

**PARTNERS IN CONSERVATION**



ADVISORY COUNCIL



CONSERVATION COUNCIL



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2012

PARTNERS IN CONSERVATION

COVER: Fishing village on  
Kiwaiyu Island in Kenya

Spirit Bears in the  
Great Bear Rainforest,  
British Columbia, Canada



**ICCF's Partners in Conservation are fulfilling a vital role within the conservation community and in the management of natural resources globally. The collaboration consists of 50 leading organizations from the private and intergovernmental sectors who understand the value of natural capital and are taking action by investing in conservation and sustainable development. In doing so, these Partners in Conservation are helping to advance American economic and security interests.**

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## PREFACE

Underpinning U.S. power and the world's largest national economy are remarkably productive natural systems—forests and wetlands, coral reefs and fisheries—wonderfully complex living networks that give us clean air, clean water, and ample supplies of fish, wood products, and other assets. The availability of sufficient natural resource supplies to any one country or region has rippling effects across the world, and most of the world's leaders have come to appreciate the importance of safeguarding these supplies for global economic prosperity and stability. The value that flows from nature to human communities worldwide—the planet's total natural capital—is estimated to contribute as much as US\$72 trillion to the global economy.

Government and business leaders have traditionally given little thought to the value of natural systems because environmental concerns have been considered as externalities to growth and development. The fluctuation in global commodities markets over the last few years, however, has given pause to consider such systems in a new light. The current economic climate presents an apt moment to make the economic case for conservation: conservation is not charity; it is a vital component of sustainable long-term growth.

If we are to meet the natural resource demands of the 21st century, our conservation investments must be effective, with long-term resource considerations brought into decision-making processes. A growing number of communities and businesses are using new tools to evaluate where conservation can cultivate public wealth and add value to the “triple bottom line” of people, planet, and profit; where restoring a wetland instead of building a water treatment facility could save tens of millions of dollars in cost while providing the same or greater public benefit; or reforestation of unproductive farmland could prevent flood damage while improving soil quality and overall biodiversity.

As global levels of consumption rise due to increased populations and living standards, increased demand for natural resources will stress our supplies of potable water, arable land, fish stocks, wood products, and other renewable and nonrenewable resources that people depend on for their livelihoods. Given the value that ecosystem goods and services have to the overall global economy, it is vital that communities and businesses understand the importance of natural assets and consider the implications of their utility in the short and long term. Unless we address the economics of natural capital in an integrated manner, we will experience irrevocable loss of natural wealth that will unleash economic hardships far worse than ever before.

Failure to internalize and account for natural assets in investment decisions, development scenarios, and other processes will challenge not only our economic security, but our national security as well. U.S. government and military leaders have long realized that there are security implications associated with the unsustainable use of natural resources, but today a much more focused field of study has emerged to address issues of natural security. Stability of countries and regions rests firmly on the sufficient, steady, and sustainable supply of and access to natural resources. Global population and consumption trends will place large portions of the world under high stress for resources that underpin all national economies and food supplies. These pressures will generate economic dislocation, tension, instability, and even conflict.

With the new realities of globalization and interconnectedness, a broader set of national security objectives will require governments and citizens to think differently than in the past. The military alone will be unable to address the threats to security and foreign policy interests caused by resource scarcity. U.S. Secretary of Defense Robert Gates noted in May 2009 that the challenges we face ahead will "...require whole-of-government approaches." The new framework to address the security of natural resources—natural security—must connect the capacities of the U.S. government Defense, State, Interior, Agriculture, and Commerce departments whose work relates to issues of resource utilization and pressures on society and development.

Even whole-of-government efforts, however, are insufficient to address the sheer magnitude of the problems faced globally. Solutions need to include partnerships with the private sector. Business and NGO leaders have a large role to play in implementing effective solutions and addressing the challenges. Government, corporations, and the conservation community must work together to address the breadth of economic, social, and political interests at stake.



"Let us conserve  
the foundations  
of our prosperity."  
*Teddy Roosevelt*

*Sitka Harbor, Tongass National Forest, Alaska*

## THE VALUE OF EDUCATION



*Congressional Member dinner briefing honoring Ian Khama, President of Botswana*

ICCF provides a framework that links legislative decision-makers, leaders of industry, and NGOs so that public and private sector actors can share information and better leverage one another's efforts to address conservation challenges. ICCF's Partners in Conservation collaboration consists of 50 leading organizations from the private and intergovernmental sectors who understand the value of natural capital and are taking action by investing in conservation and sustainable development. In doing so, these Partners in Conservation are helping to advance American economic and security interests.

ICCF's educational forum is essential to U.S. leadership in conservation-based solutions to natural resource challenges, including those that undermine our development goals. Participating organizations are able to cultivate strategic connections across various sectors and thereby work together to address natural security issues. ICCF's educational briefings benefit from the scientific and technical expertise of partners in the network and improve our decision-makers' understanding of the value of natural capital, the security threats posed by unsustainable use, and the best means of reaching solutions.

Through ICCF's Partners in Conservation network, the international conservation community and global decision-makers are able to engage in a constant dialogue to develop cooperative approaches and share the best models of natural resource wealth management™. ICCF's model has been successful over the past six years, and is now being replicated in several countries in Latin America and Africa. As new ICCF partner networks emerge around the world, ICCF will maintain bridges between them so that members and countries can continually improve their responses to international resource challenges.

## WHY INTERNATIONAL CONSERVATION IS IMPORTANT TO U.S. INTERESTS

### National Security

We have seen in the past, and we are seeing now, that the loss of critical natural resources is a factor that can lead to instability and eventually conflict. In regions critical to U.S. interests, American leadership from the public and private sectors is needed to build the capacity to conserve natural resources and enforce legal and sustainable resource extraction. Afghanistan's across-the-board environmental degradation—from the clearing of 70 percent of their forests to the limited availability of clean water—has decimated their economic prospects. President Obama's March 2009 strategic review of Afghanistan correctly described "sustainable economic development"—specifically "restor[ing] Afghanistan's once vibrant agriculture sector"—as vital to America's overall security mission. "It's cheaper... to help a farmer seed his crops than it is to send our troops to fight."

**"Sustainable development is a compelling moral and humanitarian issue. But sustainable development is also a security imperative. Poverty, destruction of the environment and despair are destroyers of people, of societies, of nations, a cause of instability as an unholy trinity that can destabilize countries and destabilize entire regions."**

*Secretary of State Colin Powell*

In an era of globalization, domestic security and international security are inextricably intertwined. The fallout of failed states and destabilized regions inevitably reverberates to the United States, whose interests touch every industry and sphere of influence in the world. The United Nations Environment Programme (UNEP) estimates that over the past 60 years, 40-60% of conflicts have links to resource scarcity, and that this link doubles the risk of a conflict relapse within five years of settlement. Military and humanitarian responses, while important, only address the surface of the issue, and conflicts tend to relapse over time. For key regions in Asia, North Africa, and elsewhere, securing and managing the resource base for sustainable economic development is necessary to ameliorate drivers of conflict and prevent the need for costly military and humanitarian responses.



*U.S. Army officers greet local Afghans while on a patrol near the Enzarkay Pass*

### Economic Security

Poor natural resource management around the world has a direct impact on the American economy. Illegal and irresponsible resource extraction depletes the total

resource base of the global economy and undermines the value chains of multinational corporations, including American businesses.

Just as today's sovereign debt crisis is threatening to derail the global economy, a global natural debt crisis caused by systematic over-borrowing from the planet's natural capital and asset base is looming that could be vastly more damaging. Current mismanagement of natural assets is costing the global economy around US\$6.6 trillion a year—the equivalent of 11% of global gross domestic product. For example, worldwide, illegal fishing is estimated to be about one-fifth of reported catches and cause economic losses between US\$10 billion and US\$23.5 billion annually. These numbers represent lost opportunities for U.S. companies and higher prices for American consumers, and often these illicit traders have connections to other types of organized crime and insurgent groups.

All economic activity depends on biodiversity and ecosystem services, directly or indirectly. American businesses are taking steps to mainstream sustainable use of natural capital and remove the space occupied by competitors who seek short-term advantage by exploiting resources today at the cost of long-term growth.

*Panjshir Valley in north-central Afghanistan*



### Global Influence

For both economic and national security reasons, there are many countries whose interests intersect with those of the U.S. yet lack the capacity to implement or enforce natural resource management strategies. In these cases, it is a matter of good foreign policy to work together to establish natural resource wealth management™ programs and collectively develop lasting solutions to promote prosperity and stability throughout the world.

Natural resource vulnerabilities can serve as opportunities for positive engagement with all stakeholders. Through such cooperation, communities can be empowered to see

the direct benefits of conservation to their own lives. Assisting in education, training, and capacity building can achieve American foreign policy objectives while also advancing the capabilities of other nations to securely manage their own resources.

Representatives of conservation NGOs who work in the field are often the first Americans that people from developing countries meet; positive experiences generate goodwill and help long-term foreign relations. American agencies and NGOs which are helping establish sustainable resource practices in developing nations are paving the way for receptive markets for businesses and building a foundation for dialogue, consensus building, and cooperative policy formulation.

**“...much of our national security strategy depends upon securing the cooperation of other nations, which will depend heavily on the extent to which our efforts abroad are viewed as legitimate by their publics... [T]o truly harness the “full strength of America,” as I said in the National Defense Strategy, requires having civilian institutions of diplomacy and development that are adequately staffed and properly funded.”**

*Secretary of Defense Robert M. Gates*

### Well-Being

It is estimated that one-half of all modern medicines and more than 90 percent of traditional medicines are based on natural sources like rainforest plants and marine sponges. Ecosystem degradation and biodiversity loss are restricting future development and supplies of new medicines and treatments. The United Nations Environment Programme estimates that at today's extinction rates, one major new drug will be lost every two years.

Nature provides the many other things that we need for healthy lives: clean water and air, abundant foods, and medicinal plants that are the basis for global health care. However, irrevocable damage to the ecosystems that provide these resources is threatening the health and welfare of the world's population. It is important for us to understand these links and act now to protect these natural systems on which our lives depend.



*An artisanal fisherman drags a homemade net over the beach to catch crabs, Abrolhos National Park, Brazil*

# ICCF SUPPORTS CONSERVATION LEADERS IN THE U.S. CONGRESS

ICCF works with the leadership of the U.S. Congressional International Conservation Caucus (ICC), which comprises more than one-third of the U.S. Congress, to identify critical conservation issues and generate the broadest audience for ICCF educational programs. ICCF's support of the Members of the ICC has helped the Caucus grow and remain bipartisan in nature for over 10 years.

**“House and Senate members from across the political spectrum look to ICCF for vital information delivered in an unbiased and pragmatic way. This inclusive and objective approach has made ICCF a respected and effective voice on and off the Hill.”**

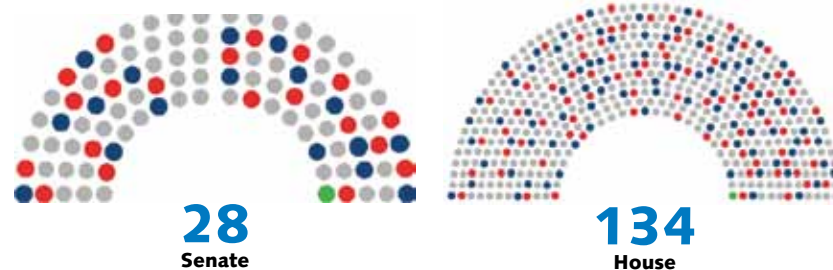
*Sen. Rob Portman (R-OH)*

ICCF's new focus on maritime and coastal natural resource issues is quickly attracting bipartisan support for the Oceans Caucus, largely due to the popularity of the balanced approach that ICCF has taken with terrestrial issues. This educational agenda allows conservation leaders to quickly identify places of agreement where the U.S. should be leading global conservation. The scientific and technical expertise, experience, and resources of ICCF's Partners in Conservation help the U.S. Congress better leverage the tools of the United States to promote sound management of natural resources worldwide in partnership with the private sector.

**“Many of the biggest threats of the coming years will come from regions with resource insecurity, and the education ICCF brings policymakers is critical to our understanding of the underlying nature of these threats and how the U.S. must address them.”**

*Sen. Tom Udall (D-NM), Founding ICC Co-Chairman*

## U.S. ICC Membership in the Senate and House of Representatives



### Mission statement of the ICC:

The Members of the International Conservation Caucus share a conviction that the United States of America has the opportunity, the obligation and the interests to advance the conservation of natural resources for this and future generations. The mission of the Caucus is to act on this conviction by providing the strong U.S. leadership necessary to conserve the world's most biologically rich and diverse places.

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C.W. Bill Young  
Don Young  
Fr. Patrick Conroy (Chaplain)

## CCN Members

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 Argentina  
 Austria  
 Bahrain  
 Belgium  
 Belize  
 Botswana  
 Cameroon  
 Central African Republic  
 Chad  
 Chile  
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 Peru  
 Romania  
 Senegal  
 Sierra Leone  
 Singapore  
 South Africa  
 Spain  
 Tanzania  
 Timor-Leste  
 United Kingdom  
 United States of America  
 Zambia

## ICCF'S CONSERVATION COUNCIL OF NATIONS

As the International Conservation Caucus in the U.S. Senate and U.S. House of Representatives gained strength, Congressional leaders sought better relationships with and insight into the regions in need of U.S. assistance. ICCF recognized that there was not enough interparliamentary collaboration between nations to sufficiently address global or transnational conservation challenges, and in 2011 launched the Conservation Council of Nations (CCN). The CCN brings parliamentary leaders together to promote dialogue and exchange best practices for better natural resource management.

**The Conservation Council of Nations (CCN) is a global network of legislators and parliamentarians that collaborate and exchange best practices and solutions for international conservation policies.**

The CCN differs from formalized intergovernmental treaty membership bodies by creating and enhancing direct channels for constructive exchange of ideas and solutions among public and private stakeholders. The membership base of the CCN consists of country representation, primarily through the consulates and embassies located in Washington, D.C. To date, more than 40 countries have opted to participate in the CCN network. The CCN staff act as secretariat to coordinate the programming and meetings of the network and to help identify the conservation priorities of member countries.

The major focus for 2012 is to help foster open dialogue through the establishment of conservation caucuses. The CCN emulates the model embodied in the U.S. Congressional International Conservation Caucus: informal discussion groups represented by all political parties which meet regularly to learn more about how improved management of natural resources can help to achieve mutually agreed upon policy objectives. By focusing on conservation caucuses as a primary hub for education and dialogue, countries are empowered to act upon their own national agendas while benefitting from the knowledge, wisdom, and best practices of other CCN members. Developed and developing countries in the network engage in meaningful dialogue with their counterparts to share perspectives on project implementation and ideas for future alignment of policies.

Several countries have already established conservation caucuses which have provided a non-partisan channel for all parties in the legislative branch of government to have a voice and engage in a meaningful dialogue about why conservation matters and why natural resource management is important for our common future.

The CCN benefits from a close partnership with the ICCF and its corporate and NGO Partners in Conservation, as well as from support of the Global Environment Facility (GEF) and UNEP. As the caucuses grow, ICCF's network of scientific and technical experts will expand to regional hubs in Africa, South America, and Asia, adding even greater representation to ICCF's broad international partner framework.

## IT'S ABOUT PEOPLE

This year, the Partners in Conservation portfolio focuses on the ways in which recognizing the value of and conserving natural capital directly benefit businesses and local communities. ICCF and its collaboration of private sector leaders are dedicated to maximizing the annuities which people draw from their natural assets so that better health, more stable communities, and prosperous lives may be realized alongside healthy ecosystems.

Our reliance on market prices as an indicator of value can lead to failure in measuring and managing economic value not priced in the market. The economic invisibility of natural wealth to market participants is a significant contributor to the loss of biodiversity and degradation of ecosystems, which are the critical life-support systems that underpin the global economy. Continual over-borrowing from our natural assets as if they were endlessly renewable can create scarcities that translate into lost lives, homes, and jobs. Protecting and maintaining natural systems is critical to ensuring continued opportunities and prosperity for businesses and communities.

Conservancy projects in developing countries have shown that when ownership of and responsibility for managing natural wealth shift from governments to local communities, enterprising individuals establish sustainable wildlife management programs and turn eco-tourism into an economic anchor. By recognizing and utilizing the economic value of their natural assets, communities and countries are able to maintain healthy populations of cornerstone species while simultaneously generating development opportunities that improve their quality of life.

Business models that put natural assets on the ledger and then manage those assets in a way that increases their productivity over the long term find ways to add value to the businesses' bottom lines and the communities in which they operate. Many industry



Morondava, Western Madagascar



leaders are advancing the idea that understanding and accounting for the ecosystem services that underpin their businesses—such as fresh water, clean air, and flood protection—reduces their risks of value chain disruption and allows them to seize profitable opportunities.

Economic valuation of biodiversity and ecosystem services helps connect ecological impacts and dependence to not only long-term profitability of businesses, but also the public wealth of the communities in which businesses operate. The health of ecosystems surrounding communities is essential to their capacity to support lives and livelihoods, as well as mitigate the impacts of natural disasters and the subsequent property loss. It is estimated that the decimation of mangrove forests off the coasts of Indian Ocean countries allowed the infamous 2004 tsunami to cause tens of millions more dollars in damage than would have occurred had these coastal defenses been left intact. Areas with healthier coastal ecosystems had much better protection and suffered much less damage than those where ecosystems had been degraded.

Businesses, NGOs, and governments working together have created myriad conservation solutions that thrive in the free market. When large consumers of ecosystem services invest in natural infrastructure, we can develop self-sustaining models that safeguard and cultivate natural capital, as we have seen with The Nature Conservancy's water funds (page 68). Global opportunities for certified sustainable goods and services are growing. The World Business Council for Sustainable Development estimates that this market will grow to US\$2-6 trillion by 2050, indicating that the private sector's role in natural resource management will be an increasingly important one.

The pages ahead depict how leaders of the business and non-profit world are ensuring sustainable supply chains and creating opportunities for long-term economic growth. Natural resource conservation is not philanthropy; rather, it is essential to creating jobs, growing enough food, and purifying enough water to sustain a growing world and prevent violent conflict.



*Rice fields in a hill tribe village, near Sapa, Viet Nam. According to the World Water Council, global fresh water consumption has increased by 600% during the twentieth century, accompanying a tripling of the population in the same period.*

## SECURITY AND PROSPERITY

While the focus areas in this booklet each present a unique challenge to American economic and national security, they are connected with and affect each other. Addressing these challenges individually, or simply treating them with humanitarian aid or military response, will not be enough to advance U.S. interests around the world.



### FOOD SECURITY

Ingenuity in farming and fishing practices is essential to feeding the expected 9 billion people that will inhabit the planet in the year 2050. Without taking a holistic view of the food economy, soil quality and marine ecosystems may be degraded and overtaxed to levels from which they cannot recover.



### GLOBAL HEALTH

Biodiversity and natural services provide the support systems for all life. We depend on them to purify our air and water, make soils fertile, and provide the chemical and genetic material from which medicines are derived. The accelerating loss of ecosystem services across the world is endangering our access to these necessities for human health and welfare.



### NATURAL SECURITY

Long-term stability of political and economic systems hinges on the reliable, affordable, and sustainable supply of natural resources. In the 21st century, pressures on the natural goods and services on which life depends will be the most persistent and dangerous threat to nations' security.



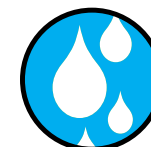
### POVERTY ALLEVIATION

The economic costs of failing to conserve natural capital fall most heavily on the world's poorest communities, where 60-70% of the population directly rely on forests, rangelands, freshwater, and agriculture for their livelihoods and subsistence. Securing the resource bases of developing regions is key to economic growth and establishing political stability.



### SUSTAINABLE ECONOMIC DEVELOPMENT

To secure and cultivate vital natural assets, development must take into account its impacts and dependence on biodiversity and ecosystem services. Sustainable economic development works with nature to improve people's living conditions.



### WATER

Water scarcity affects one in three people on every continent of the globe. The situation is getting worse as needs for water rise with population growth, urbanization, and increases in household and industrial use. Lack of access to clean water is emerging as one of the most troubling challenges of our time.



*A man in a dhow, a traditional sailing vessel, crosses a coral reef at high tide, Diani, Kenya. Fishing is an important driver of the local economy.*

The private sector is playing an increasingly large role of integrating vital natural capital into business and state decision-making. Identifying and valuing the natural services that underpin economic activity is key to ensuring natural services will be protected for future use.

## PRESERVING BIODIVERSITY AND LANDSCAPES TO BENEFIT COMMUNITIES AROUND THE GLOBE



**PARTNERS:**

Conservation International  
The Nature Conservancy

**PROJECT SITES:**

Australia  
Brazil  
Canada  
China  
Mexico  
U.S.

**WEBSITE:**

3M.com

In 2001, the 3M Foundation broadened its focus by creating an environmental giving category, which supports the sustainability of the Earth's ecosystems. To date, 3M has donated more than \$21 million to support environmental organizations and projects including species preservation, water conservation, forest protection and restoration, and creation of protected areas, all of which provide significant benefits to local communities.

3M has partnered with The Nature Conservancy (TNC) to protect the three toed sloth, golden lion tamarin, and dozens of endangered species of plants and animals in the tropical forests of Brazil. In British Columbia, the Darkwoods project will restore caribou habitat and other critical species with 3M support, in part, helping them secure the single largest private land purchase for conservation in Canadian history.

Species protection is critical to maintaining healthy ecosystems, as well as to health, incomes, security, and other aspects of human wellbeing.

