) (16 U.S.C. 5303(3)) is amend-
14	ed by striking "Rhinoceros and Tiger Conservation
15	Fund established under section 6(a)" and inserting
16	"the account established by division A, section
17	101(e), title I of Public Law 105–277 under the
18	heading 'MULTINATIONAL SPECIES CONSERVATION
19	FUND' ''.
20	(2) Section 6 (16 U.S.C. $5305$ ) is amended by
21	striking the section heading and all that follows
22	through "(d) Acceptance and Use of Dona-
23	TIONS.—" and inserting the following:
24	<b>"SEC. 6. ACCEPTANCE AND USE OF DONATIONS.".</b>
25	(b) TECHNICAL CORRECTION.—Title I of section
26	$101(\mathrm{e})$ of division A of Public Law 105–277 (112 Stat.
	•HR 645 IH

2681–237) is amended under the heading 'MULTI NATIONAL SPECIES CONSERVATION FUND'" by striking
 "Rhinoceros and Tiger Conservation Act, subchapter I"
 and inserting "Rhinoceros and Tiger Conservation Act of
 1994, part I".



8 3

### 107th CONGRESS 1st Session

# H.R.700

To reauthorize the Asian Elephant Conservation Act of 1997.

9

#### IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 14, 2001 Mr. SAXTON introduced the following bill; which was referred to the Committee on Resources

# A BILL

To reauthorize the Asian Elephant Conservation Act of 1997.

Be it enacted by the Senate and House of Representa tives of the United States of America in Congress assembled,

**3** SECTION 1. SHORT TITLE.

4 This Act may be cited as the "Asian Elephant Con-5 servation Reauthorization Act of 2001".

6 SEC. 2. REAUTHORIZATION OF ASIAN ELEPHANT CON-7 SERVATION ACT OF 1997.

8 Section 7 of the Asian Elephant Conservation Act of
9 1997 (16 U.S.C. 4266) is amended by striking "1998"
10 and all that follows through "2002" and inserting "2001,
11 2002, 2003, 2004, 2005, 2006, and 2007".

I

	2
1	SEC. 3. LIMITATION ON ADMINISTRATIVE EXPENSES.
2	Section 7 of the Asian Elephant Conservation Act of
3	$1997\ (16\ {\rm U.S.C.}\ 4266)$ is further amended by inserting
4	"(a) IN GENERAL.—" before "There are authorized", and
5	by adding at the end the following:
6	"(b) Limitation on Administrative Expenses.—
7	Of amounts hereafter appropriated to carry out this Act
8	each fiscal year, not more than 6 percent, or \$80,000,
9	whichever is less, may be used to administer this Act.".
10	SEC. 4. CONFORMING AMENDMENTS.
11	The Asian Elephant Conservation Act of 1997 is
12	amended as follows:
13	(1) Section 4(3) (16 U.S.C. 4263(3)) is amend-
14	ed by striking "Asian Elephant Conservation Fund
15	established under section 6" and inserting "the ac-
16	count established by division A, section 101(e), title
17	I of Public Law 105–277 under the heading 'MULTI-
18	NATIONAL SPECIES CONSERVATION FUND'".
19	(2) Section 6 (16 U.S.C. 4265) is amended by
20	striking the section heading and all that follows
21	through "(d) Acceptance and Use of Dona-
22	TIONS.—" and inserting the following:
23	"SEC. 6. ACCEPTANCE AND USE OF DONATIONS.".

 $\bigcirc$ 

10

2

•HR 700 IH

Mr. GILCHREST. I do this morning look forward to the testimony from our witnesses. It almost seems like there is barely this thin thread between extinction and survival, and the thin thread are those of you and those whom you represent who have come here to testify, and the little pittance, although you have used it wisely, of Federal money

I recently completed a book called "The Sea of Slaughter," by Farley Mowatt, the man famous for "Never Cry Wolf," in which he describes wildlife to a large extent along the East Coast of the U.S. and Canada in a historical perspective from the 1500's—actually, he fixed the date, 1500 to the present, and what happened to the ptarmigan, the golden eagle, the polar bear, the black bear, the grizzly bear, the mink, the auk, a myriad of shore birds, and the list goes on, because of our intrusion in a way that, looking back now, was ruthless for the slaughter of profit, the habitat loss, the vast starvation because of habitat loss, and fundamental stupidity, arrogance, and ignorance.

I have a nephew who is a Presbyterian missionary in Ethiopia and I saw him recently when he came back to visit. He said there is a very widespread saying in Ethiopia and it goes like this: if all you know you learned from your father and your father is ignorant, what does that make you? It is pretty profound, not necessarily politically correct, but quite profound.

So we look forward to what we will hear this morning, and we will do our darnedest to make sure the program not only survives but gets as near fully funded as possible and expands.

[The prepared statement of Mr. Gilchrest follows:]

#### Statement of The Honorable Wayne Gilchrest, Chairman, Subcommittee on Fisheries Conservation, Wildlife and Oceans

Good morning and welcome to our first legislative hearing of the 107th Congress. I am Congressman Wayne Gilchrest and I represent the 1st District of Maryland.

Today's hearing will focus on three wildlife conservation bills that will extend the authority of the Secretary of the Interior to undertake grants to conserve the flagship species of African elephants, Asian elephants, rhinoceros and tigers. I was pleased to introduce legislation to reauthorize the African Elephant and

I was pleased to introduce legislation to reauthorize the African Elephant and Rhino and Tiger Conservation Funds because this small investment of U.S. money is critical to the long term survival of these species and the ecosystems where they live. In fact, these funds represent the only continuous source of money in the world and they are to quote the U.S. Fish and Wildlife Service not a hand out, but a helping hand.

ing hand. During the past thirteen years, the Service has approved 251 conservation grants to assist rhinos, tigers and elephants in a number of range countries. The total expenditure of Federal funds has been \$16.7 million which has been matched by \$56.9 million in private money. While the list of approved projects is lengthy, it represents less than 50 percent of the total number submitted to the U.S. Fish and Wildlife Service. The need is great and it is essential that these funds be extended for an additional five years.

Furthermore, I have co-signed a letter to Secretary Gale Norton supporting a million dollar appropriation for each of the five accounts under the Multinational Species Conservation Fund.

Finally, I look forward to hearing from our distinguished witnesses and I hope that they will address the benefits of these Acts and whether any modifications or changes are necessary.

I am now pleased to recognize the Ranking Minority Member

Mr. GILCHREST. On that note, I would like to yield to the gentleman from American Samoa.

#### STATEMENT OF HON. ENI. F.H. FALEOMAVAEGA, A DELEGATE TO CONGRESS FROM AMERICAN SAMOA

Mr. FALEOMAVAEGA. Thank you, Mr. Chairman. Allow me to congratulate you on becoming the Chairman of the Fisheries Conservation, Wildlife and Oceans Subcommittee. Certainly, I am sure that myself and my colleagues wish you all the best in your new responsibilities, as I am also confident that you will carry on the business of the Subcommittee on the same bipartisan basis as your predecessor, and certainly a dear friend and colleague, now the Subcommittee's Vice Chairman, the gentleman from New Jersey, Mr. Saxton.

I just want to compliment and certainly thank him for allowing me to work with him in the past two years as his ranking minority member on this Subcommittee. It has been an enriching experience for me to learn so much, and I am still learning a lot concerning these responsibilities that we now have under this Subcommittee.

Mr. Chairman, our ranking member, the gentleman from Guam, Mr. Underwood, has asked me to pinch hit for him this morning. He has had to get up at 4 this morning to catch a 6 a.m. flight to his home district, which is only about 18 hours, a plane experience that I am sure none of us here are envious of. But he does send his regards and regrets for not being here, but certainly wishes and hopes that what we consider here in our Subcommittee will be fruitful and productive. Certainly, I don't see any problems in the passage of the proposed legislation that is now before us.

As you know, Mr. Chairman, the conservation and protection of wildlife resources is one of the major oversight responsibilities of this Subcommittee. Consequently, I was pleased to join you and Mr. Saxton in cosponsoring your legislation to reauthorize three very important international wildlife conservation statutes—the African Elephant Conservation Act, the Rhinoceros and Tiger Conservation Act, and the Asian Elephant Conservation Act.

The grant programs initiated under these Acts have been responsive, effective and successful in supporting a diversity of conservation activities in various range states scattered throughout Africa and Asia. In fact, these grant programs have been so successful that the 106th Congress authorized two additional conservation programs, one for great apes and a second for neotropical migratory birds.

Of course, no program is without its critics. I am sure that some aspects of these programs can be improved. One question I do have is whether or not these grant programs are funding the most critical priority needs in the field, as identified by the range states themselves. In this respect, I look forward to hearing from our witnesses this morning, and I look forward to working with you and the ranking Democratic member of our Subcommittee, Mr. Underwood, and certainly swift, favorable consideration of these proposed bills.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Faleomavaega follows:]

#### Statement of The Honorable Eni F.H. Faleomavaega, a Delegate to Congress from American Samoa

Thank you Mr. Chairman, and good morning. Allow me to congratulate you on becoming the Chairman of the Fisheries Conservation, Wildlife and Oceans Subcommittee. I wish you well and good luck in your new responsibilities. I am confident that you will carry on the business of this Subcommittee in the same bipartisan fashion as your predecessor, and now the Subcommittee's Vice Chairman, Jim Saxton.

As you know Mr. Chairman, the conservation and protection of wildlife resources is one of the major oversight responsibilities of this subcommittee. Consequently, I was pleased to join you and Mr. Saxton in cosponsoring your legislation to reauthorize three very important international wildlife conservation statutes: The African Elephant Conservation Act; the Rhinoceros/Tiger Conservation Act; and the Asian Elephant Conservation Act.

The grant programs initiated under these Acts have been responsive, effective, and successful in supporting a diversity of conservation activities in various range states scattered throughout Africa and Asia. In fact, these grant programs have been so successful, the 106th Congress authorized two additional conservation programs: one for great apes and a second for neotropical migratory birds.

Of course, no program is without its critics, and I am sure that some aspects of these programs can be improved. One question I do have is whether or not these grant programs are funding the most critical priority needs in the field as identified by the range states themselves.

In this respect, I look forward to hearing suggestions from our witnesses today on how Congress might be able to improve these vitally important conservation programs.

Mr. Chairman, I look forward to working with you and with the ranking Democratic member on the Subcommittee, Mr. Underwood, on the swift consideration of your legislation.

Thank you, Mr. Chairman.

Mr. GILCHREST. Thank you, Mr. Faleomavaega. Mr. Saxton?

#### STATEMENT OF HON. JIM SAXTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. SAXTON. Thank you, Mr. Chairman. Let me just say congratulations to you for assuming the Chairmanship of this great Subcommittee. I have certainly enjoyed my tenure here and I have enjoyed working with you. I guess through everybody's career there are bright spots, and one of the bright spots is knowing that you will be here guiding this Subcommittee, and we certainly appreciate it.

There is good news and bad news, though. The good news is that Wayne will be here doing a great job on this Subcommittee, but if you look at this Chairmanship from the standpoint of a nutria, it is probably a dark spot because they are in trouble.

For those of you who don't know, nutria are little varmints that were imported into the Eastern Shore of Maryland from someplace in South America and they have kind of taken over parts of the Eastern Shore. I know that they are now in trouble. So, anyway, I look forward to working with you and to continuing to share in the successes of this Subcommittee, and I know that the Subcommittee is in great hands.

Let me just say a word about one of the bills that we are going to be discussing this morning, and that, of course, is the bill which I introduced four years ago. It was a bill that had to do with preserving Asian elephants as I started to learn that there were less than 40,000 Asian elephants living in the world and that nearly 50 percent of those elephants were living in various national parks in India, while the remaining animals were scattered in fragmented populations throughout 12 other countries in South and Southeast Asia.

The primary reason for this serious decline in population was the loss of essential elephant habitat. So we introduced a bill known as the Asian Elephant Conservation Act, which was passed and authorized \$25 million to be spent until the end of the authorization, which is September 30 of this year. Whereas we actually made a start at spending some of that money, we sent a powerful message, in my opinion, throughout the conservation community and the rest of the world that this is an absolutely important issue and an important step forward by the United States Government. I thank you for your cooperation in the past. I know that we are here to discuss this this morning.

I ask unanimous consent that my full statement be placed in the record. Again, congratulations on your Chairmanship.

Mr. GILCHREST. Thank you, Jim. Without objection, your statement will be submitted to the record.

#### [The prepared statement of Mr. Saxton follows:]

#### Statement of The Honorable Jim Saxton, a Representative in Congress from the State of New Jersey, on H.R. 700

Good morning, Mr. Chairman and Members of the Subcommittee. Thank you to the witnesses for joining us here today. I appreciate you taking the time out of your schedules to be here. I am pleased to be able to speak in support of the reauthorization of the Asian Elephant Conservation Act.

Four years ago, I introduced this bill, because I was startled to learn that there were less than 40,000 Asian elephants living in the wild. Furthermore, nearly fifty percent of those elephants were living in various national parks in India, while the remaining animals were scattered in fragmented populations throughout twelve other countries in South and Southeast Asia.

The primary reason for this serious decline in population was the loss of essential habitat. It is no secret that elephants and man are in direct competition for the same resources. In most cases, it was the elephants who lost in those confrontations. In addition, Asian elephants are poached for their bones, hide, meat and teeth; they are still captured for domestication; and conflicts between elephants and people are escalating at an alarming rate.

Furthermore, it was clear that millions of people were not aware of the plight of Asian elephants and that range countries lack the financial resources to help conserve this flagship species.

Without an international effort, the future of the Asian elephant was in serious jeopardy. In response to this problem, I, along with a number of other Members, proposed the establishment of an Asian Elephant Consortium Fund.

<sup>1</sup> This concept was modeled after the highly successful African Elephant Conservation Fund, and the fundamental goal of my legislation was to obtain a small amount of Federal assistance for on-the-ground conservation projects.

of Federal assistance for on-the-ground conservation projects. Fortunately, this important legislation was overwhelmingly approved by both bodies, and it was signed into law on November 19, 1997. Under the terms of P.L. 105-95, the Congress could appropriate up to \$25 million to the Asian Elephant Conservation Fund until September 30, 2002. In fact, some \$1.9 million in Federal funds has been allocated and those moneys have been matched by an additional \$1.1 million in private donations.

Those funds have been used to underwrite 27 conservation grants in nine different range countries. The type of projects funded have included: develop an elephant strategy in Sri Lanka; identification of a suitable managed elephant range in Malaysia; molecular tools for the local population assessment of Asian elephants; school education to support Asian elephant conservation in India and trace the mobility patterns of Sri Lankan elephants. These projects were carefully analyzed and competitively selected from a list of nearly 100 proposals that were submitted to the U.S. Fish and Wildlife Service. While the early indication is that the worldwide population of Asian elephants has stopped its precipitous decline, it is unrealistic to believe that \$3 million can save this species from extinction. Nevertheless, this law sent a powerful message to the international community that we must not allow this flagship species to disappear from the wild. The United States must continue to play a leadership role in this effort.

I am pleased to have introduced this reauthorization and will push for its pas-

Mr. GILCHREST. I do want to make a quick comment about the staff, past and present. There is a great staff on the Fisheries Subcommittee, both Democrat and Republican staff, and they do a lot of the work that we sometimes get the credit for. I just want to thank them for all their efforts.

This morning, we have Marshall Jones, U.S. Fish and Wildlife Service, accompanied by Dr. Ken Stansell. Welcome.

Mr. James Rapp, Executive Director of the Salisbury Zoological Park. Jim, thank you for coming and making the trip here this morning. It is a beautiful place on the Eastern Shore which is representative of the kind of work all of the groups here today are trying to do, and Jim has been a great contributor with his time and talent to these efforts.

Ms. Ginette Hemley, Vice President of Species Conservation, World Wildlife Fund.

Thank you all for coming this morning.

Mr. Jones, you may begin first.

#### STATEMENT OF MARSHALL P. JONES, ACTING DIRECTOR, U.S. FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF THE IN-TERIOR, ACCOMPANIED BY KENNETH B. STANSELL, ACTING ASSISTANT DIRECTOR, INTERNATIONAL AFFAIRS, U.S. FISH AND WILDLIFE SERVICE

Mr. JONES. Thank you, Mr. Chairman. It is a great pleasure to be here today, and since this is the first opportunity that the Fish and Wildlife Service has to testify before this Subcommittee with you as Chair, let me say how much we look forward to working with you, as we certainly enjoyed working with Mr. Saxton.

We know you very well from your strong support for Blackwater National Wildlife Refuge and for conservation issues on the Eastern Shore of Maryland, and we are happy to see you have the opportunity to take that philosophy and extend it to fish and wildlife issues nationwide.

Mr. GILCHREST. Thank you.

Mr. JONES. It is also a great pleasure, Mr. Chairman, to be here to talk about a program that I believe is one that has a demonstrated track record of success and one that, with a small expenditure of funds in the big picture, is having a huge effect on the ground.

Mr. Chairman, I have a written statement and some attachments which we have offered for the record. I will be brief this morning. I have Mr. Stansell with me here, who is himself an expert in these matters and has spent much time in the field.

This program is one that succeeds for several reasons, and I would like to briefly outline, Mr. Chairman, what I believe are the most important parts of that success. First of all, it has had bipartisan support since the first enactment of the African Elephant Conservation Act in 1989 through the support of some of your very able staff who are still with the Committee today. We appreciate it very much. That tradition has continued with each of the succeeding pieces of legislation which built on the African Elephant Conservation Act as the foundation, bipartisan support that grew out of a need and a demonstrated track record of success.

Secondly, Mr. Chairman, we believe this program is so strong because it is one that depends on partnerships. Those are partnerships with, first of all, the other countries which are the range countries for the species we are talking about in Africa and in Asia. We couldn't succeed if those countries weren't interested in working with us, or if those countries hadn't demonstrated a commitment.

That is why we talk about, as you said, Mr. Chairman, this being a helping hand, not a hand-out. These are people who want our help. These are people who are ready and willing to put in the energy, but they are often not able to do that without financial assistance, training, equipment, and the technical assistance that we can give.

And the "we," Mr. Chairman, is not just the U.S. Fish and Wildlife Service, but all of the organizations that you have invited here today to testify at this hearing. So the partnership extends to nongovernmental organizations of all kinds like the World Wildlife Fund, the American Zoo and Aquarium Association, the Wildlife Conservation Society, the International Rhino Foundation, and the International Fund for Animal Welfare. In addition, organizations like Ringling Brothers, have shown that there is a corporate role in this partnership; the National Fish and Wildlife Foundation, through its Save the Tiger Fund, which I am privileged to serve as a member of the council, and funded by ExxonMobil, has also contributed. Others are now joining in to contribute to that, too. So this is a partnership that is growing and growing, and we believe it is all built on the foundation of the African Elephant Conservation Act.

Third, Mr. Chairman, we believe that this program enhances the prestige and the credibility of the United States. It is easy for us in the United States to sit back and criticize or tell other countries what we think they should be doing. This is a program that says we will work with you to help you.

we will work with you to help you. Finally, Mr. Chairman, this is a program that works. These small investments have huge effects. A \$25,000 grant in a country like Gabon, Cameroon, Nepal, or Thailand can have a huge effect on the ground. What we would consider in the big picture of things here to be a tiny program may be funding rangers, training people, helping people keep elephants out of their crops, funding surveys, or developing innovative ways for people to live with these animals that are beautiful and inspiring, and also sometimes destructive or dangerous.

So, Mr. Chairman, we believe that this is a program that has a strong track record. Mr. Faleomavaega mentioned that programs can always be improved. We have offered some technical amendments that we think would strengthen the program. We would be very interested in working with you, Mr. Chairman, and all the members of the Subcommittee and the Subcommittee staff to find ways that we can make these programs even better.

I certainly would like to extend an invitation to you and to the staff. Sometime, we hope that you will have the opportunity to come with our staff and visit one of our projects on the ground in Africa or in Asia, so that you can see the benefits for yourself.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Jones follows:]

#### Statement of Marshall P. Jones, Acting Director, United States Fish and Wildlife Service, Department of the Interior, on H.R. 643, H.R. 645, and H.R. 700

Mr. Chairman, I appreciate the opportunity to be here today to discuss H.R. 643, the African Elephant Conservation Reauthorization Act of 2001; H.R. 645, the Rhinoceros and Tiger Conservation Reauthorization Act of 2001; H.R. 700, the Asian Elephant Conservation Reauthorization Act of 2001; H.R. 700, the Mildlife Service's (Service) implementation of these three multi-species conservation Acts. The Service fully supports the reauthorization of these Acts and looks forward to working with the Subcommittee to consider several technical amendments to make the grants program more efficient and encourage greater collaboration with the private sector. My remarks today will focus on an overview of implementation of the grant programs and these technical considerations. Attached to the Service's testimony are copies of the reports for each of the three grant programs. These attachments are also available on the Service's website at http://International.fws.gov. These reports provide a summary of various projects funded and include detailed examples of how these funds help to conserve species in the wild.

As members of the Subcommittee may be aware, the Service has a long history of proactive programs on behalf of foreign endangered species and their habitats. Over the past two decades the Service's conservation efforts in Asia have resulted in the development of local institutional capacity and training, which in turn has facilitated more effective resource protection by local wildlife researchers and managers. On behalf of rhinoceroses, tigers, and Asian elephants, we have been one of the leaders in helping range countries address the problems affecting the continued existence of these animals. The decade-long implementation of the African Elephant Conservation Act in Africa has played a significant role in U.S. efforts to encourage and assist on-the-ground projects aimed at conserving elephants.

As a Party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and a major consumer of species covered by the Convention, the U.S. shares responsibility for supporting and implementing measures to provide for the conservation of endangered and threatened species both at home and abroad. The African Elephant Conservation Act, Rhinoceros and Tiger Conservation Act, and the Asian Elephant Conservation Act are designed to encourage and assist efforts to conserve some of the world's most ecologically and sociologically important wildlife species. The key element of these Acts is the authorization of financial resources, which is a reflection of the strong U.S. commitment to help support local conservation programs of these species in the wild. Continued support by the U.S. through reauthorization of the three Acts remains critical to the conservation of rhinos, tigers, African and Asian elephants.

In implementing these Acts, the Service has designed a streamlined process that allows for timely approval of projects and that has the capacity to respond quickly to emergency situations. Since no implementing regulations were deemed necessary, there has not been any time lag from the initial receipt of funds and the implementation of the program. Furthermore, the grant programs are designed to provide quick, short-term support for holding actions and other conservation measures, in concert with existing or proposed long-range activities, or until such long-range activities are in place. During the early implementation of the African Elephant Conservation Act, it became apparent that there was a definite need for such a responsive grant program. Since that time it has become the hallmark of its success and most recently great apes and neotropical migratory birds.

All five Acts are administered through the Service's International Affairs program under the Multi-National Species Conservation Funds account. While each account is maintained separately for each Act, a single fund allows the Service to maximize coordination of these programs and minimize the administration costs. The Service is currently reviewing ways to administer these programs consistent with the President's Budget to streamline government and operate more efficiently. After this review, the Service will be willing to work with the authors to revise those provisions related to administration of these programs to address the true administration needs of these programs.

needs of these programs. Regarding H.R. 643, H.R. 645 and H.R. 700, the Service would also recommend the creation of an advisory group for each of the Acts to help increase public involvement and Federal and private partnerships. Both of the newly enacted multi-species conservation Acts, the Great Ape Conservation Act and Neotropical Migratory Bird Conservation Act, provided for advisory groups, and we believe that it would be a positive addition to these Acts as well. The Service would also recommend the inclusion of language to ensure that

The Service would also recommend the inclusion of language to ensure that grants supporting local capacity building and institutional development are among the projects for potential funding. The intent here is to balance the needs for direct species-focused projects with the need to develop human resources necessary to achieve effective conservation over the long term. We have attached language to this testimony that we believe will further benefit these species as well as help range countries better manage their natural resources. In addition, while both the Asian Elephant Conservation Act and the Rhinoceros and Tiger Conservation Act include language providing for consultation with the U.S. Agency for International Development, this language is absent from the African Elephant Conservation Act. With regard to this consultative role, the Service recommends amending the African Elephant Conservation Act with parallel language to make it consistent with these other Acts. We believe that these minor technical amendments will serve to further enhance these dynamic programs.

other Acts. We believe that these minor technical amendments will serve to further enhance these dynamic programs. As the first of the multi-species conservation Acts, the African Elephant Conservation Act was enacted in 1989 and received its initial funding in Fiscal Year 1990. The Act has now given us over 10 years of experience with African elephant programs in 23 of the 37 African range countries. The African Elephant Conservation Act came into existence at a time when most African elephant populations were declining at an alarming rate, due primarily to poaching for a large illegal trade in ivory. In response to this precipitous decline, the Act authorized a two-pronged conservation strategy. First, it required a review of elephant conservation programs and established a process for implementation of strict ivory import controls; and second, it established a Fund for cooperative conservation projects in African elephant through both its import control provisions and the grant program. African elephant populations today are now stable in some countries and increasing in others. However there is still a need to help control poaching in many countries and assist those countries with recovering elephant populations with their management. Much still needs to be done to secure the continent's elephant populations at sustainable levels.

Much of the success of the African Elephant Conservation Act has been a direct result of the unique Small Project Conservation Fund that is targeted at cooperative, on-the-ground conservation projects in Africa. Implementation of this program has had a positive impact on the conservation of the African elephant, and played an indirect role in the conservation of numerous other species that benefit from the conservation of this keystone species. To date, the Service has funded 123 different projects in 23 African countries affecting over 300,000 elephants. Each project is a cooperative effort with African CITES Management Authorities, other foreign governments, non-governmental organizations, or with private sector entities. No incountry project is approved unless it has the full support of and has been identified by that country as a priority for conservation. Through this cooperative approach, the actual on-the-ground resources directed at African elephant conservation is nearly five times the \$11 million allocated to the grant program since 1990.

In response to the growing concerns of the status of rhinos and tigers worldwide and modeled after the African Elephant Conservation Act, Congress enacted the Rhinoceros and Tiger Conservation Act of 1994. Rhinos and tigers remain among the most charismatic and some of the most endangered species on earth. However, since its inception, the Service has been able to provide substantive support to range countries to aid their efforts to conserve these species. Sustaining tigers and rhinos in the wild depends on a number of factors including international and national commitment to conservation, effective implementation of existing international and national laws, upgrading the legal status of rhinos and tigers wherever necessary, strict implementation of CITES by all tiger and rhino range countries, cooperation between range countries in combating poaching and trade in tiger and rhino products, efforts to protect existing tiger and rhino populations and their habitat, and international support for conservation in tiger and rhino range countries. To date, the Service has funded 116 different projects in 16 Asian and African countries. Each project is a cooperative effort with local range country governments, non-governmental organizations, CITES Management Authorities, or with private sector entities with experience in rhino or tiger conservation. No project is approved unless it has the full support of and has been identified as a priority for conservation. Through this cooperative approach, the actual on-the-ground resources directed at tigers and rhinos is twice the \$4 million appropriated to the grant program since 1996. It is noteworthy to mention that in the previous two years, 51 percent of the matching funds and in-kind contributions originated from range countries. Continued funding of this Act is crucial in order to help support efforts for these critically endangered species.

Again in 1997, following the small grants model as a blueprint for success, Congress enacted the Asian Elephant Conservation Act. The Asian elephant shares a land mass that contains some of the largest and poorest human populations in the world. The combination of pressures on the environment brought on by these conditions has resulted in the conversion of forest cover to village and agriculture use, thereby fragmenting elephant habitat and populations. It is believed that there are only about ten elephant populations with over 1,000 elephants and half of these are found in India. The majority of populations are small and consist of less than 100 elephants. The greatest threat, although not new, is the increased poaching of Asian elephants.

The first funds were made available in Fiscal Year 1999. Following the successful methods of implementation of the African Elephant Conservation Act and the Rhinoceros and Tiger Conservation Act, the Service has developed a grants program encouraging proposals for protection to at-risk elephant populations, habitat and ecosystem conservation and management, applied research including surveys and monitoring, conservation action plans, and support of efforts to decrease human-elephant conflicts. Similar to the other two multi-species conservation fund programs, the Service seeks cooperative efforts with in-country wildlife organizations, non-governmental organizations, CITES Management Authorities, and private sector entities with Asian elephant conservation experience. While this grant program is only in its third year of funding, 27 grants Asian elephant conservation activities have been awarded involving nine range countries and leveraging a 1:1 financial match to the \$1.9 million appropriated. In closing, Mr. Chairman, the findings made by Congress in first enacting these Acts are regrettably still true today. Many African and Asian countries do not have

In closing, Mr. Chairman, the findings made by Congress in first enacting these Acts are regrettably still true today. Many African and Asian countries do not have sufficient resources to properly manage, conserve, and protect their rhino, tiger and elephant populations. While much has been accomplished, much remains to be done. The annual requests for support of high priority projects greatly exceed the funds available, and we believe that reauthorization of the three Acts can make important contributions to rhino, tiger and elephant conservation. The United States must share the responsibility to provide for the conservation of these magnificent species. The principles embodied in these Acts are sound. They provide catalysts for cooperative efforts among the governments of the world, non-governmental organizations, and the private sector to work together for a common goal the conservation and continued healthy existence of populations of rhino, tigers and elephants. These are not hand outs, but helping hands. For all of these reasons, the Service strongly supports the reauthorization of these Acts.

We look forward to working with the Members of this Committee regarding reauthorization of the multi-species conservation acts. I would be happy to answer any questions.

<sup>\*</sup> Suggested Language Regarding Formation of an Advisory Group This language is modeled after Section 7(b) of the Neotropical Migratory Bird Conservation Act (16 U.S.C. 6106(b), P.L. 106–247).

(1) In General—To assist in carrying out this Act, the Secretary may convene an advisory group consisting of individuals representing public and private organizations actively involved in the conservation of [species name].

tions actively involved in the conservation of [species name]. (2) Public Participation—(A) Meetings—The advisory group shall (i) ensure that each meeting of the advisory group is open to the public; and (ii) provide, at each meeting, an opportunity for interested persons to present oral or written statements concerning items on the agenda.

(B) Notice—The Secretary shall provide to the public timely notice of each meeting of the advisory group.

(C) Minutes—Minutes of each meeting of the advisory group shall be kept by the Secretary and shall be made available to the public.

(3) Exemption from Federal Advisory Committee Act—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the advisory group. Suggested Language Regarding Project Sustainability and Capacity Building A section on Project Sustainability should be added to the African Elephant Conservation Act (16 U.S.C. 4211):

(e) Project Sustainability—To the maximum extent practical, in determining whether to approve project proposals under this section, the Secretary shall give consideration to projects which will enhance sustainable conservation programs to ensure effective, long-term conservation of African elephants.

Section 5(e) of the Rhinoceros and Tiger Conservation Act of 1994 (16 U.S.C. 5304) should be amended to read:

(e) Project Sustainability—To the maximum extent practical, in determining whether to approve project proposals under this section, the Secretary shall give consideration to projects which will enhance sustainable conservation programs to ensure effective, long-term conservation of rhinoceros and tigers.

Mr. GILCHREST. We would certainly take advantage of that opportunity. Thank you.

James Rapp, welcome.

#### JAMES L. RAPP, EXECUTIVE DIRECTOR, SALISBURY ZOOLOG-ICAL PARK, ON BEHALF OF THE AMERICAN ZOO AND AQUARIUM ASSOCIATION

Mr. RAPP. Thank you very much. Thank you, Mr. Chairman, for the opportunity to testify this morning on three very important legislative reauthorizations, and thank you for your kind words about the Salisbury Zoo.

My name is Jim Rapp. I am Director of the Salisbury Zoological Park, in Salisbury, Maryland. Our zoo is a 12-acre facility that displays over 100 species of wildlife, over 350 specimens in our collection, and we host an annual attendance of about 250,000 visitors, including 15,000 local school children who come for education programs.

The Salisbury Zoo has been an accredited member of the American Zoo and Aquarium Association, the AZA, since 1972. I currently serve on the AZA Government Affairs Committee and am representing the Association today.

AZA represents 191 professionally-managed and accredited zoological parks and aquariums that draw over 130 million visitors annually and have more than 5 million members combined. Collectively, our institutions teach more than 12 million people each year in a living classroom setting, and dedicate over \$50 million annually to conservation education programs that focus on the devastating effects of the loss of vital species habitat and the illegal trade in endangered species parts and products.

In addition, AZA members invest over \$50 million annually in scientific research, and support over 700 field conservation and research projects in 80 countries. In addition to that, AZA institutions have established the Species Survival Plan, a long-term plan that facilitate genetically diverse breeding, habitat preservation, public education, field conservation, and supportive research to ensure survival for many threatened and endangered species.

Currently, AZA members are involved in 95 different SSP programs covering 124 species from around the world. A majority of those species represented are listed under the Endangered Species Act or CITES, including all of the great apes, Siberian and Sumatran tigers, African and Asian elephants, and four species of rhinoceros. While AZA zoos and aquariums have become the last stronghold for some species, we fully realize that we cannot save these animals by zoo propagation alone. AZA members continue to work with Congress, the Federal agencies, conservation organizations, the private sector, and the countries of origin to conserve our wildlife. It is in this context that AZA expresses its strong support for the quick passage of H.R. 643, H.R. 645 and H.R. 700.

