

Testimony

of

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before the

**House Subcommittee on Fisheries, Wildlife & Oceans
Committee on Resources
U.S. House of Representatives**

regarding the

H.R. 50, To reauthorize the African Elephant Conservation Act and the Rhinoceros and Tiger Conservation Act of 1994, the "*Multinational Species Conservation Funds Reauthorization Act of 2000*"

and

H.R. 465, To reauthorize the Asian Elephant Conservation Act of 1997, the "*Asian Elephant Conservation Reauthorization Act of 2007*."

March 13, 2007

Madame Chairwoman, Members of the Subcommittee: Thank you very much for the opportunity to comment on the reauthorization of the *African Elephant Conservation Act*, the *Rhinoceros and Tiger Conservation 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 112-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, Chairwoman Bordallo, 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, iconic, and 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. In Africa, numbers of the formerly numerous black rhino have declined from perhaps 65,000 in 1970 to about 3,500 today, and the species has been extirpated over large areas of Africa. While the species has begun to rebound in some places, like Kenya, due to effective conservation efforts, one of the four sub-species, the West African Black Rhinoceros (*Diceros bicornis longipes*), was declared to be extinct by the IUCN in 2006. 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. And while the white rhino is doing well in southern Africa, the northern sub-species, *Ceratotherium simum cottoni*, is critically endangered and on the verge of extinction.

Population numbers of elephants are much greater. However, according to the recent *African Elephant Status Report 2007*, published by the IUCN African Elephant Specialist Group, reliable estimates for the species are only available from 51% of this species range. For the African elephant, the dramatic decline in numbers from about 1.2 million to 600,000 in the 1980s was halted by vigorous conservation action, including the ivory trade ban. Numbers over the last few decades have been more stable, with probable increases in population numbers in the savannas and woodlands of East and southern Africa in the past decade. But recently, an increase in hunting for ivory trade and for bushmeat is affecting populations in many parts of Africa, leading to declines in the rarer forest sub-species in the forests of West and Central Africa: numbers for these areas

suggest that perhaps as few as 100,000 individuals remain. Work by WCS soon to be published by the Public Library of Science in *PLoS Biology*, suggests significant declines in both numbers, and range, in Central Africa. Elephant poaching continues throughout the Congo Basin, including in protected areas, despite the current CITES ban in ivory trading. Poaching for ivory remains the principle reason for poaching, with high levels of observed poaching near roads and other access points. Increasingly, in both Central and West Africa, remote protected areas are becoming the last refuge of the species.

For the Asian elephant the situation is far more severe. Estimates of Asian elephants range from 30,000 to 50,000, fully half of which are found in India. But these estimates are undermined by a severe deficit of systematically collected data. Reliable population estimates of many African elephant populations have been available for decades: the first such data for elephant populations in Southeast Asia was published in 2005 on data collected by WCS staff, with US F&WS support, for two populations in southern Sumatra, Indonesia. While numerical data on population numbers is lacking, range collapse across Southeast Asia is certain. In the Sumatran Province of Lampung in Indonesia there were 12 populations of elephant in the mid-1980's. WCS surveys, funded in part by the USFWS, revealed that only three were extant in 2002. 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 of fewer than five thousand individuals remaining in the wild: again, absolute estimates are difficult, but trends show a decline across most of the species range. In 1995, the WCS and the WWF conducted the first range-wide priority setting for tigers. We revised this study in 2005, with assistance from the Smithsonian Institution, and funding from several key donors, including the USF&WS. The results were disturbing: tigers now occupy 7% of their historical range, and in the past decade estimates of area occupied by tigers has dropped by as much as 41%.

India remains a stronghold for tigers, and strong U.S. Government support in the past has been critical in shoring up tiger and prey populations. Support to WCS has assisted us in increasing the numbers of tigers in critical reserves in the southern Indian State of Karnataka, and provided some of the best data on the distribution and abundance of tigers, and their prey, in India. But recent episodes of poaching – fueled by trade to Tibet and China – have resulted in decline and local extinction of some populations in India, most notably in the Sariska reserve in Rajasthan. A decade of surveys by WCS, and colleagues in many range state governments, have shown rapid range contracted in Cambodia, Vietnam, Laos, Burma, and Thailand. The species remains critically threatened in Southeast Asia.

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 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 including bills such as that proposed to save some of the rarest and most threatened species of *Great Cats and Rare Canids*.

The impacts on these programs and the conservation of these species have been real and significant. 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 of rhinoceros, elephants and tigers.

The Wildlife Conservation Society is strongly supportive of conservation strategies that focus on individual species, and this subcommittee has heard previous testimony from many WCS staff. 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. I would like to review some of the extensive impacts of the funding that is provided under these bills, and have organized my comments into the following themes:

- Conservation Impact
- Reach, Efficiency and Speed
- Innovation & Information
- Leverage

Conservation Impact: HIGHLIGHTS OF CONSERVATION SUCCESSES

Wildlife conservation in the early 21st Century often relies on slowing the rate of decline of a species to buy time to find long-term solutions and strategies for recovery. To save rhinos, elephants, and tigers, we have to have accurate and current data on the distribution and status of these species, and an understanding of the threats that drive their declines. Such data helps us identify priorities, and work to reverse declines. And no matter how bad the situation may be locally, the reality is that in the last decade there have been notable successes in the conservation of many of these species. There is space for optimism, and even some data to support this optimism. And for all these species, I have no doubt that the funding and support of the U.S. Government for the conservation of these charismatic species has been instrumental in helping us grow that optimism. Let

me touch on two examples of the conservation impact of the work sponsored by the funds administered by the USFWS on behalf of the American people.