**To date, 3M has donated more than \$21 million to support environmental organizations and projects including species preservation, water conservation, forest protection and restoration, and creation of protected areas.**



The Nature Conservancy: Crown of the Continent from Montana to British Columbia

In 2005, 3M collaborated with Conservation International to help restore threatened forests in China. The mountains of Southwest China, which form the headwaters of the Yellow and Yangtze Rivers, are home to many rare species. Much of this region has been degraded and the mountains have become one of the world's most critically threatened biodiversity hotspots. 3M donated \$4 million to support the restoration of degraded forests to preserve the forest ecosystem on which millions of people depend. The last year of the project focused on designing payment for watershed services to add economic impact to the water conservation pilot project.

3M provided a \$500,000 grant to protect one of the largest tropical savanna grass lands, located in Australia. This grant helps TNC and indigenous communities protect forests and floodplains. A 2008 grant supports a micro-watershed project in Brazil, a project with China's nature reserves, and the forests of Mexico's Yucatan Peninsula. All of these contribute to the overall economic security and wellbeing of the surrounding communities by providing valuable products and services.

3M also supports conservation efforts within the United States, including the following:

- **A \$5.1 million grant** to TNC to preserve and restore prairie in the Tallgrass Aspen Parkland region and support conservation efforts at two preserves along the Rio Grande River.
- **A \$500,000 grant** to help connect two existing Conservancy preserves in Texas and create a 32,000-acre protected area.
- **A \$3 million grant** to TNC for its work on the Paint Rock River and Sharp-Bingham Mountain Preserve.
- **A \$1.5 million grant** to help retain Minnesota's northern forest as one of the few intact forests of its size left in the U.S. Forests are home to more than half of all land-based species and provide a vast array of natural services. They are a large contributor to the livelihoods of millions of people, particularly the impoverished.
- **A \$1 million grant** for two of the largest conservation acquisitions in North American history that knit together a 60-million-acre network of protected public lands. The economic value of the services provided to communities by these landscapes and ecosystems is exponentially greater than the initial monetary investment.

Through partnerships with premier conservation organizations, 3M is working to protect threatened ecosystems that provide natural services, underpin local economies, and contribute to human health, livelihoods, and wellbeing. Together, we are making the world a better place for us and future generations.



The Nature Conservancy: Darkwoods, British Columbia, Canada



**PARTNERS:**

- Antarctica Climate Change Project
- The Australia Museum's Lizard Island Research Station
- Birdlife International Save the Albatross
- College of the Atlantic Allied Whale Program
- Chengdu Research Base of the Giant Panda
- Friends of Conservation
- Hawk Conservancy Trust
- Kilimanjaro Porters Assistance Project
- Kiwi Encounter
- Joyce Poole 'Elephant Partners' Project
- South Carolina Aquarium Sea Turtle Hospital
- Travel Operators for Tigers

**PROJECT SITES:**

Worldwide

**WEBSITE:**

akphilanthropy.org



A&K Vice Chairman Jorie Butler Kent joins in the delight of Maasai children as they go on an AKP-sponsored "Rhino Watch" Field Trip in Kenya's Masai Mara National Reserve.

## HELPING NATURE TO THRIVE & CULTURES TO FLOURISH<sup>SM</sup>

Abercrombie & Kent Philanthropy (AKP) is dedicated to preserving natural habitats, protecting wildlife and promoting the welfare of indigenous communities throughout the world. AKP supports grassroots projects across the globe spearheaded by dedicated local experts in conservation, education, community development and public health. These initiatives provide testing and education that allows people with HIV to lead

**In Kenya, where over 60% of the 36 million people live on less than a dollar a day, biodiversity conservation must contribute to the economic welfare of the local communities through neighboring national parks and reserves, or it will not be successful.**

productive lives, dig wells to bring families clean bacteria-free water, teach and shelter impoverished children, and enhance and preserve our natural world.

Founded and led by Jorie Butler Kent, Vice Chairman of renowned international travel company Abercrombie & Kent, AKP traces its beginnings to 1982 with its support for projects launched to preserve endangered wildlife and habitat in the Masai Mara region of Kenya. Today, A&K's more than 50 companies and offices worldwide sponsor projects designed to benefit local communities and help conserve their cultural and natural treasures.

Over the years AKP has led the travel industry in forging a 21st Century approach to philanthropy, linking local projects which conserve resources and help people in need with compassionate travelers who want to give something back to the communities and lands they visit. Rigorous oversight ensures that 100% of every donation is sent to local projects and put to worthy use.

### Sharing Our Passion for Conservation

AKP continues to support local conservation efforts to preserve the rich cultural heritage and natural treasures of the Masai Mara. Funding for Elephant Partners is helping researchers monitor, protect and create a network of safe-havens for the Mara elephant population. Borrowing from the mantra of western ranchers in the U.S.—“good fences make good neighbors”—AKP is assisting efforts to fortify with chain-link fencing traditional ‘boma’ enclosures made from acacia branches, which eliminates predation on domestic livestock and local revenge killings of lions and leopards, whose survival is threatened.

### Empowering Local Communities

Ongoing AKP support for the grassroots initiatives of Friends of Conservation (FOC) over the past three decades has enabled this local NGO to become a trusted institution that responds sensibly to issues relating to wildlife conservation and natural resource management, and a permanent partner in conservation of the Masai Mara National Reserve and the greater Masai Mara area.

In Kenya, where over 60% of the 36 million people live on less than a dollar a day, biodiversity conservation must contribute to the economic welfare of the local communities through neighboring national parks and reserves, or it will not be successful. AKP is helping FOC foster a constituency for conservation in the Mara through workshops that address 21st Century concerns—from HIV AIDS & Sanitation Awareness to Wildlife Conflict Mitigation, Conservation Enterprise Training and Community Forums.

At the same time FOC Conservation Clubs established with AKP support in 50 Mara schools emphasize to the future stewards of the entire Masai Mara area the importance of a thriving ecosystem for the Maasai people. The “Rhino Watch” program brings students on nature-based field trips into the Masai Mara National Reserve and gives Maasai children the opportunity to view their rich natural heritage as international visitors do, and experience firsthand the economic benefit that sustainable tourism provides.



For three decades AKP has funded grassroots conservation initiatives in the Greater Masai Mara Region of Kenya.

With the core support of AKP, the FOC Community Scout project continues to expand its mission in the Masai Mara region of Kenya, protecting and preserving the vast biodiversity of the region and empowering the Maasai people who steward this global treasure.





## LIVESTOCK ADVANCING LIVELIHOODS AND CONSERVATION IN KENYAN LANDSCAPES

Kenya's arid and semi-arid landscapes are renowned for their wildlife, including the endangered Grevy's zebra, wild dog, and black rhinoceros in addition to robust populations of elephant, wildebeest, giraffe, and antelope. While Kenya enjoys a well-developed system of national parks and reserves, private conservancies and local communities are key partners in making sure land remains open and available for wildlife and their migrations. Wildlife spend approximately 70% of their time on community land outside protected areas, where they regularly encounter communities who are dependent on pastoralism for their livelihoods. Here, humans and their livestock have coexisted with wildlife for thousands of years, and each has historically moved over vast tracts of land in search for pasture and water.

Over the last four years, the African Wildlife Foundation (AWF) has launched and refined strategies which target local pastoralists in two wildlife-rich landscapes, which AWF terms African Heartlands, to improve livestock production and rangeland management and in return gain better access to markets in order to increase their profit.

**Over the last four years, the African Wildlife Foundation (AWF) has launched and refined strategies which target local pastoralists in two wildlife-rich landscapes to improve livestock production and rangeland management and in return gain better access to markets in order to increase their profit.**



### PARTNERS:

AgriTrade  
Community Market Access Companies  
Royal Netherlands Embassy, Kenya  
OI Pejeta Conservancy  
UN International Fund for Agricultural Development (IFAD)  
USAID—SCAPES

### PROJECT SITES:

Samburu and Kilimanjaro landscapes in Kenya

### WEBSITE:

[awf.org](http://awf.org)

Kenya's pastoralists face a series of challenges including inefficient market systems, lack of commercial skills, and unpredictable weather patterns. Cultural traditions, wherein people view cattle as a source of wealth, have led to excessively large herds, which in turn degrade grasslands making them unusable to livestock and wildlife both. There has also been increasing tension between people and wildlife as they compete for resources. Supporting pastoralists to manage land well and keep it open for wildlife also has benefits for Kenya's tourism industry, an important source of foreign exchange.

Given this context, AWF recognizes the importance of supporting pastoralists to improve their practices and find new ways to strengthen the value chain. Working with pastoralists from nine group ranches in the Laikipia District in northern Kenya, AWF provided a private sector partner, the OI Pejeta Conservancy (OPC), with a US \$350,000 soft loan on a revolving basis to buy livestock at premium prices from those communities that adhere to agreed conservation and governance practices. Participating livestock is tagged and branded for effective monitoring. OPC then fattens the livestock before selling either live animals or carcasses to high-end butchers in Nairobi, Kenya's largest market. In southern Kenya, AWF is working with the private firm AgriTrade to help community producer groups to access real-time market and price information through use of mobile phones and billboards, and facilitates AgriTrade's purchase of livestock directly from producers, for fattening and subsequent marketing.

Both schemes are designed to reward pastoralist communities for sustainable rangeland management practices compatible with wildlife with access to premium markets for their livestock. AWF complements this with further outreach work to communities to reduce conflict between wildlife and people, for example by designing and building bomas, or corrals, which resist nighttime predation from lions and other carnivores, improved daytime herding practices, and planning and improving the distribution of water points.

Laikipia County—Samburu Heartland



Laikipia County—Samburu Heartland



Laikipia County—Samburu Heartland





**American  
Forest & Paper  
Association**

## BETTER PRACTICES, BETTER PLANET 2020

### Continuing AF&PA's Commitment to Sustainability

Sustainability is the foundation of the forest products industry and how its businesses operate, in no small part due to the inherent dependence on renewable and recyclable natural resources for paper and paper-based products.

Throughout the American Forest & Paper Association's (AF&PA) history, its members have set and met goals focused on sustainability—from greenhouse gas emissions to recovery of paper for recycling—and as a condition of membership, companies are also required to source fiber from well-managed lands in order to protect life-sustaining forests.

Millions of people worldwide depend upon forests—which cover nearly one-third of the world's land areas—for survival. Additionally, forests provide a broad range of ecosystem services that are crucial to sustaining human lives and livelihoods, including: water flow regulation and purification, prevention of desertification, maintenance of soil quality and provision of organic materials, erosion control, providing habitat for critical species of plants and animals, providing services necessary to agriculture in



rural communities throughout the developing world, and providing resources such as timber, processed wood, paper, rubber, and fruits.

AF&PA and its members are committed to sustainable forestry. In the United States, forest inventories are at their highest level in decades, due in large part to the increased focus on sustainable planting and harvesting practices. Unfortunately,



**Sustainable practices—forest management, efficient manufacturing processes, energy and water conservation, worker safety, and fiber recovery and recycling—are an integral part of the forest products industry's dedication to protecting the environment and meeting economic and social commitments.**



this is not yet the prevailing attitude in some parts of the world. However, by promoting policies like the 2008 Lacey Act amendments, together industry, government and conservationists can work to counteract this alarming trend.

In 2011, AF&PA leadership set a course to explore how to further its commitment to sustainability, contributing to the environmental, economic and social aspects of the communities in which member companies operate and to society. The result of that process led to a new sustainability initiative: Better Practices, Better Planet 2020.

The idea behind the initiative is to set forth one of the most extensive collections of quantifiable sustainability goals for a major U.S. manufacturing industry. Each goal is targeted for achievement by 2020, and progress toward those goals will be measured and reported every other year beginning in 2012.

Five specific, measurable goals have been established, including increased paper recovery; increased energy efficiency; reduced greenhouse gas emissions; increased use of certified fiber; and increased worker safety. The association also committed to analyze how it might be able to reduce the industry's future water consumption. And, of course, work will continue on promoting policies that eliminate illegal logging around the globe.

Setting the goals and holding the industry accountable for achieving them go hand in hand. In March, AF&PA announced that the paper industry successfully recovered 66.8 percent of paper for recycling, and in mid-2012, AF&PA will report on the industry's progress in its biennial Sustainability Report. Sustainable practices—forest management, efficient manufacturing processes, energy and water conservation, worker safety, and fiber recovery and recycling—are an integral part of the forest products industry's dedication to protecting the environment and meeting economic and social commitments. Better Practices, Better Planet 2020 will help the industry take that dedication to the next level, while continuing to operate in a complex business environment.



#### PROJECT SITES:

United States

#### WEBSITE:

[afandpa.com/sustainability](http://afandpa.com/sustainability)



Scan the QR code for up-to-date news and information about AF&PA's sustainability initiative.

**PARTNERS:**

WWF

**PROJECT SITES:**

Kenya  
Mozambique  
Tanzania

**WEBSITE:**

group.barclays.com/  
Citizenship



Photo credit: Brent Stinton / Getty Images / WWF - UK  
WWF Sustainable Carving Project based in Mombasa, Kenya

## ENHANCED RESOURCE MANAGEMENT THROUGH PROACTIVE GLOBAL CITIZENSHIP

At Barclays, we have a clear sense of our business purpose: to help individuals, businesses and economies progress and grow. For us, the term Citizenship captures this purpose and directs how we use our resources, expertise and people to create long-term value for all our stakeholders.

In the first instance, Citizenship is about contributing to growth in the real economy, creating jobs and supporting sustainable growth. Second, it's about the way we do business: putting our customers' interests at the heart of what we do, and managing our social and environmental impacts responsibly. Third, it's about supporting our communities through investment programmes and the direct efforts of our employees.

We engage on environmental issues on multiple fronts. We manage our operational impacts, we provide products and services for environmental and cleantech markets, and we work to identify and manage environmental risks.

In 2008, Barclays launched a partnership with WWF to support communities in East Africa to utilize their natural capital more sustainably. The PEARL program—Preserving Eastern Africa's Resources and Livelihoods—trains local people to assess their business dependencies and impacts on biodiversity and ecosystem services, and seize opportunities for sound, efficient and profitable use of their natural assets.

The partnership has enabled communities to tackle the most pressing threats to the natural wealth and future welfare of the region. Two of the focus areas are discussed below.

### Good Woods Sustainable Carving

The WWF Good Woods carving project in Kenya was established to protect the

country's coastal forests and the futures of the estimated 80,000 local people whose income depends on the traditional carvings they sell to tourists.

The Forest Stewardship Council (FSC)-approved project has been successful in persuading carvers and farmers to switch from slow-growing hardwoods to fast-growing species.

WWF also supports an initiative to identify farmers falsely selling logs as FSC-certified to carvers, and helped develop an ID card system to increase accountability and carver confidence.

WWF has delivered training to carvers to help them successfully market their products to help create a viable sustainable export business.

### Rumaki Seascape Programme

Fish is the main source of food and income for many communities in coastal Tanzania—so it's vital that local people are able to manage marine resources sustainably.

WWF's Rumaki Seascape Programme works with local communities and the Tanzanian government to improve management of marine and coastal resources. The project creates opportunities for local people to secure their livelihoods and increase their income.

Barclays and WWF are working together to expand the programme, extending the capacity of microfinance savings groups, training communities and district officials in collaborative fisheries management; raising awareness of the marine environment, legislation, rights and policies; and supporting new small business enterprises.

Our support has helped strengthen the capability of more than 70 microfinance groups in the region, which has in turn led to an increase in the number of large loan providers, creating greater opportunities for small businesses.

We've worked with local Beach Management Unit representatives and village government leaders to raise awareness of the importance of sustainable fishing. Beach Management Unit members are actively participating in the voluntary enforcement of fisheries law, helping to significantly reduce illegal fishing.

The PEARL program is developing environmental management models to ensure that Eastern Africa's rich natural wealth delivers sustainable community benefits, providing a firm foundation for individual livelihoods and economic growth.

**The PEARL program—Preserving Eastern Africa's Resources and Livelihoods—trains local people to assess their business dependencies and impacts on biodiversity and ecosystem services, and seize opportunities for sound, efficient and profitable use of their natural assets.**



Photo credit: Brent Stinton / Getty Images / WWF - UK  
The PEARL program has helped communities and families in East Africa take ownership of and generate sustainable profits from their natural resources.



## SHAPING A HEALTHIER FUTURE FOR FISHERIES WITH SCIENCE-BASED MANAGEMENT AND CONSERVATION



**PARTNER:**  
ISSF

**PROJECT SITES:**  
Worldwide

**WEBSITES:**  
bumblebee.com/  
about/sustainability/fisheries  
iss-foundation.org

As a seafood company, no single aspect is more important, or more central to, Bumble Bee Foods' sustainability program than ensuring the responsible harvesting and management of seafood we provide to our consumers. Chris Lischewski, President and CEO of Bumble Bee Foods, conveys a strong message that "Sustainability is not an option; it is essential to doing business in the seafood industry—whether fishing, processing or retailing. It is our responsibility to ensure that the seafood we provide to our consumers is sourced from stocks that are harvested and managed in a manner that not only meets today's needs but, equally importantly, ensures a healthy supply for future generations. Without responsible fisheries management, those of us who depend on the seafood industry have no future."

The responsible harvesting and science-based management of fisheries is a key component in ensuring long-term sustainability of fish stocks. Bumble Bee has taken a strong leadership role in this area, particularly in the management of tuna stocks which provide the source for a major

**It is our responsibility to ensure that the seafood we provide to our consumers is sourced from stocks that are harvested and managed in a manner that not only meets today's needs but, equally importantly, ensures a healthy supply for future generations.**

Researchers aboard a vessel in the Indian Ocean get up close with a shark while testing techniques to lure the non-targeted marine life away from a floating object.



Photo credit: Fabien Forget/ISSF/MADE

portion of our business and offer millions of Americans an affordable and nutritious source of protein.

In 2009, Bumble Bee became a proud founder of the International Seafood Sustainability Foundation (ISSF). ISSF is a global partnership among scientists, tuna processors representing nearly 75% of the world's shelf stable tuna production, and WWF, the global conservation organization. This unique combination of industry, science and the environmental community is committed to driving positive change in tuna fisheries through direct action of its participants.

The ISSF mission is to undertake science-based initiatives for the long-term conservation and sustainable use of tuna stocks, reduction of by-catch and promotion of ecosystem health. The strategy and focus of the ISSF addresses head-on the major sustainability challenges facing the global tuna fishery through applied science, advocacy and direct action:

- **Control** fishing capacity
- **Mitigate** bycatch (unintended capture of non-targeted species)
- **Eliminate** illegal, unreported and unregulated (IUU) fishing
- **Expand** data support
- **Advance** performance in monitoring, control, and surveillance
- **Improve** overall tuna stock health

In its first two years, ISSF and its participants have committed to a number of actions aimed at ensuring long-term sustainability of tuna including: agreement to traceability standards from capture to plate; not sourcing tuna caught using large scale drift nets or from IUU fishing; sourcing from boats with unique vessel identifiers; and funding and supporting a multitude of sea turtle conservation projects.

A significant area of focus and action has been in reduction of bycatch where ISSF is facilitating a globally coordinated, \$12 million three-year at-sea project to identify best practices, new techniques and enhanced technologies that will allow fishers to minimize the amount of non-targeted fish and other marine life captured as a result of purse seine fishing for tuna. This research is being shared with vessel crewmembers through workshops hosted in communities around the world, fostering a direct dialogue that can have an immediate impact on the practices of fishers who supply the world's processors with tuna.

In the summer of 2011, ISSF released the "Make the Commitment" global improvement plan which calls for best practices and commitments across purse seine, longline and pole and line fisheries that we believe can eliminate half the discarded bycatch in purse seine fisheries by 2014.

Marine researchers carefully handle a yellowfin tuna onboard a vessel in the Indian Ocean. Before the tuna is released, it is equipped with an electronic tag, which allows the team onboard to track the fish and determine its habits and survival.



Photo credit: Fabien Forget/ISSF/MADE



**PARTNERS:**

Namibian Ministry of Agriculture  
Polytechnic of Namibia  
University of Namibia  
United States Agency for International Development

**PROJECT SITE:**

Otjiwarongo, Namibia

**WEBSITE:**

Cheetah.org



Namibia is home to the largest remaining population of wild cheetah.

## REVERSING HABITAT LOSS IN NAMIBIA

In 2001, the Cheetah Conservation Fund (CCF) initiated an innovative program to implement an economically feasible solution to a problem that was causing ongoing loss of cheetah habitat—“bush encroachment”—which has destroyed more than 10 million hectares of savanna in Africa.

### The Problem: Loss of Habitat from Thorn Bush Encroachment

Bush encroachment—the steady proliferation of intruder species of acacia thorn plants that eventually convert African savanna to choked bush lands—continues to be a huge problem within Namibia and throughout Africa, causing severe habitat destruction, loss of biodiversity, and economic loss for local communities. The root cause of bush encroachment is overgrazing and fire suppression, which changed the mix and quality of plant biodiversity, and fencing, which changed the migration patterns of animals and restricted access to feeding grounds. Hunting and the introduction of livestock further reduced the quantity and mix of wild browsers and grazers, and the cumulative effect resulted in the conversion of savannas to dense, acacia-dominated thickets with little grass cover. Today, an estimated 10-12 million hectares in Namibia are severely impacted by bush encroachment. The change from mixed grassland/bush land savannah to encroached bush land changes the mix and quantity of prey species available in

A worker places invasive thorn bush into a chipper. The chips will then be processed into compressed fuel logs.



the habitat. And because cheetah hunt using bursts of speed to overcome prey, the presence of thick bush hinders their ability to successfully hunt.