Before I briefly discuss these bills, I would first like to commend the Subcommittee for your far-sighted vision in passing the Great Ape Conservation Act and the Neotropical Migratory Bird Conservation Act during the last Congress. These Acts created two very critical additions to the Multinational Species Conservation Fund program.

Mr. Chairman, we have before us today three important pieces of legislation that represent a significant portion of the Federal Government's direct contribution to preserving endangered wildlife abroad. We are going to hear a lot today about declining species populations and depleting habitat. In fact, according to recent estimates, 20 percent or more of the world's biodiversity could disappear in the next two decades as a result of habitat fragmentation, alteration, and over-exploitation of threatened and endangered species. It is therefore vital that more people, governments, institutions, and organizations become involved in these efforts to conserve our imperiled environment.

Over the duration of the African elephant, Asian elephant and rhino-tiger funds, the U.S. Congress has appropriated over \$14 million that have been leveraged with nearly \$56 million in real dollars and/or in-kind services from host countries and local international non-governmental organizations. This is a significant partnership, especially in terms of Government programs. The funds provided by Congress have served as the catalyst for the implementation of over 230 projects worldwide, ranging from highly sophisticated and innovative data collection, tracking and monitoring programs, to simply providing essential on-the-ground resources, weapons, ammunition, vehicles, and communications systems to game wardens and law enforcement officials who have been entrusted to protect these magnificent animals from the ravages of civil unrest, poaching, and habitat exploitation.

What makes these programs highly effective is that the U.S. Fish and Wildlife Service distributes the funds in a timely and efficient manner with very few bureaucratic entanglements. The funds are targeted to high-priority field conservation efforts that most directly benefit the species of concern.

Most importantly, the African elephant, Asian elephant, and rhino-tiger funds have long recognized the value of promoting cooperative projects among government entities, NGOs, and the affected local communities in the range states. This is essential because it is only through local action, local education and local support that realistic solutions for saving these species can be effectively devised and implemented.

I am going to just briefly touch on a few numbers with the African Elephant Reauthorization Act, H.R. 643. Currently, in the wild, it is estimated that the population ranges from 300,000 to 600,000 individuals. That represents less than half of the elephant population that existed in Africa in the 1970's. Certainly, these funds in the African Elephant Conservation Act have gone a long way.

On H.R. 645, the Rhino-Tiger Act, since the 1940's—some figures might be of interest to you—three tiger subspecies, the Caspian, Bali and Javan, have become extinct, and 95 percent of the world's remaining tiger population has disappeared since the early 1900's, from about 100,000 tigers in the early part of the century to less than 7,000 today.

The rhino population, as well, is also in serious decline, and the rhino-tiger funds have done a great deal to help those populations recover. As Representative Saxton said, the Asian Elephant Conservation Act has done a great deal for elephants in Asia, similar to the African Elephant Conservation Act.

Basically, let me summarize here. The challenges before this Subcommittee with regard to international wildlife conservation we see as three-fold. One is to reauthorize these three highly effective conservation funds. Second is to work to secure an appropriation of \$1.5 million for each of the five funds under the Multinational Species Conservation Fund; and, third, to look beyond the established funds to examine new and innovative legislative mechanisms for addressing ecosystem-wide management protection issues.

Again, Mr. Chairman, the AZA wholeheartedly supports H.R. 643, 645 and 700. I want to thank you for the opportunity to comment today and I would be happy to answer any questions, if you have them.

Thank you.

[The prepared statement of Mr. Rapp follows:]

#### Statement of James L. Rapp, Director, Salisbury Zoological Park, on H.R. 643, H.R. 645, and H.R. 700

Thank you Mr. Chairman, for the opportunity to testify this morning on three very important legislative reauthorizations: H.R. 643, the African Elephant Conservation Act; H.R. 645, the Rhino-Tiger Conservation Act; and H.R. 700, the Asian Elephant Conservation Act.

My name is Jim Rapp and I am the Director of the Salisbury Zoological Park in Salisbury, Maryland. I have worked for the Zoo for 10 years serving in a number of capacities. The Salisbury Zoo is a twelve-acre facility that displays over 100 different wildlife species over 350 specimens. We host an annual attendance of 250,000 visitors, including 15,000 local school children.

visitors, including 15,000 local school children. The Zoological Park has been an accredited member of the American Zoo and Aquarium Association (AZA) since 1972. I currently serve on the AZA Government Affairs Committee.

AZA represents 191 professionally managed and accredited institutions which draw over 130 million visitors annually and have more than 5 million zoo and aquarium members. Collectively, our institutions teach more than 12 million people each year in living classrooms and dedicate over \$50 million annually to conservation education programs that focus on, among other things, the devastating effects of the loss of vital species habitat and the illegal trade in endangered species parts and products. AZA members invest over \$50 million annually in scientific research and support over 700 field conservation and research projects in 80 countries.

In addition, AZA institutions have established the Species Survival Plan (SSP) program a long-term plan involving genetically diverse breeding, habitat preservation, public education, field conservation and supportive research to ensure survival for many threatened and endangered species. Currently, AZA members are involved in 95 SSP programs featuring 124 species throughout the world. A large majority of those SSPs cover species which are listed under the Endangered Species Act or CITES, including all the great apes—chimpanzees, gorillas, orangutans and bonobos, African and Asian elephants, Siberian and Sumatran tigers and black, white, Sumatran and greater one-horned rhinos. And while AZA zoos and aquariums have become the last stronghold for some species, we fully realize that we cannot save them by zoo propagation alone. AZA members continue to work with Congress, the Federal agencies, conservation organizations, the private sector and the countries of origin to conserve our wildlife heritage. It is in this context that AZA expresses its strong support for the quick passage of H.R. 643, H.R. 645 and H.R. 700.

H.R. 643, H.R. 645 and H.R. 700. Before I briefly discuss these bills, I would first like to commend the members of this Subcommittee for their far-sighted vision in passing HR. 4320, the Great Ape Conservation Act during the last Congress and creating a very critical addition to the Multinational Species Conservation Fund program.

OVERVIEW

Mr. Chairman, we have before us today, three important pieces of legislation that represent a significant portion of the Federal Government's direct contribution to preserving species-specific wildlife abroad. Twenty percent or more of the world's biodiversity could disappear in the next two decades, primarily due to habitat fragmentation and alteration and the over-exploitation of threatened and endangered species according to recent estimates. It is therefore vital that more people, governments, institutions and organizations become involved in efforts to conserve our imperiled environment.

Over the duration of the African Elephant, Asian Elephant and Rhino/Tiger funds, the U.S. Congress has appropriated over \$14 million that has been leveraged with nearly \$56 million in real dollars and/or in-kind services from host countries and local/international non-governmental organizations (NGO's). This is a significant partnership especially in terms of government programs. The funds provided by Congress have served as the catalyst for the implementation of over 230 projects worldwide ranging from highly sophisticated and innovative data collection, tracking and monitoring programs to simply providing essential on-the-ground resources weapons, ammunition, vehicles and communication systems to game wardens and law enforcement officials who have been entrusted to protect these magnificent animals from the ravages of civil unrest, poaching and habitat exploitation. What makes these programs effective is that the US Fish and Wildlife Service dis-

What makes these programs effective is that the US Fish and Wildlife Service distributes the funds in a timely and efficient manner with very few bureaucratic entanglements. The funds are targeted to high-priority field conservation efforts that most directly benefit the species of concern. More importantly, the African Elephant, Asian Elephant and Rhino/Tiger funds have long-recognized the value of promoting cooperative projects among government entities, NGO's and the affected local communities in the range states. This is essential because it is only through local action, local education, and local support that realistic solutions for saving these species can be effectively devised and implemented.

Let me turn now to the three reauthorizations:

1) H.R. 643, the African Elephant Conservation Reauthorization Act The African elephant is the standard bearer for the conservation fund programs. At the time of the enactment of the African Elephant Conservation Act in 1989, the population of this magnificent species was declining at a perilous rate due to ivory poaching, habitat destruction and elephant-human conflicts. The Act has gone a long ways toward stemming the dramatic decline in African elephant numbers, with wild population estimates now ranging from 300,000 to 600,000 individuals. While this may seem to be a stable size, it represents less than half of the elephants that inhabited Africa in the 1970's. The species is still not out of danger as increased pressures from the ivory trade, ongoing civil wars and the evolving bushmeat crisis in Central and East Africa continue to threaten populations. In addition, only about 20 percent of the more than 2.2 million square mile range of the African elephant is under some form of protection.

Since the late 1980's, the African Elephant Conservation Fund has generated 123 projects in 22 range countries. These projects have provided critical assistance to range countries and NGO's for anti-poaching/anti-smuggling law enforcement efforts, population surveillance and monitoring, habitat protection and management, conservation education, cross-border cooperation and elephant-human conflict resolution.

2) H.R. 645, the Rhinoceros/Tiger Conservation Reauthorization Act As this Subcommittee 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 endangered mammals on earth. Ninety-five percent of the world's tiger population has disappeared since the early 1900's. At that time, an estimated 100,000 tigers roamed India, Indochina and other parts of Asia. Today, approximately 7,000 tigers are left in the wild and those numbers continue to drop. The estimated wild populations of the five subspecies of tiger in the wild are as follows: South China tiger 20–30 individuals; Amur/Siberian tiger: 360-400 individuals; Bengal tiger: 3200–4500 individuals; Indo-Chinese tiger: 1200-1800 individuals; and Sumatran tiger: 400–500 individuals. While pressure from an expanding human population and the development of natural resources to support a burgeoning Asian economy have contributed to the decline in tiger populations, poaching and the use of tiger parts in traditional Asian medicines have clearly taken center stage since the 1980's as the primary reasons for this species decline.

The situation facing the three Asian and two African rhino species is also extremely serious. Populations were abundant and rather widely distributed in Asia through the mid-1800's. Today fewer than 100 Javan rhinos, 300 Sumatran rhinos and 2400 Indian rhinos remain in the wild. In Africa, wild populations of black rhinos have declined by over 95 percent (to approximately 2700 individuals) over the past two decades while over 10,400 white rhinos still remain. The precipitous decline in the black rhino numbers can be directly attributed to poaching for the trade in traditional medicines and ornamental dagger handles. Obviously these population numbers are not sustainable. Conservation biologists contend that a population size of 2000–3000 individuals within each species is necessary for long-term viability. Most rhino species are near or well below this 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 timberlands, unchecked conversion of land to agricultural use and human over-population.

The Rhino/Tiger Conservation Fund created in 1994 has generated 116 projects in 16 countries. The fund has proven itself effective for critical conservation programs in Africa and Asia for the highly endangered species and subspecies of rhinoceros and tiger. The fund has delivered immediate results by assisting range countries and conservation NGO's on the front lines through critical field conservation work, in situ breeding programs, monitoring and surveillance, habitat management, and anti-poaching/anti-smuggling efforts. Conservation education programs designed to address animal-human conflicts, consumer awareness of rhino/tiger products and the intrinsic value of these species to local communities have also been effective.

3) H.R. 700, the Asian Elephant Conservation Reauthorization Act The number of Asian elephants in the wild varies between 35,000 and 50,000 individuals in over 13 countries. With a population that is 1/10th the size of their African relatives, Asian elephants can ill-afford a prolonged decline in their numbers. Yet, with the tremendous increase in the human population of Asia and the resulting increase in elephant-human conflicts due to shrinking critical habitat, the prognosis for the Asian elephant is guarded at best.

The Asian Elephant Conservation Fund created in 1997 has generated 27 projects in nine range countries. Like its African elephant counterpart, these projects have primarily focused on habitat and protected area management, surveillance and monitoring of populations, cross-border cooperation, conservation education in the local communities and the resolution of elephant-human conflicts. Mr. Chairman, the endangered status of the wildlife species highlighted by these

Mr. Chairman, the endangered status of the wildlife species highlighted by these three conservation funds represents an ecological and societal problem of enormous proportions. It is a problem of political unrest compounded by unregulated resource exploitation and habitat degradation through logging, mining, farming and poaching. It is also a problem that is not specifically limited to the species we have discussed today. In Borneo, for example, the orangutan population has declined by 90 percent. Then there are also lesser-known species such as the Rodrigues Island fruit bat a highly endangered species that is essential for seed dispersal and pollination on the Rodrigues Island in the Indian Ocean.

We are now facing what is popularly referred to as the Empty Forest Syndrome, where the trees in the forest may be left standing but the endemic wildlife is long removed. And if the essential wildlife—the predators, the prey, the seed spreaders, the natural fertilizers are gone, the question of ecological balance becomes paramount.

During the last Congress, AZA and many of the NGO's beside me today testified on a bill entitled the Keystone Species Conservation Act, a measure that is no less critical or time-sensitive than the reauthorizations before us today. In the United States, our cornerstone piece of wildlife conservation is the Endangered Species Act (ESA) of 1973. Under the ESA, over 1,050 animal species worldwide have been designated as either threatened or endangered 555 of those are foreign species. However, foreign species do not receive the key protection mechanisms inherent in the ESA such as critical habitat designation or species recovery plans.

Similarly, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), lists over 30,000 species that receive protection through restrictions on trade in parts and products. However, CITES is not designed to offer in situ conservation measures for threatened and endangered species. The Keystone Species bill would have created a conservation fund account that

The Keystone Species bill would have created a conservation fund account that built upon the strengths of the existing elephant and rhino/tiger funds. Funding would be prioritized based on 1) projects that would enhance programs for the conservation of species that are most imperiled and that are supported by the relevant wildlife management authority in the country where the program will be conducted; 2) projects that would receive the greatest level of matching assistance from non-Federal sources; and 3) projects that would enhance local capacity for the conservation of the species. The bill had some shortcomings but there was substantial interest and support for an indicator-species, ecosystem-wide approach to wildlife conservation. In addition, the establishment of this type of legislation would obviate the need to return in two or four years to fight for other species-specific bills. In conclusion, the challenges before this Subcommittee with regard to inter-

In conclusion, the challenges before this Subsommittee with regard to international wildlife conservation are three-fold: 1) to reauthorize these three highly effective conservation funds; 2) to work to secure increased appropriations levels for all of the funds under the Multi-National Species Conservation Fund program, which includes African elephants, Asian elephants, Rhino/tiger, Great Apes, and neotropical migratory birds; and 3) to look beyond these established funds to new and innovative legislative mechanisms for addressing ecosystem-wide management and protection issues.

Again Mr. Chairman, AZA wholeheartedly supports H.R. 642, H.R. 645 and H.R. 700 and we look forward to working with you and the Subcommittee to secure swift passage of these bills this year. In addition, AZA member institutions will continue to raise the awareness of our 130 million visitors each year to bring focus on threatened and endangered species worldwide for it is public awareness of their plight that has helped engage the U.S. as a major catalyst for world concern.

Thank you again for this opportunity to comment on these important wildlife conservation measures.

I would be happy to answer any questions that you may have.

Mr. GILCHREST. Thank you very much, Jim. Ms. Hemley?

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

Ms. HEMLEY. Thank you, Mr. Chairman, Mr. Saxton, Mr. Faleomavaega, for inviting World Wildlife Fund to testify today. We very much look forward to working with you and all the Subcommittee members and staff on a number of wildlife conservation issues. We have greatly appreciated your support in the past and we look forward to working with you on the programs under discussion today.

World Wildlife Fund strongly supports reauthorization of the African and Asian Elephant Conservation Acts and the Rhino and Tiger Conservation Act, for two simple reasons. They are urgently needed and they are extremely cost-effective. I would like to elaborate briefly on these points.

All of the species under consideration today that are affected by these bills are better off today than they were 10 years ago, in part because of the U.S. programs established to help them. The African Elephant Conservation Fund, which has the longest track record of the programs we are discussing, has been instrumental in reducing poaching in many parts of Africa and has helped to equip struggling governments in their efforts to conserve and begin to rebuild remaining elephant populations.

The Rhino and Tiger Conservation Act and the Asian Elephant Conservation Act have achieved similar results. In the last few years, tiger poaching has been reduced in parts of Russia, India, Nepal, and elsewhere. For the first time in two decades, African rhino numbers are showing a modest but overall upward trend in most places. The Asian elephant is being secured in the few remaining areas where it has the best chance of long-term survival, thanks in part to the support of the Asian Elephant Conservation Fund.

There is no question that these programs have been instrumental in the conservation progress that we have seen, modest as it might be, in the last decade. We greatly appreciate your support and this Subcommittee's support in reauthorizing these, but I want to just elaborate a bit on why Congress should continue to support them in the future.

First, this is no time to let up our guard. Many populations of these species remain seriously at risk. We have learned the hard way with endangered species that have big price tags on their heads that they need sustained, direct support if they are going to survive. As you said, Mr. Chairman, these programs offer the only international fund that has been sustained in supporting conservation programs for these species.

Second, the role that these programs play is often a catalytic one. Many of the projects they support are effective because, as Mr. Jones pointed out, they bring together multiple partners that leverage additional conservation funding and assistance. They truly have a multiplier effect.

Third, a strong emphasis of these programs is training, and that is a very key thing, I think, because by focusing on training park guards, wildlife managers, and scientific researchers, these programs have lasting value and really build conservation capacity in the countries where they operate.

Fourth, by conserving these large mammals which we sometimes call flagship species—these are species that require relatively large areas to survive—these programs are also able to conserve thousands of other species sharing their habitats. Their conservation benefits extend well beyond the individual species to whole communities and ecosystems, and many of these ecosystems are highly threatened.

Fifth, the conservation community, in part thanks to the support of these programs, has begun to implement long-term strategies for the conservation of these species. We are no longer just reacting to poaching crisis, as we were in the last 10 to 15 years. Our conservation approaches have become more advanced, so that we now can determine just where in a strategic sense these species have the best chance of long-term survival so that these areas can receive priority attention. We are probably not going to be able to save all of these species everywhere they live. We have to be strategic, we have to make some hard decisions.

Finally, elephants, rhinos, and tigers are important to the American public. The diversity of organizations represented here today is testament, I think, to the broad public interest in saving these species. Together, all of our organizations represent millions of Americans. We all support programs working together with the U.S. Government to conserve these species in the wild. They are excellent examples of effective public-private partnerships.

Just to comment briefly, Mr. Chairman, on the cost-effectiveness of these programs, as you have heard, they leverage a significant amount of conservation funding and support of about \$13-\$14 million worth of grants expended over the last 10 years. You mentioned over \$56 million in matching funds and in-kind contributions have been leveraged. That is a four-to-one return. That is very impressive. World Wildlife Fund works with a lot of international aid programs. I am not aware of any that generate this level of matching or collateral support.

These programs are also administered at minimal cost. In fact, they probably aren't getting enough funding to cover the administrative costs, and World Wildlife Fund would support a modest amendment to these bills to make sure that the costs are effectively addressed. We think the Fish and Wildlife Service has done an excellent job at keeping the program bureaucracy streamlined, but could probably use a little bit more funding to make sure the program is run well.

I also would like to note that these programs have helped generate additional interest in funding from government institutions around the world. The European Union, Japan, the Global Environment Facility, aid agencies in countries like the Netherlands, Sweden, and Germany are all supporting efforts to protect elephants, tigers, and rhinos. This is, in part, I think due to the leadership the U.S. has provided, the attention the U.S. has drawn to the status of these species, and the catalytic small grants that have been provided by the elephant, rhino, and tiger programs.

been provided by the elephant, rhino, and tiger programs. Finally, in closing, just to touch briefly on the appropriations issue, we greatly appreciate this Subcommittee's support in getting an increase to the appropriations for these programs. Last year, the total funding was \$3.25 million. There are now two new funds, as was pointed out. The Fish and Wildlife Service receives twice as many proposals as it can fund with the current budget.

We recommend that each of the five species funds that are part of the multinational program be appropriated at a level of at least \$1.5 million, for a total of \$7.5 million. We do appreciate the Subcommittee's support in our effort to secure this increase. It is very clear from the record established so far that the funding will be put to very good use.

Thank you, Mr. Chairman, for your time. I will be happy to answer any questions.

[The prepared statement of Ms. Hemley follows:]

#### Statement of Ginette Hemley, Vice President of Species Conservation, World Wildlife Fund

Mr. Chairman and members of the subcommittee, thank you for the opportunity to testify 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 sponsor conservation programs in more than 100 countries, thanks to the support of 1.2 million members in the United States and more than 5 million members worldwide.

We are here today to discuss conservation programs for some of the world's most threatened species rhinos, tigers, and elephants. The United States, primarily through programs administered by the Fish and Wildlife Service, has played a critical role in the protection and conservation of these highly endangered species. World Wildlife Fund strongly urges that these programs be reauthorized, for the reasons outlined below.

#### Why These Programs Are Important

During the 1970's and 1980's, a major poaching crisis swept through parts of Africa and Asia, decimating populations of the African elephant, African and Asian

rhinos, and the tiger. This poaching was driven primarily by a dramatic increase in global market demand for ivory for use as carvings and trinkets, and for rhino horn and tiger bone, which are highly valued ingredients in traditional Chinese medicine. The crisis was made worse in the 1990's by declining economies and political instability in many African and Asian range countries.

The statistics surrounding the wildlife losses were staggering. During the 1980's, half of Africa's elephants perhaps half a million animals were lost to poaching. Black rhinos dwindled from about 70,000 in 1970 to fewer than 2,500 animals by 1992, an astounding 95 percent loss in just two decades. The tiger population in India was reduced to fewer than 3,000 animals by the late 1980's, while Russia's Siberian tigers took a major hit in the early 1990's, with numbers falling by perhaps 40 percent to 250 animals by 1993. Although less in the media spotlight, the Asian elephant population in the wild has declined to about one-tenth the size of its African cousin, to fewer than 50,000 animals, due to growing human population pressures in South and Southeast Asia.

Thanks to a broad international response, the situation for most of these species began to improve in the 1990's. CITES, the Convention on International Trade on Endangered Species, banned the ivory trade in 1989 and started to beef up enforcement efforts to stop the illegal trade of rhino and tiger parts. But stopping the trade was not enough. Direct action was needed on the ground to protect dwindling populations of these species, and the United States stepped in to help. Congress passed the African Elephant Conservation Act in 1988 to provide small grants to help African countries conserve their remaining elephant populations and help rebuild them. Since the African Elephant Conservation Fund was initiated in 1990, more than 120 grants have been awarded for projects in 22 countries, strengthening enforcement and trade control measures, protecting critical habitat, aiding training programs for park guard and wildlife managers, and assisting important elephant research, monitoring and survey efforts.

After 10 years, these scientific and conservation efforts, together with the CITES ivory ban and collaborative programs supported by other governments, aid agencies, and NGO's, have helped African elephant populations begin to rebuild in some countries. Poaching levels are significantly reduced in some areas and illegal trade has slowed. In short, the African elephant is better off today than it was a decade ago, in part because of U.S. Government support. Significant challenges remain, however, in part because of the eroding ability of many African governments to mount their own conservation efforts due to economic and political strife.

The success of the African Elephant Conservation Act led Congress to pass the Rhinoceros and Tiger Conservation Act in 1994. With the establishment of the Rhino and Tiger Conservation Fund, a steady stream of small but well-targeted grants have helped avert further losses of these species as well. In the past five years, we have seen signs of improvement in the status of tiger populations in Russia, Nepal, India, and elsewhere. Africa's black rhino has, for the first time in several years, experienced a modest increase in number in several places, and the white rhino, once threatened, is actually thriving in South Africa. Asian rhinos, representing some of the most endangered large mammals on Earth, have received invaluable assistance from the Rhino and Tiger Conservation Fund but remain severely at risk in parts of their remaining habitat fragments in South and Southeast Asia.

There is little question that the U.S. programs for tigers, rhinos and elephants, modest as they are, have helped avert disaster for these species even possible extinction in some cases. They have helped developing country governments and NGO's build more effective conservation programs. They have truly had a multiplier effect, leveraging an impressive return on partner investments and providing an excellent example of public-private collaboration. But the task is not done. While we have begun to emerge from a period of crisis for some of these species, their longterm survival is still seriously at risk.

It is important to note that these conservation programs are critical not just to the species concerned, but also to Americans who appreciate and use them as symbols of strength and endurance. The Republican Party should be first among those to acknowledge the benefit of the elephant to its image. Saving these species is not just a biological imperative elephants, tigers, and rhinos also have important social, economic, and cultural roles to play in American society.

#### The Broad Impact of Elephant, Rhino and Tiger Conservation Efforts

Elephants, rhinos, and tigers are not only threatened in their own right, they are flagships for the threatened habitats and ecosystems in Africa and Asia in which they live, including some of the world's most unique and biologically diverse systems, such as tropical lowland forests. These large mammals require relatively large areas to survive, so by protecting them, thousands of other plant and animals species also are conserved. They are true "umbrella" species whose conservation benefits extend well beyond their own to whole communities of species.

Some of these large mammals also play an inordinately important role in the ecosystem they are keystone species and their survival is crucial for the survival of the system as a whole. Tigers, for example, are top predators, keeping populations of prey species in check, which in turn keep in balance the populations of the plants upon which they feed. By virtue of their size, feeding habitats, and movements, elephants actually shape the physical environment in which they live and so have a major influence on the plant and animal species around them. In short, when tigers and elephants thrive, the whole ecosystem thrives. When they suffer, the entire ecosystem suffers, including the people that live in or around it.

#### Recent Advances in Elephant, Rhino, and Tiger Conservation

Given the significant declines these species have experienced in recent years, a logical question to ask is, are their remaining populations and are the ecosystems in which these species live still viable? Significant study and debate surround the question of biological viability, and clearly massive declines or extirpation of a population in a particular area can be disruptive. But several points are important to consider. First, we have learned with both tigers and rhinos that a species can recover if habitat and food availability is sufficient and poaching is controlled. For example, the tiger population in the Russian Far East was once reduced to fewer than 40 animals in the 1940's due to uncontrolled hunting. Strict protection in an area where habitat and prey was abundant allowed the population to recover to around 400 by the 1980's. Similarly, the white rhino population in South Africa has grown to an astounding 9,700 animals today the largest rhino population on Earth from fewer than 100 animals at the turn of the century. Likewise, greater one-horned rhinos in Nepal, reduced to 100 or so in the 1960's due to overhunting, now thrive at more than 600 animals, enough to begin repopulating areas where they were extirpated thanks to strong protection by the Nepalese government and effective community-based conservation efforts. These success stories demonstrate that a species can come back, if sufficient and sustained protection is provided.

Thanks to increased international support for conservation activities, including from the FWS programs, the conservation community has begun to implement longterm strategies for the conservation of tigers, rhinos, elephants, and other large mammals. We are increasingly able to determine where our conservation investments will have the biggest long-term payoff. For example, a ground-breaking analysis undertaken by WWF, the Wildlife Conservation Society, and the National Fish and Wildlife Foundation/Exxon-Mobile Save the Tiger Fund, shared previously with this subcommittee, has prioritized remaining tiger populations and habitats across Asia based on habitat type and integrity, levels of disturbance, and other factors related to long-term viability. This analysis is helping to guide global tiger conservation efforts so that the most promising areas and populations receive priority attention. We know that we cannot save tigers everywhere, and that we must make tradeoffs in our decisions. Similar analyses have been undertaken for Asian elephants and rhinos, and comparable regional efforts are underway for African elephants.

The conservation community has also come to recognize that, for many large mammals like tigers, rhinos, and elephants requiring large areas to maintain healthy populations, the current universe of parks and protected areas does not provide sufficient habitat for their long-term survival. That is, a large proportion of their populations in some cases 50 percent or more are found outside areas that receive official protection, so effective conservation efforts must extend throughout the entire landscape where the species lives and moves. New approaches to conservation are encompassing larger areas than ever before ecoregions and landscapes and bringing together habitat protection, land-use planning, managed resource use, and community-based conservation in an integrated fashion that benefits both wildlife and people. In some cases, this includes undertaking efforts to restore forest corridors that connect parks and protected areas so that species like tigers, rhinos, and elephants can more easily disperse, breed, and establish new populations, enhancing their genetic viability and prospects for long-term survival.

#### The Unique Value of the Elephant, Rhino, and Tiger Funds

The situation for elephants, rhinos, and tigers remains serious, but it is far from hopeless. The progress of the last few years, thanks in part to the programs authorized by the African Elephant, Asian Elephant, and Rhino and Tiger Conservation Acts, demonstrate that, when reliable financial support is available and is used wisely, improvements can be rapid and dramatic. We know what needs to be done to save these species, and our conservation approaches and methodologies are becoming more effective and innovative every day. We have better data on these species and their critical habitats and stronger international collaboration than ever before. We must build on this important momentum.

The FWS programs for tigers, rhinos, and elephants have a number of unique features that underpin their effectiveness. These include:

#### Leveraging Significant Conservation Funding and Support

The FWS reports that from 1990 through January 2001, about 240 grants totaling some \$13.5 million have been awarded for elephant, tiger, and rhino projects. These together have leveraged almost \$56 million in matching funds and in-kind contributions, a 4:1 return. In 1999 and 2000, 51 percent of the matching funds and in-kind contributions for tiger and rhino projects originated from the range countries. Few international conservation or aid programs are able to generate this level of matching or collateral support.

#### Program Administration with Minimal Bureaucracy and Cost

To date, the elephant, rhino, and tiger grant programs have been administered at minimal cost for less than 4 percent of the monies appropriated for the grant programs from 1990 to 2000. In fact, this amount has proven inadequate to cover the costs of full program administration, and subsidies have been needed from other FWS programs. Although these grant programs are relatively small, they include several important activities, such as developing and reviewing proposals and reports, issuing and tracking project contracts and payments, communicating with grantees and host governments, and tracking and monitoring projects. WWF supports amending the elephant, rhino, and tiger acts to ensure a modest increase in the allowance for administrative expenses so that the grant funds are administered with maximum effectiveness. We encourage the subcommittee to include the same language pertaining to administrative expenses as contained in the Great Ape Conservation Act of 2000, i.e. that the Secretary "may expend not more than 3 percent, or up to \$80,000, whichever is greater, to pay the administrative expenses necessary " We believe this is a more appropriate formula than now contained in the reauthorization bills under consideration today.

#### Strengthening Collaboration Among NGO's and Governments

As both a partner donor and implementing organization for various FWS-supported projects, WWF is acutely aware of the important role the elephant, rhino, and tiger programs have played in fostering collaboration among NGO's and governments. Many of the projects supported by these conservation funds involve multiple partners, and grants provided to NGO's receive approval from range country governments before they are awarded. The FWS programs have thus acted as a catalyst, not only for leveraging funding, but also for bringing important conservation players together in ways that enhance collaboration and conservation impact.

#### Providing International Leadership

By passing the African Elephant, Asian Elephant, and Rhino and Tiger Conservation Acts and implementing the programs they authorize, the U.S. Congress and FWS have together staked out important leadership roles in international conservation. This has helped bring the plight of these endangered species to the attention of governments worldwide, including both range and donor countries, which have increased their support for conservation programs accordingly. It has helped strengthen the activities of CITES in addressing key threats to these species. It has helped make these species a higher priority on policy and philanthropy agendas in the private sector, leading to increased public support for conservation programs.

#### Increasing Public Awareness

Over the past decade, the American public's interest in and concern for the future of these endangered species has grown. This is clearly the result of the combined efforts of non-governmental organizations such as those testifying here today and the efforts of the FWS and Congress. All of us receive a regular stream of letters of concern about and in support of these species. There is little question that the American public cares deeply about the future of elephants, tigers, and rhinos, and expects and encourages us all to do more on their behalf. Public contributions to many of the organizations here today are a strong sign of the importance the public places on efforts to protect these species, and have enabled the private sector to work hand-in-hand with the government on conservation efforts.

#### The Rhino and Tiger Product Labeling Act

Recognizing the importance of the United States as a market for Asian medicinal products purporting to contain rhino and tiger ingredients, Congress amended the Rhino and Tiger Conservation Act in 1998 to include a specific prohibition on the import, export, and sale of any product for human consumption that contains or is labeled or advertised to contain tiger or rhino parts. This new law, consistent with a recommendation by CITES, was intended to facilitate enforcement efforts by shifting the burden of proof that a product actually contains these ingredients from the government to the trader or salesperson. The law also required, within 180 days of its passage, the initiation of an education program to inform consumers about the law and the plight of the species it is intended to protect. To date, we are aware of few activities undertaken by the FWS to begin such an education program, although several NGO's have offered to collaborate in these efforts in order to minimize the cost to the government. WWF encourages the subcommittee to confer with FWS on their plans for developing such a program in the future.

#### The Need for an Increase in Appropriations for the Multinational Species Fund

From 1990 to 2000, over 650 proposals have been submitted for funding by the elephant, rhino, and tiger programs. Of these, some 240 grants have been awarded. Clearly, the number of projects in need of funding outstrips the capacity of the FWS to support them. With the addition of two new programs the Great Ape Conservation Fund and Neotropical Migratory Bird Conservation Fund the total combined amount of funding authorized by Congress is \$30 million. Last year, just \$3.25 million was appropriated. WWF and other NGO's are seeking an increase in appropriations to \$1.5 million for each fund, for a total \$7.5 million. We believe that this increase is fully warranted because of the urgent conservation needs these species and their habitats face, the number of worthy projects that have gone without support, the addition of the two new funds, and the outstanding record of the FWS in administering the programs to date and the conservation results they have achieved.