In Africa and Asia, WCS has worked as the key NGO partner, and a strong scientific advisor, to the CITES program on the Monitoring of Illegal Killing of Elephants (MIKE). Through the MIKE process, WCS has helped developed state of the art and harmonious methods that are applied across study areas to produce data that can be analyzed and compared in aggregate. These data were produced to a mandate of the Parties to CITES, and represent some of the best data on the status of elephant species ever collected, particularly for forest elephants in Asia and Africa. While there remains a need for better information, the work, and the key support of the MSCFs, have been invaluable.

In the Russian Far East, with support of the USFWS and other donors, staff of WCS, Russian government agencies, and other national and international NGOs, completed the first range-wide tiger survey in a decade. Results show that the tiger population has been stable over the past 10 years (428-502 tigers), despite social upheaval in this remote area of the former Soviet Union. Tigers were reported north of the Amur River for the first time in three decades. The long-term, and sustained support of the Rhino-Tiger Fund, no doubt contributed strongly to this remarkable finding. The news is hopeful, and tells us that recovery is not only on the horizon, but occurring now. A recent workshop, sponsored by the U.S. Fish and Wildlife Service, brought together government officials from both China and Russia to promote the trans-national recovery of tigers in Northeast China, and connectivity between and among populations of tigers in the region. The meeting led to establishment of a governmental Working Group at a policy level, as well as collaboration on the ground among NGOs who are building teams of national conservationists, all working together to ensure a future for the Siberian tiger.

Reach, Efficiency and Speed: EXTENSIVE

The Wildlife Conservation Society has been a key partner with the U.S. Government in both Africa and Asia in supporting conservation of elephants, rhinos and tigers. We have also been a grateful beneficiary of funds. However, the reach of these funds extends well past WCS, well past the U.S. NGO community, and across the range states of these species. Since 2002, these three funds have made nearly 500 grants to dozens of institutions across Asia and Africa. The grants have assisted international NGOs, local NGOs, academic institutions, and government agencies from across the range states of these species. Thousands if not tens of thousands of people have been involved with these projects. With low overheads, and rapid review of proposals, the programs are run efficiently and have a maximum impact.

One of the hallmarks of the granting process is the ability to be nimble and provide key seed funding rapidly. This has assisted WCS, and other organizations, in being the first responders to key conservation challenges and opportunities. Recent support from the African Elephant Fund has allowed WCS to conduct the first elephant surveys in South Sudan in 30 years, provided funding to help rapidly secure the Langoue Bai, one of the most remarkable wildlife areas in the Congo basin that was identified by Dr Fay in his

Megatransect, and provided funds to survey Salonga National Park, in the Democratic Republic of Congo, Africa's largest forest park, for elephants, and apes.

Funding has been responsible for ensuring that we have better information on which to base conservation action across the complete range of the species of interest. In short, the large number of relatively small grants has ensured that the reach and impact of these activities has been extensive. The grants have also supported a huge range of activities that are critical to successful conservation, from monitoring key wildlife populations, to the development of alternative livelihoods for local communities, to the development of education and outreach programs for children and adults.

Innovation & Information: US PIONEERS NEW METHODS

American science has always been at the forefront of technological innovation, and the creativity of conservationists the world over has been catalyzed with funds from the USFWS. I want to offer a few examples.

Counting animals that are headed to extinction may seem a futile task. But if we cannot get good baseline data on the status and distribution of a species, we can neither set priorities, nor can we evaluate the impact of our conservation interventions. U.S. Government support has been critical to the development and testing of new ways to assess population status of key species. This includes:

- Development and implementation of the use of remote sensor cameras that allow us to accurately count populations of tigers and other species. WCS has pioneered these methods with USG support, and now these methods have become widespread in their use for many species, and have replaced and/or supplemented other less accurate techniques.
- Counting forest elephants has been problematic in both Asia and Africa. Support from the USFWS to WCS on both continents has greatly improved the standard methods of using the density of elephant dung to estimate elephant population numbers.
- New results using DNA derived from elephant dung has allowed staff of WCS and the Smithsonian to estimate elephant populations on the Nakai plateau in Laos. Simultaneous estimates using DNA methods, and dung counts, came up with statistically indistinguishable population estimates. This is the first formal proof of the technique working for elephants and one of the first formal proofs of a DNA based mark-recapture population estimate.
- To establish conservation priorities for tigers across their range, WWF, WCS, and the Smithsonian Institution compiled over 3000 tiger survey locations made over the period 1995-2005. We then applied a new satellite-based land use and cover dataset, and a number of other global datasets, as filters to help identify key conservation areas for tigers, and to rank these areas for conservation priority.