### The Start of a Solution

In 2001, the United States Agency for International Development (USAID) provided a grant to CCF to study this problem and investigate alternatives. Additional help from key organizations such as the Namibian Ministry of Agriculture, the Polytechnic of Namibia, and the University of Namibia enabled careful study of harvest and restoration techniques. The result was a proposal to create a new commercial enterprise that would harvest thorn bush, process it into compressed fuel logs, and sell the fuel logs to western markets for a profit. A further grant from USAID of U.S. \$1 million provided the initial capital for the formation of a company, CCF Bush (Pty) Ltd., and a plant in Otjiwarongo, Namibia, to manufacture and sell fuel logs under the brand name Bushblok.

The success of Bushblok has been impressive—annually more than 2,000 tons of Bushblok fuel logs are manufactured and sold to distributors in Europe, the United Kingdom and South Africa. Hundreds of hectares of Namibian land in the heart of cheetah habitat are cleared of intruder thorn bush each year, a number that may be small when compared to the scope of the full problem, but an encouraging start nonetheless. The program has garnered accolades such as the Tech Museum Intel Environment Award and, most recently, the Tyler Prize for Environmental Achievement. New initiatives are underway to investigate markets for other biomass products such as fuel pellets, charcoal, and even electricity generation in a country that produces very little of its own power. The project must be scaled up to return the “large landscapes” that cheetahs and their prey require to survive. CCF has developed a protocol for “rewilding” captive cheetahs in Namibia that has seen the successful release thus far of seven formerly captive cheetahs, but habitat must be reclaimed from thorn bush before these magnificent animals can be returned to the wild.

CCF's Bushblok program is a prime example of the public and private sectors working together to create innovative conservation programs that not only protect iconic species, but also pave the way for prosperity in local communities.

12 million hectares of Namibian savanna have been lost to invasive thorn bush species.



The result was a proposal to create a new commercial enterprise that would harvest thorn bush, process it into compressed fuel logs, and sell the fuel logs to western markets for a profit.



## OPENING HAPPINESS IN A HAPPIER BOTTLE: COCA-COLA'S PLANTBOTTLE™ PACKAGING



**PARTNERS:**

- CARE
- H.J. Heinz Company
- Imperial College—London
- Institute for Energy and Environmental Research—Germany
- The Nature Conservancy
- UNDP
- USAID
- WWF

**PROJECT SITES:**

Worldwide

**WEBSITES:**

- [thecoca-colacompany.com/citizenship/plantbottle.html](http://thecoca-colacompany.com/citizenship/plantbottle.html)
- [thecoca-colacompany.com/citizenship/water\\_main.html](http://thecoca-colacompany.com/citizenship/water_main.html)

At The Coca-Cola Company, beverage packages help ensure the safe delivery of refreshment for billions of people every day. As Coca-Cola works to grow the business in a world with finite natural resources, environmental challenges and heightened consumer expectations, success depends on finding new ways to make packaging more sustainable. Through advancing smart technology, the Company works on performance and sustainability innovations that go hand-in-hand to make a world of difference for consumers and the environment.

With increasing pressure on natural resources—particularly on the petroleum and natural gas required to make plastic bottles—businesses are seeking alternatives to conventional PET bottles. That is why Coca-Cola's research and development team created PlantBottle™ packaging—the first-ever fully recyclable PET bottle made partially from plants.

The Coca-Cola Company worked with leading academic, government and NGO partners to find a plant source for a more environmentally responsible bottle that wouldn't harm the ecology or people of the region where it is produced, or compete with food.

It is estimated that the use of PlantBottle™ packaging in the first two years alone has helped save carbon dioxide emissions equal to those of more than 20,000 automobiles.

The Coca-Cola Company offers PlantBottle™ packaging for both PET and HDPE plastic bottles.



Photo credit: The Coca-Cola Company

In February 2011, Coca-Cola entered into a partnership with H.J. Heinz Company, enabling Heinz to achieve its sustainability goals by bottling its ketchup in PlantBottle™ packaging. The Coca-Cola Company's goal is to use PlantBottle™ packaging for all virgin PET plastic used in our bottles by 2020.

Responsible packaging is just one of many ways in which The Coca-Cola Company is making a meaningful difference beyond the confines of our own bottling plants. Today, more than 1 billion people lack access to safe drinking water and 2.6 billion lack adequate sanitation, leaving billions of people vulnerable to disease and food insecurity. The Company is working closely with its supply chain, local communities, governments and nongovernmental organizations to replenish water in communities and nature through the support of healthy watersheds and community water programs.

The Coca-Cola Company's "replenish" commitment offers forward-thinking, scientifically-based methods that can begin to quantify the benefits to people and nature of water stewardship and conservation strategies.

Since 2005, Coca-Cola has been involved in more than 386 community water partnerships in 94 countries to support initiatives such as watershed protection, community water access, rain water harvesting, reforestation and agricultural water use efficiency. Coca-Cola community water partnerships include projects with organizations such as World Wildlife Fund (WWF), USAID, The Nature Conservancy, CARE and UNDP.

With external experts, Coca-Cola has worked to quantify the impact of its community water partnership projects. Based on this work, it is estimated that 35 percent (53.3 billion liters) of the water used in the Company's finished beverages (based on 2010 unit-case volume) was replenished through the 386 community water projects conducted from 2005 through 2011.

The Coca-Cola Company will continue striving to be a truly sustainable business on a global scale. The Company recognizes that this can only be accomplished over time in partnership with bottlers and suppliers, as well as with conservation organizations, local officials and communities. With its efforts to bring together government, civil society, industry and the NGO community, Coca-Cola is a model corporation in delivering natural resource solutions that are in harmony with people, industry, and nature.

The Coca-Cola Company announced a strategic partnership with H.J. Heinz Company in February 2011.



Photo credit: The Coca-Cola Company

**Coca-Cola's continued success in the changing global business environment hinges on its ability to relieve stress on its natural resource supplies across all fronts in its operations.**



# PROTECTING ECONOMIC AND SECURITY INTERESTS THROUGH INTERNATIONAL CONSERVATION



**PARTNERS:**

- U.S. Government
- Global Environment Facility
- World Bank
- Governments around the globe
- Walmart
- Northrop Grumman
- ExxonMobil
- Starbucks
- Marriott
- Disney
- JPMorgan Chase & Co.
- Bill & Melinda Gates Foundation
- The John D. and Catherine T. MacArthur Foundation
- The Gordon & Betty Moore Foundation
- The Walton Family Foundation

**PROJECT SITES:**

Worldwide

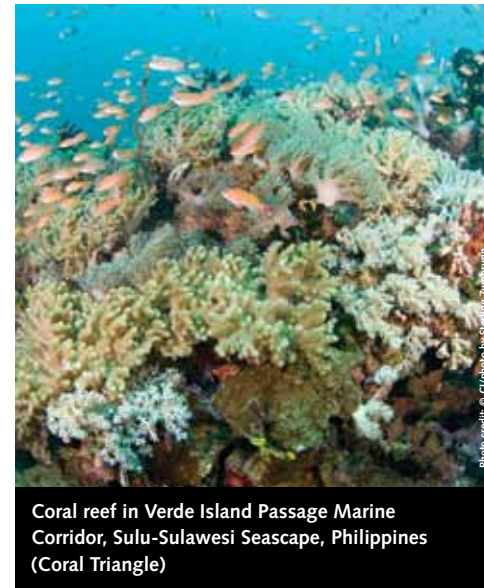
**WEBSITES:**

conservation.org/uspolicy  
conservation.org

Conservation International's mission is to protect natural resources and the essential goods and services they supply for the well-being of humanity. As the world's population grows from 7 billion to 9 billion by 2050, Conservation International is partnering with leading corporations, international organizations, local communities, the U.S. government and governments around the globe to address the many challenges associated with the increasing demand on natural resources.

The direct connection between international conservation and America's economic and national security interests has never been clearer. The loss of natural resources, such as forests, fresh water, fertile soils and natural pollinators, poses enormous challenges for the United States and the rest of world. Competition for these increasingly scarce resources can lead to instability, conflict, radicalization, and in the worst case, failed States. The illegal extraction of natural resources undermines U.S. competitiveness and impacts the economic security of Americans and U.S. businesses by distorting international markets and increasing the cost of doing business abroad. Protecting markets, as well as supply chains for U.S. businesses, is critical to America's long-term economic prosperity.

**The loss of natural resources, such as forests, fresh water, fertile soils and natural pollinators, poses enormous challenges for the United States and the rest of the world. Competition for these increasingly scarce resources can lead to instability, conflict, radicalization, and in the worst case, failed States.**



Coral reef in Verde Island Passage Marine Corridor, Sulu-Sulawesi Seascape, Philippines (Coral Triangle)

Many international conservation programs work to protect natural capital, address resource scarcity, secure supply chains and curtail the illegal extraction of natural resources. The Coral Triangle Initiative is one example where governments and various stakeholders, including Conservation International, the United States Agency for International Development (USAID) and the Global Environment Facility (GEF), are working to protect one of the most economically and biologically valuable marine ecosystems on the planet. The Coral Triangle, a region spanning across the



Overlooking the Wayag islands, Bird's Head Seascape in Papua, Indonesia (Coral Triangle)

tropical marine waters of Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands and Timor-Leste, directly sustains the lives of more than 120 million people and contributes an estimated \$2.3 billion annually towards the economies of the region.

The U.S. has important economic, commercial and security interests in the Coral Triangle due to the region's strategic location astride a number of key international maritime straits. In 2010, imports made up 86% of the seafood consumed in the United States. A significant proportion of U.S. imported seafood originates from marine fisheries in Southeast Asia, such as the Coral Triangle. Challenges such as unsustainable fishing methods; illegal, unregulated and unreported fishing; and weak governance are placing enormous strain on the natural marine resources of the Coral Triangle, threatening global and U.S. food security.

Protecting natural capital through international conservation projects, such as the Coral Triangle Initiative and the Sustainable Landscapes Partnership, is vital to America's long-term economic and national security interests. The Sustainable Landscapes Partnership focuses on reducing deforestation and improving land use policies for the sustainable management of forests in Indonesia, a country that has lost 80 percent of its forests and one that is of strategic importance to the United States.

With the global demand for food, water and energy expected to double over the next 40 years, protecting our natural resources is not an option, but a necessity.



Aerial view of Kaieteur Falls, Guyana

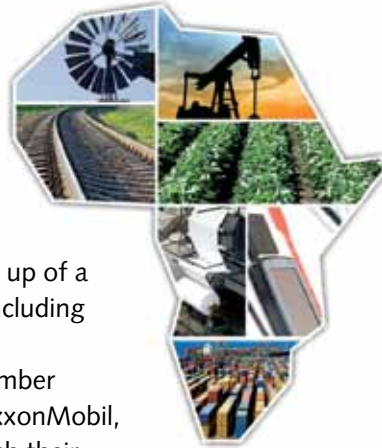
## PROMOTING TRADE AND INVESTMENT BETWEEN THE UNITED STATES AND AFRICA

The Corporate Council on Africa (CCA) is a non-profit, membership-based organization at the forefront of strengthening and facilitating the commercial relationship between the United States and the African continent. CCA works closely with governments, multilateral groups and businesses to improve Africa's trade and investment climate, and to raise the profile of Africa in the U.S. business community. CCA members represent nearly 85 percent of total U.S. investment in Africa, and are made up of a diverse pool of industries from more than 20 key sectors, including agribusiness, health and infrastructure.

CCA is proud to support the continuing work of its member companies and ICCF partners, The Coca-Cola Company, ExxonMobil, Marathon Oil Company and Walmart, as they strive to reach their respective sustainability and conservation goals in Africa.

Water conservation is a priority for The Coca-Cola Company, which is working with CARE International to provide 1,500 households in the Egyptian governorate of Beni Suef with safe drinking water. The partnership plans to provide 7,500 people in three villages with clean water over the next 18 months.

ExxonMobil aims to avoid contamination of the environment by unloading diesel from supply vessels, moving oil and chemicals from containers and transporting product via pipelines on and offshore, thereby preventing anything from spilling into the sea or on land.



### PARTNERS:

The Coca-Cola Company  
ExxonMobil  
Marathon Oil Company  
Walmart

### PROJECT SITES:

The African Continent

### WEBSITE:

africacncl.org

CCA's grant programs identify Africa's strategic value chains with the greatest opportunities for American business investment.



Walmart's broad environmental objectives include: to create zero waste, to be supplied 100 percent by renewable energy, and to sell products that sustain people and the environment.

CCA provides a number of programs and services that give its members a competitive edge in African agribusiness. According to USAID, agriculture is one of the most effective drivers of growth in the world's poorest countries. CCA's Agribusiness Working Group provides a forum for members to address policy constraints and work to link American agribusiness to African trade and investment opportunities. CCA also promotes African agriculture through two USAID-funded programs: the U.S.-Africa Business Center and the Southern Africa Trade Hub.

In addition to aiding the advancement of African agribusiness and conservation efforts of member companies, CCA also offers many other programs in the areas of health, infrastructure, security, power and energy. CCA brings groups together that focus on attracting investors who are willing to responsibly manage the natural resources African economies are so dependent on for their livelihoods, so as African countries develop they are doing it in a way that lays a foundation for long-term growth, rather than short-term exploitation of resources. This is critical to the stability of those regions, and also creates opportunities for American multinational companies who will be looking for new, stable markets in the future. CCA's network provides exclusive opportunities to corporate leaders who will bring positive change to the investment environment and protect emerging markets from disruptions of supplies and rapid price fluctuations that have severe security and economic consequences.

CCA members believe that Africa's future success depends upon the ability of its entrepreneurs and business people to create and retain wealth through private enterprise—including natural resource wealth. CCA's many programs and services are designed to bring together potential business partners and raise Africa's investment profile in the U.S. by developing critical contacts and business relationships and providing a forum for the exchange of information and ideas.



CCA believes that raising agricultural productivity is essential for reducing rural poverty, establishing food security and stimulating broad-based economic growth.

**This is critical to the stability of those regions, and also creates opportunities for American multinational companies who will be looking for new, stable markets in the future.**



**PARTNERS:**

The Dow Chemical Company Foundation  
The Nature Conservancy

**PROJECT SITES:**

Brazil  
Texas, USA

**WEBSITE:**

dow.com/sustainability



Before the TNC collaboration, Dow's site in Terneuzen, the Netherlands, worked with the local government and a local provider to reduce energy used for water purification by 65 percent—by using the community's treated household wastewater twice in Dow's manufacturing process.

## DEMONSTRATING THE ECONOMICS OF ECOSYSTEMS

Too often, the tremendous importance and economic value of nature's benefits are appreciated only upon their absence. But measuring how much nature is worth—while it's still with us—is a critical and complicated task.

In January of 2011, The Dow Chemical Company and The Nature Conservancy (TNC) embarked on a very important global experiment—a breakthrough Collaboration that will help build a roadmap for how companies assess, incorporate and invest in nature and the services it provides, like fresh water, clean air and flood protection.

The project has brought conservationists and corporations together to create a business model that puts “natural assets”—nature's benefits for business—on the ledger and then manage those assets in a way that increases their value over the long term.

**By finding ways for companies to account for nature's services on their bottom line, this collaboration will deliver new practices and solutions that benefit both business and conservation.**

By finding ways for companies to account for nature's services on their bottom line, this collaboration will deliver new practices and solutions that benefit both business and conservation. Tools, models, lessons learned and results will be shared publicly and through peer-review for other companies, scientists and interested parties to test and apply.



It will take public and private sector partnerships like never before to make real change happen. That's why these two companies are rolling up their collective sleeves, putting boots on the ground to test their methods, and engaging leaders and experts from a variety of disciplines along the way.

### Pilot Site Activity

Over the course of five years, Dow and The Nature Conservancy will implement and refine ecosystem services and biodiversity assessment models at three Dow sites around the globe. These sites will serve as “living laboratories” for developing, testing and implementing scientific and economic methods.

The first pilot site is Dow's Texas Operations in Freeport—Dow's largest integrated manufacturing site, and the largest chemical complex in North America. Over 40 Dow and TNC experts convened at the site to identify critical ecosystem services it impacts and depends on. Those determined to have high value for investigation include Fresh Water, Air Quality Mitigation, and Coastal Natural Hazard Mitigation.

Work begins in February, 2012 at the second pilot site in Brazil, and a third pilot site outside the U.S. will also be selected.

### Tool Development, Work Process Modification and Public Policy

Parallel to pilot site work, the Collaboration is developing tools that will inform corporate decision-making. The first is a Biodiversity and Ecosystem Services (BES) Assessment Tool to provide business managers quick access to relevant information. Using global maps and indicators, it aims to help managers improve corporate visioning and goal-setting, prioritization of global risks and opportunities, and alert individual business units of potential risks and opportunities in their areas.

The Collaboration is also beginning efforts to integrate biodiversity and ecosystem services data and considerations into Dow's work processes.

The collaboration will also focus on developing novel public policy approaches for issues of common interest. While we draw lessons from the valuation techniques of our program, we intend to see how we can work with the public sector to mutually reinforce the security of natural resource supplies. As the rising expectations of a growing world population further strain critical ecosystems, only a combined public and private sector approach will be enough to ensure reliable access to natural resources for American businesses and communities.



View from wetlands of Dow's Texas Operations in Freeport, Texas, where Air, Water and Natural Hazard Mitigation are being studied for their economic value to Dow and the community.



**PARTNERS:**

Belize Fisheries Department,  
Government of Belize  
Toledo Institute for  
Development and Environment  
United States Agency for  
International Development  
Wildlife Conservation Society

**PROJECT SITE:**

Belize

**WEBSITE:**

[edf.org/oceans](http://edf.org/oceans)



Photo credit: © EDF/Larry Epstein  
Belizean fisherman diving for conch, a major source of their livelihoods.

## COMBATING ILLEGAL FISHING AND RESTORING NATURAL WEALTH IN BELIZE

Environmental Defense Fund—an environmental advocacy organization that combines science, economics and law to tackle the planet's most urgent environmental threats—is working to protect ocean ecosystems in the U.S. and around the world by creating sustainable and healthy fisheries. EDF teams up with trailblazing fishermen to restore fisheries to environmental and economic health using an innovative management tool called "catch shares," which gives fishermen a stake in the health of fisheries.

Most recently, EDF has joined with government, scientists, and local environmental and development organizations in Belize to preserve fisheries and to protect the magnificent Mesoamerican Barrier Reef. Toward this end, EDF launched the Mesoamerican Sustainable Fisheries Initiative to establish catch share programs in Belize to restore the country's struggling lobster and conch fisheries and renew its fishing communities. Catch shares have been proven to rebuild fish stocks and provide economic benefits to fishermen.

Fishermen in Belize depend heavily on spiny lobster and queen conch as the anchors of the nation's wild-caught fisheries, but these fisheries are now becoming overfished.

The Belize Ministry of Agriculture, Fisheries, and Cooperatives reports that

Belizean fisherman prying conch from shell.



Photo credit: © EDF/Larry Epstein

the lobster catch from 1981 to 2006 fell by almost half. Annual lobster production in Belize has dropped by 15% since 2000, while the number of commercial fishermen has increased by 25%. Likewise, the conch fishery has shrunken dramatically: from 1972 to 2006, the conch catch fell from 1.2 million pounds to 699,000 pounds.

Overfishing is taking a serious toll on the livelihoods of fishermen, and the economic vitality of coastal communities. And because fishing is also a subsistence activity in Belize, depletion of fisheries has serious implications for Belize's food security. Fishermen report taking an entire season to catch what they once caught in a week, and note their catches of lobster have diminished not only in numbers but in size.

To end overfishing and strengthen the economic opportunities for fishermen, EDF is working with fishermen, the Belize Fisheries Department, other government agencies, and local NGOs in Belize to transition from a longstanding tradition of open access fishing (in which nearly everyone can get a fishing license and catch as much as they want—until the resource is depleted) to a management program that gives fishermen an incentive to fish more carefully and protect essential habitat. By allocating shares of fishing rights to fishermen in specific areas, setting sustainable catch limits and developing community-based systems of management, catch shares will speed Belize toward the goal of ending overfishing in its biologically richest regions and help fishermen earn a better living.

To raise awareness of the environmental and economic benefits of catch shares, chief oceans scientist Doug Rader and expert Kate Bonzon led workshops that drew government officials, fishing cooperative leaders, NGO managers, conservationists and scientists.

"A year ago, catch shares were only a theoretical concept; now we have strong support from the government and are in the process of implementing catch shares at two pilot sites," says Larry Epstein, EDF's Mesoamerican reef program manager. "Our team and partners helped move the conversation from talking about why catch share programs can work, to demonstrating that they are working."

Belizean fishermen meet to discuss new management approaches to protect Belize's pristine barrier reefs.



Photo credit: © EDF/Larry Epstein

**EDF** works with fishermen and local NGOs to restore fisheries' productivity and increase the benefits that Belize's ocean resources provide fishermen and families.



## CONSERVING BIOKO'S UNIQUE BIODIVERSITY

Equatorial Guinea's diminutive Bioko Island (875 mi<sup>2</sup>) is one of Africa's biodiversity hotspots, especially important for its seven species of rare monkeys, its nesting sea turtles and its miles of unspoiled rainforest stretching from black sand beaches to volcanic peaks more than 10,000 ft. high. Among the rare monkeys are four endangered subspecies, including the critically endangered Pennant's red colobus monkey. Bioko's southern coast is a major nesting ground for both the huge leatherback turtles and the unfortunately tasty green turtles. A rapidly growing bushmeat market in Equatorial Guinea's capital city presents a critical conservation challenge: illegal commercial hunting is rapidly depleting the forests of the rare monkeys, even though the monkeys are protected by law from hunting and live in protected areas where hunting is forbidden. Removal of species like these threatens the balance of the entire ecosystem, which could drastically reduce its ability to recover from damage and maintain the sustainable flow of natural capital to local communities. This situation highlights the need for local awareness and capacity building to enforce protection.