It may interest the subcommittee that several of the NGO's represented here today are pursuing an initiative to augment the funding provided for these programs through a possible series of wildlife "semi-postal" stamps produced by the U.S. Postal Service. Modeled after the highly successful Breast Cancer Research Stamp, which has generated over \$19 million in funding for government breast cancer research programs since its introduction in July 1998, a "Vanishing Wildlife" stamp series could help raise additional funds for these FWS programs. This could help shrink the gap between the Congressionally authorized funding ceiling and the actual appropriation. Last year, Congress transferred authority for the approval of semi-postal stamps to the Postal Service, which is now preparing guidelines and criteria for a 10-year program. We would be grateful for the subcommittee's support in pursuing the wildlife semi-postal initiative and will keep you informed accordingly.

Mr. Chairman, thank you for the opportunity to testify before the subcommittee today. I will be happy to answer any questions.

Mr. GILCHREST. Thank you very much, Ms. Hemley, and thank all three of you for your testimony.

I would like to start with Mr. Rapp. In your full testimony, you used a phrase called "empty forest syndrome."

Mr. RAPP. Yes.

Mr. GILCHREST. Could you explain that?

Mr. RAPP. Certainly. Empty forest syndrome refers to the fact that the future for wildlife could very well be in empty forests where the trees remain and some of the smaller species, but the predators, the prey species, seed disbursers, and fertilizers are vacant. And it wouldn't be the same forest as we have today, and I think the funding from these Acts goes a long way in keeping those species in the forests and the habitats where they are from.

Mr. GILCHREST. So an empty forest syndrome disrupts the natural mechanics of the ecological system in ways that we probably would find it difficult to predict what that forest would look like in the future? Mr. RAPP. Very well said, and the way they would behave. I mean, you take out these key species and things change dramatically and it is not the same forest. Especially animals like rhinos, elephants and tigers are extremely important to habitats where they live in all sorts of ways that if you remove them from the habitat, it is very much different; it is not the same place.

Mr. GILCHREST. That phrase "empty forest syndrome" has a deep, hollow loneliness to it.

Mr. RAPP. It does. It reminds me of "Silent Spring."

Mr. GILCHREST. Right. Jim, can you give us some idea of what roles zoos play and might continue to play in the propagation of threatened or endangered species as far as that impact on releasing them to the wild and increasing species populations?

Mr. RAPP. Absolutely. Our first goal truly is to prevent that. I think the zoos are a stronghold in the very end as a tool to preserve animal species from becoming extinct. Some of the species we have talked about today—Sumatran tigers, Javan rhinos—are in extreme decline. Less than a few hundred individuals remain in those populations. For good genetic viability, I think scientists would say that 2,000 to 3,000 are needed to really remain healthy. Of course, if you fragment populations, it gets even worse.

Zoos fundamentally, I believe personally, are really education institutions first. I think our strongest asset lies in the 130 million visitors—American citizens, tourists, people from abroad—who come to see our collections. You multiply that by the zoos worldwide and it can become a pretty dramatic effect in bringing these concerns and problems to light.

However, on the scientific side of the zoo community, there is a lot of work being done, all sorts of new technologies available—in vitro fertilization, the frozen zoos—again, last-ditch efforts that can be used to prevent animals from becoming extinct. But when you take an animal like that and try to release it back into the wild, it comes with costs. It is not easy just to take an animal from a zoo, a captive-born animal, and take it back to the wild. But in certain instances it becomes quite effective to at least boost genetic viability in wild populations.

So it is a last-ditch effort we would rather see not happen, one reason why these funds are so important, but we are involved very much in creating the technology today that can help the wild and help field technicians in the work they are doing in the countries where these animals live.

Mr. GILCHREST. Jim, in recent decades a number of conservationists and biologists have had fairly strong negative comments, and I think in the present-day situation— at least in most instances in the United States, it is not true, but a number of conservationists have had very negative comments about zoos and the number of species that were—the manner in which those species were collected to bring to zoos and the number of species that were threatened or endangered at the time. And then because they were caught to bring to zoos, their populations further declined.

Do you have any comment to those statements?

Mr. RAPP. Certainly. I think decades ago, zoos were consumers of wildlife. "Bring Them Back Alive" Frank Buck and characters like that going overseas to bring animals to this country were the founding stock for a lot of animals in collections in zoos and aquariums today.

At this point, I feel pretty safe to say that in this day and age, when animals are brought into captivity, it is only because the scientific community has suggested as a last-ditch effort to bring animals from the wild into captivity for captive breeding—California condors, black-footed ferrets, a lot of the programs managed by Fish and Wildlife. The zoos have had a tremendous impact in working with the technology in situ in the zoo collections, out of the field, of course, also educating the public.

I think the role has changed quite a bit. I know at our collection at Salisbury, the only true wild animals we have in our collection are animals that are brought to us for injuries. We have bald eagles on exhibit. We have an orphaned river otter that helped make up our collection. But I know for the majority of zoos in this country, I think it is like 90 to 95 percent of animals in collections today have been captive-bred.

Indeed, the technology for captive breeding is so far advanced these days there really isn't a need to go to the wild to supply zoos with animals. But, certainly, the history was that. That is how zoos got started. We are much more involved today than we were then.

Mr. GILCHREST. Thank you. Sort of an assisted living facility for injured or aged animals.

Mr. RAPP. Very well said.

Mr. GILCHREST. That is good. I think we may have a second round because I have some other questions, but I will yield now to recognize Mr. Faleomavaega.

Mr. FALEOMAVAEGA. Thank you, Mr. Chairman. I certainly want to thank our witnesses for their testimony. I do have a couple of questions.

Mr. Jones, in your efforts on behalf of our Government, and I guess in your efforts in coordinating these three important programs with the host countries, other than just to say that we admire the beauty of these animals, can you share with the Subcommittee why they are so important to the ecology? Why do we have to look at protecting the elephants and the rhinos and the tigers? Tigers eat other animals. Can you tell us how they protect the biodiversity of the environment in which they live?

Mr. JONES. Thank you, Mr. Faleomavaega. I would be pleased to do that, and I would like to build on the response Mr. Rapp just gave because if you think about that empty forest, or you could think of it in the same way, an empty marsh or an empty zone next to an island—if the coral reefs were gone or if the migratory birds didn't come back every fall, that would be an empty habitat. It is not the same thing.

In the same way, the habitats we are talking about for these animals are all part of a web. If these, the major species, sometimes referred to as keystone species, are not present, everything else in that habitat suffers. Some species that depend on them may indeed disappear. Others may actually over-populate. If there are no tigers to keep deer numbers in check within the habitat, then the deer may overpopulate and eat the vegetation, and the result is then starvation and population collapse. Birds, monkeys, and other species may in turn suffer. Mr. FALEOMAVAEGA. What animals suffer if, let's say, the elephant becomes extinct?

Mr. JONES. Elephants, for example, Mr. Faleomavaega, maintain water holes. Elephants can dig for water, and in a time of drought they will go to the dry riverbed. They dig, they get to the water, they drink themselves. They are prodigious drinkers of water, but they also make a place where other animals then can come.

Mr. FALEOMAVAEGA. What about tigers?

Mr. JONES. Tigers are part of a natural fabric. They certainly are predators. They even sometimes are predators on humans, but they also are critical to the functioning of that ecosystem.

Mr. FALEOMAVAEGA. I have got a picture here, I think, on the Rhinoceros and Tiger Conservation Act, and you have got a poacher here taking care of these ungulates that are supposed to be one of the favorite species for tigers to eat. Shouldn't we also be concerned about conserving this ungulate that the tiger feeds on?

Mr. JONES. Absolutely. Mr. Faleomavaega, if there is no prey species for tigers—if humans, for example, come in and poach all of the deer or pigs out of an area, then regardless of how good it may look to our eyes, to a tiger there is nothing to eat. Those are all issues that we, working with the partner organizations that are here today and with the range countries, are working on to make sure there is an ecological balance in these communities—that is, biological communities—where these animals live.

Mr. FALEOMAVAEGA. You suggested earlier that you have some suggestions on how we might better improve the reauthorization of these legislations. Can you share with us in substance if there are any critical areas that we really need to look at in terms of improving the provisions of these proposed bills?

Mr. JONES. Yes, sir. One of the suggestions we have made is to pick up language which is in one, but not all of the bills—it is called Project Sustainability, but there is a lot more to it than you might think just by seeing those words.

What we want to do is to have the authority to fund projects which will be broadly sustainable. For example, training programs where many of the participants are people who are involved with rhinos or tigers or elephants, but maybe some of them aren't. Would we want to train the game guards from nine parks in a country which have elephants and say to the tenth park, you don't have any elephants, so your game guards can't come to the training? Tomorrow, the game guard who is at that park may well be reassigned to another one.

Broad ecosystem projects which would result in benefits to the habitat that is essential for the survival of the elephant or the other species. These are the kinds of projects where we may have funded some of those already, but we have been kind of careful and we would like to have a more explicit congressional recognition.

Mr. FALEOMAVAEGA. Now, in response to some of these countries that we are working in with these programs, do you sometimes get the idea that we are telling these countries what to do? How receptive have they been in our efforts in trying to work with them closely and making sure that we are not overbearing and saying we know better what should be done with these animals? Perhaps these animals live the way they do as best suited with the way those host countries provide for them. I don't know. Tell us which countries have been the most critical of these programs.

Mr. JONES. Mr. Faleomavaega, I am not sure that I know of any country that has been critical of these programs. We have some countries that we don't work in right now, but they are mostly countries that are too dangerous for us and countries that the U.S. State Department has advised us not to go into.

Mr. FALEOMAVAEGA. Like?

Mr. JONES. Angola is a country that is still in civil war with mine fields and other dangers. We want to work there.

But going to your main point, we have learned from our experience that it doesn't work to go into a country and try to tell them how their wildlife should be managed. That does not work. We work with partners to respond when they come to us. A partner may come to us and say, we are interested in a project in country "x." Let's say it is Nepal. We are not going to go ahead and fund that project unless we know that the government of Nepal agrees that this is a good project that fits within their view of the cultural and biological priorities for their country. If Nepal says no, regardless of what we may think, that is not a viable project and we won't fund it. We will say instead to Nepal, well, what kind of projects might be a priority for you, and then work to structure a program that meets their needs.

Mr. FALEOMAVAEGA. The other concern I may have also, Mr. Jones, is that a country may have a critical need, but we are putting the carrot out there, like if you don't conform to what we expect you to do, then we won't give you the funding. Do you find that perhaps this is something that we could also learn to adjust in terms of how we can best assist these countries?

Mr. JONES. There is no doubt, Mr. Faleomavaega, that we can always learn to do things better, and we are always looking for ways that we can make sure that we are a good partner and not a dictator. So we would be pleased to talk to you further or to get any advice that you might have from your experience about how we can make sure that that doesn't happen.

Mr. FALEOMAVAEGA. Well, there is an African proverb—I know my time is almost up—that I want to share with the Chairman that says that when two African elephants fight, the grass is trodden. But those of us from the islands say when two elephants make love, the grass is still trodden.

[Laughter.]

Mr. FALEOMAVAEGA. Thank you, Mr. Chairman.

Mr. GILCHREST. I think the grass will grow back, Eni.

We are joined by the gentleman from California, Mr. Pombo.

Mr. POMBO. Thank you, Mr. Chairman. I think, to follow up on what Mr. Faleomavaega was talking about, unquestionably there are times when other countries feel like if they don't do it our way, they are in trouble. But I do think that, in the aggregate, these programs have been very worthwhile.

Something Mr. Jones just said was that the purpose of this program is not to dictate to other countries how to manage their wildlife, but to assist them in managing their wildlife, which is very much, in my opinion, the basis for CITES, not to dictate to an individual country what they can and can't do, but to assist them in conserving their endangered species.

I wanted to start with Ms. Hemley. Your organization or the organization that you represent has done some very good things to help with conservation, and I am familiar with some of the things that they have done in Africa. I was wondering if you could explain to the Subcommittee how some of these grants are used. Give me an example of a specific project, how the money was used, and what the result was of that particular project, just so that we understand exactly how this money is being used.

Ms. HEMLEY. I would be happy to, Mr. Pombo. World Wildlife Fund is both a recipient organization for some grants and we also are a co-funder in many places in the world, which I think is an example of how well these programs work. They are helping us to get matching amounts of support.

In parts of Asia, we have received funds, for example, in Vietnam to protect a very, very endangered population of Javan rhino. It is the vestigial population that was only recently rediscovered by Western scientists in the last 10 years. It is such a dire situation that there are needs across all fronts, helping to develop an education program for local people to appreciate this heritage they have left in this rhino that has only recently been rediscovered.

We have been helping with training of wildlife managers around the area in Vietnam, and we have been helping with the government to get stronger legislation passed, as well, to ensure that this critical habitat is protected well into the future. So, that is one area where we have, I think, been able to cross various types of project activities.

<sup>^</sup> Mr. POMBO. One of the things in your testimony that you talked about was you used the phrase that the habitat is highly threatened. I know in every different habitat there are different threats to that habitat. Can you give the Subcommittee an idea of what some of those threats are in particular places?

Ms. HEMLEY. Sure. I think perhaps one good example, because the situation is so critical, is in Southeast Asia, particularly in Sumatra, where in the last few years, according to World Bank satellite imagery data, the rate of forest conversion is probably twice as great as we thought it was three or four years ago today. I mean, it is changing so quickly, and the biggest force behind that change is conversion to develop oil palm plantations and paper pulp plantations.

These are areas that are critical not for just one of these species under consideration, but for three—Asian elephants, the tiger, and the Sumatran rhino. A lot of the conversion is the result of increased trade and importation of these products to East Asia, China, Japan. But this, for us, is one of the most urgent situations in terms of critical habitats today. This is tropical lowland forest, of which there is very little remaining in Southeast Asia, and it happens to be areas where three of these very important species live. So, that is one good example.

Similarly, in other parts of Asia—in India, where you have got now over 1 billion people, wildlife is left in a handful of parks. They have been established and in place for a good while, but these parks—there is very little buffer zone around most of these parks in India. Yet, they are perhaps the last hope for the Bengal tiger, for example.

The encroachment from human populations for agriculture and development related to human survival is really the big threat to the habitats there. So it is essentially human population pressures, together with pressures resulting from exploitation for commercial purposes, are the two big threats to a lot of the habitats that these species live in.

Mr. POMBO. The Committee had the opportunity, a number of us, to go to Africa and look at different management schemes for wildlife, and we looked at national parks and the management tools that they use at highly managed national parks. We looked at privately-run parks or game preserves and the ability that they had to maintain the wildlife in those areas. Then we looked at some of the broader areas, particularly in places like Zimbabwe where the people in those particular regions had the ability to manage the wildlife in their particular areas.

In all three of the different management schemes that we looked at, they were able to preserve the wildlife in those particular areas, and in most instances had the ability to build on their numbers, in some cases to the point where they had more animals than the carrying capacity of the land.

Do you look at all those different options for managing habitats as a way of returning some value to the people who live in those areas so that they don't have to go in and bulldoze thousands of acres to plant some kind of agriculture? Is that an option that you are looking at in terms of some of the work that your organization has done?

Ms. HEMLEY. Absolutely, and I think there are two areas in the world that highlight that type of approach which essentially we would call community-based conservation involving the local communities that live around the protected areas where these animals live.

In Zimbabwe, as you say, the national law allows limited hunting and the fees from hunting are returned to local communities in a managed way. That is one place where that kind of approach might work.

Another country where community-based conservation has been very effective is Nepal, where ecotourism has been very much a revenue generator. One of the great values of the system in Nepal is that the national law allows for the recycling of tourist revenues back into local conservation, which is not usually the case. Usually, those monies go into the national treasury. But in Nepal they have got a model law that allows the funds to go back into the communities to develop agriculture that is consistent with conservation and different approaches for even limited harvesting of timber in these areas.

So it is absolutely important, in our view, in virtually every place we work that you have got to involve local communities and find incentives for conservation, and those incentives can take a range or different forms.

Mr. POMBO. Thank you very much.

Mr. GILCHREST. Thank you, Mr. Pombo.

Mr. Jones, having a long history of CITES, and certainly with this issue and the development of this issue, and having some idea, I guess, of the land area that is now set aside or proposed to be set aside for these various species that we are talking about this morning, do you have some idea—and this relates a little bit to Mr. Pombo's question about carrying capacity—do you have some idea of the maximum population that we can expect to sustain in the areas that you are now working with for the African elephant, the Asian elephant, the tiger, the rhino, and perhaps other species?

I guess I ask the question, do you have some idea of an area that 100 elephants need or 1,000 elephants need, or the rhinos in Southeast Asia or in India or Africa? Has there been any type of study to understand carrying capacity for these animals, and if there has been, can that population that we have heard this morning is very fragmented, greatly diminished, sustain itself without the burdens of in-breeding?

Mr. JONES. That is an excellent and a pretty complicated question, Mr. Chairman, since we are talking about a number of different species that occur in different areas.

We have had the privilege of having Mr. Pombo with us the last two CITES Conferences of the Parties, in Zimbabwe and then in Kenya. Just between those two countries, there are some ecological differences, so that an area of the same size in the lower Zambezi Valley of Zimbabwe might support more elephants, for example, than an equal-sized area in a very dry part of Kenya way up near the northern border where you are almost into a desert.

When you expand that to look at rhinos and other species, I am certainly not the one who is best qualified probably to comment on this. I am going to turn to Mr. Stansell in just a minute, but I would say that all of the organizations here have been involved in these kinds of studies—the World Wildlife Fund, the AZA, the Wildlife Conservation Society, and others—scientific studies to look at that very question because it is also often a question of the human population in the area.

Elephants, for example, are a species that is very dangerous. Tigers are also dangerous. But elephants overall are probably one of the most dangerous species on Earth, not just to human life but also to property, because elephants can destroy crops. And in an area where there is a high human population, the elephants, in fact, might do just fine. They will be very pleased to come in every night and eat the farmer's corn, but the farmer isn't going to survive.

So we need to find the right balance and have areas where elephants can have the natural food they need, and then find innovative ways where elephants and people can coexist. Because of fragmented habitat, there are some areas where elephant populations just are not viable anymore, not because the elephants wouldn't live there but because the human presence is too great to be able to deal with them.

But, Mr. Chairman, with your permission, let me ask Mr. Stansell to comment for a second about his experience. He has spent a lot of time in Africa himself and probably has some thoughts on this. Mr. STANSELL. Thank you, Mr. Chairman. I think Marshall has covered the issue. Particularly under our various grant programs, I think it is very important to recognize that we really do look to the range countries and what their priorities for their resources are.

There is a tremendous amount of information out there and we would be happy to provide that to the Subcommittee as far as varying estimates of population levels by species. There is a lot of information available on that and all of that information is taken into account as we are trying to identify projects to help support the conservation of those species.

But as Marshall indicated, carrying capacity is one factor. You certainly want to be at a little bit below carrying capacity to make sure that you don't get into habitat damage. With a species as big as elephants, they modify the landscape, and so it is important that we understand those factors as we are trying to help through this grant program to provide that additional funding.

Thank you.

Mr. GILCHREST. Thank you.

Ms. Hemley, do you care to comment on that question and then the concept of a conservation corridor? Is that suitable for these large species? Would it have any positive effect to link certain areas that are set aside?

Ms. HEMLEY. To answer that question first, as I said in my comments, a number of conservation organizations are taking a new approach to conservation that involves looking at larger scales of areas spatially than ever before, for the reason that these large species—elephants, tigers, and rhinos are paramount among them—need these areas.

When you have a species like the tiger which, depending on the density of the prey, may require several hundred square miles for its home range, it needs to be able to move between forest areas in order to hunt, to breed, reproduce, and then rebuild new populations.

Mr. GILCHREST. So you are saying that a tiger might take advantage of a corridor?

Ms. HEMLEY. A tiger is a good species; in fact, a species that we are using in some of our work in Asia to design and look at landscape needs for conservation. If you can address the needs for a tiger's survival, you are effectively conserving a broad landscape that then will, of course, benefit many other species.

In Nepal, in one area, we are actually looking at a very large what we are calling one grand wildlife corridor, what we call the Terai Arc, that aims to link 11 protected areas. It is a very big, ambitious project. It will involve a lot of forestry and reforesting these corridors and working with local people to make sure—

Mr. GILCHREST. Does it involve purchasing land, then?

Ms. HEMLEY. It will in some cases, but most of this land is, in fact, state land, and we are now working with the government to come up with agreements that work for the local people and will allow them to use the strips of land alongside these corridors to continue to harvest the forest products in these areas so that they can still benefit from it. We are right now undertaking analyses to identify the bottlenecks that need to be addressed first. Mr. GILCHREST. How wide would this corridor be, or how wide would you like to see it?

Ms. HEMLEY. Well, it will vary in different places, but it could be as small as a couple of miles wide in one area and then larger in other areas. But it straddles the Nepal-India border and is something that is a high, high priority for us. We hope in the next couple of years to have more to report on how this big, ambitious effort is going.

Mr. GILCHREST. Thank you. I guess we could continue this, but the hearing room is needed by another Subcommittee eventually.

Mr. Faleomavaega, any follow-up questions?

Mr. FALEOMAVAEGA. A real quick question, Mr. Chairman.

Ms. Hemley, I was fascinated by your testimony in terms of looking at the big picture. As you may be aware, two-thirds of the world's population is in the Asia-Pacific region, and so the density of the population per whatever area and how you may want to measure—looking at the climate now even among the industrialized countries, the global economy and globalization of this and that, where are we going to find the forests to provide for the species of these animals, not just the tiger and the rhino and the elephant?

You are saying something that is understandable, but when the human species comes to the forefront and says, look, I need that extra space to live—we have got 1.2 billion people living in China, over 1 billion in India. When you talk about reality, when the rubber meets the road, who should be preserved, the humans or the animals?

Ms. HEMLEY. That is kind of the big question, isn't it? I appreciate that. I guess one response would be that I think the conservation community certainly recognizes that, and Asia is a huge challenge because of the human population growth there. That is why we are becoming more strategic than ever before in our efforts.

I mentioned a report that the World Wildlife Fund and the Wildlife Conservation Society prepared, with support from the Save the Tiger Fund, a few years ago. It was the first ever analysis that really took a large mammal, in this case the tiger, and looked at all of its critical habitats. The tiger lives in 13 or 14 countries in Asia. We know we probably can't save the tiger everywhere. We have to be strategic, and what we have done is we have picked 25, 26 areas that we consider the highest priorities, but we are recommending that greatest attention be put on these areas across Asia.

And perhaps we have to say that in some areas the tiger will not survive, but in these areas that we have identified we believe the tiger does have a good chance of long-term survival.

Mr. FALEOMAVAEGA. Let me share with you a reality. I know my time is running, but Senator Inouye from Hawaii, I think, two years ago went to North Korea. Here is the capital of this country, in the millions. There were no birds; he could not see one bird flying, and then when he went out into the country, no trees. I mean, can you just imagine what that state of existence must be like?

I know the island of Guam, Mr. Chairman, is having real problems with brown tree snakes. That whole ecosystem in terms of the birds there in Guam is almost gone because of this predator, the brown tree snake. Should we be concerned about conserving the brown tree snake, or should it be the birds?

Ms. HEMLEY. In Guam?

Mr. FALEOMAVAEGA. In Guam.

Thank you, Mr. Chairman.

Mr. GILCHREST. Thank you, Mr. Faleomavaega.

Mr. Pombo?

Mr. POMBO. Thank you.

Mr. Jones, although I think these programs have done some good and will continue to do some good, it seems apparent to me that no matter how much money we spend, we can't save these species, other than actions that are taken in the host countries of those particular species. That is really what is going to turn it around. We can be helpful, we can give them advice, we can help them to develop management programs. But unless they are willing to do that and have a real incentive to do that, we are not going to turn these species around.

One of the things that struck me the most in Africa was that as you went from country to country, you saw a huge difference in the habitat just across a fence, across a border, and a lot of that was driven by not the particular management schemes that the countries employed, but the political stability of those particular areas.

I know you have seen it because you have spent time over there as well, but I just think that as we move ahead with this legislation, I don't know how we do any more to bring political stability and a willingness on the part of some of our partners in this. But I think that is going to be the key to the survival of a number of these species.

We saw the difference between Southern Africa and Kenya in the way that they managed their large-mammal populations, particularly elephants, and the difference in poaching and the difference in the carrying capacity that they had to deal with. I just think that we can do some good with this, but being able to, by ourselves, reach out to these countries is just not going to happen. I know that you know that and have been through this.

But as we get into the future, Mr. Chairman, hopefully you will have the opportunity to see some of these areas because the political stability in an area and the incentives that we give or the countries give the local people that live there make a bigger difference than anything we can say or do here.

I do have additional questions for Mr. Jones. I would like to submit those in writing. I know we have another panel, but thank you very much.

Mr. GILCHREST. Well said, Mr. Pombo.

Mr. FALEOMAVAEGA. Mr. Chairman, I also would like to submit additional questions for the members of the panel for follow-up for the record.

Mr. GILCHREST. Without objection, both sets of questions will be submitted to the record and sent off to our witnesses.

[The response to questions submitted for the record by Mr. Pombo follow:]



# United States Department of the Interior

FISH AND WILDLIFE SERVICE Washington, D.C. 20240

IN REPLY REFER TO:

Honorable Wayne T. Gilchrest Chairman, Subcommittee on Fisheries Conservation, Wildlife & Oceans Committee on Resources House of Representatives Washington, DC 20515 MAY 2 4 2001

Dear Mr. Chairman:

Thank you for your March 20, 2001, letter containing questions regarding the U.S. Fish and Wildlife Service's testimony on H.R. 643, the "African Elephant Conservation Reauthorization Act," H.R. 645, the "Rhinoceros and Tiger Conservation Reauthorization Act," and H.R. 700, the "Asian Elephant Conservation Reauthorization Act."

We hope that the enclosed answers to your questions clarify the issues presented. We appreciate your interest and support, and we look forward to working with you to reauthorize these very successful and important acts.

Sincerely,

Manhales Junge

Enclosure

### Answers to questions submitted by Mr. Pombo

1. Q: It is my understanding that at least initially there were some delays in the Service's administration of the Asian Elephant Conservation Fund due to a lack of personnel to review grant proposals. How has the Service addressed that problem and is it still an issue?

A. Upon passage of the Asian Elephant Conservation Act in November 1997, the Service did not have personnel directed to implement the Fund. In addition, in May 1998, the Service was prohibited from funding projects to conserve the Asian elephant, rhinoceros, and tiger populations in India under sanctions mandated in section 102 of the Arms Export Control Act. Although, approximately 50 percent of the entire Asian elephant population (35,000-50,000 individuals) and 6 of the 10 largest populations (1000 individuals) live in India and numerous tiger and rhinoceros populations call India home, the sanctions forced the Service to delay or postpone funding for critically-needed conservation efforts in this nation. On September 21, 1999, a Presidential waiver of the sanctions for the Asian elephant, rhinoceros, and tiger conservation programs was granted. The FY2000 and 2001 Interior Appropriations Acts – declared the rhinoceros, tiger, and Asian elephant conservation programs exempt from any sanctions imposed against any country under section 102 of the Arms Export Control Act. The FY2002 President's Budget continues this exemption for future appropriations acts. In early 1999, the Service re-assigned one technical project officer (GS-13) to coordinate and manage the Asian Elephant Conservation Fund.

Since that time, the Service has received 69 proposals and awarded 27 grants, in 9 range countries, for Asian elephant conservation. The project officer was able to expend carryover appropriations in a timely manner. We do not foresee the Fund having a carryover balance for FY2001. The Asian elephant conservation grants have leveraged more than \$1 million in matching and in-kind support, a 1:1 match of the amount allocated.

2. Q: The Chairman and several other Members and Senators have contacted Secretary Norton to advocate increased appropriations for all three of the funds and several of the witnesses have advocated full or increased funding. From the Service's perspective, could it put additional funds to effective use? Are there enough worthy projects out there and is the Service properly equipped to manage larger funds?

A. The President's budget request provides adequate funding, given overall priorities and resources available, to fund the highest priority projects that qualify for funding under the Multinational Species Conservation Fund. Historically, however, the Service has annually received requests for project funding that significantly exceed the appropriations level for all three of the Funds.

3. Q: In response to a question from the Chairman, Mr. John Kirtland referred to a situation in which Ringling Bros. was unable to secure a CITES permit from the Service to allow the import of a male Asian elephant from Canada for breeding purposes. I am already familiar with this matter and am aware that the Canadian government had issued an export permit. I also know

Page -1-

that particular elephant was eventually sold and transferred to Germany pursuant to CITES export and import permits. Please explain why the Service was unable to issue the requested permit. In addition, how does the Service respond to the assertions of Ringling that this incident demonstrates the need for greater coordination of the CITES program with the objectives of the species conservation funds? Shouldn't we be encouraging entities such as Ringling to engage in captive breeding instead of frustrating their efforts?

A. Feld Entertainment's Ringling Bros, and Barnum & Bailey Center for Elephant Conservation submitted an application to the U.S. Fish and Wildlife Service to import a male Asian elephant from African Lion Safari of Ontario, Canada. While the Service was processing the application, the elephant was sold to an operation in Germany and, subsequently, Feld withdrew the application.

When the permit application was under consideration, the Service considered the following information. The Asian elephant is listed as Appendix-I under CITES and as Endangered under the Endangered Species Act. By regulation, there are criteria that must be met prior to the importation of an Appendix-I specimen into the United States. Under CITES, the import of an Appendix-I specimen is being imported by a non-profit zoological park or research center, it is typically easier to evaluate what commercial aspects such an importation would have for the organization. However, it is more difficult to make this determination when the importing organization is a for-profit corporation, like Feld Entertainment. Even though the stated purpose of the importation was for breeding purposes, Feld Entertainment/Ringling Bros. Circus maintains elephants for commercial purposes and would have been required to give the Service assurances that offspring sired by the imported elephant would not be used for commercial purposes.

The second issue that was under consideration was how the importation of the male elephant under the ESA would enhance the propagation or survival of the species in the wild. Although the Service recognizes that a captive-breeding program may play a role in the conservation of a species, such a program needs to be tied to *in-situ* conservation efforts in the range country of the species. In addition, if an applicant is seeking a permit for the purpose of enhancement through propagation, the applicant must show a willingness to participate in a cooperative breeding program and to maintain or contribute data to a studbook. Although the Service recognizes that Feld Entertainment and Ringling Bros. Circus has had success in breeding Asian elephants, they did not provide documentation that they participate in a nationally or internationally recognized breeding program set up to promote and maintain genetic diversity and contribute to conservation efforts within the elephant's range countries.

There is an ongoing effort to more closely coordinate the CITES program with the objectives of the species conservation funds. Projects supported by species conservation funding, such as funding the CITES-mandated Monitoring of Illegal Killing of Elephant (MIKE) program and border guard training in Southeast Asia, have aided the in-country efforts of CITES Parties to more effectively manage their wildlife resources. The Service also encourages and supports

Page -2-

captive breeding efforts by public and private organizations provided that breeding activities contribute to *in-situ* conservation efforts and are consistent with the criteria established under the CITES Treaty and the ESA.

Page -3-

[The response to questions submitted for the record by Mr. Faleomavaega follow:]

### Answers to questions submitted by Mr. Falcomavaega

1. Other witnesses suggested that the three acts should be amended to establish as priorities for funding basic communication and infrastructure needs, such as computers, law enforcement and anti-poaching training and custom inspections activities.

**Q:** Does the Fish and Wildlife Service support amending these acts to require that some portion of funding in the Multinational Species Conservation Funds be devoted to these unmet needs? Please qualify your reasons for support or disapproval.

A: The Service currently provides funds for many of these types of activities through the Multinational Species Conservation Fund when they are <u>specific</u> to a project. We recognize that local institutional infrastructure development is a key factor in the successful implementation of projects and a major influence on the long-term sustainability of conservation efforts for species such as rhinos, tigers, and elephants. The Service recommended a technical amendment as indicated in our March 15 testimony, that clarifies that when necessary, projects that support general capacity building could be funded.

**Q:** Is this proposal comparable to your suggested recommendation to amend the acts to ensure grants that support local capacity building and institutional development? If different, what are the distinctions?

A. The Service proposed language, entitled "Suggested Language Regarding Project Sustainability and Capacity Building" and attached to the March 15 testimony, was intended to allow <u>general</u> projects indirectly affecting target species and those that address local capacity building and institutional development to be funded. Past funding of such projects has been limited to those instances where there was a direct benefit to a target Multinational Species Conservation Fund species. It was not the intent of the suggested recommendation to require finding these types of activities or establish a priority for their funding.

Q: What has been the level of past funding and technical assistance that the Fish and Wildlife Service has provided to range states to address these priority needs?

A. The Service has provided funding for these activities (*i.e.* communication and infrastructure needs, law enforcement and anti-poaching training, and custom inspections) only when they were required to fulfill the objectives of a larger project proposal directly benefitting a target Multinational Species Conservation Funds species. As such there has been no separate cost accounting for these activities. However, there have been a number of projects funded where these activities comprised a major component of the project.

Law enforcement training, which includes anti-poaching and customs inspection training, can be identified as a component of a grant and the following table shows law enforcement related grant proposals funded through the three Acts for the time period given.

Page -1-

	Time Period	Number of Projects	MSCF Allocated	Leveraged Funds	Total
Rhino-Tiger	1999-2000	21	\$518,657	\$1,052,487	\$1,571,144
African Elephant	1998-2000	. 9	\$578,730	\$2,669,288	\$3,248,018
Asian Elephant	1999-2001	6	\$233,975	\$309,000	\$542,975

**Q:** Has the Fish and Wildlife Service ever estimated what the total cost would be to address these basic communication and infrastructure needs in range states?