Innovation can also take the form of on-the-ground conservation implementation. The form of such implementation is changing rapidly, from the days in which strictly

enforced protected areas were the only solution, to one in which we look to protect species across a wide landscape including areas of extensive human presence and use. Learning how to coexist with elephant and tigers may, perhaps, be one of the greatest challenges in modern conservation. Support from the USG has led to many new innovations including:

- Crop-raiding elephants pose a danger to farmers and their livelihoods, are often viewed as pests, and may be persecuted. Electric fences, and other methods of excluding elephants from crops are expensive, and have showed varying effectiveness. But elephants hate chilli peppers, and this has led to a new set of programs that use capiscum oil derived from chilis to deter elephants from crop raiding. At the same time, markets for chili peppers are strong. With a decade of support from WCS, the Elephant Pepper Development Trust (EPDT) promotes the farming and marketing of chilli peppers, providing farmers a new cash crop in rural areas in Africa, simultaneously reducing human-elephant conflict. Poaching of elephants and other wildlife is often driven by the need for cash to support basic needs.
- The WCS Zambia Program’s Community Markets for Conservation” (COMACO), is a model network of producer depots linked to a trading center that offers low-cost, high value agricultural markets for organized producer groups, conditional on compliance with conservation guidelines aimed at reducing conflict and poaching. Agricultural products gain added value through the distribution to urban markets under the COMACO brand name, *It's Wild!*
- Having a tiger in your backyard can be distracting, and dangerous. Support from the Rhino-Tiger Fund has helped train a group of Russian conservationists and veterinarians to develop the first tiger response team in Asia. Modeled on, and trained by, teams that capture and relocate grizzly bears in Montana, the Tiger Response Team provides a non-lethal alternative to dealing with problem tigers, and tigers that just end up in the wrong place.
- Satellite telemetry has become a moderately standard wildlife research tool. A radio transmitter that uploads to the ARGOS Satellite system tracks wide-ranging animals as they move across the landscape. But the use of these tools in closed canopy forest has proven problematic. Support from the African elephant fund allowed WCS conservationist Steve Blake to successfully crack this problem, and collect some of the first data on habitat use (and human avoidance) by forest elephants in the Republic of Congo

Leverage: ENORMOUS

Measuring leverage is not easy. In the reports to the USFWS, financial leverage may range from \$1.50 to \$4.00 for every dollar granted. But such measures of direct financial leverage underestimate the overall impact of these grants. Clearly, the development of new approaches and technologies leads to huge leverage, with better conservation being done more cheaply across Asia and Africa. Grants from the USG funds can also amplify fund raising opportunities for other organizations. Funding from the Rhino-Tiger Conservation Fund has been instrumental to WCS in the development and on-going

implementation of tiger conservation projects across the range of the species. The funds have directly leveraged private support from the Save the Tiger Fund of the National Fish and Wildlife Foundation which receives \$1,000,000 a year from ExxonMobil. In addition, early support from the USG has helped WCS develop our *Tigers Forever* initiative which, in turn, has garnered commitments of \$10 million over the next decade. It is impossible to calculate how the funds indirectly leveraged each other, but after a decade of working on tiger conservation, I have no doubt the leverage of the USG funds is enormous.

The USFWS grants under these Funds also have tremendous policy leverage. For example, direct support of the CITES-MIKE process has helped establish a critical baseline for population numbers, species distribution, and illegal killing. While imperfect, the data are critical to moving forward the debate on the trade in elephant ivory, and will be critical to the doubtless heated discussion around this issue that will take place at the next Conference of the Parties (CoP14) in The Hague in June, 2007.

Leverage has many other measures. For instance, by identifying and funding key issues, and by identifying key priorities, the USG funds greatly amplify the investment of other governmental and non-governmental organizations. Perhaps most importantly, the grants made by the USFWS under these Acts help build the national capacity of government staff across Asia and Africa, develop the capacity and abilities of local NGO activists, and support the growth of a healthy civil society in many countries in which civil society is poorly developed, or actively repressed. The direct conservation benefit of these funds is high and worthy. But perhaps one of the best justifications for reauthorization, and continued funding of these activities, is the indirect benefit they bring the USG in pursuit of our foreign policy goals. Small grants, widely dispersed, to governmental and non-governmental organizations, implementing conservation activities in remote areas of developing countries extend the reach and visibility of the USG in a positive and relatively inexpensive way.

As we discuss the needs for these four charismatic species today, I would be remiss if I didn't mention the needs of other significant players in the ecosystem—predator species like great cats and rare canids. WCS is working with our colleagues in the conservation community to enact a bill modeled after the ones we've been talking about today, to support the conservation of more than a dozen species of predators threatened by habitat loss, loss of prey, illegal hunting for the medicinal trade and disease. We look forward to working with the Committee and Subcommittee to enact the Great Cats and Rare Canids Act.

In closing, the Wildlife Conservation Society urges the Subcommittee to move swiftly on these bills:

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

2. We, together with a number of other conservation NGOs, strongly recommend increased funding of these bills.
3. 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 of conservation action.

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.