As a leading energy producer in Equatorial Guinea, ExxonMobil has collaborated with Dr. Gail Hearn's Bioko Biodiversity Protection Program (BBPP), an academic partnership between the National University of Equatorial Guinea and Drexel University since 2002. The program's mandate is to protect Bioko's unique biodiversity with sustainable projects in education, research and conservation that emphasize the economic value of wildlife and natural ecosystems.



### PARTNERS:

BBPP

Drexel University  
National University of  
Equatorial Guinea

### PROJECT SITES:

Bioko Island  
Equatorial Guinea

### WEBSITES:

ExxonMobil.com  
Bioko.org

The program's mandate is to protect Bioko's unique biodiversity with sustainable projects in education, research and conservation that emphasize the economic value of wildlife and natural ecosystems.

"ExxonMobil's long-term support for our research allowed us to generate the scientific understanding necessary for local policy makers to ultimately institute a law banning the hunting of endangered primates on the island. Now we are able to further engage and educate the local population about the value of conservation and biodiversity." —Dr. Gail Hearn

We recently established the Moka Wildlife Center, a biological field station and environmental center strategically located on the eastern slopes of the Biao Volcano at the northern border of the largest protected area, the Gran Caldera and Southern Highlands Scientific Reserve. In addition to serving as a base for scientific research by both BBPP as well as visiting scientists, the wildlife center has an active community program, educating school children about the value of wildlife and ecosystem services and developing income-generating community projects.

The Moka Wildlife Center hosts over 1,000 eco-tourists from 45 different countries a year, to whom it offers a premier venue to experience Bioko Island's exquisite wildlife, its conservation programs and an example of a sustainable, rural lifestyle. We are looking forward to further growth in Bioko's eco-tourism sector, which along with their strong sustainable agriculture, represents great market success in which economic development and environmental stewardship go hand in hand.



Photo credit: Gail Hearn/BBPP

As part of the course Field Research in Tropical Ecology, BBPP has begun a study of the distribution and abundance of birds near the Moka Wildlife Center. Birds are captured in mist nets and then after banding and measuring, they are released.

The Moka Wildlife Center, created with funding from ExxonMobil Foundation, hosts undergraduate field courses for combined classes of American study abroad students and local university students.



Photo credit: Gail Hearn/BBPP

Undergraduates from American universities work with local school children in the village of Moka. Here, an undergraduate introduces a local boy to Fea's chameleon, a species that is found only on Bioko Island.



Photo credit: Gail Hearn/BBPP



## FMC VISION 2015: THE RIGHT CHEMISTRY

Feeding the world, protecting health, and providing the conveniences of life—that is what we do at FMC. We strive to employ the best technology, cultivate strong customer partnerships, and find solutions that improve people's lives.

Since 1883, FMC has continued a proud heritage of pioneering solutions for our customers. Today, our products provide important sustainable benefits, including increased agricultural production, better foods and medicines, advanced energy storage, and cleaner water, air and soil.

FMC's safer chemistries have increased sugar cane crop yields in Brazil for alternative fuel use. FMC's new lithium chemistries are responsible for advances in



### PARTNERS:

- Franklin Institute
- Natural Academy of Sciences
- Panthera
- Philabundance
- Red Cross
- World Food Prize
- Wyoming Land Trust

### PROJECT SITES:

Worldwide

### WEBSITE:

fmc.com/sustainability



Off the coast of Singapore FMC harvests and renews *Laminaria hyperborean*.

electric vehicle technology. FMC's use of natural and renewable raw materials in food and pharmaceutical applications is conserving scarce resources. And FMC's growing environmental solutions business is making water safer and air cleaner. We have redeveloped and restored our old industrial sites, creating new jobs with new uses such as waste to energy.

We are constantly innovating new chemistries that perform more safely and effectively. Our natural biopolymers and crop protection chemistries are growing the world's food supply in a way that conserves our planet's finite resources. And, we are contributing to the sustainability in many developing countries by empowering their coastal communities with income from maricultural activities.

### A Bounty from Nature

FMC processes carrageenan and alginates from seaweed around the world. Off the coast of Norway, FMC and its supplier harvest seaweed from carefully delineated beds

on a fixed schedule to allow constant replenishment. In Australia, seaweed is gathered as it washes ashore. In the Philippines, Indonesia, Tanzania and Madagascar, seaweed cultivation and harvesting provide remote communities with sustainable economies and higher standards of living. FMC has empowered some 100,000 seaweed farmers worldwide over the last two decades.

Our carageenans and alginates provide food, pharmaceuticals, personal care and many other products with some of their most important properties, and our seaweed-based products can help the food and other industries reduce their energy requirements and carbon footprints. For example, our products enable the dairy industry to extend the unrefrigerated shelf life of milk and other products by as much as three years, reducing the need for refrigeration. Alginates absorb water quickly, making them key to the production of dehydrated foods. By removing water before shipping, far less energy is required to transport these products.

### New Environmental Solutions

FMC's FDA- and EPA-approved chemistry used for disinfection and sanitation in food processing operations is now being applied in an exciting range of new environmental applications. Our new green biocide is substituting for more conventional chemistries used in natural gas production. We are helping energy producers with wastes resulting from production waters. Our new air pollution control chemistry is being applied to utility control systems and industrial boilers as a way of further reducing contamination.

Over the last five years FMC's soil remediation chemistry has been applied at almost 200 sites, including major DOE and DOD contaminated facilities, quickly returning them to productive use.

Increasingly, our customers are looking for more sustainable products, and we are moving assertively to meet that demand. From food production and new energy solutions to emissions reduction technology and innovative soil remediation applications, FMC has a constantly evolving portfolio of solutions.

FMC's Ewing Laboratories are dedicated to safer chemistries which will enhance and extend world food supply.



Photo credit: FMC

**We are constantly innovating new chemistries that perform more safely and effectively. Our natural biopolymers and crop protection chemistries are growing the world's food supply in a way that conserves our planet's finite resources.**





## SAVE AND GROW

We All Have a Stake in Saving Our Planet and Ensuring that Agriculture Can Grow to Meet Future Challenges

The goal of the Food and Agriculture Organization of the United Nations is to alleviate poverty and hunger by promoting sustainable agricultural development, improved nutrition and food security, and the access of all people at all times to the food they need for an active and healthy life.

### PARTNERS:

Global Environment Facility  
United Nations Environment Programme  
World Bank

### PROJECT SITES:

Worldwide

### WEBSITE:

fao.org

To help low-income farm families in developing countries—some 2.5 billion people—produce more with less and build healthy agro-ecosystems that will enable them to maximize yields and invest the savings in their health and education, FAO is promoting a new approach.

### A Greener Revolution

To feed a world population projected to top 9 billion by 2050, we must improve crop production. But the yield growth rate of major cereals is declining, and farmers face unprecedented challenges, including increasing competition for land and water and rising fuel and fertilizer prices.

FAO believes that in order to grow, agriculture must learn to save. To help low-income farm families in developing countries—some 2.5 billion people—produce more with less and build healthy agro-ecosystems that will enable them to maximize yields and invest the savings in their health and education, FAO is promoting a new approach.

The “Save and Grow” model draws on conservation agriculture techniques that minimize tillage, protect the soil surface, and alternate cereals with soil-enriching

A farmer trained in Integrated Production and Pest Management through an FAO Farmer Field School in Senegal cultivates cabbage seedlings in a trial garden.



Photo credit: ©FAO/Olivier Asselin

legumes. Precision irrigation produces more crops from fewer drops. Precision placement of fertilizers can double the amount of nutrients absorbed by plants, and integrated pest management minimizes the need for pesticides.

Such methods not only help grow more food but also contribute to reducing water needs by 30 percent and energy costs by up to 60 percent.

### Protecting the Marine Commons

In partnership with the Global Environment Facility, the United Nations Environment Programme and the World Bank, FAO is embarking on a new programme aimed at promoting efficient, sustainable management of fisheries resources and biodiversity conservation in marine Areas Beyond National Jurisdiction (ABNJ), commonly called the high seas.

ABNJ make up 64 percent of the surface of the oceans and 95 percent of their volume, and their marine resources are valued at well over US\$10 billion annually. Often considered the world's last global commons, overfishing and other threats have resulted in the near collapse of some species of tuna, loss of marine biodiversity, and threats to marine ecosystem health and services.

The new initiative, which will be coordinated by FAO, comprises four projects bringing together governments, regional management bodies, the private sector and NGOs to promote sustainable use and conservation of these complex ecosystems. Projects include strengthening global capacity to effectively manage ABNJ, and an Oceans Partnership Fund to catalyze public and private sector investment.

The GEF is providing \$50 million in grants, which is leveraging \$270 million in co-financing from public and private partners, including FAO, the World Bank, UNEP, the Tuna and Deep Sea Regional Fisheries Management Organizations, the U.S. National Oceanic and Atmospheric Administration, the International Coalition of Fisheries Associations, the International Seafood Sustainability Foundation, the South Indian Ocean Fisheries Association, Birdlife International, Conservation International, the International Union for Conservation of Nature, World Wildlife Fund, and the Global Oceans Forum.

The ecological and economic stakes are high—FAO estimates that tuna represents about 8 percent of the total value of world fisheries and the ABNJ area over 10 percent.

Through the ABNJ program, FAO and its partners will work to ensure the food security and wellbeing of millions of families in developing and developed countries who depend on fishing and related activities for their livelihoods.

The ABNJ program aims to promote efficient, sustainable management of fisheries resources and biodiversity conservation in the high seas.



Photo credit: ©FAO/A. Urtizalde

**PARTNERS:**

Arthur A. Seeligson  
Conservation Fund

Caribbean Wildlife  
Alliance (CWA)

Caribbean Wildlife  
Foundation (CWF)

Eagle Conservation  
Alliance (ECA)

International Bongo  
Foundation (IBF)

International Elephant  
Foundation (IEF)

International Iguana  
Foundation (IIF)

International Rhino  
Foundation (IRF)

Puerto Rico Department of  
Natural and Environmental  
Resources (DNER)

Texas Parks and Wildlife  
Department (TPWD)

Turtle Survival Alliance (TSA)

United States Fish and  
Wildlife Service (USFWS)

**PROJECT SITES:**

Worldwide

**WEBSITE:**

fortworthzoo.org

## BUILDING PARTNERSHIPS FOR WILDLIFE

The Fort Worth Zoo is committed to wildlife conservation, education and research initiatives around the globe. The Zoo has invested significant resources into conservation work that has resulted in hundreds of individual projects throughout the world. Today, the Fort Worth Zoo coordinates or supports projects in 34 countries.

The Fort Worth Zoo is second to none when it comes to leveraging resources for conservation. The organization's proven approach has stimulated the development of eight distinct non-profits dedicated to conservation, reintroducing endangered species back into the wild and conducting original research. These foundations capitalize on partnerships with corporations, universities, conservation centers, private individuals and other zoos. The results have been tremendous, providing millions of dollars for species conservation programs worldwide. The following project is just one example of how the Zoo has maximized its conservation impact through creative partnerships.



The Fort Worth Zoo and the International Elephant Foundation actively support conservation, awareness and scientific programs that enhance the survival of elephants and protect their habitat worldwide.

### Local Effort, Global Impact

In Sumatra, Indonesia, the significant reduction of forests and an increase in the human population over the last two decades have placed Sumatran Asian elephant populations in jeopardy. Elephants wandering into human settlements caused an escalation of conflicts between elephants and humans, resulting in relocating more than 700 elephants to government-created Elephant Training Centers in Sumatra.

The CRU elephant/mahout teams are employed to carry out forest patrols and wildlife monitoring, as well as provide educational workshops about elephants in neighboring communities.



However, because of insufficient knowledge and funding, the elephants lacked food and proper care.

The Fort Worth Zoo-supported International Elephant Foundation (IEF) sent veterinarians and other experts to Sumatra to share their knowledge with the staff at each training center in an effort to improve the quality of care. IEF teams recorded data on food and water sources, provided veterinary care and observed husbandry practices. The training centers were poorly managed and funded, the habitat around the centers was being destroyed, and human-elephant conflict was increasing. Because there wasn't useful work for the elephants, many mahouts (elephant handlers) lacked motivation to care for the elephants.

In response to these findings, IEF worked with in-country partners to develop a model elephant camp and provided facility upgrades, improving both the health of the elephants and the community's perception of them. The plan was developed by IEF and project partners to make the elephants valuable to the mahouts, forestry personnel and the public, thus improving overall elephant management. Mahouts would now use captive elephants to provide conservation-related duties, protecting plant and animal species in the region through elephant-back patrols. These duties led to the creation of Conservation Response Units (CRU).

Each CRU conducts patrols, recording sightings or evidence of illegal activities, human-wildlife conflicts and wildlife presence. The team carries GPS units to properly identify sighting locations and a digital camera for documentation purposes. Through the use of CRU teams, forest crime, such as illegal logging, poaching and illegal settling, has significantly declined.

This project provides useful work for the mahouts and their elephants, improves local health care and training services, and creates education opportunities for the surrounding communities. By ensuring that elephants are seen as natural assets with social and economic value, local communities and other stakeholders recognize elephants' contribution to society and will hopefully continue to focus greater attention on protecting Sumatran elephants in the wild and in captivity. Due to the success of the Conservation Response Units, the IEF has been encouraged to expand the concept to additional elephant centers in Sumatra.

**By ensuring that elephants are seen as natural assets with social and economic value, local communities and other stakeholders recognize elephants' contribution to society and will hopefully continue to focus greater attention on protecting Sumatran elephants in the wild and in captivity.**

The Fort Worth Zoo-supported International Rhino Foundation (IRF) is coordinating conservation efforts to keep the fourth largest rhino population stable in Zimbabwe.



## THE GLOBAL ENVIRONMENT FACILITY: INVESTING IN OUR PLANET

The Global Environment Facility (GEF) unites 182 member governments, in partnership with international institutions, nongovernmental organizations and the private sector, to protect and improve the global environment. GEF grants support sustainable development projects in biodiversity, international waters, land degradation, and persistent organic pollutants, among others. Established in 1991, the GEF is today the largest multilateral funder of projects to improve the global environment. The GEF has allocated \$10 billion supplemented by \$47 billion in cofinancing for more than 2,800 projects in 168 developing countries as well as 13,000 smaller-scale projects in its Small Grants Programme.



Yellowfin tuna catch in Manado, Indonesia

The United States Government has consistently been a leading GEF contributor, providing \$1.55 billion over 20 years with an additional \$637 million pledged. When measured against the total of \$57 billion invested in GEF-financed projects, every dollar in U.S. funding leverages about \$36 from other sources. In biodiversity, the GEF has helped place 10% of the world's land area—nearly four times the size of Alaska—under protection, encompassing some 700 threatened species and 30 billion tons of stored carbon. GEF projects foster international cooperation, improved natural resources management, and economic growth and stability in volatile regions,



Mali cattle and herder

from the Balkans to equatorial rain forests to international waters. Following are descriptions of two GEF projects:

### Great Green Wall—Fighting Land Degradation in Sub-Saharan Africa:

The Great Green Wall Initiative (GGWI) engages the GEF, the World Bank, and allied organizations with twelve African countries from the Atlantic to the Red Sea to fight land degradation and desertification. Often misconstrued as a tree-planting program, GGWI involves a range of land-use strategies developed by participating countries in the Sahel and Sahara regions based on expertise gained in successful programs already underway. The initiative begins with \$108 million in direct GEF funding and \$1.8 billion in cofinancing from other sources. GGWI participants understand that the enemy is not the Sahara, which is actually a stable desert, but land degradation—the loss of productivity from poor land use practices such as overgrazing and overreliance on fuel wood, further exacerbated by climate extremes. Without intervention, these fragile lands reach a tipping point, destroying local economies and increasing instability. The GEF envisions the 'green wall' as a mosaic of landscapes in which the productivity of land and the health of local economies is sustained and enhanced. The collective determination of participating countries delivers a scaled-up effort that will bring global environment and adaptation benefits.



Villagers in Senegal

### Marine Resources—Protecting High-Sea Fisheries:

Addressing the depletion of tuna and other high-seas resources, the program unites the GEF, the U.S. National Oceanic and Atmospheric Administration, Bumble Bee Foods, the U.N. Food and Agriculture Organization, Conservation International, World Wildlife Fund and the International Seafood Sustainability Foundation. This global initiative is the largest campaign of its kind, protecting waters responsible for 10 percent of the global catch. The program, Global Sustainable Management and Biodiversity Conservation in Areas Beyond National Jurisdiction, aims to protect migratory species such as tunas, alone worth more than \$10 billion annually. Responsible fisheries stewardship through rights-based management undergirds the strategy. Reducing illegal, unreported fishing and protecting biodiversity from pollution and other adverse impacts will lead to a sustainable deep-sea fishery. This powerful public-private alliance of organizations experienced in dealing with fisheries and ocean biodiversity aims to demonstrate that a seemingly intractable problem can be reversed to the benefit of economic development and ocean biodiversity conservation.

**Every dollar in U.S. funding leverages about \$36 from other sources.**



#### RECENT GEF PUBLICATIONS:

(at <http://www.thegef.org/gef/publist>)

*Contributing to Global Security*  
March 2012

*Selection of Persistent Organic Pollutant Disposal Technology for the Global Environment Facility*  
November 2011

*Marine Debris as a Global Environmental Problem*  
November 2011

*Addo Elephant National Park*  
November 2011

*Land for Life: Securing Our Common Future*  
October 2011

*Hypoxia and Nutrient Reduction in the Coastal Zone*  
September 2011

#### PROJECT SITES:

Worldwide

#### WEBSITE:

TheGEF.org

**PARTNERS:**

WWF

**PROJECT SITES:**

Worldwide

**WEBSITES:**

hp.com/hpinfo/  
globalcitizenship/environment/  
envprogram/paperpolicy.html  
gftn.panda.org

## PROTECTING VALUABLE AND THREATENED FORESTS

As the world's largest IT company, a leading supplier of imaging and printing equipment and with one of the industry's most extensive supply chains, HP can have an impact on responsible paper sourcing. With global environmental and social responsibility embedded in its DNA, HP has an Environmentally Preferable Paper Policy that provides principles for buying, selling or using paper and paper-based product packaging.

HP recognizes that effective forest management can increase forest productivity while protecting the capacity of the ecosystems to filter water, prevent soil erosion, and provide food. By enhancing the value of forests, we conserve nature while cultivating opportunities for our business and local communities.

As a major initiative to its paper policy, HP is partnering with WWF's Global Forest & Trade Network (GFTN) in North America, an initiative linking more than 270 companies globally that share a commitment to responsible forestry.

In 2009, HP launched a three-year, global companywide plan to implement this policy, which is using a phased approach that targets HP-branded paper currently found in the marketplace. As part of its commitment, HP reached its goal of 40 percent or more of HP-branded paper sold worldwide being Forest Stewardship Council (FSC) certified or having at least 30 percent post-consumer waste (PCW) content by the end of 2011. In 2012, HP set a new goal of 50 percent or more of its branded papers being FSC certified or having at least 30 percent PCW content by the end of 2015. In 2011, HP became a member of FSC and is actively engaged with both FSC and GFTN in growing market demand for credibly certified paper in North America.

Out of a commitment to advance legal and responsible forestry, HP demonstrated its support for tiger conservation by signing the WWF Corporate Tiger Declaration in 2011, pledging to avoid paper fiber sourced from tiger habitats. Expanding upon this commitment, sustainability representatives from HP traveled to the Riau Province on the Indonesian island of Sumatra in October of 2011 to better understand the issues surrounding forestry practices and wildlife conservation in the region, including threats to endangered species like the tiger. Meeting with WWF staff in Indonesia, the team



HP representatives interacting with rescued and rehabilitated endangered Sumatran elephants that are part of WWF's Flying Elephant Squad in a village bordering Tesso Nilo National Park

surveyed controversial pulp and paper company operations on the Kampar Peninsula and met and spoke with local community leaders and conservation experts from the Indonesian Department of Forestry.

The HP representatives also had the pleasure of interacting with several of the rescued and rehabilitated endangered Sumatran elephants that are part of WWF's Flying Elephant Squad in a village bordering Tesso Nilo National Park. The Flying Elephant Squad works to protect wild elephants living inside the park's borders from human-animal conflict by keeping them from wandering into neighboring farms and commercial plantations in search of food. In addition to Sumatran elephants, Tesso Nilo is home to other endangered species, including orangutans and tigers. HP's representatives were able to observe first-hand the severe threats to this high conservation value area resulting from palm oil expansion, illegal logging and other encroachment. The urgency of conserving Sumatra's forests became clear on this trip, and as a result, in 2012, HP plans to contribute additional funds to support the conservation of Indonesia's forests and endangered species, such as the Proboscis monkey.

This unique partnership between industry and the environmental community continues to play an important role in protecting Indonesia's high conservation value forests—forests of outstanding or critical importance due to their environmental, socioeconomic, biodiversity or landscape values.