A. No. Range states have differing needs and are often at varying levels of development. Each range country also has a variety of wildlife under its administration other than the targeted MSCF species such as elephants, tigers and rhinos. Separating out the basic communication and infrastructure needs for the targeted MSCF species from other needs would be an impractical task.

However, in 1993, the Government of India prepared a national conservation plan to estimate needs for Asian rhinoceros. They estimated 5-year costs for basic communication and infrastructure was \$2.7 million (U.S. dollars). This estimate was compiled for one species, in one range country, nearly 10 years ago, so the total cost for these needs for all species in all range states is likely to be much greater. Not all of these costs, however, would be appropriate for funding under the MSCF.

**Q:** What actions have range states taken to develop dedicated sources of domestic funding to support their conservation programs? What is the prospect for the future?

A: To date more than \$56 million has been leveraged in matching and in-kind support for Multinational Species Conservation Fund projects. A significant portion of these funds were in the form of in-kind contributions for salaries and operational support from participating range state wildlife conservation agencies. We anticipate that the FY2002 request for proposals will generate at least \$9 million in similar contributions from range states.

These funds are typically general revenues and not specifically dedicated sources of domestic funding. However, a number of steps are being taken to develop dedicated sources of domestic funding to complement these already substantial in-kind contributions. A few examples include: (1) development, in Russia, of a federal strategy for the Amur tiger, which will identify new domestic costs for conservation of the species for which the Russian government has expressed interest in bolstering its support of conservation efforts once this strategy is in place; (2) preparation of a South China Action Plan to which the Chinese government has expressed a funding commitment; and (3) updating of the Asian Elephant Conservation Plan, which includes 13 range states, that have pledged increased commitments to enhance Asian elephant conservation.

Page -2-

The prospect for the future is improving due to these and other initiatives which are helping to prioritize conservation actions, elevate the conservation needs of these species at both national and international scales, and enhance the capacities of local entities to seek funding from domestic and international sources.

2. You note in your written testimony that "the [Fish and Wildlife] Service will be willing to work...to revise those provisions related to the administration of these programs to address the true administration needs of these programs."

**Q:** What are these provisions? What does the Fish and Wildlife Service consider the true administration needs of these programs?

A. The provisions in the reauthorization bills referred to in the written testimony relate to the amount of appropriated monies that may be spent by the Service on administration of the funds. Typically, the Service expects to incur certain expenses in administering these programs. For example, both skilled project officers with extensive expertise with the appropriate region/species and grants managers are required. A lesser expense, but one also crucial to project success oversight is travel. Project officers must visit different field sites to conduct project development and evaluation. Other administrative expenses include office space; communications, such as telephones, facsimile, and e-mail; copy services; and grant processing. The Service considers these to be the true administrative needs of the programs. As further noted in the written testimony, the Service is working to ensure that these programs are administered as efficiently as possible.

Page -3-

,

Mr. GILCHREST. We will do all we can. I certainly would enjoy traveling to the areas that you think would be in most need of our attention. We will make every attempt to do that during this session of Congress.

I want to thank all of you for your energy, your knowledge, your patience, your persistence, and your lifelong effort in this most worthy cause. Thank you all very much.

Mr. JONES. Thank you, Mr. Chairman.

Mr. RAPP. Thank you, Mr. Chairman.

Ms. HEMLEY. Thank you.

Mr. GILCHREST. Our next panel will be Mr. John Berry, Executive Director, National Fish and Wildlife Foundation; Ms. Karen Steuer, Director of the Commercial Exploitation and Trade Program, International Fund for Animal Welfare; Dr. John Robinson, Senior Vice President, Wildlife Conservation Society; Mr. John Kirtland, Executive Vice President of Animal Stewardship, Ringling Brothers and Barnum and Bailey Circus; and Dr. Tom Foose, Program Director, International Rhino Foundation.

I think we have a vote. I ask unanimous consent from the Members and the witnesses—don't object, I hope. We are going to take a 10-minute break. Relax, have a cup of coffee. I will be back in 10 minutes.

[Recess.]

Mr. GILCHREST. The hearing has already come to order. One of the former Merchant Marine and Fisheries staff members who, I guess, is still here was encouraging me to crank this up, so we will get them moving.

Thank you for coming this morning, and we look forward to your testimony to add to the information and the knowledge that we have acquired this morning. Once again, in case I miss saying this at the end of the hearing, we appreciate all your efforts in this issue, and we will continue to be optimistic that we will be successful as humans to preserve some of the wildlife heritage that this planet has been so blessed with for so long a period of time.

We will start with Mr. John Berry.

### STATEMENT OF JOHN BERRY, EXECUTIVE DIRECTOR, NATIONAL FISH AND WILDLIFE FOUNDATION

Mr. BERRY. Thank you, Mr. Chairman, for the opportunity to appear before you today in support of H.R. 645, and I would especially like to thank you and the members of the Committee for the leadership and vision that you have brought to this important conservation issue, as well as the professionalism and dedication of your excellent staff. It has been a real pleasure working with them.

My name is John Berry and I am the Executive Director of the National Fish and Wildlife Foundation, a nonprofit foundation created by the Congress to foster healthy populations of fish, wildlife, and plants for the next generation.

One of our most important programs has been the Save the Tiger Fund, which was created in partnership with an outstanding corporate leader, ExxonMobil, whose generosity will have provided by the end of next year over \$9 million to the Save the Tiger Fund, an investment that I believe is unrivaled in corporate conservation philanthropy. It took a great deal of courage for ExxonMobil to initiate this project in 1995, in the face of dire expert and widespread press predictions that the tiger would likely be extinct by the year 2000. Both the Federal funding provided by the Rhinoceros and Tiger Conservation Act to the U.S. Fish and Wildlife Service and the private dollars brought to bear by ExxonMobil, our Foundation, and other conservation organizations have seamlessly woven together to reverse those dire predictions and give renewed hope that the tiger can survive in the wild.

The Save the Tiger Fund has proven the old model of keeping tigers and humans apart does not work. If we are to succeed, tigers must be seen as an integral part of a healthy landscape and important to human prosperity in Asia and Russia. Long-term, sustainable habitat management also protects key watershed areas, helping not only tigers, but all who live and rely upon those waters downstream. Sustainable forestry practices save tigers and jobs, as does careful ecotourism.

We are here today with good news, Mr. Chairman. Your investment and that of ExxonMobil have made a real difference. Tiger populations have stabilized in every area where funding has been intensely invested.

In the Russian Far East, for example, poachers had nearly wiped out all remaining Siberian tigers, leaving only approximately 200 alive in the mid-1990's. After targeting more than \$1.5 million of investments in this region, in a multi-layered approach that included forming anti-poaching patrols with retired and unemployed Russian military personnel, educating schoolchildren and families in adjacent communities, acquiring and protecting key habitat parcels, and pursuing better science, today's population now stands at more than 400 tigers, steady, and we hope, growing.

In India and Nepal, community woodlots have been created to eliminate the need to take firewood from protected tiger habitat areas. In China and across Asia, working with practitioners of traditional medicine and with culturally-sensitive advertising campaigns, we are beginning to reduce the demand for tiger parts, so that, as Jackie Chan says in one of the advertising campaigns "When the buying stops, the killing can, too."

The fight is far from over. We know almost nothing of the South China tiger, and given the lack of conservation capability in China, the South China tiger may well already be lost. In Burma/ Myanmar, biologists found incredibly rich tiger habitat recently, but no tigers. You heard the previous panel discuss the empty forest syndrome. This is the ghostly result of continued black market poaching in those areas.

Logging and growth pressures continue to press forward. But at the same time, good news has been found in Cambodia, for example, and great tiger partnerships are underway, forming along the very rich Terai Arc on the border between India and Nepal. I believe that success is within our grasp if we can stay the course. We must make tigers worth more alive than dead.

We must build the support of people who live near tigers and of political and economic leaders in those nations. We need to continue to build and grow partnerships with local communities, and we will continue to need money. From the nickels raised by school kids in Arizona selling pickles to contribute their \$135 to the Save the Tiger Fund, to the millions provided by ExxonMobil and this Congress, every penny is making a difference in creating a world where mystery, wildness, beauty, and tigers can continue to burn bright.

Thank you, and I will be happy to answer any questions.

[The prepared statement of Mr. Berry follows:]

### Statement of John Berry, Executive Director, National Fish and Wildlife Foundation

Good morning, Mr. Chairman and Members of the Committee. Thank you for the opportunity to testify today in strong support of H.R. 645, the Rhinoceros and Tiger Conservation Reauthorization Act. I am John Berry, Executive Director of the National Fish and Wildlife Foundation, which is a nonprofit foundation established by the 98th Congress. The Foundation was created to support a growth economy for conservation solutions by connecting the skills, resources and goals of private and public partners in innovative ways. Our program with ExxonMobil, the Save The Tiger Fund, is the perfect example of a successful public-private partnership for conservation, and I am pleased to provide you testimony on behalf of both the Save The Tiger Fund and the National Fish and Wildlife Foundation. We have worked closely and cooperatively with the U.S. Fish and Wildlife Service over the past several years. Our direct experience in tiger conservation experience leads us to believe that the ongoing congressional appropriations for this Act are a sound investment. The following testimony, which is excerpted from a report recently prepared by the Foundation on behalf of the Save The Tiger Fund, provides a detailed overview of the status of wild tigers and the impact of such conservation efforts as those of the Rhinoceros and Tiger Conservation Act and the Save The Tiger Fund.

Saving tigers is about people. Humans and tigers are neighbors and it is a relationship fraught with hazards for both sides. It is at once a simple truth—and a complicated notion—that saving Asia's remaining wild tigers requires engaging the millions of people who live near the tiger. The challenges facing the tiger are as diverse as the many languages of the people who live near it, but the reasons for saving the tiger are remarkably straightforward: to preserve this keystone predator is to conserve its habitat, which in turn benefits the cornucopia of other species that share the same home, including humans.

Support for tiger conservation is dependent on people who coexist with tigers believing that this effort enhances the prospect for a more materially, emotionally and spiritually worthwhile life for themselves, their families and communities. For many people, tigers are the stuff of ancient myth and legend. They also are powerful predators who live on- land that provides some of the most fertile and abundant natural resources for humans and wildlife alike. Often referred to as an umbrella species, this large carnivore ranges over vast territory that typically supports a myriad of complex flora and fauna. Save the tiger and you save an entire ecosystem.

### TIGERS ON THE EDGE

In 1995, Asia's wild tigers were in alarming and widespread decline throughout their range. At the beginning of the 20th century, when William Blake immortalized the tiger in poetry and Rudyard Kipling introduced Shere Khan to the literary world, an estimated 100,000 tigers roamed the Asian continent. But the ensuing decades treated the tiger no more kindly than so many other species of large predators. Human population growth and the resulting loss of habitat drove tigers from their former homes, while the over-harvest of prey species starved the cat and trophy hunting, followed by rampant poaching, took its toll.

Initial conservation efforts centered on passing game laws and creating reserves, but problems for the tiger grew steadily. Three of the animal's eight subspecies were extinct by 1980. In the early 1990's, crisis flared and the possibility of species extinction seemed more than prophecy. Many conservationists and biologists—working mostly in isolation from one another and focusing their energies narrowly on tiger biology and petty turf tussles—had become complacent and were caught off guard by the wave of poisoning, poaching and trafficking in wild tigers. Respected biologists glumly predicted extinction by the year 2000. A 1994 Time cover story shouted that the tiger was "Doomed!" An estimated 5,000-7,000 tigers remained in all of Asia—fewer tigers on an entire continent than there were humans in a few city blocks of New York City or Calcutta.

Consider the "official" tiger population numbers in 1994-95 (quoted in Tilson 1996):

South China: 30 or fewer Amur: 150-200 Sumatran: 500 Indo-Chinese: 1,050-1,750

Bengal: 3,250-4,700

In 1995, the Save The Tiger Fund (STF) was created by the Exxon Corporation and the National Fish and Wildlife Foundation. The two organizations had first joined to support research on the Amur tiger in the Russian Far East in 1991. But the tiger crisis of the early 1990's made it clear that something more substantial was needed. Exxon agreed to commit a minimum of \$5 million over five years and bring to bear its worldwide network of companies, shareholders, and customers to support tigers through the STF. Exxon's commitment marked one of the largest corporate financial commitments to saving a species ever made. In turn, the Founda-tion anted up its conservation credibility and grantsmanship competence. Recognizing the need for direct tiger expertise, the Foundation formed the Save The Tiger Fund Council, a panel of volunteer experts, to assist the Foundation in guiding the

overall direction of the STF and its project investments. Proclaiming an intent to "save" the tiger was a bold and far-reaching goal amidst the tiger crisis of the mid 1990's. Until the STF began increasing investments in basic monitoring and research, no one could make more than an educated guess as to how many tigers might remain in corners of Asia. Until the STF used its influence to encourage cooperation among tiger biologists, there was little collaborative work underway and no overall assessment of tiger conservation priorities existed. The Save The Tiger Fund's six-year history has marked its growth from a bold concept to a cornerstone of tiger conservation initiatives. Calling the Save The Tiger Fund "catalytic" in the conservation world, Kathryn Fuller, President of World Wild-life Fund (WWF) and STF partner observed:

"The Fund has encouraged non-governmental organizations to cooperate, pool resources, and share the limelight: tiger experts are now talking to one another and joining forces more often, giving rise to larger landscape-level programs that are increasing the tiger's chance for long-term survival in the wild.'

Against the odds and all predictions, wild tigers survive today. They still prowl the western Terai of India and Nepal, the mangrove swamps of Bangladesh, the untamed borderlands of Vietnam, Laos and Cambodia and the vast boreal forests of the Russian Far East. It is neither bold nor boastful to say that the STF has played a pivotal role in helping to secure this stability.

Despite these gains, optimism must be tempered with vigilance for the tiger's status remains tenuous and fragile. It is both an urgent and hopeful forecast to predict that the continued investment and stability of the Save The Tiger Fund and other similar efforts will be critical to ensuring a future for the tiger and its many human neighbors. It is a measure of the STF's success that the present has been secured for this majestic species. And it is the Foundation's belief that this unique partnership provides a genuine opportunity to create a sustainable future for wild tigers and their landscapes.

### A MODEL OF SUCCESS

In six years, the Save The Tiger Fund has invested more than \$8.3 million in 142 projects throughout 12 of the 14 tiger range states. The STF has taken a multilayered approach to tiger conservation, providing flexible grants to tackle the diverse problems of multiple cultures and regions throughout the tiger's range. These grants have ranged from health clinics in rural Indian villages and educational programs for schoolchildren in China, to anti-poaching teams in Thailand and habitat acquisitions in Russia.

The largest amount of STF funding-more than \$3.3 million-has gone to field study and management projects. The Save The Tiger Fund has directed \$1.3 million to 31 projects supporting anti-poaching, conflict resolution and tiger trade reduction. More than \$2.1 million has gone to conservation education and \$773,000 has been earmarked for habitat restoration and protection to date. By region, STF funding has been split nearly evenly between the Indian subcontinent, at \$1.85 million, and the Russian Far East, at \$1.71 million. STF projects in Southeast Asia have topped \$1.3 million; in Sumatra, nearly \$870,000.

But conservation success does not merely reside in tabulations of numbers and project listings. Rather it lies in the thoughtful and cooperative efforts behind them. The Save The Tiger Fund's investments, along with the vision and commitment behind them, reinvigorated the tiger conservation community at a time of great crisis,

when some were tempted to give up. It also helped to vitalize tiger conservation by focusing on the human side of the equation. For 25 years, conservationists tried to save tigers by keeping people and tigers apart. Thoughtful, diversified investments by the STF have assisted conservationists as they devise ways to keep people and tigers together, so both prosper in the future Asian landscape. The STF has drawn upon its Council members, ExxonMobil, and numerous conservation organizations and individuals to develop a program that: 1. Increases the impact and availability of funding for priority tiger projects.

2. Invests in a diversified and sustained conservation portfolio.

3. Forges partnerships to create new breadth and depth in tiger conservation.

4. Addresses the root of tiger conservation problems.

Tolerates risk and remains flexible to accommodate new opportunities. 5. 6

Invests in conservation leadership throughout tiger range.

7. Lays the groundwork for future tiger conservation. This report examines each of these attributes to appraise the activities of the Save The Tiger Fund, ascertain the conservation impact of its actions, and glean the lessons learned for future activities.

1. INCREASE FUNDING IMPACT AND AVAILABILITY.

"We believe that [partnerships] provide opportunities for creative solutions to a wide range of conservation and environmental challenges. Exxon is committed to tiger conservation—helping to save a legendary beast." Lee Raymond, Chairman, ExxonMobil Corporation

ExxonMobil Corporation Today, according to a study by the Zoological Society of London (Christie 2000,) the STF provided more than 28 percent of all tiger conservation funding worldwide in the past two years. ExxonMobil's initial \$5 million pledge in 1995 has grown to a \$9 million pledge through 2002. To date, ExxonMobil has contributed more than \$8.2 million to the Save The Tiger Fund. This commitment permeates the corpora-tion's worldwide operations, from corporate headquarters to Asian subsidiaries to local service stations, to employee volunteers. Through collaborative efforts between the Foundation and ExxonMobil, the STF has offered an unprecedented opportunity for public and private sectors to partici-

has offered an unprecedented opportunity for public and private sectors to partici-pate directly in a global effort to save wild tigers, raising snore than \$1.4 million to date. Special marketing promotions and targeted international contributions from ExxonMobil marketing efforts and international Esso operations have attracted more than \$600,000. ExxonMobil employees have volunteered their time and energy for STF events and activities. Walt Disney, the Discovery Channel, and other pri-vate corporations, foundations and organizations have donated more than \$200,000. Some 15,000 individual donations have been made to the STF, totaling more than \$580,000. These gifts have ranged from a \$68,000 anonymous donation from Switzerland, to \$400 raised by an elementary school bake sale in New Jersey, to a \$20 check sent by an elderly woman from Wisconsin, who accompanied her contribution with a hand-written elegy to the tiger. Boyfriends have honored their sweethearts with contributions, office colleagues have donated in the name of a hard-to-buy-for boss, and children have sent poems and crayon drawings with their dollars. Twice yearly ExxonMobil distributes 150,000 copies of its Tiger Watch newsletter

to teachers, students, shareholders and other tiger fans throughout the world. The response can be poignant and heartening. Nine-year-old Nicole Gaither of Southlake, Texas just completed her third annual book sale. Using her own tigerstriped flier to urge residents to donate books, Nicole has raised more than \$1,800 so far for tigers. Sixth-grade students in Gulf Stream, Florida, raised \$102 for the STF with a raffle and meatball sale. In Phoenix, Arizona, elementary school students sold pickles for 50 cents each, raising another \$153 for the Save The Tiger Fund.

The Save The Tiger Fund has become a catalyst for tiger fund-raising both directly and indirectly. Donations to the Russian Far East increased as a result of publicity arising from the 1998 Year of the Tiger Conference, sponsored by the STF and ExxonMobil (Christie 2000.) Internationally renowned entertainers, Siegfried & Roy, have joined the STF in promoting tiger conservation. And tiger mascots are helping real tigers through the alumni and students of the University of Missouri. Finally, the Foundation's historical involvement in leveraging legal settlement funds for conservation has resulted in the payment of restitution funds from a Federal in-vestigation into tiger trafficking to the STF to enable and promote high priority tiger conservation.

In addition to raising funds and grant making, the Save The Tiger Fund is committed to accountability. Conscious of a longstanding criticism that large sums of money are raised on the back of the tiger without ever making it to the ground for tangible conservation efforts, the National Fish and Wildlife Foundation takes a 10-percent management fee while investing all remaining contributed funds and accrued interest straight into projects. STF accounts are audited as part of the Foundation's annual audit.

2. DIVERSE AND SUSTAINED CONSERVATION INVESTMENTS.

The Russian Far East provides an excellent example of the Save The Tiger Fund's return on investment and its lasting conservation impact. It is a case study of the diverse and effective conservation efforts the STF is facilitating throughout tiger range. First, a few statistics to set the tiger conservation stage:

1. In the period 1990-1993, it is estimated that poachers killed one-third of Russia's remaining tigers. Just 200 to 250 tigers existed in 1994. Poachers were killing tigers at a rate of 50 to 75 a year. Simple math added up to tiger extinction by the year 2000.

2. Although Russian biologists were sounding the alarm, conservation groups were finding it nearly impossible to gain traction on the ground and maneuver through the political thicket of the turf wars raging among politicians and conservationists alike.

In 1991, the Foundation and Exxon began supporting Amur tiger studies con-ducted by Hornocker Wildlife Institute (now part of the Wildlife Conservation Soci-

ducted by Hornocker Wildlife Institute (now part of the Wildlife Conservation Soci-ety) in the Russian Far East. But as tiger poaching escalated, scientists working in Russia confronted the hornor of seeing their study tigers killed almost in front of their eyes. If they were ever to learn about tiger ecology, they would have to address the complicated issue of demand for tiger parts. With the creation of the Save The Tiger Fund, the investments in the Amur region increased and gained greater focus. The STF continued its support of the Hornocker Institute, believing they had the strongest connections with Russian scientists and the most experience tracking and monitoring tigers. In addition, the Save The Tiger Fund branched out, awarding a grant to a relatively obscure operative in the conservation community, Steve Galster, of Global Survival Network (now WildAid) who had managed to gain local buy-in for aggressive anti-poaching teams. The STF also invested dollars for land acquisition, expanding the boundaries of Sikhote-Alin Reserve, at the core of prime tiger habitat in the region. The STF further supported Russian-based community outreach programs and publications such as Zov Taigi, which targeted educational programs to school children and forest communities most affected by tigers. The STF underwrote its grantees to reach out and cultivate local leadership and build local capacity as an integral part of project design. Finally, the STF worked to enlocal capacity as an integral part of project design. Finally, the STF worked to en-courage partnerships between all of these groups and the people and governments they worked with. \_\_\_\_\_

In all, the Save The Tiger Fund has targeted more than \$1.71 million in six years to the Russian Far East, making STF the region's second largest investor in tiger conservation (second only to WWF/GEF.) Central to this support was the conscious effort to diversify grant commitments, attempting to pinpoint what Council Chair-man John Seidensticker labels as the "Four C's"—carnivores, connections, core habitats, and community support. Absent diligent and adaptive attention to each of these critical components, conservation efforts in the Russian Far East and else-where are ultimately doomed to failure.

As a result of these ongoing investments, STF's Russian Far East portfolio in 2001 includes:

1. Support for the Hornocker Wildlife Institute/WCS for undertaking solid, biology-based conservation projects. The work has broadened to include an intimate working relationship with the dozen preeminent Russian biologists in the region. Collectively, these scientists have one of the most comprehen-sive understandings of tiger behavior in all of the tiger range.

2. Operation Amba-the Russian anti-poaching teams-succeeded beyond anyone's expectations, convincing former poachers to cross the line to work for the good guys, protecting tigers from the guns, snares and poisons of other poachers. Tiger poaching plummeted by 60 percent, and many credit Operation Amba with saving the Amur tiger from extinction. Under-standing the price for complacency, Operation Amba and it partners recently stepped up patrols and arrested an aggressive poaching ring in an undercover sting operation. WildAid is working to expand the Operation Amba model to create new anti-poaching projects in Cambodia and Thailand with the Save The Tiger Fund's support.

3. Carrying the investment formula to its logical conclusion, Dale Miquelle of Hornocker/WCS worked with Steve Galster of WildAid to help the antipoaching teams set up their own local organization, the Phoenix Fund, and transfer the anti-poaching project into the hands of Russians. The Save The Tiger Fund continues to support the Phoenix Fund and is working to help them expand their own fund-raising capabilities as they move toward becoming a self-sustaining, locally driven program that won't go away when

the foreigners do. In the years since the launch of the STF, the dollar investment in Russian tiger conservation has grown steadily. More importantly, the growth in investments in Russian agencies and local leadership has accelerated as well. 4. Zov Taigi is now considered the authoritative source of environmental

news for the Russian Far East. They have sponsored photo and art con-tests, produced public service announcements, and generated a twice-monthly, 20-minute TV series that reaches 50,000 viewers. The group has translated some 100 tiger articles into Russian and English, making them available in government archives as well as on their sophisticated web site. The local efforts of this group to educate Russian forest communities and reduce human/tiger conflicts have touched thousands of rural schoolchildren in tiger range villages. Entire communities draw together each year to cele-

brate the tiger in events such as a Tiger Day parade in Vladivostok. Today the wild tiger population of the Russian Far East holds steady at 400-plus animals. Official Russian Federation customs data show that the volume of illegal contraband produced for the Chinese market (tiger skins, bones and derivatives) has decreased dramatically. The Russian Federation special forces anti-poaching team decreased dramatically. The Russian Federation special forces anti-poaching team claims that tiger poaching has been reduced by more than 60 percent. And regional law enforcement data reveals that the number of people killed in direct confronta-tion with tigers has dropped significantly. Presently, the tiger population in the Russian Far East is considered the most stable in the world. "Much of our work would simply not be possible without the support of Save The Tiger Fund," says Dale Miquelle, a Russia-based biologist with WCS. "The Fund has been a guiding force in tiger conservation at a critical juncture in the worldwide conservation movement. In providing support for tiger conservation, the Fund has become a key player in the overall conservation of Asia's biodiversity." 3 FORGING PARTNERSHUPS TO CREATE BREADTH AND DEPTH

3. FORGING PARTNERSHIPS TO CREATE BREADTH AND DEPTH.

Partnerships are a central tenet of the Foundation and the Save The Tiger Fund. The Foundation has more than 12 years of solid, quantifiable experience working with more than 1,200 local, state, and Federal organizations and agencies on the national and international level. The Foundation has involved universities, industry, philanthropies and individuals in conservation partnerships. This cooperative approach to conservation is a central feature of the STF. The Save The Tiger Fund is committed to bringing conservation interests to the table to collaborate and create an unprecedented impetus for tiger conservation. With a \$5 million commitment from Exxon in 1995, the Foundation and the Coun-

cil surveyed the tiger problem and were astonished to find that no assessment of tiger populations and habitats existed under a single cover. Assuming sound tiger conservation must be based on good information, how could the STF hope to fund priority tiger conservation if no analysis of needs existed? At the request of the Save The Tiger Fund, WWF and WCS agreed to jointly produce the first-ever, range-wide Published in 1997, A Framework for Identifying High Priority Areas and Actions for Conservation of Tigers in the Wild was grounded in two strengths: good science and collaboration.

"It was a religious experience, seeing those maps for the first time," recalls Coun-cil Chairman John Seidensticker, "here was the big picture, spread out before us, leading us into the future." For the first time, tiger researchers around the world had a reference, a catechism, on which to analyze the opportunities and barriers for the future of wild tigers.

The STF has played a central role in fostering the sharing of information—begin-ning with a 1997 Zoological Society of London tiger conference and continuing with the Year of the Tiger Conference held in 1998. Following on the heels of the London gathering, John Seidensticker, Peter Jackson and Sarah Christie worked for a full year to synthesize the proceedings into a coherent vision that translated the many different languages used in tiger conservation into one-the language of conservation biology. Riding the Tiger, published in 1999, has become the central primer for tiger conservation. Taking advantage of the momentum from 1997 and the timing of the Chinese calendar, the Year of the Tiger Conference in 1998 marked the largest meeting of tiger conservationists ever assembled. Representatives from 13 of the 14 tiger range countries participated, along with their colleagues from the United States, Canada and Europe. For the first time, conservation groups with an interest in saving tigers came to a consensus on a vision for a realistic future for wild tigers. Securing a Future for the World's Wild Tigers was published in 2000 as a summary of the Year of the Tiger Conference's findings.

Conservation planning did not end with the hosting of two major meetings but has returned home to tiger range. Countries previously wrought with political, economic, and social strife have begun to realize the significance of the tiger and its role in biologically diverse ecosystems. Many of the developing nations in tiger range are eager to get involved with this prized natural resource and have solicited guidance and support from experienced organizations in this field. The STF has consistently supported tiger action planning from the national level in countries such as Myanmar and Burma to more regionally specific plans for areas such as national parks.

The partnerships of the Save The Tiger Fund have expanded well beyond the scientific community. A partnership with the Minnesota Zoo offers one-stop tiger information geared to young and old alike through the worldwide web. The 5Tigers.org web site attracted more than 4 million "hits" per month by the end of the year 2000, or an average of 20,000 page views per day. Among other accolades, the web site was named a five-star site by the Electric Schoolhouse Digital Library; and the Education Index, a guide to the best educational Internet sites, named it "an outstanding educational resource."

In 1996, National Geographic World magazine joined ExxonMobil and the STF to sponsor a Save The Tiger poster contest that drew an impressive 3,100 entries. "Kids love cats," said World magazine's Eleanor Shanahan. "And they love to help endangered species." Another joint project with National Geographic produced Habitats: Realm of the Tiger, a comprehensive teaching kit for middle school teachers that has reached at least 6,500 classrooms in the United States and the thousands of students in them.

The Save The Tiger Fund has touched untold other tiger lovers through the Smithsonian National Zoo "Great Cats!" exhibit, a traveling American Zoo and Aquarium Association exhibit, exhibits at Disney's Epcot Center and the Smithsonian's Museum of Natural History, and in special Zoo Day events in such cities as Houston, Baton Rouge, Philadelphia, New York, Memphis, Philadelphia and Las Vegas.

The educational outreach and innovative partnerships also touch the upper rungs of academia. In February 2001, the University of Missouri joined the Save The Tiger Fund to create a model tiger-mascot program aimed at reaching the 68 U.S. colleges and universities that carry the tiger banner over their athletic programs. This is the first-ever sustained effort by an university to put money and educational efforts from a tiger-mascot program directly into on-the-ground tiger conservation. "We want there to be wild tigers as long as there are Mizzou Tigers," says Chancellor Richard Wallace of the University of Missouri. He adds that the STF "brings great credibility to the table, years of commitment and expertise, established and respected relationships in tiger-range countries, the potential for greater leverage of our own resources, and a passion for conservation that we want to pass on to our students."

In 1998, the famed illusionists, Siegfried & Roy joined the STF in its conservation mission. Siegfried & Roy are using their signature white tigers and popular Las Vegas act to serve as Ambassadors for their wild relatives in Asia. Siegfried & Roy worked with ExxonMobil to produce a commercial for the Save The Tiger Fund, which ExxonMobil placed in strategic markets as part of its national advertising budget. "We strongly believe that we must do everything we can to help save tigers in the wild," said Roy. "As powerful as tigers are, they need our help. It would be a tragedy if this magnificent creature were to vanish from the earth."

The outreach of such high profile partnerships has been significant. Following the announcement of the Save The Tiger Fund partnership with Siegfried & Roy in May, 1999, the ensuing media campaign reached an international audience of well over 70 million. Over the past six years, reports on the work of the STF have been featured by Parade Magazine, Life Magazine, the New York Times, the Baltimore Sun, the Kansas City Star, CNN, the Today Show, Discovery Channel, network radio and television, as well as a special PBS production of "The Visionaries." Overall, extensive national and international media coverage of the Save The Tiger Fund has reached populations throughout the U.S., Russia, Western Europe, Asia, Australia and China.

In the business community, the Save The Tiger Fund has become emblematic of corporate environmental stewardship, leadership and responsibility. In a recent article on corporate philanthropic giving, Worth magazine held up the Save The Tiger Fund as a notable example of ExxonMobil's charitable efforts. The results-driven and accountable work of the STF has built a solid reservoir of good will and created the capacity to expand this public/private partnership to higher levels of international visibility. Observes Ed Ahnert, President of ExxonMobil Foundation: "The Foundation provides a forum where business, government and non-profit organizations can work together harmoniously on conservation projects. By acknowledging that human activity and preservation of the environment have to co-exist, it operates in an area of shared values and on strong middle ground."

### 4. ADDRESSING THE ROOTS OF TIGER CONSERVATION PROBLEMS.

An abiding belief in a tiger's power to protect and cure is as ancient as Asia itself. Often revered as gods, tigers occupy a central place in the myth and medicine of traditional Asian culture. Images of tigers guard homes and temples from evil while tiger parts, when eaten, applied, or worn, are believed to treat ailments, confer courage, and even immunize against snakebite and bullets. But wild tigers and stockpiles of tiger bones have been largely depleted in the past two decades. If the demand continues, so will the tiger poaching. To reach the goal of making live tigers worth more than the sum of their parts, the Save The Tiger Fund has supported efforts to reduce demand for tiger parts and to curtail trafficking.

Responding to this critical issue, the Save The Tiger Fund supported groundbreaking work by WWF and TRAFFIC resulting in the report, Far From a Cure: The Tiger Trade Revisited (Nowell 2000,) which completed an earlier look at this black market by Council Member Peter Jackson and WWF's Judy Mills. Their analysis is the backbone of ongoing tiger trafficking work aimed at arresting the growth of tiger bone consumers from Shanghai to New York and San Francisco to Toronto. "The Fund had the foresight to fund these efforts well before they were embraced by the conservation community as a whole, and significant progress continues as a result," says Ginette Hemley, vice president for species conservation at WWF.