**Through a partnership with WWF's Global Forest & Trade Network, HP is working to achieve its goals in responsible sourcing of paper and establishing an operational model that is resilient to pressures on ecosystem services.**

FSC logo painted on sustainably harvested logs. Uzachi forest, Oaxaca, Mexico





INTERNATIONAL LEAGUE OF  
CONSERVATION  
PHOTOGRAPHERS™



#### PARTNERS:

Amazon Watch  
Amigos de Sian Ka'an  
Amigos de Cabo Pulmo  
Arkive  
Chesapeake Bay Foundation  
Conservation International  
Greater Yellowstone Coalition  
Island Conservation  
LightHawk  
Minden Pictures  
National Geographic Society  
National Parks Conservation Association  
Nature's Best Foundation  
Pacific Wild  
Scripps Institution of Oceanography  
Sierra Club BC  
Skeena Watershed  
The Gitga'at First Nations  
The Nature Conservancy  
The Wild Foundation  
Wildlife Conservation Society  
World Wildlife Fund  
and many others ...

#### PROJECT SITES:

Worldwide

#### WEBSITE:

iLCP.com

## BRINGING CONSERVATION INTO FOCUS

### The International League of Conservation Photographers

The International League of Conservation Photographers (iLCP) is a non-profit charitable organization whose mission is to further environmental and cultural conservation through ethical photography. We believe that awe-inspiring photography is a powerful force for conservation. Our vision is that Conservation Photography will enable the iLCP to replace environmental indifference with a new culture of stewardship and passion for our beautiful planet. As an organization we value conservation, integrity, storytelling and photographic excellence. We work with leading scientists, policy makers, government leaders and conservation groups to produce the highest-quality documentary images of the beauty and wonder of the natural world—and the challenges facing it.

#### Our Work

Our work is conservation photography, mission-driven photography that combines artistry and action to further bio-cultural conservation. From the deserts of Africa, to the rainforests of South America, and the barren landscapes of Antarctica, our photographers spend countless hours in the mud, ice, skies, and waters of the world to capture both its beauty and fragility.

iLCP Photographers are storytellers. They are the voice of the planet, bringing back the stories that inspire, raise awareness and ultimately effect change. From poaching to pollution, habitat loss to cultural erosion, sustainability to biological corridors, the work of iLCP photographers covers the entire range of threats to biodiversity and is a critical component of the conservation toolbox. The goal of the iLCP is to get these photographers in the field to document the beauty and the challenges of our threatened planet.

**Our work is conservation photography, mission-driven photography that combines artistry and action to further bio-cultural conservation.**

bio-cultural importance. The success of this initiative rests on the three legs of the tripods: a world-class photographer, an engaged conservation organization, and iLCP. The photographers and conservation partners rely on the iLCP to facilitate the expedition and conservation communications campaigns.



Yucatan Peninsula, Sian Ka'an Biosphere Reserve, Mexico. Hatchling sea turtles make their way to the warm Caribbean waters off the coast of the Yucatan Peninsula near the Sian Ka'an Biosphere Reserve which is a UNESCO World Heritage Site. 103 known mammal species and 336 known bird species call this reserve home. From the iLCP Yucatan RAVE expedition. June 2009



In the waters off of the Yucatan Peninsula, Mexico. Feeding whale shark with remora fish. From the iLCP Yucatan RAVE expedition. June 2009

Capturing nature's story as a visual narrative, these missions contribute directly to supporting a number of conservation efforts around the world. The iLCP currently has three Tripods initiatives—Tripods in the Mud, Tripods in the Sky and Tripods in the Blue.

#### Rapid Assessment Visual Expedition (RAVE)

RAVEs aim to achieve a full visual and media assessment of a threatened ecosystem in a short period of time, by means of a multi-disciplinary team including iLCP photographers working in a variety of specialties (landscape, wildlife, macro, camera trapping, portraiture, documentary, etc.), writers, and videographers. Their job is to bring back a comprehensive portrait of a conservation issue or threat and to train the lens of the international media on that issue. Powerful images generated from the RAVE fuel strategic conservation communications campaigns with local partners and have proven to be effective tools for conservation gains. iLCP has conducted 11 RAVEs to date, all of which have furthered the conservation efforts of our partners.



The waters off of the Great Bear Rainforest, British Columbia, Canada. The northeast Pacific Ocean harbors the highest sea star diversity of any temperate marine realm in the world. A venerable hotspot, more than 40 species occur in water less than 200 m deep. The ochre sea star is a common keystone predator that feeds on mussels and structures the community of exposed rocky shores. From the iLCP Great Bear Rainforest RAVE expedition. August 2010

## INTERNATIONAL PAPER



### PARTNERS:

The Emerald Coast Utilities Authority (ECUA)

The University of West Florida: Marine Research Program

### PROJECT SITES:

Perdido Bay and Conservation Area

### WEBSITE:

[ippensacolaproject.com](http://ippensacolaproject.com)



Golfer tortoise burrows are especially common in longleaf pine savannas where the tortoises are the primary grazers, playing an essential role in their ecosystem.

## INTERNATIONAL PAPER PERDIDO BAY ECOSYSTEM PROJECT

International Paper is a Fortune 500 company with manufacturing operations in North America, Russia, Europe, the Middle East, Africa, India, Latin America and Asia. As the global leader in fiber-based manufacturing, we link people to products and companies to communities by making what matters to an interconnected world. We're proud of the things we make and the way we make them. Our 60,000 team members world-wide strive toward a common

mission to respect the people and places we serve so we are welcomed as good neighbors, employers and environmental stewards. That's why International Paper is proud to announce the start-up of a unique and innovative environmental project that promises to achieve significant ecological and conservation benefits for years to come.

Following what has been called one of the most comprehensive studies ever conducted of a coastal ecosystem, the International Paper mill in Pensacola, Florida has commenced a project which will achieve multiple environmental benefits.

The project:

- **removes** a direct surface water discharge from a small creek, thereby allowing the creek to return to a more natural condition;
- **transports** the effluent ten miles by a pipeline using gravity flow to 1,200 acres of natural wetlands that border Perdido Bay;
- **reapplies** and evenly distributes the effluent across the site using a series of berms and discharge structures allowing the natural vegetation and trees to further treat the effluent by removing its nutrients;

International Paper along with the Florida Department of Environmental Protection and scientific, educational, and citizen organizations are working together to better understand our natural ecosystem. Partnerships such as with the University of West Florida's summer marine biology camp allow students to acquire technical and analytical skills. The mill hosts a community advisory committee to share and solicit feedback on our efforts and activities.



Taken together, this project promises to protect and enhance the ecological value of the entire Perdido Bay ecosystem which includes a bay, creek, river, aquifer and coastal wetlands.

- **introduces** over 190,000 wetland trees to restore the site to resemble its original wetland hardwood forest;
- **sets aside** an additional 1,400 acres of adjacent natural wetlands for conservation with land management activities aimed at enhancing areas of unique and special habitat such as pitcher plants; and,
- **partners** with a local domestic wastewater utilities company to access and use reclaimed water in its manufacturing process to reduce its consumption of fresh water.

Taken together, this project promises to protect and enhance the ecological value of the entire Perdido Bay ecosystem which includes a bay, creek, river, aquifer and coastal wetlands. The project demonstrates how private and public interests can come together to achieve benefits that would otherwise not be possible.

IP's Pensacola mill is currently accepting 5 million gallons per day of highly treated reclaimed water, which represents close to 25% of its total water usage. The mill has also begun to remove its treated water from a small receiving stream. Twenty-five percent of the mill's effluent has been removed from the creek and redirected to wetlands with the remaining 75% of the volume to be removed by the end of 2012.

The project also contains valuable community education and engagement elements. International Paper along with the Florida Department of Environmental Protection and scientific, educational, and citizen organizations are working together to better understand our natural ecosystem and to quantify the benefits obtained from the changes made. The company has sponsored summer camps conducted by the local University of West Florida. The camps invite high school students to participate in studies on the wetlands site to learn and develop technical skills and to provide an opportunity for students to expand their interests in the biological sciences.



Large planting islands, otherwise known as "hummocks," were created within the wetlands on which IP planted over 160,000 trees. Over time, a canopy of hardwood trees will develop over the hummocks and create an ideal habitat for fish, birds and other wildlife.



## KRAFT FOODS' COMMITMENT TO SUSTAINABILITY



### COLLABORATORS:

- 4C Association
- Bill & Melinda Gates Foundation
- CARE
- Conservation International
- Consumer Goods Forum
- Fairtrade
- International Cocoa Initiative
- Rainforest Alliance
- World Cocoa Foundation
- World Wildlife Fund

### PROJECT SITES:

Worldwide

### WEBSITES:

- [Kraftfoodscompany.com](http://Kraftfoodscompany.com)
- [Kraftfoodsbetterworld.com](http://Kraftfoodsbetterworld.com)



Cacao pods growing on certified farms in West Africa.

Photo credit: Kraft Foods

Sustainability is about “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” It’s about conducting business in a way that’s environmentally, socially and economically responsible. Our vision: make sustainability part of every business decision at Kraft Foods.

As the world’s largest chocolate company, we’re especially dependent on the earth for the raw materials we use every day to make quality products for our consumers.

Clearly, we need to do our part to ensure that the earth’s resources are properly managed. We’re changing the way we conduct our business, both directly and indirectly, to become more sustainable.

The environmental, societal and economic challenges that face our planet require collaboration and cooperation. So we’re working with peer companies, governments, nongovernmental organizations, farmers, suppliers, consumers and others to find innovative solutions. We’re concentrating on the issues most relevant to our business and where we can make a difference, recognizing that our long-term success depends on biodiversity and ecosystem services.

Sustainable agriculture promotes the long-term viability of crops, the preservation of fertile soil, the economic well-being of farmers and farming communities, and the health of ecosystems. We have a long-standing commitment to sustainable agriculture projects, and we’re working with partners around the world to increase our support of sustainable farming.

We’ve been working in sustainable agriculture for nearly 20 years, starting with coffee in 1993 and expanding to cocoa in 2005. We take a three-pronged approach to sustainable agriculture that focuses on commodities certification, support for industry-wide sustainable development programs, and projects by some of our brands.

Our work with Fairtrade and the Rainforest Alliance certification models enables more scale in more locations, accelerating sustainable development.

In 2010 and 2009, we were the largest buyer of cocoa beans from Rainforest Alliance Certified™ farms. Our Côte d’Or and Marabou chocolates were the first pan-European brands to bear the Rainforest Alliance seal across a variety of their product lines.

Cashews from West Africa: In 2009, we joined other partners in two Bill & Melinda Gates Foundation initiatives that will invest \$90 million over five years to advance sustainable production of cocoa and cashews in the region.



Photo credit: Kraft Foods

Since 2008, our Cocoa Partnership has committed approximately \$70 million to invest in cocoa farming in Ghana, India, Southeast Asia and the Caribbean over 10 years. The program is already in 100 Ghanaian communities, with plans for further expansion. It has helped 60,000 farmers and their families, and in just two years, we’ve achieved Fairtrade certification for varieties of Cadbury Dairy Milk bars available in six countries. We’ve quadrupled the volume of cocoa sold under Fairtrade terms in Ghana, generating approximately \$5.7 million in premiums to improve farming communities’ livelihoods.

We’ve been part of the World Cocoa Foundation (WCF) since 2004, supporting its many ongoing cocoa sustainability efforts designed to help farm families. In 2009, we joined other industry, government and nongovernmental partners in two Bill & Melinda Gates Foundation initiatives that will invest \$90 million over five years to advance sustainable production of cocoa and cashews in West Africa. The program will create 5,500 new jobs, impact 1.4 million family members in the region and improve the lives of farmers. In all, we hope to help break the cycle of poverty for 200,000 cocoa farmers and 150,000 cashew farmers.



Our Fairtrade certified Cadbury Dairy Milk bars are available in six countries.

Photo credit: Kraft Foods

**Our vision is to make sustainability part of every business decision at Kraft Foods.**



**PARTNERS:**

Malaysian Palm Oil Association

Malaysian Palm Oil Council

Malaysia oil palm industry

**PROJECT SITES:**

Worldwide

**WEBSITE:**

mpob.gov.my

# MALAYSIA'S SUSTAINABILITY INITIATIVES

## The Way Forward for the Oil Palm Industry in Malaysia

Malaysia has a competitive advantage in the palm oil industry, as it has over 100 years of experience and strong market leadership in terms of productivity and R&D. The Malaysian palm oil industry is the 4th largest contributor to the Malaysian Gross National Income (GNI). The Ministry of Plantation Industries and Commodities Malaysia has set an ambitious GNI contribution target of USD57.4 billion in 2020 against the present GNI contribution of USD17.6 billion. The Ministry, MPOB and the industry will ensure that efforts to achieve this target are in line with the concept of inclusiveness and sustainability involving all stakeholders throughout the supply chain. The GNI gap will be bridged through the implementation of eight core entry point projects (EPP) spanning across the palm oil value chain.

*Upstream productivity and sustainability*—Five EPPs have been identified to improve upstream productivity:

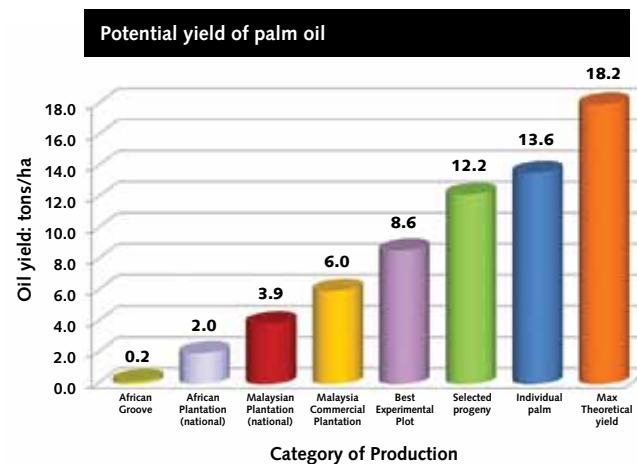
- **EPP 1:** Accelerating the replanting of oil palm;
- **EPP 2:** Improving fresh fruit bunch yield;
- **EPP 3:** Improving worker productivity;
- **EPP 4:** Increasing the oil extraction rate; and
- **EPP 5:** Developing biogas at palm oil mills

*Downstream expansion and sustainability*—involving public-private R&D efforts with strong commercialization focus. Three EPPs have been identified to improve the downstream sectors:

**MPOB** is expanding the scale of its operations through sustainable management of its resources and instituting accountability measures that span across the palm oil value chain.

- **EPP 6:** Developing oleo derivatives;
- **EPP 7:** Commercializing second generation biofuels; and
- **EPP 8:** Expediting growth in food- and health-based downstream segments.

Successful implementation of EPPs and business opportunities hinges on ownership and accountability. As such, a dedicated owner is identified for each



New variety of palm oil trees with higher bunch index and higher oil content.

initiative with a detailed delivery plan consisting of implementation details, timeline, key performance indicators as well as risk and mitigation plans.

In a globalized world where palm oil is exported, sustainable development cannot be achieved in isolation. The palm oil industry through MPOB continues to make a concerted effort to work within international frameworks to reduce pollution that threatens human health.

Palm oil mills in Malaysia are taking advantage of a new revenue generating source from carbon credit program under UNFCCC where biogas from the mills is captured to generate Green Electricity. In addition, the existing Green Technology Fund set up by the Ministry of Energy, Green Technology and Water will be used to speed up the implementation of biogas plants for the generation of Green Electricity from palm oil mills in Malaysia. By 2020, 400 mills in Malaysia will be equipped with biogas plants of which 200 mills will have excess power and be able to supply Green Electricity to the National Grid. Other mills will have enough Green Electricity to run their own boilers. At present, 38 mills have completed biogas plants, 34 mills are under construction and 47 mills are under planning to install biogas plants.

As we move forward into a modern global system where increasing demand on natural resources is met with increasingly stressed supplies, MPOB will do its part to move the free market to more responsible production methods, use all its resources efficiently, and hold itself accountable to ever-increasing standards of ethics and corporate citizenship.



Biogas plant at one of the oil palm mills in Malaysia.





## MARS' SUSTAINABLE COCOA INITIATIVE

The global cocoa sector may suffer a 1 million metric ton shortfall by 2020 because of increasing economic and environmental pressures on cocoa farms around the world. Our long-term business depends on a sustainable supply of high-quality cocoa, and we believe that securing cocoa's future begins with increasing yield, and therefore incomes, for the smallholder farmers at the industry's core. Putting these farmers first is our guiding principle.

To ensure that cocoa can be a vibrant, environmentally sound industry at all levels of production, we are investing tens of millions of dollars each year in our Sustainable Cocoa Initiative to foster innovation in agricultural science, transfer key technologies to farmers, and enact rigorous certification standards that address farmer productivity and key issues like the worst forms of child labor. Because we know that we cannot succeed alone, wherever possible we enable effective collaboration between farmers, manufacturers, governments and NGOs.

**Investment in Agricultural Research**—The radically transformative research we conduct and support will help farmers increase their income through more productive agricultural practices and higher quality, more disease-resistant plants. At the Mars Center for Cocoa Science (MCCS) in Brazil, we focus on creating best post-harvest practices, improving the quality and performance of cocoa plants and developing new methods to control pests and disease.

In 2010, Mars, IBM and the U.S. Department of Agriculture completed a two-year effort to sequence and annotate the cocoa genome. This research will lead to quicker, more accurate breeding and allow farmers to plant better-quality trees that produce



### COLLABORATORS:

Fairtrade International  
Government of Cote d'Ivoire  
IBM  
Rainforest Alliance  
U.S. Department of Agriculture  
UTZ

### PROJECT SITES:

Brazil  
Cote d'Ivoire  
Ecuador  
Indonesia  
Philippines  
Vietnam  
and more in the future

### WEBSITES:

[mars.com/cocoasustainability](http://mars.com/cocoasustainability)  
[cocoasustainability.com](http://cocoasustainability.com)



more cocoa and are more resistant to pests and disease. The genome will be made public, and the gene sequence will not ever be patented by Mars or any other entity.

**Technology Transfer**—Mars' Cocoa Development Centers (CDCs) in Africa and Asia cultivate and distribute cocoa trees bred to produce more cocoa and be more disease resistant directly to farmers through a "spoke and hub" method that can reach thousands of farmers through each CDC and its network of Cocoa Village Centers (CVCs), privately owned nurseries that distribute planting material locally.

Currently there are 5 CDCs in Indonesia, with 20 more planned to support 500 VCCs. Mars has built 5 CDCs in Cote d'Ivoire, with 75 total planned to reach 150,000 farmers through a network of 1500 VCCs within the Vision for Change program. The CDC model can be easily replicated anywhere cocoa is grown and is available to partners and donors to support.

**Certification**—Certification is the best tool we have to reach as many farmers as possible around the world and provide them with the material support, organization and market access that will enable them to be successful. To have a meaningful impact, however, certification must bring the entire sector together in a pre-competitive effort to emphasize farmer benefit at origin over competitive advantage in the consumer market.

Mars was the first major chocolate manufacturer to pledge to buy 100% certified sustainable cocoa by 2020. Our current certification collaborators are Rainforest Alliance, UTZ Certified "Good Inside," and Fairtrade International, and we have committed to purchase 100,000 tons annually from Rainforest Alliance and UTZ each by 2020.

Mars' approach to responsibly addressing cocoa demand serves as a model for the agricultural sector. It is crucial for industry to find means of increasing output to meet human needs while conserving the environment and supporting economic growth in the communities in which we do business.



**Our long-term business depends on a sustainable supply of high-quality cocoa, and we believe that securing cocoa's future begins with increasing yield, and therefore incomes, for the smallholder farmers at the industry's core.**

## LASTING PROTECTION FOR OCEAN ECOSYSTEMS AND THE PEOPLE THAT DEPEND ON THEM



### PARTNERS AND PROJECT LOCATIONS:

Please see here:

[www.moore.org/init-grants-awarded.aspx?init=112](http://www.moore.org/init-grants-awarded.aspx?init=112)  
for a full list of our grantees, their websites, and information about their projects

### WEBSITE:

moore.org



Fishing fleet in Morro Bay

Healthy ecosystems sustain life—from providing food and clean water to supplying medicines and raw materials. Humans influence the health and vitality of virtually every ecosystem on the planet. If managed well, people will be able to continue to rely on ecosystems for the benefits they provide for generations to come.

Through its Marine Conservation Initiative, the Gordon and Betty Moore Foundation works to align incentives with conservation to achieve lasting protection for ocean ecosystems and the people that depend on them. The Foundation envisions a working seascape where the ocean provides food, jobs, and recreation without sacrificing ecosystem health. To that end, the initiative funds a portfolio of grants that are focused on two of the largest, yet most solvable, threats to the oceans: overfishing (including bycatch and discards of unwanted catch) and habitat alteration. Together, the initiative and its partners support efforts to promote sustainability through Marine Spatial Planning (MSP), and reforming fisheries management activities in North America. Across this spectrum of projects, the initiative and its grantees aim to build diverse and broad constituent support; promote durable policies, governance mechanisms, institutions, and financing; and support science synthesis, monitoring tools, and technology.

### Marine Spatial Planning

At its core, MSP is an approach to guide intensity and location of ocean uses in a way that integrates human use and conservation. Its strength comes from considering and addressing the entire suite of activities occurring in a specific place, integrating human uses with conservation to facilitate smart use of the ocean. To share lessons learned about MSP from places all around the world, the initiative funded the Step by Step Guide to MSP, published by UNESCO in 2010. Through support for public-private partnerships, the initiative has helped launch two innovative planning processes, on the water, in Massachusetts and British Columbia. The initiative also supports the creation of a national ocean data portal and processes for public engagement in planning. The initiative's work in Canada offers the opportunity to stretch MSP from sea to land in the Marine Planning Partnership for the North Pacific Coast (MaPP) region, with First Nations and provincial governments playing a lead role.