The following are examples of ongoing projects supported by the STF directed at trade:

 Support for WWF's and TRAFFIC's work with the Traditional Chinese Medicine community to educate practitioners and endorse medical substitutes for tiger derivatives. The approach—concern tempered with respect for traditional Asian cultural practices—has made the first serious inroads to staunching the medicinal demand for tiger parts.
 In China and other southeast Asian markets, WildAid is using support

2. In China and other southeast Asian markets, WildAid is using support from the STF to target the region's general population through popular media. They have enlisted the backing of such Asian luminaries as Jackie Chan to produce commercials and public service announcements that reach millions through programming on the Discovery Channel and popular Asian television networks.

3. In the United States, recent investigations have uncovered a sizable market for tiger pelts and other parts fueled by a variety of market forces including unscrupulous trophy hunters and the ongoing demand for traditional Asian medicine with tiger derivatives. (FWS, personal communication.) Court-ordered restitution funds will be directed by the STF Council in support of trade-related projects.

in support of trade-related projects. Another issue at the root of tiger conservation is the simple need to build recognition of tiger conservation issues in politically sensitive regions. Conservationists face stiff challenges when working with countries whose past and present political instability deeply cloud the ability to focus on tiger conservation. Be it Russia, Myannmar or Indonesia, the STF targets grants to support a wide range of tiger research and conservation efforts in these countries, focusing on building stability and capacity from within.

In Sumatra, for example, a tiger team fielded by Flora and Fauna International is working day-to-day in a land riddled with the dangers of disease, isolation, poachers and the difficulties of mediating the often-deadly results of conflicts between villagers and neighboring tigers. Even so, conservationists are hopeful about the tiger's future. In the words of Margaret Kinnaird and Tim O'Brien, WCS biologists who are working with STF support in Sumatra; "without grants from the Save The Tiger Fund, we would have been unable to accomplish our research on Sumatran tigers in the Bukit Barisan Selatan National Park. Before we started our work, the government did not believe the park was an important conservation area for tigers and other wildlife. Now we believe it may harbor some of the largest remaining populations of tigers, rhino and elephant in Sumatra. STF provides significant and very flexible grants that allow us to put young Indonesians into the field, provide on-thejob training and in doing so, boost capacity and build professionalism."

The Save The Tiger Fund continues to expand into new territory, making its first grant in Vietnam in 2000. The Bach Ma National Park will monitor tiger and prey density and movement within the Park and its buffer areas to get a better reading of species decline. Political strife and unchecked poaching in Vietnam has made it difficult for many conservation groups to work in the tiger's habitat. Until 2000, the capacity and infrastructure to manage such a project just was not there. A similar situation persists in Bangladesh, where tigers are being lost to poaching at alarming rates and human-tiger conflicts are quite frequent. The Sunderbans, which straddles the border between India and Bangladesh, represents the last remaining mangrove forest ecosystem in all of tiger range. This area is of international importance for tiger conservation and the STF awarded its first grant to a collaborative Sunderbans tiger conservation project in 2001.

5. FLEXIBILITY TO ACCOMMODATE RISK AND INNOVATION.

The Save The Tiger Fund Council has made it clear that the STF needs to include grants to the unknown and the untested in its portfolio. Like the Foundation's Board of Directors, the Council has stressed a willingness to consider small and non-traditional grants because a project's conservation value is unrelated to its price, and the line between innovation and speculation is often indiscernible at first glance.

For example, in 1998, the STF took a chance on a young Indian graduate student who wanted to work in a largely unstudied tiger reserve in central India. Harsha Reddy took the first photographs of wild tigers in the area and undertook the challenging, and often frustrating, task of working with local villagers who lost livestock to tiger kills. Today, Reddy is a graduate student at Harvard Medical School who hopes to go back to India as a doctor and continue the fight to save wild tigers. "Please know how much the STF has affected me. Those two years in India were the most rich experiences of my life," writes Reddy. "The contribution I could make at the time was sincere but small. However, the motivation to continue the good work is still very much alive within me. I strive to repay the trust the Save The Tiger Fund put in me by staying active in the tiger cause."

work is still very much alive within me. I strive to repay the trust the Save The Tiger Fund put in me by staying active in the tiger cause." Asia holds a number of areas that appear to be suitable habitat for tigers but the requisite research has not been conducted. A look at the WWF/WCS Assessment map suggests that the northern tier of Myanmar should be a key area for tigers. With the Save The Tiger Fund's support, WCS was able to successfully make inroads into the political quagmire of Myanmar in order to conduct a serious appraisal of the status of tigers. Sadly the survey results suggest that there are few or no tigers left in these rich habitats of former Burma. The knowledge, however disappointing, is vital and similar scientific assessments of the baseline biological data are invaluable to conservationists as they set priorities for future conservation investments.

Camera trapping techniques have greatly enhanced census work in India and Southeast Asia. But this technique is not as useful in the Russian Far East where the tiger's territory is too vast to be covered by camera traps. The potential of training dogs to find scats and identify individual tiger scents as a method for tiger census has been proposed for STF funding. It is an unproven technique for tigers, but the Foundation has previous experience with similar methods used successfully for large carnivores in the U.S. Rather than turn down the proposal, the STF is working with the Russian scent-dog researchers to more fully develop the technique and have it peer-reviewed.

6. BUILDING LOCAL LEADERSHIP AND CAPACITY.

Tiger Wallahs is a term of respect for the tiger men who have devoted their lives over the past century to the struggle to save the tiger from extinction. "They all share certain qualities—courage, independence and territoriality among them -and all of them are as remarkable in their way as the magnificent animals for whose survival they have risked, and sometimes lost, everything," says noted author Geoffrey Ward (Ward 1993.) The Save The Tiger Fund is fortunate to have benefited from the advice and counsel of several Tiger Wallahs who sit on its Council and serve as its advisors. From the start they have emphasized the need to build local capacity and train the next generation of young men and women to carry on the future of tiger conservation.

Along the Terai Arc, a fragmented strip of forest and tall grasslands strung between the base of the Himalayas and the densely populated Ganges Plain, the King Mahendra Trust for Nature Conservation in Nepal has successfully engaged local communities in conservation and environmental stewardship. Council member Hemanta Mishra was the visionary who saw that without the support of local people all would be lost. He was founding secretary of the Mahendra Trust, which focuses on making conservation a way to improve human life in the Chitwan Valley and throughout Nepal.

In Čambodia, where years of border wars have created a hostile, nearly impenetrable terrain, researchers have made their way into its trans-boundary forests and found evidence of a robust tiger population as well as a rich diversity of other flora and fauna. A small grant from the STF allowed Cambodian university students like Sun Hean to get involved in the early exploration, leading to their current roles as conservation leaders who are making a difference for tigers in what is fast becoming a key conservation area known for its unique biodiversity. STF support in Cambodian conservation projects also has fostered collaborative partnerships between researchers, conservationists, local citizen and Cambodian officials in an area that

continues to suffer from a lack of political and social support for conservation. In Malaysia, the STF is actively working to increase the capacity of the wildlife department and improve the agency's ability to plan and implement tiger conserva-tion activities. STF Council member Mohammed Khan has long been a recognized leader of Malaysian conservation. He has helped the Save The Tiger Fund to under-

leader of Malaysian conservation. He has helped the Save The Tiger Fund to under-stand the importance of supporting leaders and building capacity in Malaysia. Simi-lar leadership is found in neighboring Indonesia where STF supports three different groups on the ground. As one of Indonesia's foremost conservation leaders, Council member Effendy Sumardja understands first-hand the crucial importance of build-ing capacity and investing in people. For several years now, the Save The Tiger Fund has supported a small, commu-nity-based project outside the famed Ranthambhore National Park in India. Some 200,000 people live in the 74 villages that lie within a three-mile radius of the park. The "buffer zone" that once separated park and people is mostly gone. The Prakratik Society is engaging local villagers in tiger conservation through a health clinic, reforestation projects and other community outreach. Dr. Goverdhan Singh Rathore, an earnest young Indian who leads the Prakratik Society, has this to say of their work: "We're like missionaries. We cure people and convert them." Rathore's religion is tigers, trees, and the Park. He exhorts his grateful patients to report tiger poachers, to plant trees, and to practice family planning to ease popu-lation growth around the park. Dr. Rathore is an evangelist for tree plantations and there is at least one plantation in each of the 40 villages he works in. But it's been an uphill battle over more than six years to achieve this. It's difficult to persuade

unere is at least one plantation in each of the 40 villages he works in. But it's been an uphill battle over more than six years to achieve this. It's difficult to persuade people to plant trees that take several years to yield fuel or fodder when both are available today in the park. "You have to change a mind set," he says with more than a hint that he's prepared to do just that. These and other Tiger Wallahs are at the very root of the STF's efforts; their self-less and voluntary contributions are at the heart of the Save The Tiger Fund's suc-

cess to date. The Foundation also recognizes all its Council members for their invaluable contributions to the shaping and operation of the STF.

7. LAYING GROUNDWORK FOR FUTURE CONSERVATION. The Save The Tiger Fund has identified geographic areas with the potential to serve as prototypes for community-based conservation programs with direct benefits for tiger conservation. "The bottom line is not about saving the world, but about how we can fit into this world more fully with our fellow species intact," explains Council Chairman John Seidensticker. "The Save The Tiger Fund is committed to making tigers star in efforts to implement actions that enable people to live in balance with natural resources

One such model project is Nepal's Royal Chitwan National Park, which anchors the western end of a 1,000-mile-long green ribbon of forest and tall grassland stretched along the base of the outer ranges of the Himalayas. The Terai is not only excellent tiger habitat, but is also home to leopards, sloth bears, Asian elephants, excellent tiger habitat, but is also home to leopards, sloth bears, Asian elephants, greater one-horned rhinoceros and sambar, to name a few. But in the last half-cen-tury, people have cut through the ribbon and frayed the Terai's edges to meet needs for land, food, fuel, and fodder. Fortunately, the damage is not complete or irrev-ocable—the beads remain and can be polished. Investing in the Terai and tiger con-servation is one of STF's highest priorities. Once a royal hunting reserve, Chitwan was established as a national park in 1973 to protate the tiger, which and other graving that were variable declining as people

to protect the tigers, rhinos, and other species that were rapidly declining as people in search of new land replaced and degraded the habitat. The study and monitoring of tigers and other species began immediately, with the Nepal-Smithsonian Tiger Ecology Project and has continued without interruption to this day. The park is renowned as a tourist destination, attracting more visitors than any other park in Asia. Early on, park leaders also recognized the importance of local support and permitted villagers to collect thatch grass, essential for roofing their homes, in the park. This helped to reduce resentment at the loss of access to other natural resources.

Still, problems remained. As the local population grew, the protected area became the only source of firewood for many local people, and the temptation to graze cattle there was great. The poaching crisis affected Chitwan, peaking in 1992, with poach-ers taking both tigers and rhinos in large numbers. Except for thatch grass, villagers were receiving little benefit from the park; for instance, only a small fraction of the income from tourism found its way to the local populace. And, like parks throughout Asia, Chitwan is too small. If tigers were to survive in Nepal, people would have to make room for them outside of protected areas.

Today, Chitwan National Park is emerging as a positive feature in the local landscape, tiger and rhino numbers are increasing, and new forest habitat is being added at the edge of the park. Local people are becoming guardians of wildlife and wildlife habitat. For the first time, economic incentives have given villagers a direct stake in the park. New legislation dictates that a third to a half of all revenues earned from park entrance fees be returned to villages in the surrounding buffer zone to use for community development, such as building schools and clinics. Equally important are events in the buffer zone itself, where nearly 300,000 poor people live in 36 villages still largely dependent on forest for firewood and fodder. After years of destroying the tiger's habitat, people are now creating and managing it. A large, hand-painted sign set in the middle of a newly planted community forest area called Chitrasen credits the organizations involved in this ground-breaking habitat restoration effort, widely considered the most successful community conservation program in Asia. Prominent among these names is the Save The Tiger Fund.

As the community forestry project expands to additional parts of the buffer zone, another challenge is to create habitat links between the restored forest plots and other forest blocks in the buffer zone so tigers can move through the larger landscape. The STF is also supporting surveys in other parts of Nepal to find additional places where tiger habitat can be restored with local participation. Finally, conservationists from other parts of the tiger's range are viewing the Chitwan experience firsthand to see how they can apply this model to their own particular circumstances.

A second model conservation example lies amidst the moist tropical forest of southwest India. The Western Ghats forest complex rivals Chitwan for the title of world's best tiger habitat and is home to a similar richness of wildlife. Covering more than 9,000 square miles (24,000 square kilometers,) the conservation landscape includes several protected areas, including Nagarahole National Park and Bhadra Wildlife Sanctuary. Led by Dr. Ullas Karnath of the Wildlife Conservation Society, the Karnataka Tiger Conservation Project works in these areas in another Indian subcontinent initiative supported in part by the Save The Tiger Fund for the past three years. The Karnataka Tiger Conservation Project promotes community interest in tiger conservation through education programs for local students, teachers, and interested adults. It further focuses on anti-poaching efforts, including training, providing park protection staff with jeeps for patrolling, and provisioning front-line forest guards with insurance and new uniforms. These sorts of benefits, which Americans and Europeans take for granted, help to improve morale of men whose jobs are dangerous and often lonely.

As is the case almost everywhere in Asia, people ring these protected areas, and many people actually live within them. About 7,500 landless people live inside the boundaries of the 644 square kilometer Nagarahole National Park, for instance, where they lack schools, health care, and other basics. To meet the needs of these people for a better life, the Karnataka Tiger Conservation Project is assisting in the voluntary resettlement of 51 families to land outside of the park. If this resettlement goes as expected, many more families will join the exodus from Nagarahole setting an example for others on the benefits of thoughtful resettlement.

Dr. Karanth also leads efforts to rigorously monitor the numbers of tigers and prey species in his study sites so progress can be measured. Karanth believes that "without applying good science it is impossible to evaluate whether the efforts to reverse the tiger's decline are succeeding or failing." A unique feature of the Karnataka project is that it is staffed almost entirely by volunteers. "What it takes is a number of committed people. And that can't be bought with money," says Kararnth. "Tigers aren't going to be saved if local people aren't involved."

### BUILDING ON SUCCESS

"Daring ideas are like chessmen moved forward; they may be beaten, but they may start a winning game." Johann Wolfgang von Goethe

The Save The Tiger Fund is making a critical difference in the plight of the endangered wild tiger. Seven years ago, the headline was "Doomed." Last year, the New York Times' headline read "The Tiger. Improbably, It Survives." Where the Save The Tiger Fund has invested intensely, the tiger's population is considered stable today. As the STF evolves and grows, it is positioned to move conservation forward; to secure a long-lasting future for tigers. This prophecy will require an increased commitment to habitat restoration linked with community involvement on landscape levels; sustained anti-poaching efforts; and sustained underwriting of capacity building and public education. With ExxonMobil's continued leadership, the STF will focus increasingly on human infrastructure; entrepreneurial enterprises in tiger ranges; leadership, education and training. The future calls for investments in

people and projects that link tiger conservation to the uplifting of rural communities in terms of economy, health and education. The results will be well worth the effort. For example, it is optimistic, but certainly plausible, to set a goal of a doubled tiger population in the Russian Far East and in Nepal over the next 10 years.

Once predicted as the date of reckoning for the wild tiger, the year 2000 has come and gone and the tiger remains. So. too, do the forest guards and biologists and communities who are working together to make the wild tiger worth more alive than dead; and, equally important, working together to make the lives of villagers from India to Malaysia to Sumatra to the Russian Far East richer and fuller for the presence of tigers. In the words of STF Council member Hemanta Mishra: "We must invest in conservation solutions that bring smiles and laughter, not frowns and tears." Our efforts to secure the tiger's future must be as adaptable as the animal itself. It is tempting to say that the battle to save tigers must be fought on many fronts. But likening tiger conservation to a battle is to suggest that we can press for a victory and send the troops home. Securing a future for wild tigers, however, requires pressing to win the short-term skirmishes while committing to constant care and vigilance for the long term. If tigers survive, it will be because the troops-the people who live with tigers and care enough to save them-are at home.

### REFERENCES

Christie, S. 2000. The ZSL/WWF Global Tiger Projects Data base- and interim re-port to the WWF Global Tiger Conservation Strategy meeting in Anyer, West Java,

September 2000. London: Zoological Society of London. 9 pp. Dinerstein, E. et al. 1997. A Framework for Identifying High Priority Areas and Actions for the Conservation of Tigers in the Wild. Washington, DC, World Wildlife Fund-US with the Wildlife Conservation Society. 72 pp +. Nowell, K. 2000. Far from a Cure: the Tiger Trade Revisited. Cambridge, UK:

Traffic International. 100 pp. Seidensticker, J, S. Christie, and P. Jackson, eds. 1999. Riding the Tiger, tiger conservation in human-dominated landscapes. London: Cambridge University Press. 383 pp.

Tilson, R. 1996. A Tiger White Paper: 1995. Report prepared for Save The Tiger Fund, Washington, DC: Save The Tiger Fund, National Fish and Wildlife Foundation. 15 pp.

Tilson, R. P. Nyhus, P. Jackson, H. Quigley, M. Hornocker, J. Ginsberg, D. Phemister, N. Sherman, and J. Seidensticker, eds. 2000. Securing a Future for the World's Wild Tigers, Executive Summary Year of the Tiger Conference. Washington, DC: Save The Tiger Fund, National Fish and Wildlife Foundation. 24 pp.

Ward, Geoffrey C. with Diane Raines Ward. 1993. Tiger-Wallahs: encounters with the men who tried to save the greatest of the great cats. Harper Collins Publishers, Inc., New York. p. x.

# National Fish and Wildlife Foundation Schedule of expenditures of federal awards For the year ended September 30, 2000

	CFDA number	Contract award number
U.S. Department of the interior:		
Fish & Wildlie Service- Alles and Stand Disk Assumption'		100 M 1000 M 110 0
Mississioni Flood Plain Accumution	19.66	
lows Flood Plain Acquestion	15 FFC	Coop #14-48-0003-95-938
Endangered Species in Upper Colorado River	15 167	Coop #14-48-0006-95-3020
Public Education Endangered Species to Exotic	15 167	Coop #14-48-0009-95-956
Whithing Disease	15 608	Coop #14-48-0009-96-908
Black-Footed Ferrel	15 167	Coop #14-48-0006-97-J014
Private Land Habital Restoration – Nebraska	15 167	Coop #14-48-0006-95-1128
Partness in Flight	15 167	Coop #14-48-0009-96-1322
Williamson River-Yulana Farms	51	Coop #14-48-0001-97514
Invasive Plants/Land Rehabilitation	2	Coop #DD5300R05
Sea Turke	15 608	Coop #14-45-0002-95-0861
Iroquois Gas Pipeline	5	Coop #14-48-50181-97-3-0099
Mississippi Della Welland Restoration	15	Coop #68-4423-8-4817
Friends Organization	15	Coop #14-48-6210-98 J014
Platte Rrver	15.618	Coop #14-48-60181-99-J457
Great Swamp Interpretative Master Plan	15	Coop #14-48-50181-96-J015
Friends Organization	13	Coop #14-48-98210-99-3055
International Nigratory Bird Day	15 FFC	Coop #14-48-98210-0-J082
Aldo Leopold Foundation	15 FFC	Coop #30161J111
Chesapeake and Delaware Bay Restoration	15	Coop #501819-J056
Finends Organization	51	Coop #14-48-58210-0 J074
Total Fish & Wildlife Service.		
Burgau of Reclamation-		
Spring Run Chanock	- 51	Coop #5-FG-20-12910
Fish, Wildlife, and Plant Enhancement Program <sup>*</sup>	15	Coop #1425-96-FG-81-97011
Recovery implementation Program Activities*	15	Coop #6-F.C-4018950
Withamson River Detta Restoration	15	Coop #7 FG-20-14440
Dolores River	15	Coop #98-F C -40-0550
Lower Colorado River	15	Coop #1425 98-FG: 30-00014
Total Bureau of Reclamation		
Bureau of Land Management-		
Answering the Call	15 DAK	Coop #14-229852-A5-0005
National Park Service-		
Northeast Rivers industive	15	Coop #CA4520-95-004
Native Plant Conservation	5	Coop #1443CA000197021
Total National Park Service		
Total U.S. Department of the Interior		
" Major Program		

The accompanying notes are an integral part of this schedule 1

Receivable (deferral) Espenditures 30, 2000	110 UNC 1 100000	206		6.269 12.270		5,150 14,000	10.000 (35 000)	44.033 (36 481)		166,154 (3.008,130)	- (30.554)	20.000	35.008 (299.035)	219.687 (153.338)	(10,135) 148,72	1	- 4,315	90.580 4,155	(11,140)	1	- (20,000)	13,043	866.384 (3.756.237)	- (5.876)	1 565.129 (2.604.577)	151.173 50,773	383,660 (2.461.335)	(407.931)	423.360 (248.170) 2.523.330 (5.697.116)	2,275,442 (1,354,340)	5,000 12,947	(87.517 (8.279)		
Receipts (Reimbursements)	5 474 TOO			1	I	5.150	45 000	87 201	I	192,082	777.6	I	328 043	249 453	46.230	I	I	92 825	071'11	ł	50.000	1	1.585.001	1	1,254,672	122,751	159.262	22 841	300.000	3,801,933	1	54,607	54,807	7301.007
Receiveble (deferral) September 30, 1999	54 082)		1592 617	6.001	19 924	000 111	I	6 687	3 900	(2.982 202)	(26 777)	20.000	(6:000)	(123,772)	8 711	1	4.315	6.400	4	I	1	1	(3 057,620)	(5,876)	(2.915 034)	22 351	(2.705.733)	(385.090)	(0.71.538) (6.360.920)	172.151	7.947	(40.689)	(33 042)	(0 279 411)
Contract award amount	3 400 000		2 000 000	35 000	105 401	150 000	205 000	200 000	28 075	2 950 000	250 000	20 000	402 500	1 500 000	185 000	13 016	25 000	235 000	45 000	15 000	20 000	285 000		300 000	11 146 704	482 000	2 500 000	371 000	1 200 000	7.974.000	30.000	367 100		
Contract eward number	Coor #14 48-0003 95 937	Coon #14-48-0003 95-939	Coop #14-48-0003-95-938	Coop #14-48-0006-95-3020	Coop #14-48-0009-95-956	Conp #14-48-0009-96-908	Cosp #14-48-0006-97-J014	Coop #14 48-0006-95-1128	Coop #14-48-0009-96-1322	Coop #14-48-0001-97514	Coop #DD5300R05	Coop #14-46-0002-95-0861	Coop #14-45-50181-97-J-0099	Cosp #68-4423-8-4817	Coop #14-48-6210-98 J014	Coop #14-48-60181-99-J457	Coop #14-48-50181-96-J015	Coop #14-48-98210-99-J055	Coop #14-48-98210-0-J082	Coop #30161J111	Coop #501819-J056	Coop #14-48-58210-0 J074		Coop #5-FG-20-12910	Coop #1425 96 FG-81-07011	Coop #6-F C-4018950	Coop #7 FG-20-14440	Coop #98-F C-40-0550	Coop #1425 98.FG.30.00014	Coop #14-228852-A5-0005	Coop #CA4520-95-004	Cood [1443] 4000162021		
CFDA number	15 FFC	15 FFC	15 FFC	15 167	15 167	15 608	15 167	15 167	15 167	2	15	15 608	5	15	15	15 618	15	13	15 FFC	15 FFC	5	2		. 51	15	ŝ	15	5	5	15 DAK	15	ź	2	

62

Natitonal Fish and Wildlife Foundation Schadue of expenditures of federal avards For the systember 30, 2000 (Continued)

Current control         Current contro         Current control         Current con							
10         Const NS GCG GM         1		Cf DA number	Confract award number	Contract Award Amoust	Receivable (deferral) Sectamber 30, 1644		Receivable (deferral) Si sptenber 30, 2000
III         Constrained Constrained (Constrained)         I (19800)         C (4000)         I (19800)         I (19800) <thi (19800)<="" th=""> <thi (19800)<="" th="">         I (19800)         <thi (19800)<="" th="">         I (19800)         I (19800)         <thi (19800)<="" th=""> <thi (19800)<="" th=""> <thi (19800)<="" th="">         I (19800)         <thi (19800)<="" th=""> <thi (1<="" td=""><td>U.S. Department of Agricultury. Foreast Services</td><td></td><td></td><td>And a second second second second second second second</td><td>Non-section and the section of the s</td><td>1</td><td></td></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi></thi>	U.S. Department of Agricultury. Foreast Services			And a second second second second second second second	Non-section and the section of the s	1	
Image: Construction         Constr	FOREN Service	2 1	Code #95-SCCS-084	1,159,000	\$ (34782)	1,729	1005.03) \$
Non-off         Control         Control <t< td=""><td>Forest Service</td><td>2 1</td><td>C000 M90 CC24-034</td><td>1.000-000</td><td>46.060</td><td>3.872</td><td>ADD LINE</td></t<>	Forest Service	2 1	C000 M90 CC24-034	1.000-000	46.060	3.872	ADD LINE
0         0	Fotosi Service	2 1	Coop #37 (3-082	1.000 000	[921 159]	8,238	Trodicioni Trodicioni
10         Constructions         2 (000 00)         (0113)         2 (0113)	Forest Service	2 5	Coop #17-CC2-000	130,000	(45:136)	1	1015 242
1013         Color Methods (11)         21000         (1113)         2241         0           0         Color Methods (111)         200000         (1113)         2241         0         2241         0         2241         0         0         2241         0	Forest Service	è ;		000 400 2	(910.084)	01010	1400011117
10         Construction of the con	Welland Reserve Pressan	α i	Coop #97-CCS-205	214.000	1261 853	3 265	langath
U         Conservation Static         2 (20)         (1.2)         2 (20)         (1.2)         2 (20)         (1.2)         2 (20) <th2 (20)<="" th="">         2 (20)         2 (</th2>	Foreast Service	10 012	Coop # NRCSA-3A15-6-48	5,000,000	(CLIVEN)	280,44	1796.71
Unit         Constrained Child (11) (66)	Forest Service	2	Coop #99-CA-014	2 130 000	11,120,0901	15.641	incolacti
0         Consertial ASI (2)1         - 500 (200         - 100 (	NRCS	9 1	Cosp #00-CA-11130117-096	2 650 000	. 1	38,687	(2 014/2/0 2) (14/2 0 0 0 0
10         Constraints (5):03         1,000         (1000)	APHS	ş	Coop #68.3475-0-31	3.000.000	1	899'48	(196918)21
International         12         Construction         200000         1200000         2000000         200000         200000	Total U.S. Department of Annunkure	9	Coop #99-8100 0522GR	15,000	(10 505)	1	Looper and a
Image: Construction of the Automotion         7.20         Construction of the Automotion         7.300         9.301         1.406         7.111           1         Construction of the Automotion         773000         7.301         1.301         1.406         7.111         7.110         7.110         7.110         7.110         7.110         7.110         7.110         7.110         7.110         7.110         7.110         7.110         7.110         7.110         7.110         7.110	U.S. Department of the Army.				13 325 5851	8	1-0
1     Construction of the construction o	Habitat Protection for Southmetation Welcow Phenalisters Instruments at the features	ş			•		12 0110 2500
13         Construction (M)         23300         7333         114.           13         Construction (M)         00000         00000         000	LEGAC'S RESOLUCES Managements Drowards Synonyme approximation of Level Management	2	Coop #DACM05 98-2-0001	7 500 000	(3 920 165)	985 <b>*</b> 8	feer orbits
13         Constr         Chance	tion Native Invasive Species Control	2	Coop #DACARY 98-H 0006	379 000	308.1	111.042	100.01
(2)         66133111C         (19000)         (2311)         (211)           66.66         (2017)         (2010)         (2413)         3615         (1<10)	Total Dependent of the Arms	ä	Coup #DACAE?-98-H 0001	605,000	(000'5)	116 911	to a rot
67         MIR3.31412         100.00         (0.013)         26.55         20.25	Texinessas Valley Authority				1065 135 63	111 EAE	And Links
64         Mellici 31111;         100000         (2015)         2015         101           64.06         Construction 11         200000         0         102         102           64.06         Construction 11         200000         0         102         102         102           64.06         Construction 11         200000         0         102         102         102           64.06         Construction 11         200000         0         00000         0         102         102           64.06         Construction 11         200000         0         00000         0         102         102           11         Construction 11         200000         200000         100         102         102           11         Construction 11         200000         200000         20000         102         102         102         102         102         102         102         102         102         102         102         102         102         102         102         102         102         102         103         103         103         103         103         103         103         103         103         103         103         103 <t< td=""><td>Postere Gur Southern Proses</td><td>;</td><td></td><td></td><td></td><td></td><td>1000</td></t<>	Postere Gur Southern Proses	;					1000
6.606     Cose Prenector 3*16     2.001     -     3.34       6.606     Cose Prenector 3*16     2.00100     -     0.218       6.606     Cose Prenector 3*16     2.00100     -     0.2016       6.606     Cose Prenector 3*16     2.00100     -     0.2016       7.610     Destructure     2.00100     -     0.2016       7.610     Destructure     2.00100     -     0.2016       7.611     Cose Prenector 3*10     2.00100     -     2.00160       7.611     Cose Prenector 3*10     2.00100     2.0114     2.00160       7.11     Cose Prenector 3*100     2.00100     2.1125     -       1.11     Cose Prenector 3*100     2.00100     2.1125     -     2.1125       1.11     Cose Prenector 3*100     1.00100     -     0.0000     2.1125       1.11     Cose Prenector 3*10000     1.00100     -     0.0000     0.1135       1.11     Cose Prenector 3*10000     1.00100     -     0.0000       1.11	Environmental Protection Agency	63	90665 221412	120.000	(\$18 65)	26,165	60000001
0.000     0.000     0.000     0.000     0.000       0.000     0.0000     0.0000     0.0000     0.0000       0.000     0.0000     0.0000     0.0000     0.0000       0.000     0.0000     0.0000     0.0000     0.0000       0.000     0.0000     0.0000     0.0000     0.0000       0.000     0.0000     0.0000     0.0000     0.0000       0.000     0.0000     0.0000     0.0000     0.0000       0.0000     0.0000     0.0000     0.0000     0.0000       1.11     0.0000     0.0000     0.0000     0.0000       1.11     0.0000     0.0000     0.0000     0.0000       1.11     0.0000     0.0000     0.0000     0.0000       1.11     0.0000     0.0000     0.0000     0.0000       1.11     0.0000     0.0000     0.0000     0.0000       1.11     0.0000     0.00000     0.0000     0.0000       1.11     0.0000     0.0000     0.0000     0.0000       1.11     0.0000     0.0000     0.0000     0.0000       1.11     0.0000     0.0000     0.0000     0.0000       1.11     0.0000     0.0000     0.00000     0.00000	Restore Our Southern Rivers						546 6
0.000         0.0000         0.00         0.0000         0.000         0.000 <t< td=""><td>5 Start</td><td>5</td><td>Crop #X884 301 97-0</td><td>25 000</td><td>ł</td><td>242 C</td><td>197.10</td></t<>	5 Start	5	Crop #X884 301 97-0	25 000	ł	242 C	197.10
6.000         Comparison Statisty and Statisty and	Gulf of Mexico	2017 00	110 14 072000 0000	240 000	859		
Bit Mode         Constraints (1)         2003779         7+48         200950           14:10         Constraints (1)         200370         200370         20040           14:10         Constraints (1)         200300         201379         21100           14:10         Constraints (1)         200300         201379         21109         211           11:10         Constraints (2)         200300         213139         21175	Called Waterched Dewardship Projects	ere ere		200.000	,	I NUK GOR	206 234
Relation         74000         753.00         753.00         753.00           11         Construction         200000         264.01         71.00         7           11         Construction         200000         664.60         71.00         7         7           11         Construction         20000         664.60         71.70         7         7           11         Construction         63.00         64.60         73.30         17.70         7           11         Construction         63.00         64.60         73.30         17.70         7<	Chesabeake Bay Watershed		2 10-51 256ev= dep:1	3 093 279	24,768	545 US 1	04.496
14.10     Convertex/constant     2.08.200     2.4.200     1.0.000       11     Convertex/constant     2.08.200     2.8.126     2.1.05       11     Convertex/constant     2.08.200     2.8.126     2.1.75       11     Convertex/constant     2.000     2.8.200     2.1.75       11     Convertex/constant     2.000     2.8.200     2.1.75       11     Convertex/constant     1.000     2.0.200     2.2.15       11     Convertex/constant     1.0000     2.2.200     2.2.15       11     Convertex/constant     1.0000     2.2.200     2.2.15       11     Convertex/constant     1.0000     2.2.200     2.2.15       11     Convertex/constant     1.0000     2.2.30     2.2.15       12     Convertex/constant     <	total Environmental Protection Agency	\$0\$ \$0	Cost #X953175-010	160 000			140 660
11     Constructuota     2082.000     849.44     215.175     7       11     Loss Prince/Accidita     200000     824.94     217.05       11     Loss Prince/Accidita     0.0000     81.175     0       11     Loss Prince/Accidita     0.0000     81.175     0       11     Loss Prince/Accidita     0.0000     81.175     0       11     Hold Coss Prince/Accidita     2.000     81.000     1.015       11     Hold Coss Prince/Accidita     1.00000     1.02.000     1.03.000       11     Hold Coss Prince/Accidita     1.00000     1.02.000     1.02.000       11     Coss Prince/Accidita     1.02.000     1.02.000     1.02.000       11     Coss Prince/Accidita     1.02.000     1.02.000     1.02.000       11     Coss Prince/Accidita     1.02.000     1.02.000 <t< td=""><td>U.S. Crostifinitit of Commarce MOAA</td><td></td><td></td><td></td><td>25,233</td><td>10011127.0</td><td>÷.</td></t<>	U.S. Crostifinitit of Commarce MOAA				25,233	10011127.0	÷.
1.1     Constructure     202000     20101     21.00       1.1     Approximation     20000     20.100     21.00       1.1     Approximation     20000     20.100     21.00       1.1     Approximation     20000     20.100     21.00       1.1     Constructions     20.000     20.100     20.00       1.1     Constructions     20.000     20.000     20.00       1.1     Constructions     3.0000     20.000     20.00       1.1     Constructions     10.0000     20.000     20.000       1.1	Postaral Resources - formation - and Contact Contact						200.000
11         Loss (13000)4         0.000         (1.1.3) <th< td=""><td>Matter Martine Commission</td><td>0.2 \$ 1 1</td><td>Coop INUAS7AC0494</td><td>2.092.000</td><td>289434</td><td>210.612</td><td>169/167</td></th<>	Matter Martine Commission	0.2 \$ 1 1	Coop INUAS7AC0494	2.092.000	289434	210.612	169/167
11         Approximation(2016)         6.4.3.30         6.1.3.30         7.1.75	Relational Westman Success	z	Leop #753697804	50 090	121,2703	21,170	
11-10 Gas Markadada 24.20,00 (16.250) 13-599 1 11-10 Gas Priveasada 29.00 (45.80) 4.1.46 2 11-11 Gas Priveasada 19.00 15.2.60 25.28 2 11-11 Gas Priveasada 19.00 15.2.60 25.28 2 11-11 Gas Priveasada 19.00 15.5.6 2 11-11 Gas Priveasada 19.00 15.5.7 2 11-11 Gas Prive	Category Annual Providence	11	Agreement 00:20198	005.55	(65 500)	57:15	(32751)
11     Construction     14     14     14     14       11     Construction     14     14     14       12     Construction     14     140     10       13     Construction     140     10     15       14     Construction     140     100     15       14     Construction     190     100     15       15     Construction     100     15     15       14     Construction     100     100     15       15     Construction     100     15     15       14     Construction     100     15     15       15     Construction     100     15     15       15     Construction     100     15     15       16     Construction     100     15     15       16     Construction     100     15     15		3/7 13	Copp #NA87AC0200	3.467.590	(766.225)	269,599	-
11-11 Coordinational 1940-900 [150.60] 263.28 2 11-1 Coord-Manu August 1940-900 [150.60] 25.42			Cosp #174463066	42 900	142 5001	41.848	
11.47 (cov Party) A.0.196 (19.0 PM 25.42 (25.4 (	terretroe terreter respecteded drig E ducation"		0000 PH491400104	1 669 500	1159.000	595.338	~
1 Cosy 11 Yee 2019 103 54 1750 103 54 1750 101 101 101 101 101 101 101 101 101 1	Build Public Private Partiatshars	11.42	COP PHAGE AUDIGE	1 910 200	tobo on al	25-125	
13801 138000 138000	Market Markets Contrastion	=	0000 6124405209	IN DE	ŧ	48.720	13.353
- · ·	otal Department of Commerce					1.763.184	196'912
Majo Program. W Accorditoring water an an integral stat of the scenesue		÷					
e noose se vieces ne	Mayor Program						
ه ویکنیاولیاسی میدود مه عبر این و اور اور اینا کردهای							
ne accompanying water are an integral part of the scinegule							
وم ويورسواوساسوا مرمد وم مارسو والمراجع المراجع والمراجع المراجع والمراجع							
Automotive were and an integral part of the surveying							
	ಳ ತೆಂದರಗಾಗಿಡಿಗಳುಗಾಧಿ ಗಂಗೇಕ ತೀಕ ತಿನ ಖಗ್ಗಂಧ್ರಾಮ ಭಾಗಕ್ಷ ಧಗ್ಗೆಗುತ್ತಿ ಎನ್ನಗಾಕಿದ್ದರುತ್ತು						

The eccimpanying notes are an integral part of this screedure 2

63

National Fish and Wildfife Foundation

Schedule of expenditures of federal awards For the year ended September 30, 2000 (Continued)

 Agery for International Connectionweth: Here and the Angeline Hereacycai Maturatoria Hereacycai Maturatoria Connectioned Totak Mayor Pochem Totak
 Mayor Pochem

64

The accompanying when are an integral part of this schedule 3 Mr. GILCHREST. Thank you, Mr. Berry. Ms. Steuer?

## STATEMENT OF KAREN STEUER, DIRECTOR, COMMERCIAL EXPLOITATION AND TRADE PROGRAM, INTERNATIONAL FUND FOR ANIMAL WELFARE

Ms. STEUER. Thank you, Congressman. I am pleased to be here with the Committee again, but I have to tell you sitting on this side of the dais takes a little bit of getting used to.

Mr. GILCHREST. Is it more interesting on that side of the dais? [Laughter.]

Ms. STEUER. I am pleased to be here today and to offer testimony on the reauthorization of these statutes which IFAW believes have contributed significantly to the conservation of all the species involved.

But at the risk of being a wet blanket, in answer to the Subcommittee's specific question about the future viability of these species, we are of the view that all of our efforts, including the excellent work being done through the international species conservation funds, may not be enough to save some elephant populations from crossing over the brink into extinction if we can't find better, more effective and cooperative ways of supporting the basic communications and infrastructure needs of nations whose elephant populations are continuing to fall victim to poaching, habitat destruction, and conflicts with humans.

We think that if the Acts could be improved in any way, in our view it would be to set top funding priorities for these most basic of needs, particularly in Western and Central Africa and Southeast Asia.

Next year, the 152 member nations of the Convention on International Trade in Endangered Species are going to meet at the 12th Conference of the Parties in Santiago, Chile. Among the items on the agenda—and there will be hundreds of items on the agenda—will be whether to allow further international trade in elephant ivory. Those supporting more trade will focus on how many elephants there are in South Africa, Namibia, and Botswana, where elephants live primarily or in some of those countries entirely on protected and fenced-in lands, and admittedly where populations are doing well, as Congressman Pombo alluded to earlier, where the populations are healthy and growing.

But this debate and this issue also needs to address the desperate need for additional anti-poaching and enforcement support in Central and Western Africa, where illusive forest elephants living largely outside of protected areas in some of Africa's poorest nations may be the most threatened victims of illegal ivory trade.

In countries like the Ivory Coast, Cameroon and Chad where IFAW has support projects, funds for wildlife conservation and enforcement are so limited that governments are only guessing at the number of elephants within their borders, let alone how many might fall victim to the illegal ivory trade every year.

Assisting these countries to communicate and cooperate on conservation efforts, we believe, is critical to ensuring the future of elephants in Africa. And we believe that the most important takehome message of today's hearing should be that many of these countries don't have even the most basic computer equipment and radio transmitters for their field offices. Yet, we are expecting them to report poaching incidents to the CITES secretariat on a daily or timely basis.

They don't have functional four-wheel-drive vehicles most of the time, but we are expecting them to find the carcasses of illegally killed elephants on a timely basis. They don't have sophisticated x-ray equipment in their airports and we are expecting them to find illegal ivory as it leaves the country.

Now, add to these conditions the sheer volume of wildlife trade in a world where 350 million wild plants and animals are traded every year, in a market worth \$20 billion, 25 percent of which is illegal trade. It is the second largest illegal trade market in the world, second only to the illegal drug trade in terms of value. And without a doubt, it is continuing to have a devastating impact on the species we are discussing today.

For these reasons, we fully support your efforts to ensure that each one of these programs receives at least \$1 million in appropriated funds in the coming fiscal year, and we would suggest that when considering top priorities for funding support, the Fish and Wildlife Service should consider more projects that provide park rangers, CITES authorities, and customs officials with basic support. In that regard, we would fully support the concept of the language that the Fish and Wildlife Service has put forward today.

Regarding the Rhino-Tiger Act, we would strongly urge that more funding be provided for desperately needed law enforcement regarding traditional medicine products. In our view, the steadily increasing demand for TM products containing powdered rhino horn and tiger bone represents the current largest threat to these particular species, and it has disastrous results for more than 80 species in the world that are currently involved in the use of TM.

According to the World Health Organization, more than 80 percent of the world's population currently relies on some form of traditional medicine for its health care. Yet, there is no regulatory mechanism that requires TM products in international trade to be labeled according to species.

In the case of tigers, products may come into this country labeled "Felis" without identifying whether that means tiger bone, leopard bone, or the bones of a house cat. Conversely, products labeled "tiger bone" may contain no cat products at all.

We would strongly urge the Fish and Wildlife Service to use some of the funds in the conservation fund to support our efforts to have the CITES parties require all traditional medicine in international trade to be labeled with contents by species. Not only would this benefit rhinos and tigers, but dozens of other species as well, and we think it would be the first major step forward in controlling and enforcing the mostly illegal use of CITES-listed species in traditional medicine.

I want to thank you for all your efforts on behalf of all these funds, and I look forward to working further with you and to answering any questions you may have.

[The prepared statement of Ms. Steuer follows:]

### Statement of Karen Steuer, Director, Commercial Exploitation and Trade Program, International Fund for Animal Welfare, on H.R. 643, H.R. 645, and H.R. 700

My name is Karen Steuer and I am the Director of the Commercial Exploitation and Trade Program for the International Fund for Animal Welfare (IFAW). IFAW is a non-profit organization with over two million supporters around the world. Our global headquarters is in Massachusetts, and we have offices in Australia, China, Japan, Russia, Germany, France, The Netherlands, the United Kingdom, Canada, Belgium, Kenya, South Africa, Mexico, and in Washington.

IFAW's mission is to work to improve the welfare of wild and domestic animals throughout the world by reducing commercial exploitation of animals, protecting wildlife habitats, and assisting animals in distress. IFAW seeks to motivate the public to prevent cruelty to animals and to promote animal welfare and conservation policies that advance the well being of both animals and people.

I am pleased to be here today and to offer testimony on the reauthorization of the Asian Elephant Conservation Act; the African Elephant Conservation Act; and the Rhinoceros and Tiger Conservation Act. The Subcommitte's letter specifically requested our views on the impact of the conservation funds; the future viability of the species involved; whether the law has encouraged additional international conservation efforts; and whether the laws should be amended. Those are fair questions, without easy answers.

IFÁW is a strong supporter of both the African and Asian Elephant Conservation Acts. I believe we are in a fair position to evaluate their effectiveness in that, rather than receive government funding for our own elephant conservation programs, we have traditionally assisted governments in their conservation needs. None of our funding has come from government sources. In addition, we have offices or partner organizations in the regions most affected by these statutes, all of which are staffed entirely by nationals of the region, including former park rangers and law enforcement specialists Do we believe these two statutes contribute significantly to elephant conservation and encourage additional conservation efforts? Absolutely. IFAW has jointly funded several of the projects that were also assisted by the funds established under these laws. For example, the African Elephant Conservation Fund and IFAW are the two top sources of funding for the Cornell University Bioacoustics Research Program of acoustic monitoring of forest elephants in the Central African Republic.

In addition, we have supported or conducted programs that further the work or intent of these statutes. While the African Elephant Conservation Fund has supported post-war rehabilitation of the infrastructure of the Reserve de Faune d'Okapi in the Democratic Republic of the Congo, IFAW has supported ranger relief efforts for the war-torn Kahuzi-Biega Park, a World Heritage Site in the Congo which contains forest elephants, lowland gorillas, and one of the few remaining populations of bonobos on the planet.

In answer to the Subcommittee's question about the future viability of these species, IFAW is of the view that all of our efforts, including the excellent work done through the international species conservation funds, may not be enough to save many wild elephant populations from crossing over the brink into extinction if we cannot find more effective ways of supporting the basic communications and infrastructure needs of nations whose elephant populations continue to fall victim to poaching, habitat destruction, and conflicts with humans. If the acts could be improved in any way, in our view it would be to set top funding priorities for these most basic of needs, particularly in Western and Central Africa and Southeast Asia Next year, in November of 2002, the 152 member nations of the Convention on International Trade in Endangered Species (CITES) will meet at the 12th Conference of the Parties in Santiago, Chile. Among the hundreds of items on the agenda will be a decision on whether to allow further opening of the international trade in elephant ivory. Those supporting more trade will focus the debate on how many elephants there are in South Africa, Botswana, and Namibia, where elephants live primarily on protected fenced lands, and populations appear to be healthy and growing.

But the debate should also focus on how many elephants have managed to survive the ravages of civil war in the Democratic Republic of the Congo, where both rebel forces and government troops kill them for their meat and ivory. It should focus on the rangers throughout Africa and Asia who gave their lives in the ivory wars of the 1980's and the rangers who continue to lose their lives in gun battles with poachers today.

The debate should address the desperate need for additional research, anti-poaching and enforcement support in Central and Western Africa, where elusive forest elephants, living largely outside of protected areas in some of Africa's poorest nations, may be the most threatened victims of the illegal ivory trade. In countries like the Ivory Coast, Cameroon, and Chad, funds for wildlife conservation and enforcement are so limited that governments are unable to do more than guess at the number of elephants that live within their borders, let alone be able to accurately estimate how many of those animals may fall victim to illegal ivory trade each year.

Assisting these countries to communicate and to cooperate on conservation efforts is critical to ensuring the future of elephants in Africa. Through the Game Rangers Association of Africa, IFAW recently sponsored 34 delegates from 17 African nations to attend the International Ranger Federation Third World Congress held in South Africa. One of the most positive outcomes of the conference was an agreement among African rangers, the Game Rangers Association, and the International Ranger Federation to establish local ranger associations. IFAW will be assisting those associations in purchasing computers so they can communicate with each other and with the outside world.

Mr. Chairman, we believe the important take-home message should be that many of these countries do not have even the most basic computer equipment and radio transmitters for their field offices and ranger stations, yet we expect them to report poaching incidents to the CITES Secretariat on a timely basis. They do not have functional four-wheel drive vehicles much of the time, yet we expect them to find the carcasses of illegally killed elephants. They do not have sophisticated X-ray equipment in their airports, but we expect them to find ivory leaving the country illegally. These are the conditions under which these countries must operate.

Now add to these conditions the sheer volume of wildlife trade in a world where 350 million wild animals and plants are bought and sold each year. That represents a market worth more than \$20 billion. It has been estimated that approximately 25 percent of this trade is illegal: a black market second only to the illegal drug trade in terms of dollar value. Without a doubt, this trade continues to have a devastating impact on the species we are discussing today. For these reasons, IFAW urges the Members of the Resources Committee to work with the Appropriations Committee to ensure that each of these programs receives

For these reasons, IFAW urges the Members of the Resources Committee to work with the Appropriations Committee to ensure that each of these programs receives \$1 million in appropriated funds in the coming fiscal year. And I would suggest that when considering projects for funding support, the Fish and Wildlife Service should give top priority not to proposals that promote sustainable use, as the Act currently states, but to proposals that provide the greatest amount of immediate aid to those countries whose elephants are the most threatened, and to consider more projects that provide park rangers, CITES authorities, and customs officials with support. In the end, the survival of many elephant populations in Asia and Africa may depend entirely on successful law enforcement.

In that regard, IFAW would like to continue to work with the Fish and Wildlife Service to support worthy projects which the African and Asian Elephant Funds are unable to support; to partner with the Service to provide the additional funding or logistical support necessary to get projects off the ground; and to work with the Fish and Wildlife Service, the CITES Secretariat, and other governments to support law enforcement, ranger training, and customs training programs. We would also urge more support from the Asian Elephant Conservation Fund for programs in China, where IFAW is working with the Beijing Normal University and local communities surrounding the Cai Yang He Nature Reserve to resolve conflicts between human populations and the last remaining 200 wild elephants in China. Regarding the Rhinoceros and Tiger Conservation Act, we would strongly urge that funding the provided not apply for consiste another programs but for dog

Regarding the Rhinoceros and Tiger Conservation Act, we would strongly urge that funding be provided not only for onsite conservation programs, but for desperately needed law enforcement and consumer education efforts regarding traditional medicine products. In our view, the steadily increasing demand for traditional medicines (TM) containing powdered rhino horn and tiger bone represents the No. 1 threat to the survival of these species. In addition, the shortage of tiger bone for TM has led to a growing demand for powdered bone from other wild cats, representing a new threat to other endangered species such as the leopard.

According to the World Health Organization, more than 80 percent of the world's population relies on some form of traditional medicine for their primary method of health care. This steadily growing global market is largely unregulated and unmonitored, with sometimes disastrous results for the more than 80 species worldwide that are currently used in TM. Some conservationists are now calling traditional medicine a leading cause of endangerment, affecting species ranging from snakes and tortoises to deer, as well as tigers and rhinos.

There is currently no regulatory mechanism that requires TM products in international trade to be labeled according to species. In the case of tigers, products may be labeled as containing Felis without identifying whether that means tiger bone, leopard bone, or the bones of a common domestic cat. Conversely, products may be labeled as Tiger bone and contain no cat products whatsoever. This is an issue of concern not only for rhinos and tigers but for many other spe-

This is an issue of concern not only for rhinos and tigers but for many other species as well. For example, dried processed TM products may be labeled as containing musk without having to identify whether the musk is the natural product of the musk deer, or synthetic. Musk deer are currently listed on either Appendix I of CITES, which does not permit international trade, or on Appendix II, which allows limited trade. In recent years, the US and other nations have attempted to transfer those musk deer populations currently on Appendix II to Appendix I due to growing concerns about the impact of the musk trade on deer populations in Russia, Mongolia, and China. To date, those efforts have failed in part because we simply cannot account for the balance of natural versus synthetic musk in global trade. Accurate labeling would help us to achieve that.

While the 1998 revisions to the Rhino and Tiger Conservation Act addressed the problem of enforcement related to products labeled as tiger bone, regardless of their actual contents, it did not address the problem of products labeled in a more general manner, or not labeled with species identification in any way. At the most recent Conference of the CITES Parties in Nairobi last April, a document was presented by the CITES Secretariat expressing ongoing concerns, which IFAW shares, regarding the impact of TM on CITES-listed species. We would therefore strongly urge the Fish and Wildlife Service to support our efforts to have the CITES Parties require all traditional medicines in international trade to be labeled with contents by species, using standard scientific names. Not only would this benefit rhinos and tigers, but dozens of other species. We believe it would be the first major step forward in controlling and enforcing the use of CITES-listed species in traditional medicine.

To further these efforts, IFAW's China office is working with TM practitioners in China to find alternatives to the use of threatened wildlife species, and our U.K. office recently partnered with the British government to support a similar project in the U.K., where TM use has increased by 70 percent over the last five years. In the United States, TM use has grown by 280 percent in the past decade, making the U.S. the second largest user of traditional medicine products in the world. Here we have been working with TM suppliers in California to create vendor associations or use existing associations that would establish certification standards for their products. Those standards would include voluntarily submitting their products to the California Department of Health, working cooperatively with the inter-agency Herbal Task Force, to ensure their products contain no protected wildlife species. As you know, the Rhino and Tiger Conservation Act contains a requirement that

As you know, the Rhino and Tiger Conservation Act contains a requirement that efforts be made to educate the public regarding alternatives for traditional medicine products. IFAW is currently in discussions with the Fish and Wildlife Service to jointly produce an educational point-of-sale brochure for consumers discouraging the use of wildlife products in traditional medicine. IFAW supports these efforts by the Fish and Wildlife Service to work in cooperation with the TM communities, and would encourage the continuation of this outreach program.

I wish I could report optimistically on the future viability of rhino and tiger populations around the world. But poaching and illegal trade continue to take a huge toll on these species. All five species of rhinos are listed on Appendix I of CITES, and the International Union for the Conservation of Nature lists four of the five as critically endangered. The black rhino (Diceros biccornis), estimated to number 14,785 animals in 1980, is now down to about 2,800 animals in widely scattered populations. The southern white rhino (Ceratotherium simum) currently numbers over 8,000, following strong conservation efforts by South Africa. The great Indian rhino (Rhinoceros unicornis) is holding at 2,000 animals. The two southeast Asian species are in far worse shape, with the Sumatran rhino (Dicerorhinus sumatrensis) estimated at only 270 animals in 1995, and the Javan rhino (Rhinoceros sondaicus) now extinct in most of its former range, and estimated at 75 animals in 1995. We expect the Javan rhino to become extinct in the wild by the time my 7-year-old daughter is old enough to spell rhinoceros.

All five remaining subspecies of tigers are also listed on CITES Appendix I. I want to emphasize the word remaining, since three subspecies the Caspian tiger, the Javan tiger, and the Bali tiger have gone extinct in the last 60 years, and the South China tiger now numbers fewer than two dozen animals and is likely to become extinct within the next few years. The world's approximately 5,000 remaining tigers are subject to poaching and illegal trade throughout their range every day.

As with the two elephant funds, we would like to see increases in support for basic infrastructure and law enforcement needs. Russian customs officials and park rangers have told us that the broad, largely unpatrolled expanse of the border between China and Russia has resulted in an ongoing illegal trade of Siberian tiger pelts and bone from Russia's Far East into China. We believe that Russia's CITES officials and park rangers are certainly willing to conduct better law enforcement operations along this border, but lack the necessary financial support, basic equipment, or even species identification manuals. Much of the support reaching those border guards is currently coming from non-governmental organizations, including IFAW. Assistance from the Fish and Wildlife Service, either through the Rhino and Tiger Conservation Fund, or through other training programs, would be extremely helpful in curbing this smuggling. In closing, I would like to thank those members of the Committee, particularly Chairman Gilchrest and Congressman Saxton, who have been so supportive of these statutes over the decade since the African Elephant Conservation Fund was first enacted. Your dedication to these species and to the many others protected under the

In closing, I would like to thank those members of the Committee, particularly Chairman Gilchrest and Congressman Saxton, who have been so supportive of these statutes over the decade since the African Elephant Conservation Fund was first enacted. Your dedication to these species and to the many others protected under the U.S. Endangered Species Act and its international programs has been a critical factor in providing assistance to important conservation efforts around the world. I would be happy to answer any questions you or the other Committee members may have.

[Ms. Steuer's responses to written questions submitted for the record follow:]



# International Fund for Animal Welfare

#### April 5, 2001

Chairman Wayne Gilchrest Committee on Resources Subcommittee on Fisheries Conservation, Wildlife & Oceans US House of Representatives

71

Dear Chairman Gilchrest:

Thank you for inviting me to testify on behalf of the International Fund for Animal Welfare on the reauthorization of the African and Asian Elephant and the Rhino and Tiger Conservation Acts. I have the following answers to the additional questions submitted by Congressman Faleomavaega.

INTERNATIONAL HEADQUARTERS 411 Main Street Yarmouth Port, MA 02675-1822 USA Tel: 508 744 2000 Fax: 508 744 2009

> OFFICES IN-Australia Belgium Canada China East Africa France Germany Nerherlands , Russia South Africa United Kingdom

www.ifaw.org

 In your statement you suggest that all three acts would be improved were the Congress to amend them to establish top funding priorities for basic communication and infrastructure needs (i.e. computers, law enforcement, anti-poaching training, etc.)

Should there be specific set asides within each conservation fund for these priority purposes?

Given that the funding amounts required or requested are likely to vary from year to year, and that the quality of projects submitted for funding will vary depending on political stability and other factors, IFAW does not recommend that specific set asides be identified. Instead we recommend that reasonable infrastructure proposals from range states most impacted by poaching be given top priority whenever practicable. We also recommend that priority be given to local research and conservation projects that are either conducted by the range states or NGOs within the range states. We also encourage funding projects that include training for local scientists and conservationists. We believe that these are the investments most likely to conserve rhinos, tigers, and elephants for future generations.

Should grants for these activities require non-Federal matching funds?

We see no reason to exempt these projects from the requirement for non-Federal matching funds.

Do the respective range states concur with IFAW's recommendation that these basic needs are more critical than the maintenance of on-site conservation projects within their borders?

The needs and priorities of range states will vary. However, it is our experience that throughout Africa and Asia the people most directly responsible for daily management and protection of these species – from park rangers to customs officials – consistently site basic infrastructure and communication tools as their most critical conservation needs.

Considering the expressed needs and the limited amount of funding available in the Multi-National Species Conservation Fund to support all activities, should grants for these priority activities be limited in time and amount? Is there a presumption that range states will at some point be able to assume these costs themselves?

The countries with the most threatened populations of elephants are some of the poorest in the world. While we appreciate that the Conservation Fund would not want to be put into the position of funding some programs indefinitely, we do not think placing artificial limits on time or amount would resolve the problem. If basic infrastructure needs are funded, such as antipoaching equipment or basic training programs for customs officials, foundations can be laid for the range states to take on more responsibility in assuring the future of these species. In order to ensure long-term success, one key component of a funding proposal should be a plan for building the support received from the Conservation Fund into the existing or planned infrastructure of the region.

Other than IFAW, which has supported some of the priority needs from its own financial resources, have other non-governmental organizations acted to increase private support for these priorities?

Yes, some NGOs have purchased anti-poaching equipment or vehicles for wildlife services. IFAW would encourage more investment and support of this nature, however.

You provided a compelling description of the problems associated with the illegal trade in CITES-listed wildlife, especially rhinos and tigers, that supports a lucrative global market in traditional medicines.

Would you please elaborate further on your recommendation to amend all three acts to insert a regulatory mechanism that would require species-specific content labeling, or is separate legislation more appropriate?

Given that this problem affects all species in international trade in traditional medicines, we would recommend separate legislation. Currently, processed traditional medicine (TM) products enter the US most frequently in dried form, rendering the contents unidentifiable, even when using advanced forensic methods.

For example, products containing turtle or tortoise shell, commonly used in TM to treat a variety of ailments, from kidney disease to impotence, may be labeled "Testudina", with no further information to determine whether the shell is from a common or CITES-listed species, or a species listed under the U.S. Endangered Species Act. With many species of turtles and tortoises in rapid global decline due to the pet and food trades, as well as for use in TM, this inability to accurately identify species content and the associated enforcement problem demonstrates the critical need for legislative action.

A similar problem exists with musk products, which may be labeled as containing "musk" without identifying whether the contents are natural or synthetic. With the Russian musk deer population reduced by more than 50% in the last two decades, and populations worldwide at less than 2/3 of their 1960 estimates, inability to determine the actual amount of natural musk in international trade is a major concern.

Seahorses, another group of animals reportedly in decline in many areas, are used in TM products labeled simply "Hippocampus" without identifying which of the 32 species may be involved. A recent investigative report by IFAW, entitled "The Availability of Seahorses in the US for Use in Traditional Chinese Medicine" revealed that 90 of the 101 TM shops visited in Chinatowns in the US had dried seahorses or seahorse formulas available. In all cases the seahorses were not identified by species.

These are just a few examples to indicate the size and complexity of the problems surrounding the tracking and control of the more than 80 wild animal species used in TM.

The Parties to CITES have also expressed concerns over "the need for measures to improve implementation of the Convention in relation to monitoring of trade in parts and derivatives of species listed in Appendices I and II which are traded in semi-processed form or manufactured form or as manufactured medicinal products. At both the 8<sup>th</sup> and 10<sup>th</sup> Conferences of the Parties, resolutions were passed urging action on this issue.

What specific recommendations might you be able to provide concerning certification procedures and consumer notice and education activities for the US market?

IFAW wants to stress that labeling and consumer outreach efforts need to go beyond the immediate rhino and tiger needs. We are currently working with the Fish and Wildlife Service to produce a point-of-sale brochure for consumers emphasizing the potential impacts of TM products containing animal parts. We are also working with TM vendor associations in the United Kingdom and in the U.S. on voluntary inspection and certification procedures to ensure that the products of those associations are sustainably produced. One of the answers to this huge conservation problem lies in simply informing both suppliers and consumers of the impacts of their purchases on wild species, and we strongly encourage the Service to take a stronger role in cooperating with the TM communities in the U.S.

Thank you again for the opportunity to testify. We would be happy to assist the committee in any way we can regarding future legislation on this issue.

Sincerely, twe a

Karen Steuer Director Commercial Exploitation and Trade Program International Fund for Animal Welfare

Mr. GILCHREST. Thank you, Ms. Steuer. Dr. Robinson?

# STATEMENT OF JOHN ROBINSON, SENIOR VICE PRESIDENT AND DIRECTOR, INTERNATIONAL CONSERVATION, WILD-LIFE CONSERVATION SOCIETY

Dr. ROBINSON. Thank you, Chairman Gilchrest and members of the Subcommittee, for the opportunity to comment on the reauthorization of these Acts.

I am John Robinson, Senior Vice President and Director of International Conservation for the Wildlife Conservation Society, which was founded in 1895 as the New York Zoological Society. WCS conserves wildlife and wild lands throughout the world, as well as managing animal collections at the Bronx Zoo and other living institutions in the New York area. Given a long history of field conservation, with nearly 300 field projects in 50 countries throughout the Americas, Asia, and Africa, we have a keen interest in all three pieces of legislation.

WCS would like to thank the Subcommittee, Chairman Gilchrest and Congressman Saxton, for recognizing the need and urgency to provide additional support for wildlife protection in lands beyond our borders. Animals like rhinos, elephants and tigers are culturally important to us Americans and to people around the world, and their conservation is a global priority.

Unfortunately, there is a need for active conservation of these species. All five species of rhino are under siege, with estimated populations of 100 for the Javan rhino and somewhere around 10,000 for the white rhino, but even there with no guarantee of continued survival.

With the African elephant, the concern is not about numbers, but for the potential for decline. The dramatic decline in numbers in the 1970's and 1980's was halted by vigorous conservation action, including the ivory trade ban, but recent increases in hunting for ivory and bush meat threaten the stability of these populations.

With the Asian elephant, the situation is even more severe, with less than 50,000 wild Asian elephants remaining, fully half of which occur in India. In Vietnam, China, and much of Laos and Cambodia, populations have declined to the point of near extinction.

Tiger numbers are at perilously low levels, with a global population certainly less than 10,000. India remains a stronghold for tigers, and strong U.S. Government support in the past has been critical in shoring up those populations. Tigers have vanished from most of Indochina and are critically threatened throughout Southeast Asia.

This summary is not to say that these species are inevitably declining toward extinction. White and Indian rhino are recovering. Many populations of tiger, elephants and rhinoceros have stabilized. In the Russian Far East, with consistent U.S. Government support, tiger populations have stabilized at something under 100 individuals, and there are indications of further recovery. These changes have been brought about through conservation action, and programs supported by the Acts under discussion have been critical. The existing grant programs for tigers, rhinos and elephants have been enormously successful. Because these programs are nonbureaucratically and efficiently run through the U.S. Fish and Wildlife Service and provide timely, direct financial support and leverage to high-priority field efforts, we therefore encourage the use of similar operational mechanisms for the administration of future appropriations, though I would note parenthetically that the existing caps on administration are probably too low.

The impacts of these programs on the conservation of these species has been real and significant, especially in the light of catastrophic civil war and social unrest that many of the range states have had to grapple with over the last 10 years.

The leadership provided by the U.S. Government has stimulated action from the international community to conserve these species. For instance, the initiative to monitor the illegal killing of elephants initially supported by the United States has now received significant support from the European Union. National governments of the range states of these species are increasingly investing their own scarce resources in conservation efforts, although I would underline the comments of my colleague to the right.

The support provided by the U.S. Government has underscored the importance of these endeavors, and allowed conservation organizations like WCS to secure additional private and philanthropic support for the conservation of these species.

The Wildlife Conservation Society is strongly supportive of conservation strategies that focus on individual species, and this Subcommittee has heard previous testimony from the Society at hearings last year on the Keystone Species Conservation Act and the Great Ape Conservation Act. We know that species-based approaches are appropriate on scientific grounds, rational and administrative grounds, and effective on the ground. The public can relate to charismatic species more easily than they can to the conservation of biological communities and ecosystems.

We would recommend the Subcommittee to move swiftly on these bills. We strongly recommend the reauthorization of these three Acts. Funding these bills has been a sound investment of tax dollars. We, together with a number of other conservation NGO's, strongly recommend increasing funding of these bills. Annual appropriations of at least \$1.5 million for each bill in Fiscal Year 2002 must surely be considered a minimum. We strongly recommend that these funds remain flexible in the range of conservation activities for which they can be used.

The very survival of species like rhinos, elephants and tigers rests in the hands of our generation. Given the enormity of this responsibility and the urgency of the need for increased conservation, we therefore urge the Subcommittee and the Congress as a whole to act quickly and positively on the reauthorization of these Acts.

I thank you again for the opportunity to comment and I would be happy to answer any questions.

[The prepared statement of Dr. Robinson follows:]

#### Statement of Dr. John G. Robinson, Senior Vice President and Director, International Conservation, Wildlife Conservation Society, on H.R. 643, H.R. 645, and H.R. 700

Mr. Chairman, Members of the Subcommittee: Thank you very much for the opportunity to comment on the African Elephant Conservation Reauthorization Act, the Rhinoceros and Tiger Conservation Reauthorization Act, and the Asian Elephant Conservation Act . I am here today to represent the views of the Wildlife Conservation Society, founded in 1895 as the New York Zoological Society, a 105-year old US-based membership organization. The Wildlife Conservation Society conserves wildlife and wild lands throughout the world, as well as managing animal collections at the Bronx Zoo and other living institutions in the New York area. Given a long history of field conservation and the largest professional field staff of any international conservation organization—with nearly 300 field projects throughout the Americas, Asia, and Africa we have a keen interest in all three pieces of legislation.