### Reforming Fisheries Management

The initiative works in New England and the U.S. West Coast to improve the way fisheries are managed—shifting to a system where incentives are aligned with conservation—including setting scientifically based annual catch limits, better monitoring of catch, regular assessment of ecosystem health and its capacity to support human communities, and promoting gear modifications and harvesting practices to reduce bycatch. Strengthening local institutions and supporting collective management entities like Community Fishing Associations and permit banks helps enhance the effectiveness and durability of management.

The Foundation envisions a working seascape where the ocean provides food, jobs, and recreation without sacrificing ecosystem health.

Chatham fishermen offloading their catch





## FILLING IN THE GAPS IN SCIENTIFIC KNOWLEDGE

Since 1890, National Geographic has funded grants to every corner of the earth, from man's first flight over the South Pole by grantee Richard E. Byrd, to the mapping of the ocean floor by grantees Bruce Heezen and Marie Tharp. National Geographic grants have led to countless discoveries that continue to shed light on the planet's rich variety and diversity and help preserve it.

In 2011, the total number of National Geographic grants reached 10,000, representing a combined value of \$153 million. The bulk of the grants have been made by the century-old Committee for Research and Exploration; others came from the Society's newer grant-making groups, including the Expeditions Council, Conservation Trust, National Geographic-Waite Grants, Young Explorers Grants, Geographic Legacy Grants, Big Cats Initiative and All Roads Film Project. Scientific research, exploration, conservation, and adventure are the backbone of National Geographic's grants, with grants focusing primarily on anthropology, archaeology, biology, ecology, geology, geography, oceanography and paleontology.

Conservation biologist Krithi K. Karanth of India was the recipient of the 10,000th grant. Dr. Karanth works on human dimensions of conservation such as human-wildlife conflicts, land use change, and people-park relationships. With the National Geographic grant, she will assess human-wildlife conflicts in five parks of India's



Photo credit: Michael Nichols

Western Ghats. The project will identify and map risks and consequences for local people and the implications for conflict-prone wildlife species such as elephants, wild pigs, leopards and tigers.

### Protecting Iconic Predators

National Geographic's Big Cats Initiative (BCI) supports on-the-ground conservation projects, education, economic incentive efforts, and a global public-awareness campaign to stop the

decline of big cat populations. In 2011, BCI made sixteen grants to organizations and researchers working throughout Africa. Grantee projects represent the diversity of information and approaches needed to address the problem, including a study of

**These big cats are cornerstones of their ecosystems. Their protection preserves the integrity of the food chain, provides balance among species, and affects the health of the entire landscape.**



Photo credit: MRS. Vanni Goodall

Jane Goodall's groundbreaking work with primates was made possible in part through a grant from National Geographic.

cheetah behavioral ecology in southern Africa, an anti-poisoning campaign in Kenya, and improvement of traditional livestock corrals in Tanzania to prevent predation by lions and other big cats and thereby decrease human-big cat conflict.

Nat Geo Wild's Cause an Uproar campaign continues to raise awareness and funds for the Big Cats Initiative through an online educational portal. In December, Nat Geo Wild's Big Cat Week featured Explorers-in-Residence Beverly and Dereck Joubert's new film *The Last Lions*, a powerful portrait of a lioness and her cubs fighting for survival in Botswana's Okavango Delta, along with other big cat content. Meanwhile, the Society's Little Kitties for Big Cats campaign allowed pet owners to show their support for big cats in the wild.

Recently, National Geographic's Big Cats Initiative has teamed up with Panthera, the world's leading organization devoted exclusively to the conservation of the world's 37 wild cat species. The collaboration will facilitate the development and implementation of global conservation strategies for the most imperiled cats around the world, including tigers, lions, leopards and cheetahs. These big cats are cornerstones of their ecosystems. Their protection preserves the integrity of the food chain, provides balance among species, and affects the health of the entire landscape.

Their survival is essential to our natural world and the human communities that derive vital resources and natural wealth from the big cats' ecosystems. Preserving big cats is a means of ensuring our own future as well as the future of these magnificent beasts.



Photo credit: Chris Johns

National Geographic's Big Cats Initiative works to restore big cat populations and the ecosystems they inhabit.



**PARTNERS:**

Panthera

**PROJECT SITES:**

Worldwide

**WEBSITE:**

[nationalgeographic.com/explorers](http://nationalgeographic.com/explorers)



**PARTNERS:**

FEMSA Foundation  
Global Environment Facility (GEF)  
Inter-American Development Bank (IDB)

**PROJECT SITES:**

Brazil  
Colombia  
Dominican Republic  
Ecuador  
Mexico  
Panama  
Peru

**WEBSITE:**

[nature.org/ourinitiatives/regions/latinamerica/water-funds-of-south-america.xml](http://nature.org/ourinitiatives/regions/latinamerica/water-funds-of-south-america.xml)



Rio Grande II Reservoir, Medellín Water Fund, Colombia

## WATER FUNDS, LONG-TERM FINANCIAL MECHANISMS FOR WATERSHED CONSERVATION

More than one billion people worldwide are without access to clean drinking water, and one in three lacks adequate sanitation facilities or electricity. Conventional water treatment plants are costly options and cannot adequately address a diminishing water supply. Just as they protect biological diversity, ecosystems protect water flow and water quality. Wetlands store runoff, recharge aquifers and filter organic waste, while forests shade streams, reduce runoff and halt erosion. Society has long considered

**Once up and running, TNC's water fund model is self-sustaining, and the watershed's ecosystem services reduce treatment costs, providing a net financial gain to water utilities and users.**

these benefits as infinite and “free.” As a result, the value of these services has never figured into society's balance sheet and their vital contributions are often overlooked in public, corporate and individual decision-making. Now a new mechanism—Payment for Ecosystem Services (PES)—has emerged based on the concept that we should put the market to work for conservation: There is an economic value to nature's services, and communities can benefit by conserving the source of that service.

Water funds are an innovative ecosystem services-based approach to conservation that use a sustainable finance mechanism created through investments by water users and other stakeholders to ensure the long-term provision of critical hydrologic services

from a watershed. Investments are essentially paid into an endowment fund. Fund contributions are used to improve management of small-scale farms and ranches in the watershed and to strengthen the conservation of protected areas. Through such investments, water funds ensure the long-term protection of critical terrestrial and freshwater systems while providing a clean, reliable source of water—the key hydrologic services for the downstream water users.

### Partnership for Water Funds Replication

The Nature Conservancy (TNC), in collaboration with numerous partners, has successfully replicated a series of PES projects called water funds across Latin America. In these funds, payments from water users help protect the ecosystems that provide important hydrologic services and help improve management of working landscapes to ensure regular supplies of clean water. TNC has partnered with the Inter-American Development Bank (IDB), the Global Environment Facility (GEF) and FEMSA Foundation to improve the water funds model, to further replicate it, and to explore new sources of private and public funding for watershed conservation and management. The United States Agency for International Development (USAID) has been another critical partner in replicating water funds.

Through water funds, TNC has more than matched the rapid advancement of watershed-based ecosystem service payment schemes in the global developing world in just one region (the Northern Andes) using just one project approach. There are about 45 TNC-supported water funds in some stage of development in Latin American countries, 10 of which are operational. What makes the water fund model so

Nursery promoted by local communities in Quito, Ecuador. FONAG Water Fund



successful? Water funds are driven by water users, and the approach has the potential to be successful in a variety of political and institutional settings throughout the world. They have many of the elements for success identified in similar schemes, but they go beyond the basics to become truly participatory, long-term, adaptable, multi-institutional, sustainable watershed conservation projects whose strong leadership and advocacy set them apart from the others.



## Creating Shared Value

Nutrition | Water | Rural Development



### PARTNERS\*:

4C Association

Fair Labor Association

Fairtrade

The Forest Trust (TFT)

International Cocoa Initiative

Rainforest Alliance

UTZ

World Cocoa Foundation

### PROJECT SITES:

Worldwide

### WEBSITE:

nestle.com

\*Nestlé works in collaboration with many more partners in its other projects and domains.

# NESTLÉ'S COMMITMENT TO CREATING SHARED VALUE

Creating Shared Value is at the heart of Nestlé's business and is part of daily decision-making for Nestlé's 327,500 employees, within our chosen areas of focus—nutrition, water, and rural development. We believe that for our business to be successful in the long term, it must create value not only for its shareholders, but also for the environment and society at large.

It is however important to note that we see Creating Shared Value as built on strong foundations of compliance and environmental sustainability. You cannot create shared value if you don't abide by national laws, relevant conventions, and our own regulations, as well as ensure that our activities are sustainable and preserve the environment for future generations.

Nestlé operates 461 factories in more than 80 countries and uses a range of products that originate from farms, forests, and the oceans. Nestlé is committed to develop its business in a way that safeguards natural capital and in particular, biodiversity and ecosystem services. As part of our actions to minimize the environmental impact of our operations, we are working to identify high biodiversity in proximity to Nestlé factories by applying a systematic, scientific methodology.

Our aims, at all stages of the cycle, are to use natural resources efficiently, to promote the use of sustainably managed renewable resources and to target zero waste.

Through The Cocoa Plan, Nestlé aims to help cocoa farmers by training them in good agricultural practices to improve yields and returns, ensuring a reliable and transparent supply chain, and improving social conditions.



Photo credit: Nestlé

**F**or our business to be successful in the long term, it must create value not only for its shareholders, but also for the environment and society at large.

### Working to Ensure Zero Deforestation

In May 2010, we partnered with the non-profit The Forest Trust (TFT) to establish Responsible Sourcing Guidelines (RSGs) to ensure that our palm oil procurement has no deforestation footprint. Our new responsible Sourcing Traceability Programme will cover a total of 12 major raw and packaging materials, including our main commodities—coffee, cocoa and milk—and other priority materials such as soy, seafood, meat and poultry, vanilla, hazelnuts and shea, by the end of 2012. This programme implements our commitments on deforestation and forest stewardship and on child labour in agricultural supply chains, enacts our guidelines on the responsible use of water in agriculture, and addresses other social and environmental aspects specific to individual supply chains.

### Improving Biodiversity Through Sustainable Farming

One example of our sustainable farming is our "silvopastore" programme in Colombia. This system protects the soil and environment by combining pasture land with trees and shrubs, resulting in increased profits for the farmer and improved milk quality and quantity. In addition, this project has lowered the environmental impact of our dairy farming through enhanced biodiversity and reduction of soil erosion.

Our "Nescafé Plan" brings under one umbrella the Company's commitments on responsible coffee farming, production and consumption to further optimize our supply chain.

Through the Cocoa Plan, we are training farmers to help them to increase yields, reduce disease, respect the environment and produce a better quality crop which attracts higher prices.

Our ambition is to produce tasty and nutritious food and beverages that also have the best environmental impact, so we strive to continuously improve our operational efficiency and environmental performance. We apply a life cycle approach to assess the impacts of our own operations and those along the wider value chain from farm to fork, thereby contributing to a better environment and Creating Shared Value to both Nestlé and society.



Farmhands in Caquetá, Colombia, where we are working with the dairy community to increase milk production, reduce the amount of land use and introduce environmentally sustainable practices to lower the impact of dairy farming.

**PARTNERS:**

Audubon California  
Center for Land-Based Learning  
Federal and State Agencies  
Stewardship Council  
The Nature Conservancy  
Wildlife Habitat Council

**PROJECT SITES:**

California

**WEBSITE:**

[pge.com/environment](http://pge.com/environment)

## ADVANCING SUSTAINABLE SOLUTIONS



Photo of Humbug Valley, a picturesque meadow located on PG&E-owned property that will be permanently protected through the company's collaboration with the Stewardship Council.

Pacific Gas and Electric Company (PG&E) is one of the nation's largest utilities, delivering energy to 15 million people—approximately 1 in every 20 Americans—throughout a 70,000-square-mile service area in northern and central California.

PG&E understands that environmental excellence is an integral part of its basic business and is also part of its broader commitment to sustainability that includes using resources efficiently, advancing clean technologies, and protecting vital species and habitats.

As one of California's largest land owners, PG&E has a long history of managing lands and waters in a responsible and environmentally sensitive manner. For example, PG&E's vast hydroelectric system, with many dams and powerhouses dating back to the early twentieth century, has long been a vital source of clean energy for California. In managing this system, PG&E has made it a priority to work collaboratively with

**PG&E** is working to navigate the balance between delivering safe and reliable service to meet the state's growing energy needs while protecting wildlife and other important natural resources.

stakeholders to protect fisheries and other natural resources. PG&E sees these assets as continuing to be an important part of its power mix for years to come.

Additionally, PG&E's network of pipes and wires can traverse unique and sensitive habitat, and the company recognizes its obligation to protect these resources while performing its operations and meeting its customers' expectations regarding reliability and service.

PG&E is working to address this challenge—navigating the balance between delivering safe and reliable service to meet the state's growing energy needs while protecting wildlife and other important natural resources.

Over time, these and other efforts have earned PG&E more than 200 environmental awards in recognition of its environmental commitment. This includes recently earning "Wildlife at Work" certification from the non-profit Wildlife Habitat Council for four different sites in recognition of its wildlife enhancement efforts.

Other recent highlights of PG&E's stewardship of California's natural resources include:

- **Implementing** its Habitat Conservation Plan for the San Joaquin Valley region—the first in a series of plans that the company is developing for its service area to ensure compliance with the Endangered Species Act.
- **Working** in close cooperation with the Pacific Forest and Watershed Lands Stewardship Council to permanently protect more than 140,000 acres of company-owned watershed lands.
- **Adopting** an innovative Avian Protection Plan to reduce the risk that overhead wires and electrical equipment pose to birds, such as bald and golden eagles. PG&E's plan has set the standard for the industry and is one of the most comprehensive in the nation.
- **Adopting** voluntary "safe harbor" agreements with the U.S. Fish and Wildlife Service at two sites that enable PG&E crews to safely maintain and operate equipment while enhancing habitat for sensitive species in these areas.

PG&E completed a \$4.2 million project to protect endangered condors in a remote area near Big Sur in Monterey County. The project re-routed high-voltage power lines underground to keep them from harming the birds.



Photo credit: courtesy of the Ventura Wildlife Society



## PANTHERA'S JAGUAR CORRIDOR INITIATIVE

Like all big cats, jaguars are unconstrained by political boundaries. They use and require protected areas where core populations can thrive, but they also move beyond protected areas in search of food, space, and security, and to find mates. Outside of protected areas—and even within—jaguars face mounting threats, including habitat loss and fragmentation, direct killing, and decreased prey abundance. Panthera's Jaguar Corridor Initiative (JCI) is working to connect core jaguar populations across their range, ensuring their safe passage from Mexico to Argentina and securing their long-term future.



### PARTNERS:

American Museum of Natural History  
International Union for Conservation of Nature  
Liz Claiborne Art Ortenberg Foundation  
National Fish and Wildlife Foundation/Save the Tiger Fund  
National Geographic Society  
Oxford University–WildCRU  
Snow Leopard Trust  
Wildlife Conservation Society

### PROJECT SITES:

Worldwide

### WEBSITE:

Panthera.org

Panthera recognizes that saving jaguars range-wide is a winning strategy for conserving vast landscapes and ecosystem functions, and preserving human health and livelihoods. With support from the Liz Claiborne Art Ortenberg Foundation, Panthera is now actively working with governments in 13 of 18 jaguar range countries using a combination of rigorous science and forward-looking policy. In Mexico, we are working with partners to conduct surveys of jaguars in important and understudied areas; in Belize, with field surveys, landowner assistance, and training, we are securing Mesoamerica's most important corridor; in Costa Rica, we are supplying incentives to indigenous communities to keep their livestock protected against jaguar attacks, and working with international development funders to mitigate impacts of a planned dam project; in Panama, we are finalizing an agreement with the Panamanian government to create a national strategy for jaguar conservation; and in Colombia, we are collaborating with the Ministry of the Environment in re-delineating forest reserves and helping define conservation objectives in key national parks, while also creating pilot ranches to demonstrate jaguar-friendly ranching techniques.

Panthera's JCI is working rapidly to define the best possible corridor pathways for jaguars. Once these corridors are mapped, we apply conservation actions that meet the land use of the area, making human development more compatible with jaguar movement and survival. For instance, ranching is a common use of the land in the Jaguar Corridor, and jaguar-cattle conflict represents a major threat to jaguars throughout their range. Panthera partners with local and national governments,

**Panthera partners with local and national governments, conservation organizations, and local NGOs to help communities reduce human-jaguar conflict and improve livestock husbandry.**

A researcher takes measurements of a jaguar's paw



A jaguar rests along the river in the Pantanal, Brazil

Photo credit: © Steve Winter/Panthera

conservation organizations, and local NGOs to help communities reduce human-jaguar conflict and improve livestock husbandry. In Brazil, Panthera is creating a living model of productive and economically viable cattle ranches that are compatible with jaguar conservation. Panthera's experts have developed research and management activities that link jaguar conservation and cattle management through better cattle husbandry techniques and rangeland management practices. Panthera is now operating integrated rancher-jaguar conflict programs in six countries.

Panthera recognizes that the Jaguar Corridor depends upon the people that live in and around these areas. Without the support and assistance of local communities, and their implementation of the solutions we devise together, our initiative would be short-lived. We engage at all levels with local landowners, ranchers, park managers, indigenous groups, local and national governments, universities, and non-governmental organizations. Panthera is committed to building capacity for locally-driven scientific research and conservation action in each jaguar range country to ensure that local experts lead the way in future jaguar conservation efforts, and have a stake in conserving wildlife.

Founded in 2006, Panthera is the world's leading organization devoted exclusively to the conservation of wild cats and their ecosystems. Representing the most comprehensive effort of its kind, Panthera works in partnership with local and international NGOs, scientific institutions, local communities and governments around the world.





# INTELLIGENT RISKS, SUSTAINABLE GROWTH



**PARTNERS:**

Investor Network on Climate Risk  
United Nations Principles for Responsible Investment

**PROJECT SITES:**

Worldwide

**WEBSITE:**

prudential.com



In keeping with our commitment to doing business the right way, Prudential investment analysts consider environmental risks and opportunities in their investment decision-making.

As a leading life insurer and asset manager, Prudential believes that a healthy environment creates and preserves value for our customers, employees, and investors—and that deteriorating environmental conditions pose unacceptable challenges to our quality of life and our business.

We recognize that at the root of these challenges is the increasing global appetite for natural resources. We are at the forefront of efforts to see that new levels of demand for natural goods and services are supported by intelligent investments that take into account the business impacts and dependencies on the environment, as well as the economic necessity to keep supplies of natural resources sufficient, reliable, affordable, and sustainable.

Prudential's commitments to the environment and environmentally sustainable business extend across three areas: reducing our operational footprint, investing sustainably, and engaging external and internal stakeholders.

**Our stakeholders' wealth and well-being can be secured only through investments in methods and business models that make efficient use of natural capital.**

**Reducing Our Operational Footprint**

We are committed to reducing the environmental impact of our business operations. This includes reducing our energy consumption, maintaining a comprehensive recycling program, ensuring environmentally sustainable paper procurement and use, and offering

employees options to reduce emissions from commuting. We believe that by focusing on the sustainability of our daily operations, we build a strong foundation for incorporating environmental principles in our investments and insurance products.

**Investing Sustainably**

Sustainability is core to our provision of long-term financial security to our customers. We seek to leave a positive legacy through our products and services, including a positive legacy for the environment. Our stakeholders' wealth and well-being can be secured only through investments in methods and business models that make efficient use of natural capital. We offer our customers socially responsible and sustainable investing options so they may directly promote development that goes hand-in-hand with resource conservation.

Prudential investment analysts who help make decisions for client and Prudential portfolios are encouraged to consider all relevant factors in their analysis. As appropriate, those factors can include measuring environmental risks and opportunities, particularly in how they affect the sustainability or financial merits of an investment. Prudential's team highlights emerging successes that realize the opportunities of growing business value through sound management of biodiversity and ecosystem services.

As a major real estate investment manager, we have an opportunity to apply sustainable principles to investing in and managing real estate assets. The building sector represents nearly half of U.S. greenhouse gas emissions. U.S. Energy Information Administration Prudential-managed funds currently own or invest in more than two dozen LEED-certified buildings or properties under development.

**Engaging External and Internal Stakeholders**

Intelligent use of natural resources benefits all sectors of the global economy and as such is at the center of the public agenda. While Prudential, as a leading insurer, can make a difference in its own operations, we cannot hope to solve this daunting challenge without engaging policymakers, other private sector leaders, and the public.

In addition to ensuring the sustainability of our own operations, investments, and insurance products, Prudential supports initiatives that contribute to market-driven solutions for environmentally sustainable development. Prudential actively supports business groups who pursue sound management of natural capital and Prudential employees who take part in local conservation projects across the country.

As part of our initiative to engage our employees and external stakeholders, we have developed a symbol that represents the company's overall commitment, especially our efforts in environmentally sound printing and e-delivery. We expect that this symbol will generate awareness of, enthusiasm for, and alignment around our stewardship efforts.



We see natural capital as the foundation of the global economy, and businesses' understanding of their impact and dependencies on ecosystem services is vital to sustainable growth.