The Wildlife Conservation Society would like to thank the Subcommittee, Chairman Gilchrest and Congressman Saxton for recognizing the need and urgency, expressed in all three bills, to provide additional support for wildlife protection in lands beyond our own borders. These bills reflect the importance that American citizens place on conserving the wild, wonderful, inspiring creatures of this earth. Animals like rhinoceros, elephants, and tigers are culturally important to us Americans and to people around the world, and their conservation is a global responsibility. Their loss would be a diminution of our biological richness, our natural heritage, and our own spirits.

Unfortunately, there is a need for active conservation of rhinoceros, elephants and tigers. All five species of rhinoceros are under siege. The Javan and Sumatran species of rhino are critically endangered and their numbers continue to dwindle, a situation not helped by the political instability in Southeast Asia. In Africa, numbers of the formerly numerous black rhino have declined from perhaps 65,000 in 1970 to about 2,500 today, and the species has been extirpated over large areas of Africa. This decline continues: We have recently learned that the famous and well-known population of black rhinos in the Ngorongoro Crater of Tanzania is now almost gone. The news is better for the white rhino and the Indian rhino, whose numbers have increased substantially during this century, but even for these species the total world populations are only in the low thousands, and their continued survival is not guaranteed.

Population numbers of elephants are much greater. Here the concern is with the decline in numbers. For the African elephant, the dramatic decline in numbers from about 1.2 million to 600,000 in the 1980's was halted by vigorous conservation action, including the ivory trade ban. Numbers over the last few decades have been more stable, but recently an increase in hunting for ivory trade and for bushmeat is affecting populations in many parts of Africa. For the Asian elephant the situation is far more severe. There are less than 50,000 wild Asian elephants remaining, fully half of which are found in India. In Vietnam, China, and much of Laos and Cambodia, populations have declined to the point of near extinction. In Southeast Asia, habitat loss and hunting continue to threaten fragmented populations.

Tiger numbers are at perilously low levels, with a global population certainly less than 10,000. India remains a stronghold for tigers, and strong U.S. Government support in the past has been critical in shoring up populations. Future support should not be linked to geopolitical issues if at all possible. Tigers have vanished from most of Indochina and are critically threatened in Southeast Asia. The situation however is not universally bleak. In the Russian Far East, with consistent U.S. Government support, tiger populations have stabilized at something under 500 individuals, and there are indications of further recovery. A recent workshop, sponsored by the U.S. Fish and Wildlife Service, brought together government officials from both China and Russia in an effort to expand cross boundary protected areas and address poaching threats.

Nevertheless, despite the threats to these species, conservation action is changing, and can change the situation. We congratulate you on bringing these bills up for reauthorization. As you have clearly recognized, the existing grant programs for tigers, rhinoceroses, and Asian and African elephants have been enormously successful. Because these programs are non-bureaucratically and efficiently run through the U.S. Fish & Wildlife Service, and provide timely direct financial support and leverage to high priority field efforts, we therefore encourage the use of similar operational mechanisms for administration of future appropriations.

The impacts on these programs and the conservation of these species has been real and significant. The accomplishments are all the more impressive when one considers that many of the range states have had to grapple with catastrophic civil war and social unrest during the last 10 years. The Wildlife Conservation Society is proud to have been a partner in many of the projects supported through these programs.

The leadership provided by the U.S. Government has stimulated actions from the international community to conserve these species. For instance, the initiative to monitor the illegal killing of elephants, initially supported by the United States, has now received significant support from the European Union. National governments of the range states of these species are increasingly investing their own scarce resources in conservation efforts. And the support provided by the U.S. Government has underscored the importance of these endeavors, and allowed organizations like the Wildlife Conservation Society to secure additional private and philanthropic support for the conservation Society is strongly supportive of conservation strategies

The Wildlife Conservation Society is strongly supportive of conservation strategies that focus on individual species, and this subcommittee has heard previous testimony from Richard Lattis and Dr. Amy Vedder at hearings last year on the Keystone Species Conservation Act and the Great Ape Conservation Act. We recognize that the conservation of individual species is a concern that the public can relate to more easily than they can to the conservation of biological communities or ecosystems. And we also know that species-based approaches are appropriate on scientific grounds, rational on administrative grounds, and effective on the ground.

The Wildlife Conservation Society, for instance, focuses considerable conservation effort on a set of species known as Landscape Species . These are species, like rhinoceros, elephant and tiger, that use large, ecologically diverse areas and often have significant impacts on the structure and function of natural ecosystems. Their requirements in space and time make landscape species particularly susceptible to human alteration and use of their habitats, and these species are among the most rapidly vanishing elements of biodiversity worldwide. Yet a conservation strategy that focuses on the conservation of this set of species is responsible, efficient, and cost-effective.

- Conservation of landscape species, because of their large area requirements, secure the conservation needs of many other species, species assemblages, and larger-scale ecological processes;
- The use of a small set of selected species to achieve a broader set of conservation goals is highly efficient;
- The important functional role of landscape species provides a way to link species to landscapes and vice versa in functional ways;
- Landscape species provide a cost-effective way to achieve a significant set of conservation goals in the face of the challenge of addressing multiply threatened species and communities, and the difficulty in adequately understanding highly complex ecosystems and landscapes in a timely fashion.
- We would therefore urge the Subcommittee to move swiftly on these bills:

We strongly recommend that reauthorization of the African Elephant Conservation Reauthorization Act, the Rhinoceros and Tiger Conservation Act, and the Asian Elephant Conservation Act. Funding these bills has been a sound investment of tax dollars.

We, together with a number of other conservation NGO's, strongly recommend increased funding of these bills. Annual appropriations of at least \$1.5 million for each in Fiscal Year 2002 must surely be considered a minimum.

We strongly recommend that these funds remain flexible in the range of conservation activities for which they can be used, including but not limited to, research, monitoring, planning, training, conservation education and on-the-ground implementation.

The very survival of species like rhinoceros, elephant and tiger rests in the hands of our generation. How much poorer would our world be without these animals, and what accountability will we be held to by our children, and by our children's children if they were to vanish? Given the enormity of this responsibility, and the urgency of the need for increased conservation, we therefore urge the Subcommittee and the Congress as a whole to act quickly and positively on the reauthorization of these acts.

I thank you again for the opportunity to comment and to work with you on these bills. I would be happy to answer any questions.

[Mr. Robinson's responses to written questions submitted for the record follow:]

### Responses from Dr. John Robinson, Senior Vice President and Director, International Conservation of the Wildlife Conservation Society, to Additional Questions from Mr. Faleomavaega, March 29, 2001.

Question 1: Would you please explain how this concept is distinguished from other management schemes based upon geographic units, such as by watersheds or by drainage basins?

The landscape species approach uses the biology of certain species, landscape species, to map the area over which populations must be managed. Just as watersheds may be the most relevant units for management of pollution or water development, wildlife conservation requires ecologically relevant units in which to manage populations. This is necessary because wildlife do not recognize political boundaries and often move between watersheds, land parcels, or other units. Their conservation requires management across these boundaries. This is particularly true for landscape species, which range widely and use a variety of habitat types. By characterizing their movements and identifying the requirements of healthy populations, we identify the resources, and thus the area, to be managed for their effective conservation. Not surprisingly, the boundaries and management units identified by this process often differ from those prescribed by other management schemes focusing on jurisdictional boundaries, land use units, drainages or watersheds.

Question 2: How does the conservation of landscape species enable or promote the conservation of biodiversity more broadly?

Abundant field data demonstrate that wide-ranging species are more likely to be extirpated from protected areas (national parks, reserves, wildlife sanctuaries, etc.). Meeting the spatial requirements of wide-ranging species provides sufficient space for other, less widely ranging species, a process known as an umbrella function. The landscape species approach takes this strategy one step further. Most notably, landscape species require large areas and a diversity of habitat types. This means that conservation planning must incorporate multiple habitat types, and that these must be effectively connected. Therefore, conserving landscape species provides an even wider umbrella. This will not only lead to lasting protection for other species; it will ensure that the ecological processes maintaining healthy ecosystems are allowed continue.

Question 3: Under a landscape species scenario, what is the involvement with indigenous human populations? Does the implementation of such a scenario impose greater operations and administrative burdens on range states?

The landscape species approach provides a framework for integrating human use and wildlife conservation. By clearly identifying and mapping the requirements of landscape species, the approach provides unambiguous criteria for recognizing conflicts as well as conservation-compatible activities. This helps land managers to focus conservation action on key conflicts, rather than categorically opposing all human activities. Consequently, indigenous populations are able to continue sustainable use of wild areas. Our expectation is that this more focused approach will actually reduce the management burden on range states and minimize conflicts with indigenous people.

Question 4: Some critics allege that landscape species conservation only diverts more and more funding to charismatic megafauna, and only serves to siphon scarce conservation dollars away from other deserving wildlife, especially non-game threatened and endangered species. Is this a fare criticism or do conservation efforts for these landscape species benefit the ecosystem at large?

Landscape species benefit the coopystem at larger. Landscape species are not simply charismatic megafauna. They are selected based on ecological criteria specifically designed to maximize the umbrella function mentioned above (question 2). This is an effective strategy for biodiversity conservation as it conserves healthy populations and functioning ecosystems.

In some cases large charismatic species may be selected as landscape species, but in many cases they are not. In the sites where this approach has been developed, landscape species range from a 20 gram hummingbird to forest elephants. In fact, most are non-game species and many are threatened or endangered. Because the approach is focused on key threats, it allocates conservation resources more efficiently than crisis-driven conservation strategies. Ultimately, this will free-up scarce conservation resources for other sites or ecosystems.

Mr. GILCHREST. Thank you, Dr. Robinson. Mr. Kirtland, welcome.

# STATEMENT OF JOHN KIRTLAND, EXECUTIVE DIRECTOR FOR ANIMAL STEWARDSHIP, FELD ENTERTAINMENT, INC., AND FOUNDER, RINGLING BROTHERS CENTER FOR ELEPHANT CONSERVATION

Mr. KIRTLAND. Thank you. Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to speak to you today in support of H.R. 700, the Asian Elephant Conservation Act.

My name is John Kirtland and I am the Executive Director of Animal Stewardship for Feld Entertainment, Incorporated, which is the producer of Ringling Brothers and Barnum and Bailey, and the founder of Ringling Brothers' Center for Elephant Conservation, both of which I will collectively refer to as Ringling Brothers. Ringling Brothers strongly endorses H.R. 700. The need for and value of such a program cannot be denied. Even though the Asian

Ringling Brothers strongly endorses H.R. 700. The need for and value of such a program cannot be denied. Even though the Asian Elephant Conservation Act is still relatively new and to date has received only modest funding, the contribution it has made and will continue to make toward the long-term survival of the Asian elephant is invaluable.

Ringling Brothers veterinarians, trainers and other specialists are among the leading experts in animal care and behavior, and nowhere is this more true that in the case of elephants. Consequently, Ringling Brothers has a long-established commitment to the conservation of the Asian elephant and other endangered species.

In 1995, Ringling Brothers established the Center for Elephant Conservation, known as the CEC, to help assure the present and future well-being of the Asian elephant species. The CEC provides a safe and healthy environment in which elephants feel secure and comfortable enough to breed. In its five-year existence, there have been 10 births at the facility, and we are currently expecting the birth of a new calf any day. Additionally, there are four more confirmed pregnancies. Ringling Brothers' elephants constitute the largest and most diverse Asian elephant gene pool outside of Southeast Asia.

The CEC is also actively engaged in an elephant exchange program with several zoos throughout the country. This will enable us to strengthen and diversify not only the CEC's gene pool, but also that of the United States as a whole. Moreover, every successful breeding brings us a little closer to being able to improve the propagation of captive elephants and of wild populations in their range states. With its unparalleled database, the CEC has become a global focal point for the worldwide study of Asian elephant behavior and reproduction, and the site for some of the most important research done on Asian elephants.

Ringling Brothers has also helped to finance the Mahout Training School in Lampang, Thailand. This school is a residential program that trains Asian elephant handlers in humane and skilled treatment and care, and also rehabilitates elephants that have become dangerous and uncontrollable as the result of mistreatment and abuse. The school's comprehensive approach, encompassing training of both humans and elephants, has led to significant improvements to the well-being and continued survival of domestic Asian elephants. It is no secret that Asian elephants inhabit some of the most densely populated regions of the world, meaning that elephants and people are in direct competition for the same resources. The AECA emphasizes remedies that address human/elephant conflict resolution, and assists initiatives in Asian elephant range states by providing financial resources for these programs that directly or indirectly promote the conservation of Asian elephants and their habitats.

Working with relatively modest funds, the Asian Elephant Conservation Fund has been able to contribute to an impressive number of research and conservation projects. Grants under the Fund often focus on projects that directly support and promote wild elephant management practices. Funding is also available for research and other projects that address the use of domesticated elephants, as such use relates to the conservation of Asian elephants in the wild.

Many of these projects also involve funding from local and international non-government agencies such as the International Elephant Foundation. This private foundation is a collaborative effort of Ringling Brothers, the Fort Worth, Columbus and Indianapolis Zoos, and other groups to support and operate in situ elephant conservation and protection projects. It is also involved in and supports propagation and other programs involving domestic elephant populations around the world. There is, of course, much more that can and should be done. Full

There is, of course, much more that can and should be done. Full funding of the amount authorized for the Fund would significantly enhance the beneficial impacts of the AECA. Changes in the implementation of CITES to facilitate international breeding programs would be of immeasurable value, and the range states still need to do more themselves to protect the elephants and their habitats.

Nonetheless, the AEČA has made a valuable contribution toward the preservation of this species and should be continued. The need for the AECA remain unchanged from when it was established just a few years ago. The threats to Asian elephants and their habitat, both direct and indirect, remains perilous. The Asian Elephant Conservation Fund continues to be a necessary and vital tool for ensuring the survival of this magnificent animal.

Ringling Brothers, along with the other groups here today, remain as committed as ever to doing what we can to help, but this is an international problem and the small amount from private sources cannot satisfactorily address the overwhelming and urgent need. The Asian Elephant Conservation Act provides the additional assistance that those of us working to protect the Asian elephant desperately need to ensure its survival.

Thank you, and I would be happy to answer any questions.

[The prepared statement of Mr. Kirtland follows:]

#### Statement of John Kirtland, Executive Director for Animal Stewardship, Feld Entertainment, Inc., Ringling Bros. and Barnum & Bailey and the Founder of Ringling Bros. Center for Elephant Conservation, on H.R. 700

Mr. Chairman and Members of the Subcommittee, my name is John Kirtland. I am the Executive Director for Animal Stewardship for Feld Entertainment, Inc., which is the producer of Ringling Bros. and Barnum & Bailey and the founder of the Ringling Bros. Center for Elephant Conservation, both of which I will collectively refer to as Ringling Bros. I am testifying in support of H.R. 700, the Asian Elephant Conservation Reauthorization Act. Ringling Bros. strongly endorses H.R. 700. The Asian Elephant Conservation Fund has only recently begun to have a tangible presence. Yet the need for and value of such a program can't be denied. Even though it is still relatively new and to date it has received only modest funding, the contribution it has made and will continue to make toward the long-term survival of this species is invaluable.

#### Introduction

Ringling Bros. embodies 131 years of experience working with Asian elephants and other exotic animals. Our veterinarians, trainers and other specialists are among the leading experts in animal care and behavior and nowhere is this more true than in the case of elephants. These magnificent animals are today and have always been an integral part of the circus experience. Not only have they entertained generations of families, but their presence in the live performances has done so much to teach us all about elephants, their place in the natural world and the need to ensure their survival. As a result, Ringling Bros. has a long-established commitment to the conservation of the Asian elephant and other endangered species.

In the mid-1990's this commitment saw its two most significant events, the establishment of the Ringling Bros. Center for Elephant Conservation and the passage of the Asian Elephant Conservation Act. I am proud to say Ringling Bros. was among the earliest and leading proponents of this legislation, along with several of the other groups testifying here today. Thanks to our collective work and the tireless efforts of a number of Members of Congress, including several from this very Subcommittee, the AECA was enacted and a mechanism was put in place to address the desperate needs of this species.

# Ringling Bros. Center for Elephant Conservation (CEC)

While Ringling Bros. and Barnum & Bailey is known worldwide as a leading live entertainment entity, the December 1995 opening of its Center for Elephant Conservation, known as the CEC , grew out of one of its more serious missions: to assure the present and future well-being of the Asian elephant species. The CEC is located in Polk County Florida and is the most comprehensive facility

The CEC is located in Polk County Florida and is the most comprehensive facility of its kind. It incorporates experience and expertise gained from 131 years of traveling and working closely with Asian elephants and other exotic animals on tour. Ringling Bros. personnel know how to interact with the animals and how to keep them healthy, comfortable and well nourished. This unique experience and understanding was used in determining facility features ranging from the size and configuration of paddock areas and buildings to the design of innovative gate systems, drinking troughs, shading areas and other amenities.

Ringling Bros . century of hands-on experience caring for Asian elephants has provided valuable insights in many areas of elephant husbandry, such as diet, waste removal, grooming and transportation of the animals. A familiarity with and respect for the lifestyle of breeding elephants was a determining factor in the selection of the secluded Florida site, as well as the CEC's selective visitation policy.

The CEC provides a safe, healthy environment in which the elephants feel secure and comfortable enough to breed. The births of Romeo and Juliette in 1992 and 1993 marked the first successful Asian elephant conceptions and births in the Ringling Bros. breeding program, and they were only the beginning. We have celebrated two more births, bringing the total since the CEC's opening to 10. Currently we are expecting the birth of a new calf any day and have four more confirmed pregnancies. As a result, the herd at the CEC, together with the approximately 40 elephants currently traveling with the two touring units of The Greatest Show on Earth , constitute the largest Asian elephant gene pool outside of Southeast Asia.

The CEC is also actively engaged in a breeding loan/exchange program with several zoos around the country. This will enable us to strengthen and diversify not only the CEC's gene pool, but also that of the United States as whole. Moreover, every successful breeding brings us a little closer to being able to improve the propagation of captive elephants and wild populations of elephants in their range states.

In order to ensure the greatest benefit to the species, Ringling Bros. is firmly committed to ensuring that the knowledge and experience gained at the CEC is shared with interested veterinarians, scientists and scholars from around the world. With its unparalleled data base, the CEC has become a global focal point for the worldwide study of Asian elephant behavior and reproduction and the site for some of the most important research done on Asian elephants. Exhibit A to my testimony consists of a synopsis of the various research projects that are underway at the CEC. The knowledge and understanding gained from these and the other work of the CEC will go a long way in advancing this multi-nation conservation effort. Ringling Bros. has also helped to finance the Mahout Training School in Lampang, Thailand. The Mahout Training School trains mahouts, Asian elephant handlers, in humane and skilled elephant treatment and care. The school is a residential program that teaches the humane Northern Thai techniques for riding, controlling and caring for elephants. Since its establishment, the school has successfully trained mahouts from numerous regions of the world, including Thailand, Malaysia, Sumatra, Indonesia, Africa and the West. The school also rehabilitates elephants that have become dangerous and uncontrollable as a result of mistreatment and abuse. Through the use of consistent and humane treatment at the school, the elephants become safe and employable, thereby increasing their chances of survival. The school's comprehensive approach encompassing training of both the mahouts and the elephants has led to significant improvements to the well-being and continued survival of captive Asian elephants.

#### Asian Elephant Conservation Fund

As this Subcommittee is no doubt aware, the Asian elephant has been and is increasingly in grave danger of extinction. In 1997, the surviving populations in the wild were found in south and southeast Asia and numbered between 35,000 and 45,000. In addition, there are approximately 16,000 domesticated elephants. The Asian elephant is currently listed as Endangered under the United States Endangered Species Act, the IUCN Red List of Mammals and on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, known as CITES. The Asian Elephant Conservation Act, known as AECA, was passed by Congress in 1997. The AECA reflects what is now a universally accepted concept: that, in order to preserve this or any endangered species, the effort must focus on the area's of the world that provide the species natural habitat. \_\_\_\_\_Asian elephants inhabit some of the most densely populated areas of the world.

Asian elephants inhabit some of the most densely populated areas of the world. The ever-increasing pressures created by the exponential growth of human populations on natural habitats in the form of encroachment by human populations and forest clearance for large-scale agricultural crops has resulted in a dramatic loss of forest cover. This, in turn, has meant that elephants and people are in direct competition for the same resources everywhere.

The AECA emphasizes remedies that address human/elephant conflict resolution and assists initiatives in Asian elephant range states by providing financial resources for those programs that directly or indirectly promote the conservation of Asian elephants and their habitats. Working with relatively modest funds, a little over \$1 million to date, the Asian Elephant Conservation Fund has been able to contribute to an impressive number of research and conservation projects. Grants under the fund often focus on projects that directly support and promote wild elephant management practices. Such projects include: (a) monitoring population trends of known populations; (b) assessing movement and ranging patterns of known populations; (c) developing management plans for managed elephant ranges; (d) resettlement of elephants; (e) anti-poaching assistance; and, (h) range state community outreach and education. Funding is also available for research and other projects that address use of domesticated elephants as such use relates to the conservation of Asian elephants in the wild.

Many of these projects also involve funding from local and international non-government entities like World Wildlife Fund and Wildlife Preservation Trust International. Another such entity is the International Elephant Foundation (IEF). This private foundation is a collaborative effort of Ringling Bros., the Fort Worth, Columbus and Indianapolis Zoos and other groups to support and operate in situ elephant (African and Asia) conservation and protection projects. It also is involved in and supports propagation and other programs involving captive elephant populations around the world. The IEF has already received an AECA grant for a project for the Support for the Improved Health and Health Care management of Captive Elephant Populations of Sumatran Asian Elephants.

There is, of course, much more that can and should be done. Full funding of the amount authorized for the fund, as well as the other species conservation funds, would significantly enhance the beneficial impacts of the AECA. However, there are also problems that go beyond the reach of the AECA. Changes in the implementation of CITES to facilitate international breeding programs could be of immeasurable value. And the range states still need to do more themselves to protect the elephants and their habitats. Nonetheless, the AECA has made a valuable contribution toward the preservation of this species and should be continued.

#### Conclusion

The need for the AECA remains unchanged from when it was established just a few years ago. The threats to Asian elephants and their habitat, both direct and in-

direct, remain perilous. The Asian Elephant Conservation Fund and the other components of the Multinational Species Conservation Fund continue to be necessary and vital tools for ensuring the survival of the targeted species around the world. Ringling Bros., along with the other groups here today, remain as committed as ever to doing what we can to help, but this is an international problem and the small amount from private sources cannot address the overwhelming and urgent need. The Asian Elephant Conservation Act provides the additional assistance those of us working to save the Asian elephant need to ensure its survival.

Mr. GILCHREST. Thank you, Mr. Kirtland. Dr. Foose?

# STATEMENT OF THOMAS J. FOOSE, PROGRAM DIRECTOR, INTERNATIONAL RHINO FOUNDATION

Mr. FOOSE. Thank you, Mr. Chairman. The rhino organizations that I represent, which includes the International Rhino Foundation and the Asian and African Rhino Specialist Groups of IUCN, greatly appreciate the opportunity to testify before this Subcommittee on rhino conservation in general, and specifically in support of H.R. 645 to reauthorize the Rhino and Tiger Conservation Act. These organizations also support strongly H.R. 643 and H.R. 700 because rhinos often live in the same places as elephants and tigers, and indeed all three of these Acts and Funds have been very beneficial to rhino conservation.

The Rhinoceros and Tiger Conservation Act was passed in a time of great crisis for these rhino species. This crisis continues, but has been ameliorated because of the crucial and catalytic support from the Rhino and Tiger Conservation Fund. The efforts of Congress to provide funds for conservation of rhinos, as well as tigers and elephants, is most commendable, much appreciated, and has indeed been very effective.

The continuing crisis for rhinos is most cogently and poignantly conveyed by the current estimates of numbers of the 5 species and 11 subspecies of rhino. There are about 16,000 of rhinos, of the 5 species and 11 subspecies, in the wild, but over two-thirds of those are of just one subspecies, the Southern White Rhino. The other subspecies of White Rhino, the Northern White Rhino, is down to about 30 individuals.

The numbers of the other four species—the Black, Indian, Sumatran and Javan—combined are fewer than 6,000. Indeed, there are fewer Sumatran and Javan rhino combined than there are Members of the House of Representatives. In fact, their numbers would probably constitute little more than a comfortable majority for either party in the House.

Mr. ABERCROMBIE. We will take it.

[Laughter.]

Mr. FOOSE. The status and prospects of most of the rhino species and subspecies is better than when the Rhino and Tiger Conservation Act was last reauthorized, and far better than when the Act was originally passed. This is due in no small part to the substantial and crucial support that has been received from the Rhino and Tiger Conservation Fund.

 $\overline{I}$  will just mention some of the notable improvements. The populations of black rhino in Africa have not only stabilized, but they have recovered from a low point of 2,300 in the mid-1990's to 2,700

today. There has been continued increase of the Southern White Rhino, as well as the Indian Rhino populations. There has been the establishment, again with significant support from the Rhino and Tiger Conservation Fund, of anti-poaching teams, known as rhino protection units, for Sumatran and Javan rhino in Southeast Asia.

However, there remain critical and precarious areas and trends for rhino conservation, and I have discussed a number of those in my written testimony. The bottom line is that there should be no relaxation of, or complacency about, rhino conservation efforts. The next 5 to 7 years are going to be critical in terms of whether rhino species and subspecies survive.

The United States has provided unique and unprecedented leadership in the global efforts to save the rhino species. Other speakers have mentioned how significant the amounts of money have been, but more is needed. Basically, over the next 5 to 7 years, there is a need for at least \$5 million in external support for rhino range states in Asia, and an equal amount in Africa. Therefore, the organizations I represent would encourage an increase in appropriations for the Rhino and Tiger Conservation Fund to at least \$1 million in Fiscal Year 2002, and perhaps \$1.5 million in subsequent years.

Just to provide a little perspective, if the \$750,000 that was appropriated in Fiscal Year 2001 is equally divided among tigers, Asian rhinos and African rhinos, that would mean that Asian rhinos would get \$250,000. The anti-poaching teams that I mentioned require about \$20,000 each per year for support. There are currently about 40 of them operating in Southeast Asia for Sumatran and Javan rhinos. So the amount of money that Asian rhinos might currently receive under the levels of appropriation would only support four of those, and there is need for at least 80 of those anti-poaching teams.

In summary, rhinos are still in crisis, but stabilization and some recovery of numbers have commenced. The support from the Rhino and Tiger Conservation Fund has been a critical and catalytic factor in this improvement. There is need for the support from the Rhino and Tiger Conservation Fund to continue and, if possible, to increase.

Therefore, the organizations I represent are encouraging Congress to reauthorize the Rhino and Tiger Conservation Act, to work with other Members of Congress to increase the amount of appropriations to at least \$1 million for Fiscal Year 2002, and perhaps an eventual goal of \$1.5 million, and to reauthorize the African and Asian Elephant Conservation Acts.

If I might just have one final comment, I would like to observe that another reason that support from the United States for rhino conservation in Africa and Asia is both appropriate and ironic considers the history of the rhino family. The United States was long ago a center of rhino distribution on this planet. Rhinos were the most common large mammal in North America from about 40 to about 5 million years ago, long before the bison or the nutria arrived.

Native American rhinos disappeared because of ecological reasons now well-known. However, through the Rhino and Tiger Conservation Fund, as well as the efforts of AZA and its Species Survival Programs for rhinos and the IRF, the United States has the opportunity to help save the surviving species of this venerable, and once American, family of mammals from extinction.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Foose follows:]

#### Statement of Thomas J. Foose, Ph.D., Program Director, International Rhino Foundation

I am Dr. Thomas J. Foose. I am the Program Director of the International Rhino Foundation (IRF), which is a non-governmental organization (NGO) exclusively concerned with rhino conservation worldwide, both in situ and ex situ, and especially with linking the two approaches. The IRF is directly contributing \$700,000/year and is coordinating or administering another \$300,000/year for a total of \$1,000,000 per year on rhino conservation projects. I also serve as the Program Officer for the Asian Rhino Specialist Group (AsRSG) of the Species Survival Commission (SSC) of IUCN - The World Conservation Union, and as a member of their African Rhino Specialist Group (AfRSG). Finally, I am Secretary of the Rhinoceros Taxon Advisory Group (Rhino TAG) and am the North American Rhinoceros Studbook Keeper for the American Zoo and Aquarium Association (AZA). Today, I am representing the IRF, both Rhino Specialist Groups, and the Rhino TAG.

The organizations I represent greatly appreciate the opportunity to testify before this Subcommittee on rhino conservation in general and specifically in support of HR 645 to re-authorize the Rhinoceros and Tiger Conservation Act of 1994. These organizations also support HR 643 & HR 700 to reauthorize the African Elephant and Asian Elephant Conservation Acts. My comments will refer mostly to rhinos and hence apply mostly to HR 645. However, rhinos, elephants, and tigers frequently occupy the same areas and habitats. All three of these multinational species conservation funds have assisted rhino conservation, directly or indirectly. The Rhinoceros and Tiger Conservation Act of 1994 was passed in a time of great

The Rhinoceros and Tiger Conservation Act of 1994 was passed in a time of great crisis for these species. This crisis continues. The Act was also passed at a time of particular budgetary stringency for the U.S. Congress. The current proposal for reauthorization is also occurring at a time when federal government budgets are under great scrutiny and strictures because of other major priorities. The efforts of many members of Congress to provide funds for conservation of rhinos, tigers, and elephants in a time of budgetary austerity is most commendable, much appreciated, and very effective.

The continuing crisis for rhinos is most cogently and poignantly conveyed by the current estimates of numbers for the 5 species and 11 subspecies of rhinoceros: (Tables 1–2, Figures 1–5): (1) About 16,000 rhinos of 5 species and 11 subspecies survive in the wild. (2) However, two-thirds (10,400) of these rhinos are of one subspecies, the Southern White Rhino. The other subspecies of White Rhino, the Northern White Rhino, is estimated at 30 individuals. (3) The numbers of the other four species (Black, Indian, Sumatran, and Javan) combined are fewer than 6,000. (4) The numbers of the 3 Asian species of rhino combined (2,700+) are about equal to the rarer of the 2 African species, i.e. the black rhino. (5) There are fewer Sumatran and Javan Rhino combined than there are members of the U.S. House of Representatives.For perspective, it should be observed that conservation biologists believe that a population of at least 2,000–3,000, and preferably 5,000 or more, of each distinct kind (i.e., subspecies or geographical variety) of rhino is necessary for long-term viability. Most of the species and all but two of the subspecies of rhino are far below this viability level.

Rhinos are capable of recovery if provided with a reasonable opportunity. It should be noted that the two kinds of rhino which have prospered the most in recent years, the southern white and the Indian, were almost lost around the start of the 20th Century through over-exploitation. Stringent protection in South Africa, India, and Nepal recovered these species in each case from about 20–40 individuals.

The status and prospects for most of the rhino species and subspecies are better than when the Rhinoceros and Tiger Conservation Act was last reauthorized in 1998 and far better than when the Act was originally passed in 1994.

Among the notable improvements are:

- The stabilization and recovery of the Black Rhino as a species from a low point of 2,300 in the early 1993 to well over 2,700 today, an increase of at least 20%, but still far from the 60,000+ that existed in 1970.
- Continuation of the vigorous growth of the Southern White Rhino population to over 10,000. Most of them are in a single country, the Republic of South Africa. This country has performed magnificently in recovering the Southern White

Rhino from near extinction around 1900 to its prosperity today. However, there are always risks possible when an endangered species is located in a single political unit

- Continued increase in the populations of Indian rhino in India and Nepal, despite substantial poaching pressure and extreme budgetary limitations in these countries
- The establishment of a system of effective anti-poaching teams known as rhino protection units (RPUs) in South East Asia which seems to be ameliorating the poaching problem for Sumatran Rhino in Indonesia and Malaysia and for Javan Rhino in Indonesia and Vietnam.

The Rhino & Tiger Conservation Act has contributed substantially and crucially to these improvements.

However, there remain critical and precarious areas and trends for rhino conservation:

- The Northern White Rhino is literally on the brink of extinction with only 30 surviving in the eastern Democratic Republic of Congo, which has been a war zone since 1997.
- The Northwestern Black Rhino, which survives only in Cameroon, is almost extinct.
- Numbers of Sumatran and Javan Rhino remain precariously low and at best are only now stabilizing, with potential recovery still in the future.
- Pressures on the Indian Rhino remain high and seem to be intensifying again, e.g. in Nepal.
- Moreover, virtually all of the rhino range states in both Africa and Asia are confronting enormous problems in terms of human needs and many of these nations are or soon will be in economic, political, social difficulty and even turmoil. • Indeed, it should be noted how linked rhino conservation has become with global
- political and economic events, e.g. \* The northern white rhino in the DRC with the civil and regional wars and
- strife in this region.
- The Sumatran and Javan rhino with the economic and political crises in S.E. Asia.

The bottom line is that there should be no relaxation of or complacency about rhino conservation efforts. The next 5-7 years are going to be critical in terms of whether the rhino species and subspecies survive.

Rhinos are part of the planet's heritage of biodiversity. Hence, rhino conservation should be a global endeavor. Moreover, the close linkage of rhino conservation with geopolitical events reinforces the justification for global efforts to help these species.

The United States has provided unique and unprecedented leadership in such global efforts. Since 1994, the approximately \$3 Million provided by the Rhinoceros and Tiger Conservation Fund (RTCF) has been catalytic and crucial to many rhino conservation programs. These RTCF funds have also been direct leverage for over \$4 Million in matching and in-kind support from other sources and have been an indirect stimulus for probably another \$4–5 Million.

Moreover, in addition to the benefit of the funds, the RTCF has served an ex-tremely significant function to help better coordinate and improve the quality and rigor of many rhino conservation programs. In this regard, the organizations I rep-resent commend the USFWS for the manner in which it has administered the RTCF

It should also be noted that the private sector in partnership with range state governments has played and will continue to play a vital role in rhino conservation in both Africa and Asia, e.g.- The private sanctuaries in Asia and the conservancies and ranches in southern Africa.- The involvement of NGOs and private partners in

S.E. Asia to support rhino conservation and develop its financial sustainability. The USFWS through the RTCF has become an important partner to both range state governments, NGOs, and private parties in these endeavors. The Rhino Specialist Groups (AsRSG and AfRSG), IRF, WWF and other NGO

partners have assisted rhinoceros range states to formulate continental and national action plans, to prioritize specific programs and projects, and to calculate the costs of rhino conservation and particularly the needs of range states for external support. Details are available in the Action Plans developed by the AsRSG and AfRSG.

Basically, over the next 5–7 years, there is need for at least: • \$5 million/year in external support per year for rhino range states in Asia

• \$5 million/year in external support per year for rhino range states in Africa. The private sector can provide some of these funds but it is vital that the U.S. Government and the RTCF also continue to contribute, and if possible at an increased level.

Therefore, the organizations I represent would encourage an increase in appropriations for the RTCF to at least \$1 million in Fiscal 2002 and perhaps \$1,500,000 in subsequent years. This amount would complement and stimulate continued matching funds from other NGOs and private partners to achieve the levels of exter-nal funding the range states need. Although the Rhinoceros and Tiger Conservation Act has been earthering for us to \$10 million form the beau of the state of the stat Act has been authorized for up to \$10 million/year, the largest appropriation from Congress has been \$750,000 in Fiscal 2001. There are indications that the request in the Fiscal 2002 Budget submitted by the President may revert to Fiscal 2000 levels, i.e. \$700,000. While this level of funds is vital and most appreciated, it increasingly is insufficient to satisfy the need, particularly as range state budgets for rhino conservation decline because of other, more human-oriented problems. For perspec-tive, just consider that RTCF funds must assist 5 species and 11 subspecies of rhino as well as at least 5 subspecies of tiger. If the funds are distributed equally among regions and species, then one-third, i.e., about \$250,000 would be available for Asian rhinos, \$250,000 for African rhinos, and \$250,000 for tigers. In Asia, such a distribution could provide only about \$80,000 for each of the three species of rhino. For comparison, the cost of 1 anti-poaching team for Sumatran rhino is about \$17–20,000/ year. So \$80,000 might support 3 or 4 RPUs. There are currently 40 RPUs operating for Sumatran rhino and there is need for twice that many. Similar cost/need anal-yses could be provided for the other 2 Asian and the 2 African species with their numerous subspecies.

Of course, all appeals to the Federal Government for funding are considered important and immediate by their advocates. However, some needs are intrinsically more immediate than others. The simple fact is that substantial support for rhinos and tigers is needed now. If adequate funds cannot be provided, the need will disappear because the rhinos and tigers will have vanished.

Ín summarv.

- Rhinos are still in crisis but stabilization and some recovery of numbers have commenced.
- Support from the RTCF has been a critical and catalytic factor in this improvement.
- There is need for support from the RTCF to continue and if possible to increase over the next 5–7 years. • Therefore, the IRF, the IUCN/SSC Asian and African Rhino Specialist Groups,
- and the AZA Rhino Advisory Group encourage Congress to: Reauthorize the Rhino and Tiger Act through the Year 2007 as proposed in HR
- 645
- Increase the amount of the appropriations to at least \$1 Million for Fiscal 2002, toward a goal of \$1,500,000/fiscal year in the near future.
  Reauthorize the African and Asian Elephant Conservation Acts, which provide
- substantial support for rhinos as well as the species for which they are designated.

As final comment, may I observe another reason that support from the United States for rhino conservation in Asia and Africa is both appropriate and ironic considering the history of the rhino family. The United States was long ago the center of rhino distribution on this planet. Rhinos were the most common large mammal in North America from about 40 until about 5 million years ago, long before the bison arrived. Native American rhinos disappeared because of ecological reasons not well known. However, through the RTCF, as well as the efforts of IRF and the AZA and its Species Survival Programs for rhino, the United States has the opportunity to help save the surviving species of this venerable and once American family of mammals from extinction.

Thank you Mr. Chairman and Members of the Subcommittee.

TABLE 1	WILD AND CAPTIVE POPULATIONS	<b>OF RHINOCEROS</b>	Vaar 2001
---------	------------------------------	----------------------	-----------

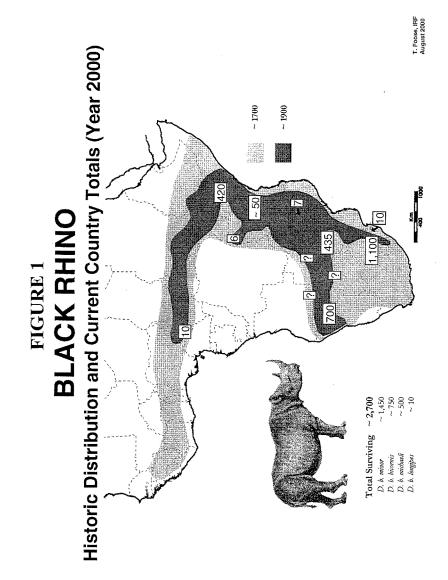
Year 2001	WILD CAPTIVE POPULATION POPULATION	ACK RHINO ~ 2,700 ~ 240	HITE RHINO ~ 10,400 ~ 740	RHINO SPECIES ~ 13,100 ~ 980	TOTAL INDIAN/NEPALESE RHINO ~ 2,400 ~ 140	VAN RHINO ~ 60 0	JMATRAN RHINO ~ 300 15	IINO SPECIES ~ 2,760 155	
	SPECIES	TOTAL BLACK RHINO	TOTAL WHITE RHINO	AFRICAN RHINO SPECIES	TOTAL INDIAN/NE	<b>TOTAL JAVAN RHINO</b>	TOTAL SUMATRAN RHINO	ASIAN RHINO SPECIES	VII SPECIES

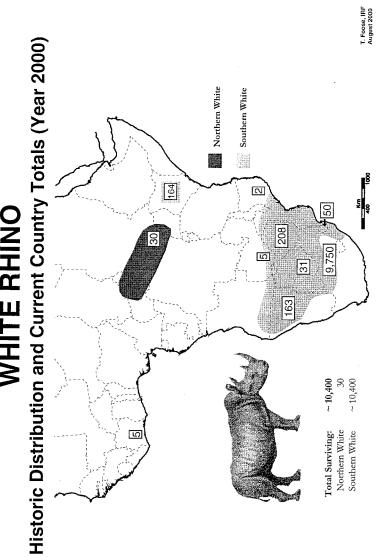
Source: IUCN/SSC African & Asian Rhino Specialist Groups & International Studbooks – March 2001

# TABLE 2 WILD AND CAPTIVE POPULATIONS OF RHINOCEROS

Ye	Year 2001	
SPECIES OR SUBSPECIES	WILD POPULATION	<b>CAPTIVE POPULATION</b>
Southwestern Black Rhino	~ 750	0
Northwestern Black Rhino	~ 10	0
Eastern Black Rhino	~ 500	~ 175
Southern Black Rhino	~ 1,450	~ 65
TOTAL BLACK RHINO	~ 2,700	~ 240
Northern White Rhino	30	10
Southern White Rhino	~ 10,400	~ 730
TOTAL WHITE RHINO	~ 10,400	~ 740
AFRICAN RHINO SPECIES	~ 13,100	~ 980
INDIAN/NEPALESE RHINO	~ 2,400	~ 140
Indonesian Javan Rhino	50-60	0
Vietnamese Javan Rhino	5-8	0
TOTAL JAVAN RHINO	~ 60	0
Eastern (Borneo) Sumatran Rhino	~ 50	5
Western (Sumartra/Malava) Sumatran Rhino	~ 250	13
TOTAL SUMATRAN RHINO	~ 300	15
ASIAN RHINO SPECIES	~ 2,760	155
ALL SPECIES	~ 16,000	~ 1,100

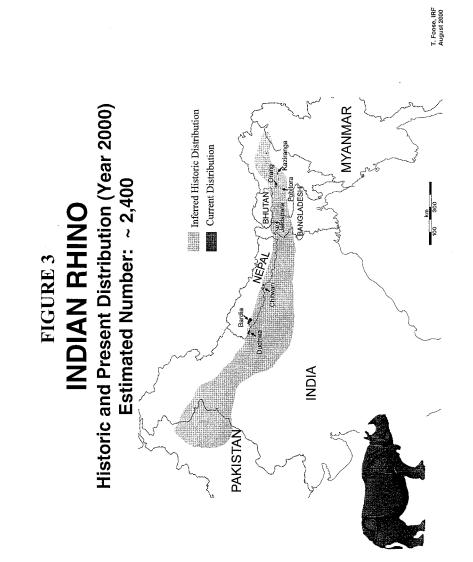
Source: IUCN/SSC African & Asian Rhino Specialist Groups & International Studbooks - March 2001

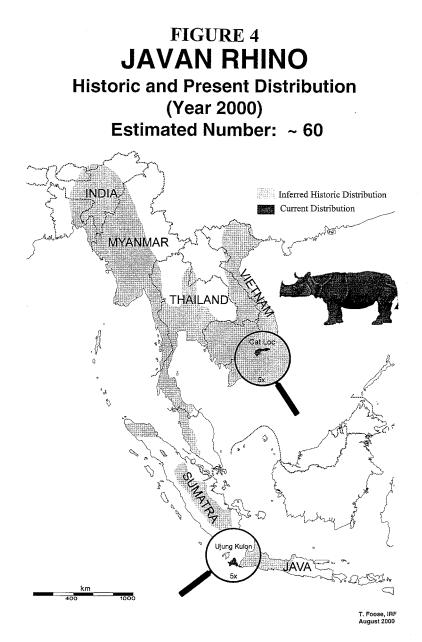


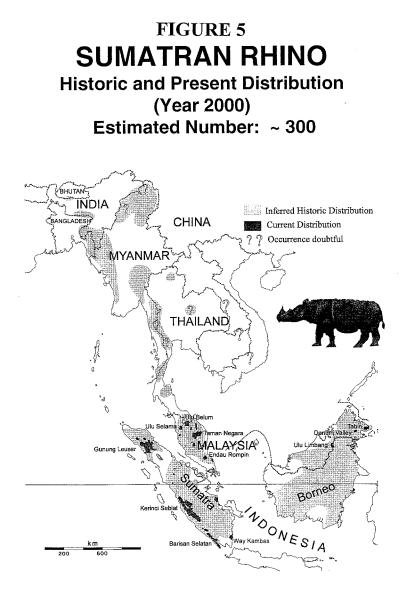


WHITE RHINO

FIGURE 2







T. Foose, IRF August 2000

Mr. GILCHREST. Thank you, Dr. Foose. I am not sure what Farley Mowatt would think of the plan for the nutria over the next couple of years.

I guess I would like to start with Mr. Berry. First of all, each of you had extraordinary testimony, from the wildly optimistic to the despair of pessimism. We will take your message to our colleagues, the appropriators, and will work very hard to increase as dramatically as we can this funding.

One of the potential targets for dollars is an unnecessary core project which might be about \$100 million that we could bring into this program, if we could just convince the energy and water appropriators that this particular core project is unnecessary. So maybe Neil and I will go after one. We will get our Subcommittee to target that.

Mr. Berry, you mentioned a poem by William Blake about tigers. Do you have that with you?

Mr. BERRY. I can get that for you for the record, Mr. Chairman. Mr. GILCHREST. Now, that is not the—

Mr. BERRY. "Tiger, tiger, burning bright" that we all remember from school and childhood. I will be sure we get that in to you today.

Mr. GILCHREST. You could e-mail that to the Subcommittee and our respective offices, I guess.

Is that William Blake?

Mr. BERRY. Yes, sir.

Mr. GILCHREST. William Blake?

Mr. BERRY. William Blake.

Mr. GILCHREST. You mentioned the problems in China, but the successes in Cambodia. Could you give us some idea about the differences in the local people, the political climate, the government, the university people you may have talked to? Why are you being successful in Cambodia and not in China?

Mr. BERRY. I should say we have just begun work and found signs of hope in Cambodia, Mr. Chairman. Recent surveys through some of the projects that we have been able to fund in some of the mountain regions of Cambodia found numbers of tigers in populations that we estimate between 500 and 700 in that region, and very good habitat, good prey base, a good habitat situation.

I don't think that those numbers are the result of any project specifically that has been underway as a result of the efforts of the past 5 to 10 years. I think it is more a result of the past history of Cambodia and the fact that they don't have the human population pressures in those regions that we found. The poaching situation obviously has not impacted on that region as significantly as it has, for example, in Burma, where similar studies, like we said, found no tigers in those areas.

I think some of the most optimistic work that is being done—and you hear the World Wildlife Fund talk about it—is this concept of corridor and linkage that is underway. And a critical area that we are working in partnership with WWF and the Fish and Wildlife Service is the Terai Arc, which is a very huge region on the border of Nepal and India. It is wonderful habitat of both forest, tall grass, low mountains. It is the foothills of the Himalayas. We have a number of protected reserve areas in existence already. For example, it is anchored in the southeast by the Chitwan Reserve, and there are a number of others. Working with the King Mahendra Trust and the Nepal and the Indian governments, we are developing that concept of corridor protection with those local communities between the reserve areas to provide much broader habitat potential for the future. That is an area rich in tigers that really has great hope for the future.

I think our most productive work to date I would put in India, Nepal, Indonesia, and the Russian Far East. I think with the results that we got from some of the initial science in Cambodia, we are going to try to continue to do work with WildAid and others there because I think obviously that population—if we can protect that and continue the growth rate there, it might spell hope for the future in reintroducing the tiger to Burma.

Mr. GILCHREST. It is amazing they survived the Khmer Rouge in the 1970's. When I was in Vietnam in the 1960's, on the Cambodian border, a fairly remote region, it wouldn't be uncommon for us at night to hear tigers. It fascinated us and gave us a cold chill at the same time.

Are there any tigers left, then, in any area of Vietnam, if they are in Cambodia?

Mr. BERRY. I am not aware. Tracy Walmer is our chief staff on the Save the Tiger Fund and our in-house expert on this, and we can provide you some more information.

Mr. GILCHREST. I know you are doing it with India and Nepal. With the tigers in Cambodia, is there any effort for a regional approach to connect what you are doing in Cambodia with possibly Vietnam and then maybe Laos and China?

Mr. BERRY. I think there is no question there is hope for that in the future. China may already be too far gone to recover.

Mr. GILCHREST. But if China is too far gone to recover, is there any area in China, if you can push a regional approach, that would be suitable habitat?

Mr. BERRY. There is no question the habitat potential is there in certain places in eastern China. But I think you heard from World Wildlife, because resources are limited, we really need to focus the resources on those areas where we can have the highest probability of success.

Mr. GILCHREST. I see. Is it worth, let's say, the government discussion, a group of government officials from our country and university people discussing this issue with the Chinese and their university people?

Mr. BERRY. Absolutely, and a lot of those discussions, for example, are underway now with, for example, on tiger parts and traditional medicine with the College of Traditional Medicine in China. We are trying to approach those discussions. That is going to be critical.

I think our most productive success we can have in China, though, is dealing with that issue and the issue of demand on the trade because that spells the future on the whole issue of poaching and the black market. So our campaign there is more focused in that regard than it is on reintroduction programs in that effort, because again trying to preserve them where those wild populations are sustainable now is really the primary focus of the funds.

Mr. GILCHREST. I have some more questions, but I am going to yield now to Mr. Abercrombie.

Mr. ABERCROMBIE. Just a couple, Mr. Chairman.

Mr. Berry, it is nice to see you and I am pleased that you are in this position. I am sure you are going to do a terrific job. With the Chinese question, did I understand you correctly that because of the interest in China in the commercial products associated with tigers that that might be the angle to approach this, that they will rapidly not have anything? They can fake it, of course, and I don't doubt that there will be plenty of that, but that would probably get around even in China in fairly rapid fashion.

Am I correct, then, that you are saying that the angle to come in at this is that they need to be working with us and other organizations in order to have a supply of tigers at all? And if that is the case, would they be talking about tigers in the wild or talking about tigers effectively being domesticated for harvesting?

Mr. BERRY. We are trying to encourage, working with practitioners of alternative approaches, to accomplish the same effective means without using tiger parts at all. The sustainable harvesting approach—there is clearly nothing to produce that in China now, and so what it is doing is fueling black market poaching in tigers in all of the other places in the world that are under pressure.

Mr. ABERCROMBIE. For import?

Mr. BERRY. Right, and so the efforts now that we are undertaking in China are a two-prong approach. One is working with the traditional practitioners, and the other is undertaking culturallysensitive advertising campaigns to convince populations that their use of these products is having the impact of forcing these species into extinction.

Mr. ABERCROMBIE. Excuse me, Mr. Berry, because my time is short. The only problem with that is if I understand the way it is operating in China, that will be used by the merchants to say you better buy it now and get it quick because it is going away and we are going to charge you more. And they could care less whether every tiger in the world is decimated; they will keep on going, and after that they will lie.

We don't need to pursue it further, but, Mr. Chairman, I think possibly in relation to contacting the Chinese or making some efforts, I think the only way we can make this work, including having survival in the wild, which I hope could possibly have some ecotourism implications or something—I don't know—phototourism or something, if the Chinese would ever allow it; that is so far down the line as to probably be almost abstract.

But it probably has to be in the line of, look, you are going to run out of this stuff and you are going to have everything else killed in short order anyway, so why don't we work toward the idea of domestication—and I don't mean that in any pejorative sense at all—maybe reserves or preserves or something of that nature, if only with the idea of some kind of harvesting, if you get enough to be able to do that.

I hope that doesn't offend anybody. I am trying to think how to save—it does offend you?

Ms. STEUER. May I?

Mr. ABERCROMBIE. Certainly.

Ms. STEUER. "Offense" is probably the wrong word, but I think I just take a different angle on it. IFAW has a very active office in China, in Beijing, where we work very closely with the Chinese government on the traditional medicine issue, in particular, not only as it relates to tigers, but as it relates to other Appendix I CITES-listed species like bears.

What we have found to be the really successful approach in this regard is that if you get to the practitioners and convince them that—and we have done so in the case of bears and are working on it in the case of tigers—that their approach—

Mr. ABERCROMBIE. Run that last sentence by me again. I am sorry.

Ms. STEUER. That is all right. If you work with the Chinese medicine practitioners, not just in China but elsewhere in Asian communities around the world, as we are doing in the United Kingdom and in the United States, which is now the second largest consumer of traditional medicine products in the world and where the demand has grown 280 percent in the last decade for traditional medicines, which are uncontrolled for the large part—

Mr. ABERCROMBIE. I understand.

Ms. STEUER. If you can get to the practitioners, what we have found in China, particularly in relation to bears, is that they can be convinced, and in the case of bear gall bladder products have been convinced to an increasing degree, that there are alternatives which work just as well for them and which don't, for lack of a better term, embarrass them into being the source of an endangerment, and in the case of the tiger for a species that has been an emblem for their nation and part of their nation's heritage for hundreds and hundreds of years. So we do think that the alternatives approach can work, but it takes time, and I think the turnaround is occurring in China and elsewhere.

Mr. ABERCROMBIE. Well, obviously, at this hearing we won't be able to pursue that in the length and depth that it requires, but perhaps on the funding side, Mr. Chairman, that is something that we need to look at and then need to figure out what to do.

You understand my motivation? I am trying to figure out how to make it work. Can you indulge me a moment more, Mr. Chairman? Mr. GILCHREST. Yes.

Mr. ABERCROMBIE. I want to make a transition, then, to Mr. Kirtland and I want to commend Feld for the work that it is doing in this regard.

Mr. KIRTLAND. Thank you.

Mr. ABERCROMBIE. It would not have ordinarily been thought of that Ringling Brothers could be a catalyst in this, and I think that that is one of the things that helps me think about, okay, how can we make this work, how can we induce others for their reasons.

I will tell you why. In politics, I have discovered the only way you get votes is to get people to vote with you for their reasons. Very seldom do people vote with you for your reasons. If they do, that is wonderful.

Mr. GILCHREST. That is how I got elected. [Laughter.] Mr. ABERCROMBIE. So what I was looking for especially in this context is what can we do to make a presentation that doesn't look like we are imposing something on them because it suits us, as opposed to working with them on something that they consider to be in their interests and that we are being supportive of them in that regard—and that includes not only other cultures, but I mean the private interests and non-profit interests in our own Nation and in the Western world—and to make it be something more than just recompense for the fact that Western society entered into all of these nations, after all, and set loose the forces of modernity which are now running rampant over traditional cultures without necessarily the sufficient time and capacity to make the transition to preserve those areas both physically and psychologically that helped to sustain the previous culture.

With that in mind, with the Center for Elephant Conservation, are you doing breeding with zoos in the United States and around the world with the Ringling Brothers elephants?

Mr. KIRTLAND. We would certainly like to. We have entered into a number of projects with other zoos. In fact, we have had very preliminary discussions with the Honolulu Zoo, in your own home State, about sending an elephant to Honolulu when they have the—

Mr. ABERCROMBIE. When we do the reauthorization and we go to the appropriators, is there any contemplation that perhaps we could put money up to work with you and similar private and public organizations to do cross-breeding in a serious way around the world?

I don't want to see non-profit organizations or even foundations set up from a profit-making organization like Ringling Brothers to have to sustain all of the expenses of sending animals to be able to do cross-breeding, because you want to get the genetic pool as broad as possible, right?

Mr. KIRTLAND. Absolutely.

Mr. ABERCROMBIE. And to move an animal is a traumatic experience for that animal, so it has to be done in a very sensitive way, and probably expensive as a result, right?

Mr. KIRTLAND. It is expensive. It is not necessarily traumatic. Our elephants move all over the country on a virtually daily basis.

Mr. ABERCROMBIE. Well, the elephants in South Asia, I notice, are willing to put up with human beings. That is remarkable on their part.

Mr. KIRTLAND. But it is expensive, as you said, and it is timeconsuming. We do need to look at easier ways to be able to move animals across national and international borders in terms of captive propagation because in many cases the captive propagation is going to be the only thing that is going to ensure the survival of some of these species.

Mr. ABERCROMBIE. But the Center is willing to utilize the existing elephant population in the Feld organization for this purpose, is that right?

Mr. KIRTLAND. Absolutely. We have animals there that are dedicated to breeding, and we will continue to do that.

Mr. ABERCROMBIE. It is kind of an interesting phrase. You are dedicated to breeding. Yes, I imagine they are.

[Laughter.]

Mr. ABERCROMBIE. Only in my imagination, though.

Do you have volunteers? Is that what you are saying?

Mr. KIRTLAND. We are working with other zoos and we would continue to work, and we would certainly look for other opportunities to broaden the relationships we have with other public display entities throughout North America and the world.

Mr. ABERCROMBIE. Mr. Chairman, one of the things I would like to suggest is perhaps in the funding side of it we look to that angle because I don't think we can necessarily expect the non-profit and/ or foundation area supported by profit-making entities to necessarily be able to swing all of the expenses. That might be part and parcel of some of the leveraging money that we take. The last question I have is—and anybody can answer this—am

The last question I have is—and anybody can answer this—am I correct that, like, say with the rhinos—Dr. Foose, when I had the opportunity to travel with Mr. Pombo on the CITES oversight and the Campfire program and we saw the rhino preservation and breeding activities that are taking place in southern Africa, it was very impressive. But the amount of money that you are talking about is so modest. I take it what you are saying is that that little bit of money leverages other dollars. Is that correct?

Mr. FOOSE. Very much so, yes.

Mr. ABERCROMBIE. So if we could increase even to some modest degree the base funding there, would that have the effect of being able to leverage additional dollars, do you think?

Mr. FOOSE. Without doubt, without doubt, it would.

If I might just comment on the discussion that you were previously conducting, the funds that are available for rhino and tiger and elephant are so limited and the highest priority, as some of the other witnesses have commented, is really to prevent the poaching that is occurring in the wild. And I don't pretend to know if something like this would be possible, but maybe to achieve what you were proposing in terms of trying to provide support to assist captive propagation, which we believe is also a very integral component of diversified strategies for conservation of all of these species, maybe there could be tax breaks for companies like Fed Ex, which has moved rhinos and elephants in the past.

Mr. ABERCROMBIE. Well, Fed Ex got a huge thing with moving the pandas, tremendous publicity.

Mr. BERRY. They have got a lot of publicity, but perhaps as this would become more routine and more frequent, if there could be some provisions that would—

Mr. ABERCROMBIE. Well, we are giving tax breaks to everybody else just for showing up and breathing, so I don't see why we couldn't do it when you are actually accomplishing something worthwhile.

Mr. GILCHREST. We will add that to the text when it gets to the House Floor.

Mr. ABERCROMBIE. That is a good point, but the Chairman has overindulged me for the moment and I am very appreciative of that. I just want to say how much I appreciate all of that.

I hope you are all supportive of the Campfire system. I was very, very impressed by that, and they have got terrible trouble now there from the politics in the area and I hope that this may be one way for the average person over there, as well as the animals we are seeking to work with and help survive, to survive all the rest of it.

Thank you very much, Mr. Chairman.

Mr. GILCHREST. Well, thank you, Mr. Abercrombie. It would be helpful and conducive, I guess, if we could recess to a large, open space, have lunch together and continue this conversation for the rest of the afternoon, but I have other commitments that are crying out for attention, as well as many of the rest of you. But I appreciate those questions and we will have further discussion on that, and some of those specific recommendations certainly will be put into the pieces of legislation that pass through here that would be appropriate to make all of this happen.

Mr. ABERCROMBIE. Just before we conclude, could we ask if there are some suggestions on—

Mr. GILCHREST. I have just got a couple of more questions.

Mr. ABERCROMBIE. I beg your pardon. I thought you were concluding.

Mr. GILCHREST. I am just going to sort of move through these expeditiously.

Ms. Steuer, can you comment on the recent African ivory sales that, on the one hand, seem to provide funds for that government to continue to help in the conservation efforts, versus the potential incentive for more poaching?

Ms. STEUER. A loaded question. The relatively small amount of funding that came out of the most recent set of ivory sales, which is the 1997 sale for Botswana, Namibia and Zimbabwe, did, from all the follow-up investigation, appear to go back into conservation programs in Botswana, Namibia and Zimbabwe. As Congressman Abercrombie just referred to the problem in Zimbabwe, I am not sure what we are going to be seeing from them in terms of conservation in the near future of their elephants.

We do expect additional requests for ivory sales to come at the next CITES Conference of the Parties from Zimbabwe, Botswana, Namibia, and we expect South Africa, potentially Tanzania as well. The issue all along, as you alluded to in your question, Mr. Gilchrest, is that whenever you fuel a demand, or for lack of a better term put a stamp of approval on a demand, it becomes extremely difficult to tell anybody living in western or central Africa or anywhere in Asia that while demand for ivory related to elephants living in Botswana, Namibia, Zimbabwe and South Africa is fine, demand for ivory from elephants in Cameroon, Chad, Ivory Coast, India, China—pick one—is not good.

Our information and the history is that the minute poachers and ivory traders believe that legal sales will begin again, they stock up. So all along our issue has not been technically what is going on in the countries that want to sell their ivory. It has been the impact of that on the rest of Africa and Africa's elephants, and the rangers are giving their lives everyday because of it.

Mr. GILCHREST. Dr. Robinson, at the beginning of Ms. Steuer's testimony she sort of brought us back to reality with the potential for real extinction of these species over the next few years. The way the program is presently structured and funded, which is pretty minimal, I guess, if nothing changes, do you see some of these species becoming extinct even with the program that we now have?

Dr. ROBINSON. Thank you, Mr. Chairman. I think what we are grappling with at the present time is minimal funding which is supporting on-the-ground conservation efforts in a number of locations. With our present level of funding, we will tend to slowly lose populations. They are going to slowly wink out across the population.

However, if we can take the available funding and really leverage it in a much more effective way, I am fairly optimistic that we are going to be able to hold on to all of these species. It is a statement of faith that I don't think we have to lose any of these species. We have been subject to years of gloom and doom about these species, and yet we have been able to hold on to them.

Species like the Javan rhino are really at the edge. If there is a species which is vulnerable, it is that kind of species. But even for that species, with effective conservation, I think we can actually hold on. So the situation is not optimistic. We are slowly losing a lot of fights across the landscape, but I don't think that is cause for loss of hope.

Mr. GILCHREST. Mr. Kirtland, are there any artificial insemination activities with any of these animals?

Mr. KIRTLAND. Yes, there is, and it is starting to show some success. But artificial insemination should not be really looked at as the answer to replace natural breeding, but there has been some success. The Indianapolis Zoo, for instance, has just had a couple of elephants born through artificial insemination; I think the Pittsburgh Zoo, as well. But it is limited and it is far more difficult in reality than letting the male and the female get together and do what they need to do.

Mr. GILCHREST. Is there ever any difficulty moving animals from one country to another?

Mr. KIRTLAND. Yes, there is, and that is one of the issues that we addressed earlier. We would like to see more cooperation between governments. In fact, Ringling Brothers tried to import an animal from Canada several years ago. The permit languished for almost 18 months. It was never formally denied, and the end result was the animal ended up in Europe, where he promptly impregnated several females over there.

Mr. GILCHREST. What was the reason for the delay in this country?

Mr. KIRTLAND. I think the problem is in CITES, which unfortunately does not make a distinction between wild populations and domestic population. The Asian elephants in North America are domestic elephants; they are not wild elephants. And by prohibiting their propagation, it does absolutely nothing to ensure the survival of the wild populations. But because CITES prohibits breeding for commercial purposes, it interferes and impedes the propagation of the domestic population.

Mr. GILCHREST. How was the animal able to be transferred to Germany and impregnate females there but not impregnate females here?

Mr. KIRTLAND. The Canadian government authorized the export from Canada to the United States immediately, but our permit request sort of died in the Fish and Wildlife Service.

Mr. GILCHREST. So that is an area that needs some attention from us?

Mr. KIRTLAND. Absolutely.

Mr. GILCHREST. Dr. Foose, you said the next 5 to 7 years are critical with Asian rhinos. What will happen in the next 5 to 7 years? Does the program that we now have need to increase the funding? Are there political obstacles, monetary obstacles, habitat problems? If we get past the next 5 to 7 years, does it look bright? Mr. FOOSE. It doesn't look bright, but there certainly is some

Mr. FOOSE. It doesn't look bright, but there certainly is some basis for optimism. As Dr. Robinson commented, there really is no reason to lose these species, and the history of rhinos actually does provide some encouragement.

I alluded briefly to the fact that the most abundant kind of rhino on the planet today, the Southern White Rhino, which now is over 10,000 individuals, was down to fewer than 40 in 1900. And through very, very strict protection, they have been able to recover to the number that exists today. The same is true of the Indian Rhino. The Indian Rhino was probably down, certainly in India, to fewer than 40 individuals, maybe as few as 20, and a similar situation in Nepal, and they have been able to recover to a couple of thousand individuals.

Mr. GILCHREST. When you get to that few animals, you have such a small gene pool there that that seemingly doesn't have an effect on the species?

Mr. FOOSE. It can, but it is more important how long the population remains small rather than how small it gets. If a population becomes very small but is permitted to recover very rapidly, all of the evidence, both theoretical and experimental, indicates that you do maintain a viable gene pool.

We still have the potential of conserving viable populations of all of the taxa of rhinos, but it is going to require even greater commitment than has occurred in the past, and a very important contribution to that would be increased appropriations for the Rhino and Tiger Conservation Fund.

Mr. GILCHREST. Well, Neil and I will look for that core project. I wish we had more time.

Mr. Berry?

Mr. BERRY. Mr. Chairman, I think it would be a disservice to this Committee—and I have not heard it raised today and Karen and I were discussing this. All of these issues are interconnected, but there is one issue in Africa, the issue of AIDS in Sub-Saharan Africa, that is also inextricably linked, I believe, with the conservation of these species.

Mr. GILCHREST. The issue of what?

Mr. BERRY. Of AIDS in the human population. Its impact in Sub-Saharan Africa and the economic impact, the pressures it places for increased demand on black markets, on poaching, down to the ability to maintain anti-poaching staff and personnel, is one that we are finding, and I know many conservation organizations are finding increasingly hard. So I think as the Congress deals with these issues, we would be remiss not to raise also—

Mr. GILCHREST. We will take a close look at that. Thank you all very much. Again, I wish we had a lot more time to deal with this, but we will make an effort to stay in touch with all of you and pursue these efforts very strongly and, with some of your recommendations, travel to distant and beautiful parts of the globe and take a look at it.

Thank you all very much.

I have got a couple of housekeeping chores here. The record will remain open for 10 business days for anybody to include anything into the record. I would also like to say that Macy Bell and Kevin Frank did a

great job, a great job.

The hearing is adjourned.

[Whereupon, at 12:46 p.m., the Subcommittee was adjourned.]