## FISHING WITH 3G NETS

### Promoting Sustainable Fishing and Entrepreneurship through Digital and Social Inclusion

As a worldwide leader in 3G and next-generation mobile technologies, Qualcomm believes that access to these technologies can improve people's lives. Qualcomm's Wireless Reach™ initiative is a strategic program that brings wireless technology to underserved communities globally. By working with partners, Wireless Reach invests in projects that foster entrepreneurship, aid in public safety, enhance the delivery of health care, enrich teaching and learning and improve environmental sustainability.

For example, Fishing with 3G Nets (Pescando com Redes 3G) focuses on improving environmental sustainability in Santa Cruz Cabrália, Brazil. In this area, fishing is one of the primary economic activities and many families depend on it for their livelihood. However, the industry has suffered from over-fishing, lack of investment and old infrastructure. As fish stocks decline due to unsustainable fish takes, certain fish species are facing the threat of extinction and natural ecosystems are being degraded. Over-fishing can lead to serious consequences for human communities as marine ecosystems become incapable of providing vital natural goods and services. As a result, people's incomes and opportunities have decreased, which has led to the emigration of family members in search of jobs.

The Fishing with 3G Nets program is a new system that integrates mobile and web-based applications and handheld devices to support sustainable fishing practices and business operations and deliver real-time market information to participating community members in Santa Cruz Cabrália, Bahia, Brazil.

Participating fishers and mariculturists have been issued 3G enabled mobile devices with mobile credit access to Vivo's 3G wireless network and a suite of creative applications custom tailored to their needs.

Additionally, the participants receive IT and sustainability training, access to a community computer lab and a floating classroom. Courses include environmental education with sustainable fishing techniques that teach participants to responsibly



#### PARTNERS:

Instituto Ambiental  
Brasil Sustentavel

The Municipality of  
Santa Cruz Cabrália,  
Bahia, Brazil

USAID

VIVO

ZTE

#### PROJECT SITE:

Brazil

#### WEBSITE:

wirelessreach.com

manage their natural wealth by catching alternative species, which are abundant and in high demand. This decreases environmental stress on traditionally overfished species, while increasing production and income levels.

*The applications on the 3G wireless devices enable the following:*

- Wirelessly monitor and communicate information on water conditions such as pH levels, salinity and temperature that helps with the successful cultivation of oysters.
- Automatic tracking of income and expenses, which allows the fishers to monitor their profits while still out at sea.
- Fishers can communicate directly with local hotels and restaurants for direct sales of the day's catch through an online marketplace. This increases profits by eliminating the need for intermediaries and the expensive storage of fish.
- Access to real-time updates on weather conditions and navigation assistance.
- The applications support governmental sustainable fishing initiatives through the statistical tracking and reporting of the type and number of fish caught.

*This program was supported by the following Steering Committee Partners:*

- Vivo provides wireless connectivity through its 3G HSUPA network.
- United States Agency for International Development (USAID) provides project support and technical assistance.
- Instituto Ambiental Brasil Sustentavel (IABS) facilitates project implementation, training and monitoring.
- Qualcomm's Wireless Reach™ Initiative is the primary funder and provides project management assistance.

*Other Partners Include:*

- The Municipality of Santa Cruz Cabrália, Bahia, Brazil
- ZTE



Participants receive IT and sustainability training as well as access to a floating classroom.



**The Fishing with 3G Nets program is a new system that integrates mobile and web-based applications and handheld devices to support sustainable fishing practices and business operations and deliver real-time market information to participating community members.**

"The partnership between the United States and Brazil will be strengthened through the application of innovative technology used to foster safety and sustainability of the fishing industry, as well as to improve the economic livelihoods of fishermen."

**Chargé d'Affaires Lisa Kubiske, U.S. Embassy in Brazil**

**COLLABORATORS:**

Caribou Coffee  
Global Environment Facility (GEF)  
Kraft Foods  
Mars, Incorporated  
and more than 20 other public and private sector companies from around the world

**PROJECT SITES:**

Brazil  
Colombia  
Côte d'Ivoire  
Dominican Republic  
Ecuador  
El Salvador  
Ghana  
Guatemala  
Honduras  
Indonesia  
Madagascar  
Nigeria  
Papua New Guinea  
Peru

**WEBSITE:**

[rainforest-alliance.org](http://rainforest-alliance.org)

## BIODIVERSITY CONSERVATION IN COFFEE AND COCOA

### Transforming Productive Practices in the Coffee and Cocoa Sectors by Increasing Market Demand for Certified Sustainable Products

The Rainforest Alliance works in more than 70 countries through partnerships that we have forged with organizations and individuals in every corner of the Earth.

In the arenas of coffee and cocoa, we are working with farmers, governments and companies to bring conservation benefits to thousands of acres of biodiversity-rich lands around the globe. Producers who engage in our best practices benefit from improved farming techniques, conserved waterways and habitat, reduced agrochemical use, adherence to local legislation and access to education for their children.

Since 2006, the Rainforest Alliance has been working with the generous support of the Global Environment Facility (GEF), and in collaboration with companies, governments and NGOs in Peru, Honduras, Brazil, El Salvador and Colombia to increase production of and demand for sustainable coffee. The growing availability and awareness of sustainable coffee has had the result that many companies—including McDonald's, Mars and Kraft Foods—are sourcing coffee from Rainforest

**Producers who engage in our best practices benefit from improved farming techniques, conserved waterways and habitat, reduced agrochemical use, adherence to local legislation and access to education for their children.**



Rainforest Alliance Certified™ coffee strengthens market competitiveness for both the producers and companies, in addition to assuring consumers that the product they are purchasing has been grown and harvested responsibly.

Alliance Certified™ farms. In addition, at the end of 2011, Caribou Coffee became the first major U.S. coffee house to source 100% of its coffee from Rainforest Alliance Certified™ farms.

These companies are sourcing Rainforest Alliance Certified™ coffee because of the competitive edge that it provides them in the marketplace. For instance, in El Salvador, a recent study determined that Rainforest Alliance Certified™ farms increased their yield

by 76%, compared to 22% in a control group. In Nicaragua, the average Rainforest Alliance Certified™ farm produces 20%–40% higher yields per acre than non-certified farms. Studies of Rainforest Alliance Certified™ cocoa farms in Côte d'Ivoire have demonstrated an average increased yield of 49%, improved working and housing conditions and increased school attendance.

Coffee is the world's second largest globally traded commodity, with large implications for the environment and the economic and social well-being for 25 million people in coffee farming communities worldwide. In the United States, more than 400 million cups of coffee are consumed each day, with the coffee market valued at \$18 billion.

Recently, and also with the support of the GEF, the Rainforest Alliance launched a project to transform the cocoa industry. Over the course of five years, this project will work to bring 10% of the world's cocoa production into more sustainable production systems that will improve biodiversity conservation in the tropics. This will benefit 250,000 farmers in Côte d'Ivoire, Ghana, Madagascar, Nigeria, Indonesia, Papua New Guinea, Brazil, Peru, Ecuador and the Dominican Republic. Kraft Foods, Mars, Incorporated and other companies sourcing Rainforest Alliance Certified™ cocoa are also joining us in these efforts.

Across all of its program areas, the Rainforest Alliance is helping to arrest the major drivers of deforestation and environmental destruction by ensuring that millions of acres of working forests, farms and hotel properties are managed according to rigorous sustainability standards. Presently, more than 90,000 farms are managed sustainably and 1.5 million farmers and their families enjoy a better quality of life as a result of Rainforest Alliance certification.

This type of across-the-board improvement in supply chains reinforces sustainable, reliable, and affordable flow of vital natural resources for a modern global economy. By closing vulnerabilities to market disruption and supporting price stability, increasing the awareness and availability of sustainably produced natural products serves as an essential component of national economic security.

Rainforest Alliance Certified™ cocoa provides benefits to local communities and ecosystems as well as consumers.



## CONSERVATION ON A HUMAN SCALE



### PARTNERS:

Conservation International  
Georgetown University's  
McDonough School of  
Business in Washington, DC

The Global  
Environment Facility

Instituto Técnico de  
Estudios Superiores de  
Occidente, Mexico

Institut Pertanian Bogor,  
Indonesia

Kaimana Regional  
Marine Protected Area  
National Geographic

The Nature Conservancy  
Southwest Forestry  
University, China

The University of Texas  
at El Paso

Wildlife Conservation Society

The World Bank  
World Wildlife Fund

### PROJECT SITES:

Worldwide

### WEBSITE:

rareconservation.org



Rare Conservation Fellow Gildas Andriamalala (right) talks with community members about sustainable fishing methods in Madagascar.

Across the developing world, fishermen, farmers and families are struggling to meet basic life needs in the face of dwindling natural resources. At the same time, conservationists are lamenting the ineffectiveness of protected areas and the lack of public support for environmental change. One thing is clear: while conservation has long been science-driven, success will ultimately come down to changing the way people relate to nature.

Rare designs programs that benefit both people and nature. To do so Rare trains and supports local conservation leaders to implement "Pride campaigns." A Pride campaign inspires people to take pride in the species and habitats that make their communities unique, while also giving them alternatives to environmentally destructive behaviors such as overfishing, illegal logging, unsustainable agriculture and poaching. Pride campaigns borrow private sector marketing tactics and use them to promote sustainable behaviors.

**A** Pride campaign inspires people to take pride in the species and habitats that make their communities unique, and utilizes private sector marketing tactics to promote sustainable behaviors.

To change behaviors and improve natural resource wealth management™, a nuanced understanding of social and cultural norms is required. Trusted messengers from within each community can then appeal to the emotional and practical sensibilities of all members of society from school children to high-level politicians and inspire conservation where

it is needed most. All Pride campaigns are run by local partner organizations, which enroll a staff member in Rare's two-year training program—providing both academic and field-based technical support in social and behavioral change.

### Communities Unite to Manage Natural Resources in Indonesia

Two years ago, Rare partnered with Conservation International and selected Wida Sulistyaningrum as a Rare Conservation Fellow. She had been working for years with her colleagues to gain the trust of the coastal communities in the spectacular southern section of Bird's Head Seascape known as Triton Bay in Indonesia. Historically feuding communities had been unable to agree on how to declare strategic marine areas as off-limits from fishing. Wida implemented Rare's social marketing model to identify key target audiences; conduct surveys on awareness, attitudes, and behaviors related to marine resources and management; and launch a sustained, multi-media marketing effort to increase adoption of the desired attitudes and behaviors. Over time, she gained buy-in from multiple stakeholders on the benefits of the protected areas and the importance of strategic natural

resource management for all community members. After persistent meetings with Wida, community forums and visits from government officials, the villagers finally united. The communities themselves not only asked for the declaration of the protected areas and no-take zones, they asked that they be established immediately. In June 2011, the communities created four new no-fishing zones and one limited-fishing area in Triton Bay which will allow fish populations to grow, thereby improving both biodiversity and food security in the region.

### Rare's Impact Around the World

Rare has five regional training centers in the United States, Mexico, China, Indonesia, and the Philippines which support programs in multiple languages. In partnership with The University of Texas at El Paso, Rare has developed the world's first globally accredited master's degree in communication for conservation practitioners. In the past 20 years, Rare and its partners have launched 215 Pride campaigns in more than 50 countries. Together they have reduced overfishing and illegal logging, improved management of marine protected areas, increased adoption of more sustainable agriculture and saved multiple species on the brink of extinction.

Rare Conservation Fellow Wida Sulistyaningrum creates maps of the community no-fishing areas in Triton Bay, West Palau, Indonesia.





## INTERACTIVE CONSERVATION

In Africa, Southeast Asia and South America, the Rare Species Fund supports varied grassroots wildlife conservation programs and enlists local people in the development and fulfillment of these projects. Direct involvement provides local communities with

**D**irect involvement provides local communities with jobs and presents a financial incentive which places importance on, and encourages the security and preservation of, their own natural resources.

jobs and presents a financial incentive which places importance on, and encourages the security and preservation of, their own natural resources.

### Indonesia:

Working in Borneo, RSF supplies funding to provide alternative forms of income to indigenous people living in wild orangutan territories. In stark contrast to the illicit and illegal log cutting so prevalent in the area, local villagers are employed in the removal of trash,

production of local textiles and crafts and the care and maintenance of hundreds of orphaned orangutans and their care facility. Funding also helps purchase and secure virgin jungle habitat. If left unprotected, this area would most likely be cut down and converted into non-sustainable palm oil plantations.

### Africa:

In South Africa, the Fund has been working with farmers and ranchers to develop and implement measures of conflict avoidance with local predator species. Specifically, the raising and maintenance of guard dogs to be placed with sheep and goat herds limits the number of lost livestock. The raising, caring and training of these dogs creates employment opportunities within the local tribal communities. This also presents both a financial advantage to ranchers and seriously reduces the unnecessary extermination of the indigenous populations of cheetahs, leopards and wild dogs.

The education programs presented by RSF introduce millions of people per year to the concepts of conservation. By meeting resident animal ambassadors up close and personal, the public gains a greater understanding, awareness and passion to help save wildlife and the places they come from. These programs also contribute to the U.S. tourism industry while producing significant funding for in-situ wildlife conservation efforts.

Bornean mother and baby orangutan living safely within a protected forest. Many other orangutans are not so fortunate.



Passanan Cutter in Thailand educating the local children about fishing cats.

### Projects supported by the Fund:

- Funding provided in Mozambique helps to conserve one of only five healthy lion populations in Africa, while engaging local residents to help be part of the solution.
- Ongoing funding provided for the conservation of fishing cat habitat in Thailand, including the protection of mangrove areas currently being polluted by commercial shrimp farming.
- Funding provided in South Africa for raptor research.
- Contributing to the development of Andean mountain cat conservation program in Chile.
- Provision of staff and essential equipment in South Africa for black footed cat conservation.
- Funding provided in Borneo for orphaned orangutan rehabilitation, protection of prime orangutan habitat and replanting of decimated forest areas.
- Providing tracking and enclosure equipment to rehabilitate and release sun bears into the jungles of Indonesia.

The Fund focuses on ensuring communities benefit from their wildlife and can draw sustainable financial benefits from secure flows of natural capital. In an era where poor economic opportunities in one part of the world can create challenges to American interests, this work is critical to American and global security.

A wild leopard drinking near a farm in South Africa, illustrating that man and predators can learn to co-exist.





## ASIAN ELEPHANT CONSERVATION PARTNERSHIP



### PARTNERS:

Biodiversity and Elephant Conservation Trust  
Department of Wildlife and Conservation, Sri Lanka  
International Elephant Foundation (IEF)  
Universities of Peradeniya and Rajarata, Sri Lanka  
Various zoos, universities and veterinary schools

### PROJECT SITES:

Worldwide

### WEBSITES:

elephantcenter.com  
ringling.com

*Ringling Bros. and Barnum & Bailey*® is committed to the preservation of the Asian elephant through conservation education, breeding, research and in situ conservation and husbandry partnerships.

Elephants are considered to be a keystone species as they help to maintain suitable habitats for many other species. They directly influence forest composition and density, as well as the broader landscape. Their preservation is critical to the survival of ecosystems in which they live.

As a founding board member of International Elephant Foundation, *Ringling Bros.* contributes funds and expertise to elephant conservation programs domestically and in range countries in Asia and Africa. We also work with and support institutions making strides in research of diseases that affect elephants, such as the National Elephant Herpesvirus Laboratory at the Smithsonian's National Zoo.

In taking an active role toward the conservation of this magnificent species, *Ringling Bros.* established the *Ringling Bros. and Barnum & Bailey* Center for Elephant Conservation—a state-of-the-art facility dedicated to the retirement, reproduction and research of the Asian elephant. Home to the Western Hemisphere's largest herd and one of the most successful breeding programs, its contribution to the knowledge of Asian elephants is unparalleled and represents a commitment to long-term survival of the Asian elephant.

A significant challenge to the survival of the Asian elephant is the issue of human-elephant conflict (HEC). To help address this challenge, *Ringling Bros.* has supported an ongoing conservation education program in Sri Lanka as well as a multi-year survey of HEC incidents. The latter has provided valuable information that will be used to focus HEC mitigation efforts.

Another unique circumstance facing Asian elephants is that as many as one-third of the range state populations are found in some form of captive environment. With over 142 years of experience in living and working with Asian elephants, *Ringling*



*Ringling Bros.* has contributed funds and expertise to elephant conservation programs both domestically and in range countries and works with and supports institutions making strides in research of diseases that affect elephants.

*Bros.* is able to offer our expertise to train and advise managers and conservationists in Asia dealing with this and other elephant-related issues.

In Sri Lanka, wildlife conservation efforts are largely focused around the elephant, but the absence of reliable information about a species that lives in dense and tangled vegetation makes it difficult to determine reliably their status and habitat needs. To that end, *Ringling Bros.* is partnering with the University of Rajarata to fund a full-scale sociological field study of Asian elephants in Minneriya National Park in Sri Lanka. This research will provide wildlife managers and other conservationists with much needed information to guide their efforts to preserve and protect elephants.

In addition to Asian elephants, *Ringling Bros.* also works with tigers and other endangered and threatened cat species, including supporting in situ conservation programs for Amur and Bengal tigers. The *Ringling Bros.* approach to elephant conservation serves as a model for protection of other species around the world.

*Ringling Bros.* recognizes that we are uniquely poised to educate the public about challenges facing the future of endangered species. *Ringling Bros.* remains committed to continuing its mission so that Children of All Ages will be able to experience these amazing animals for years to come.

**Elephant conservation is critical to the survival of ecosystems in which they live, as well as the lives and livelihoods directly dependent upon those ecosystems.**

*Ringling Bros.* Center for Elephant Conservation hosted students from the University of Peradeniya in Kandy, Sri Lanka, who are working on master's degrees involving elephant behavior or biology.





## WILDLIFE CONSERVATION CAPACITY-BUILDING IN AFRICA

Safari Club International Foundation (SCI Foundation) funds and manages over sixty wildlife conservation and management projects globally. North America, Africa, and Asia are the core focus of science-based research programs that promote the sustainable use of wildlife, which in turn ensures the balance and integrity of productive ecosystems.

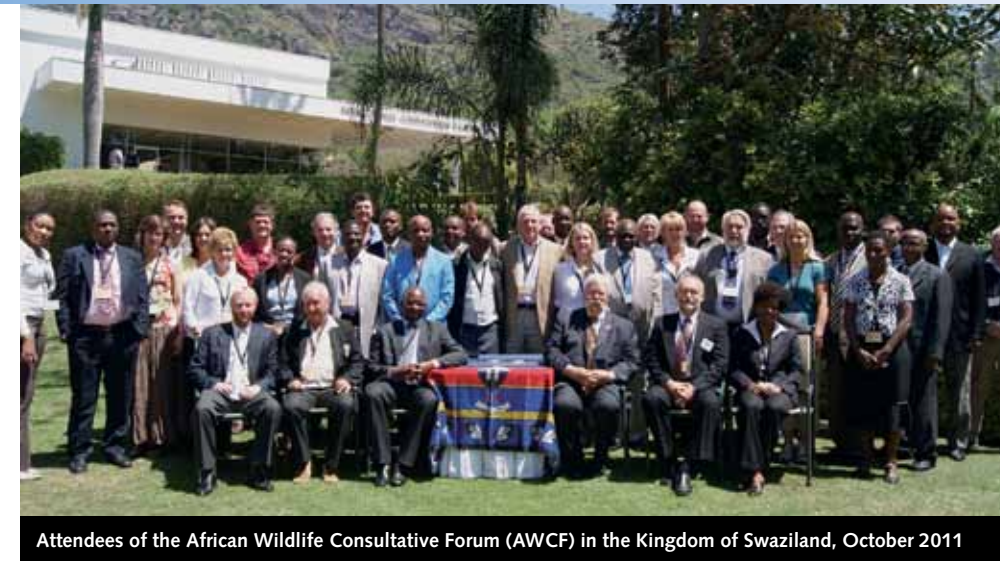
The largest of SCI Foundation's programs in Africa, the African Wildlife Consultative Forum (AWCF), convenes most of the sub-Saharan African governments for a week-long discussion on wildlife management, conservation, and hunting priorities. The AWCF provides the only real opportunity these countries have annually to come together to compare problems and develop common approaches to future management of their wildlife resources. Over fifty participants comprise the AWCF and include wildlife professionals, regulatory officials, and representatives of the hunting industry. As such, SCI Foundation is proud to be the prime catalyst and support base for this invaluable discussion forum as a basis to ensure that sustainable-use hunting remains a management priority within each of these countries.

Over the past decade, the AWCF annual meetings have included the major themes in African wildlife management: human-wildlife conflict, wildlife population management, predator-prey interactions, habitat use, hunting regulations, and anti-poaching campaigns. They strategize on the best ways to foster international cooperation and to ensure that the treasured game of Africa will be utilized by and for generations to come. Key topics at the most recent meeting included rhinoceros conservation, leopard population status, lion management and reports on current policies and regulations for each country present.

SCI Foundation supports science-based management of all species, including African lion.



Photo credit: Matt Esent, SCI Foundation



Attendees of the African Wildlife Consultative Forum (AWCF) in the Kingdom of Swaziland, October 2011

One of the most critical issues addressed at the AWCF was organizing the collection of current lion data from all the range state nations. The attending government entities agreed to fully cooperate to address the ambitious deadlines set for the Convention on the International Trade of Endangered Species (CITES) Periodic Review of the African lion. CITES uses the best science available to determine harvest quotas for numerous species which ensures that trade in those animals is sustainable.

The AWCF participants also agreed to form unified position statements on specific wildlife conservation and management issues important to their governments and organizations. Such an agreement can help communicate a powerful message to a wide number of audiences. SCI Foundation was requested to assist in communicating the unified messages from the body.

SCI Foundation is the proud leader of the AWCF. Join SCI Foundation to promote its conservation mission in Africa directly through interaction with African wildlife officials. Policy decisions made at this meeting help insure that best practices in wildlife management can be shared so that wildlife can be conserved across the continent.

**At the 10th African Wildlife Consultative Forum, representatives from 11 sub-Saharan countries joined community-based conservation NGOs, academic professionals and professional hunting organizations to discuss the future of sustainable wildlife management.**

Collaborative efforts among conservation organizations and the hunting industry are using hunter-generated revenue to successfully prevent poaching.



Photo credit: SCI Foundation

### PARTNERS:

CAMPFIRE

CITES

FACE

FAO

IGF

IUCN

NAPHA

PHASA

Resource Africa

South African Wildlife College

Texas A&M University

TRAFFIC

United States Fish &  
Wildlife Service

WCS

Wildlife management  
and tourism ministries  
of African nations

WWF

Zambia Lion Project

### PROJECT SITES:

Southern African Countries

### WEBSITE:

[safariclubfoundation.org](http://safariclubfoundation.org)



Save China's Tigers



**PARTNERS:**

- Beijing Capital Group
- China Green Carbon Foundation
- Chinese State Forestry Administration
- Conservation Finance International
- Global Tiger Initiative
- Fujian Provincial Forestry
- Hubei Provincial Forestry
- Hunan Provincial Forestry
- Jiangxi Provincial Forestry
- Leadership for Conservation in Africa
- Society For Ecological Restoration
- Wilderness Foundation

**PROJECT SITES:**

- China
- South Africa

**WEBSITE:**

savechinastigers.org

## RESTORING SOUTH CHINA TIGERS & THEIR ECOSYSTEMS



Ancestor to all tigers and Chinese national icon, the South China tiger is the world's most endangered tiger subspecies with barely 100 remaining.

### 'Lord of the Hundred Beasts'—a Living Symbol of China's Biodiversity

Social and political stability depends on sustainable management of environmental and economic resources. How China manages these issues impacts the entire planet. Save China's Tigers works with China, through its public private partnership—the Chinese Sustainability Partnership—to implement sustainable social, environmental and economic development in its showcase initiative to save the South China tiger (*Panthera tigris amoyensis*). The South China tiger is positioned to become an important symbol of international cooperation on sustainable resource management in China.

**Save China's Tigers is working with China, through its public private partnership—the Chinese Sustainability Partnership—to advance a market-based model to restore entire ecosystems that people depend on for their sustenance and livelihoods.**

Long revered as 'the Lord of the Hundred Beasts,' the tiger remains a living symbol of Chinese culture. However, while China's economy has boomed, its environment has degraded and its tigers have almost disappeared. A survey sponsored by Save China's Tigers confirmed that bringing back the South China tiger will require the restoration of entire ecosystems, including forests, grasslands, watersheds, and biodiversity.

Save China's Tigers is working with China to create tiger reserves totalling more than 250,000 acres in Hubei, Hunan, and Jiangxi based on plans adapted from proven sustainable development models in South Africa that work with communities, restore ecosystems, and create economic opportunity.

The South African experience has already successfully been applied to Save China's Tigers' ground-breaking breeding and rewilding project at Laohu Valley Reserve, a fenced 80,000 acre reserve in South Africa created from degraded agricultural land. This pilot project demonstrates how wild South China tiger populations can be recreated. However, in China the environmental restoration will be more difficult, and the resulting social and economic displacement will be greater.

Save China's Tigers is meeting these challenges by building awareness, educating, and creating sustainable economic opportunity. Chinese conservationists have been trained to apply best practice wildlife management. The message of the South China tiger's plight and the need for sustainable policies has been delivered countless times in Chinese media to encourage the Chinese to take positive action. The Chinese government has committed to support market-based initiatives to pay for the restoration of the tiger habitat and ease the resulting economic displacement.

Save China's Tigers has made tremendous progress since launching this ambitious public-private partnership with the Chinese government. Save China's Tigers has:

- Developed the world's most successful breeding program for South China tigers with more than 10% of the world's population;
- Produced the world's only re-wilding program with proven success in restoring habitat and creating self-sufficient hunters from captive-born South China tigers; and
- Earned profits from sustainable development in China to help pay for the initiative.

By harnessing China's profound desire for a new chapter in the story of the 'Lord of the Hundred Beasts,' Save China's Tigers has done much to advance a market-based model for the conservation of biodiversity paid for by sustainable development.

SCT science advisors work with the government to survey potential sites for reserves in China and plan restoration of their biodiversity.



The innovative SCT conservation model uses African habitat, prey and conservation skills on a 125 square mile protected reserve to train Chinese wildlife managers.



## OVER A HALF CENTURY OF CONSERVATION



**PARTNERS:**

- Hubbs SeaWorld Research Institute
- National Geographic Society
- National Science Teachers Association
- National Wildlife Federation
- The Nature Conservancy
- World Wildlife Fund

**PROJECT SITES:**

Worldwide

**WEBSITES:**

- swbg-conservationfund.org
- seaworldcares.com

SeaWorld Parks & Entertainment has introduced over a half billion people to our planet's magnificent animals and conservation needs of marine and terrestrial wildlife, more than any other zoological institution in the world. Through our SeaWorld, Busch Gardens, Discovery Cove and water parks, our guests encounter species they may never have heard of and create lifelong memories connecting them with the natural world and inspiring them to conserve the natural capital—the economically significant biodiversity and ecosystems—on which all life depends.

SeaWorld Parks and Entertainment is also a practical steward of local and global conservation efforts. The parks are leaders in conservation, research, education, and animal rescue and rehabilitation. Our facilities are a major economic driver in each of our communities, and our company takes active roles in sustainability efforts and conservation of local wildlife. We are global leaders in marine mammal research and publish several papers to increase the scientific knowledge of species, and the animal rescue and rehabilitation program is one of the largest of its kind.

### Research, Rescue, Rehabilitation and Return

The parks care for over 100 endangered, threatened, or at-risk species and employ an experienced team of veterinarians, animal care specialists, and researchers to ensure the best health care, enrichment, and safety of these animals. The parks' breeding programs are among the most successful in the zoological community, and our facilities provide opportunities to research and study animals in ways that would be impossible in the wild.

The parks are global leaders in animal rescue and rehabilitation. The parks have rescued more than 20,000 stranded, orphaned, or injured animals and have returned thousands of these back to their homes. The parks are often first responders to natural and man-made environmental disasters, and have played key roles in mass strandings and other tragedies impacting wildlife. When the government has deemed animals unfit for release, SeaWorld often becomes physically and financially responsible for their long-term care.



A SeaWorld veterinarian examines an endangered loggerhead sea turtle at SeaWorld's Animal Rescue and Rehabilitation Center. SeaWorld treated more than 60 sea turtles impacted by the oil spill in the Gulf of Mexico.

### Inspiring the Next Generation of Conservation Leaders

All our education efforts are designed to promote appreciation and stewardship for animals and the environment. Over 500,000 students and guests participate in our education programs each year, ranging from sleepovers and summer camps to school field trips, college courses, behind-the-scenes tours and resident programs. Our educational programs provide students with an understanding of the linkages between species conservation and the ability of ecosystems to recover from damage and to maintain functions that serve humans. Many of these programs engage students in grassroots conservation efforts in which they can participate within their own communities such as volunteer habitat restoration efforts with our conservation partners.

**All our education efforts are designed to promote appreciation and stewardship for animals and the environment. Over 500,000 students and guests participate in our education programs each year.**

### SeaWorld & Busch Gardens Conservation Fund

The SeaWorld & Busch Gardens Conservation Fund focuses on four strategic areas: Species Research, Habitat Protection, Animal Rescue and Rehabilitation and Conservation Education. Through the support of the parks, our guests, and partners, the Fund has granted over \$8 million to over 700 projects in over 70 countries since 2003.

The Fund's projects support in-situ conservation efforts that have a direct economic benefit to the region. Past projects have included funding for training alternative careers to poaching, supporting sustainable economic practices to reduce the impact on wildlife, wise use practices of natural resources through habitat protection, and employing community members as environmental educators.

With over 22 million visitors to their parks each year, SeaWorld Parks & Entertainment has an incredible ability to educate and inspire people on how they can protect wildlife and wild places. Over 500,000 students participate in the company's education programs each year, and experience incredible interactions with our animal ambassadors.





**PARTNERS:**

Tanzania National Parks  
Singita

**PROJECT SITES:**

Tanzania

**WEBSITE:**

TudorFunds.com



## THE SINGITA GRUMETI RESERVES

The Singita Grumeti Reserves is a 340,000-acre virtual wilderness with open plains, rugged rocky outcrops, woodlands and riverine forests providing habitat to some 400 species of birds, 40 species of herbivores, 25 species of large carnivores, and prolific plant life. Between June and August, the Reserves host the Great Migration of more than a million wildebeests, which spill freely over the western border of Serengeti National Park.

In creating Serengeti National Park, a third of the Great Migration route was left in concessions for development and hunting. To protect one critical link, American financier and environmental philanthropist Paul Tudor Jones won a concession in 2002 from the Tanzanian government consisting of Ikorongo Game Reserve, Grumeti Game Reserve, and Fort Ikoma Open Area. He immediately closed the area to hunting and set up Grumeti Reserves Ltd. Its mission is to rehabilitate and improve the indigenous biodiversity of the western Serengeti-Mara system to the benefit of local communities

and districts, as well as national and international stakeholders, through practices that are financially sustainable, environmentally and culturally responsible, and politically acceptable. Mr. Jones has already invested over \$20 million in this \$45-million project.

Funded by tourism in the Reserves, the Grumeti Community & Wildlife Conservation Fund dedicates millions of dollars to create community projects in the Bunda and Serengeti districts providing access to clean water, job and educational opportunities, ambulance services, and radio communications, and helping set up community gardens and microenterprise.

Before Grumeti began managing the land, wildlife poaching was rampant. Grumeti has developed a 100-member enforcement unit and invested \$2 million in area villages to stimulate economic alternatives to poaching. In just three years, the number of elephants has doubled to almost 900, Cape buffalos have more than tripled to nearly 2,250, and warhogs have multiplied 10 times to over 4,000. Now Grumeti plans the reintroduction of 25 black rhinos. Singita, a world-renowned ecotourism company, is now partnering with Grumeti to help manage and globally promote tourism and hospitality at Grumeti and generally in the Serengeti region.

Grumeti is one of the premier examples of cross-sector, for-profit management of natural resources successfully cultivating populations of important species and the overall natural wealth of the region. This growth creates substantial opportunities for both conservation and local communities, as it has in Grumeti, where the Reserve's revenues support resource management in a critical migratory corridor and are also used to improve quality of life by providing infrastructure improvements, skill building, and employment opportunities. Moreover, this model generates benefits that spread beyond tourism and hospitality, preventing economic vulnerabilities that may occur from overdependence on one sector. The success of the Singita Grumeti Reserves will ensure that natural capital remains the foundation of sustainable growth not only for ecotourism, but many more industries, in the years to come.

**F**unded by tourism in the Reserves, the Grumeti Community & Wildlife Conservation Fund dedicates millions of dollars to create community projects in the Bunda and Serengeti districts providing access to clean water, job and educational opportunities, ambulance services, and radio communications, and helping set up community gardens and microenterprise.





Unilever



PROJECT SITES:

Worldwide

WEBSITE:

sustainable-living.unilever.com/



Ahmed Gouda of Unilever Research, UK, photographed a Unilever palm oil plantation in Ghana, where native plants are grown between the trees to prevent soil loss and improve soil fertility.

## UNILEVER'S SUSTAINABLE LIVING PLAN SHOWS SMALL ACTIONS CAN MAKE A BIG DIFFERENCE

Two billion times a day, somebody, somewhere, uses a Unilever product. We believe brands like Lipton, Dove, Knorr, Bertolli, Suave and many others make small but important differences to the quality of peoples' lives.

Unilever has a long history of delivering solutions for unmet social needs and as we continue to face challenges to our quality of life and that of future generations, addressing these problems becomes even more critical. By 2050, there will be

**In order to conserve our natural resources, Unilever believes that businesses can and must take a leadership role in creating a more sustainable world.**

2.7 billion more people than there are today and in order to meet demand, world food production will have to increase by 50% in the coming years, while one in three individuals around the globe is facing water shortages. In order to conserve our natural resources, Unilever believes that businesses can and must take a leadership role in creating a more sustainable world.



To address the challenges this population explosion will create, Unilever's vision is to double the size of our business while reducing our environmental impact.

The Unilever Sustainable Living Plan, "the Plan," is the company's roadmap to achieve this vision and by 2020 and through over 50 time-bound commitments, we aim to: help 1 billion people take action to improve their health and well-being, halve the environmental footprint of our products and source 100% of agricultural raw materials sustainably. The Plan goes beyond our factory doors and addresses the entire lifecycle of our products—from sourcing to consumer use—and addresses all aspects of sustainability: social, economic and environmental.

To achieve these commitments, we need new ways of working that put sustainability at the heart of everything we do and require partnerships with governments, NGOs, suppliers, and retailers to address the monumental challenges that face us all.

For example, food security is under threat from rising populations, water scarcity and unsustainable farming practices. The Unilever Sustainable Agriculture Code requires our suppliers, and the farmers who supply them, to adopt sustainable practices on their farms. Today we source 10% of our agricultural raw materials sustainably and plan to increase to 100% by 2020. Through a host of multi-stakeholder collaborations including the Roundtable for Sustainable Palm Oil, the Roundtable for Responsible Soy, and the Sustainable Agriculture Initiative Platform, Unilever is promoting sustainable agricultural development worldwide.

Estimates of Unilever's water footprint are that around half the water consumed in the lifecycle of our products was used in agriculture. Accurate measurement of the water used in agriculture is still in its infancy, but will be vital to gauging our progress. To address this, Unilever was a co-founder of the Water Footprint Network, which draws on expertise from the International Finance Corporation, World Business Council for Sustainable Development, WWF and UNESCO as well as other businesses to derive an industry standard to measure water impacts.

These are a just a few of the steps Unilever is taking on a long journey to better the lives of our consumers and the world in which they live. Most importantly, we believe that through our brands we can help and inspire billions of consumers to take small everyday actions that can add up to a big difference for the world, and together make sustainable living commonplace.

Black soybeans harvested in Indonesia through direct sourcing partnerships. Under the Plan, Unilever will sustainably source soybeans by 2014.



Tomatoes grown using drip irrigation systems at farms in and surrounding Goiânia, Brazil.



## BUILDING PUBLIC-PRIVATE PARTNERSHIPS IN THE UNITED STATES AND INTERNATIONALLY TO MAKE PROGRESS IN ECONOMIC DEVELOPMENT AND SOUND RESOURCE USE



### PARTNERS:

Center for American Progress  
Dow Corning Corporation  
European Donor Governments  
Shell Corporation  
UN-Energy  
U.S. Government

### PROJECT SITES:

Worldwide

### WEBSITE:

unfoundation.org

The United Nations Foundation helps the United Nations solve some of the world's most pressing problems by creating, facilitating and enriching public-private partnerships. A key component of UNF's work is helping connect people, ideas and resources to foster global, lasting change. Creating access to energy solutions that are safe for people and the environment, running health initiatives to help families survive and thrive, and providing educational and economic opportunities to alleviate poverty and enhance livelihoods are just some of UNF's robust global development efforts.

Among UNF's innovative campaigns and initiatives that help the UN make progress on the most important and far-reaching international energy and environmental sustainability challenges are the following:

### Sustainable Energy for All

One in five persons on the planet lack access to modern energy services, and nearly two times as many people rely on solid fuels for cooking and heating. At the same time, there are portions of the world that are consuming energy at a rate that cannot be maintained without tremendous negative consequences. In order to address these energy inequities, UN Secretary General Ban Ki-moon recently launched 'Sustainable Energy for All' to mobilize global action around three inter-linked objectives to be achieved by 2030: ensuring universal access to modern energy services; doubling the rate of improvement in energy efficiency; and doubling the share of renewable energy in the global energy mix. Cleaner and more efficient sources of energy will help power the American economy forward, and greater access will improve the quality of life for all people worldwide.

### Global Alliance for Clean Cookstoves

The Global Alliance for Clean Cookstoves is a public-private initiative working to save lives, improve livelihoods, empower women and combat climate change by creating a thriving global market for clean cookstoves and fuels. Smoke emitted from

A woman cooks with her improved cookstove in Ghana.



As the sun begins to set in India, solar lanterns will help these boys to see at night.

burning solid fuels over open fires and rudimentary cookstoves for cooking causes a range of diseases that kill two million people annually. The environmental consequences of inefficient cooking practices are significant: overreliance on wood fuel depletes forests and creates pollution, impacting the United States and countries around the world. The Alliance's goal is for 100 million households to adopt clean cooking solutions by 2020.

### Energy Future Coalition

The Energy Future Coalition is a broad-based, non-partisan alliance that seeks to bridge the differences among U.S. business, labor, and environmental groups by identifying energy policy options with broad political and public support. The Coalition focuses on tackling the issues of global pollution, the world's dependence on oil, and the need for sustainable development by positioning the United States as a world leader in energy efficiency and clean energy production. The Coalition works around the U.S. to educate the public and activate grassroots support for the policies that will drive the world's clean energy future.

### International Sustainable Bioenergy Initiative

The United Nations Foundation advances environmentally and economically sustainable strategies for harnessing biomass energy, believing it is possible to adopt smart policies for bioenergy that expand energy access, reduce poverty, promote sustainable development and minimize competition with food resources in the United States and around the world.

**The Global Alliance for Clean Cookstoves— a partnership of government, non-governmental, and private sector organizations—is creating a thriving global market for clean and efficient household cooking solutions. Clean cookstoves can deliver health, environmental, and economic benefits in developing countries.**



## THE SERENGETI WILD DOGS CONSERVATION PROJECT

Vodacom Tanzania recognizes that wild dogs are essential to the delicate balance of the Serengeti ecosystem and that their conservation contributes to the sustainability of natural services and the wellbeing of local communities.

Through the Vodacom Foundation, Vodacom Tanzania has given 250,000 U.S. dollars to a 2-year project to increase the number of wild dogs. The objective of the Vodacom Foundation's Serengeti Wild Dog Conservation Project is to bring the wild dog back home and to address the wild dog versus human conflict in the areas surrounding the park.

The conservation authorities in Tanzania including Wildlife Division, Tanzania National Park, Ngorongoro Conservation Area and Conservation NGOs are collaborating with Vodacom Foundation to achieve the goal "of improving the conservation status of the wild dog population in the Serengeti ecosystem."

Historically, the species used to be in the park and became locally extinct by the end of 1992 due to diseases and competition with large carnivores such as lion and hyena. Now the project has been very successful and has managed



### PARTNERS:

Frankfurt Zoology Society  
Grumeti Game Reserve  
Tanzania Wildlife Research Institute (TAWIRI)  
Wildlife Division of Tanzania National Parks

### PROJECT SITE:

Tanzania

### WEBSITE:

[vodacom.co.tz](http://vodacom.co.tz)

**The project also boosts tourism, brings education on conservation to local communities, creates awareness of the dangers of depleting the population of wild animals, and contributes to a balanced ecosystem that provides natural services that are the foundation of local economic activity.**

Wild dogs in a holding 'boma' waiting for their meal.



A group of wild dogs in Serengeti.

to conserve the dogs both in captivity and in the wilderness in the Serengeti ecosystem. Currently, there were 11 dogs kept at Samunge enclosure only, ready for translocation to Serengeti National Park and about 200 dogs ranging freely in the wild.

Currently the caretakers have started a new feeding schedule from a daily basis to an interval of skipping a day. This means that the dogs will be fed only 15 days in a whole month. This has been done purposely as the puppies are big enough to withstand even two days without feeding, provided they received a recommended amount of meat at a time of feeding.

The fresh meat either from goat or sheep ranging from 38–50 kgs is fed to the dogs on a feeding day and a total of three to four shoats have to be slaughtered to attain that amount of meat depending on their size.

Apart from feeding, the dogs are receiving medical care to make sure that when the dogs are set free they will survive the health hazards. Information on health status and behaviours of wild dogs in the boma were recorded in the data sheet from the beginning to the end of the month. All 11 dogs present normal behavior and are in good body condition with no significant health problems or behavioral abnormalities recorded so far. Currently the puppies are about 7 months old.

Samunge district officers requested to allow them to use the dogs at Samunge boma for tourism, and they think that it is better to keep the dogs at Samunge for income generation for village development.

Vodacom Tanzania was inspired to invest in a non-profitable project as it has commitments to all aspects of Tanzania's life and culture. Supporting issues involving the environment led Vodacom Foundation to choose the Serengeti Wild Dog Project, as jobs are created in each village where the project is conducted. The project also boosts tourism, brings education on conservation to local communities, creates awareness of the dangers of depleting the population of wild animals, and contributes to a balanced ecosystem that provides natural services that are the foundation of local economic activity. This project, with its focus on ecosystem restoration and biodiversity protection, aligns with Vodacom Tanzania's larger CSR goals while creating economic opportunities for the people in the markets in which Vodacom Tanzania operates.

Game reserve workers strengthening the fence around the dog holding area in Samunge.





## WE'RE A RESPONSIBLE PARTNER, ON THE ROAD AND IN YOUR NEIGHBORHOOD



Volkswagen Group has a deeply embedded commitment to preserving our environment. Sustainability is a corporate objective that we take very seriously, one that's embodied by Think Blue®, our initiative to go beyond green. Think Blue is more than just food for thought; it's a state of mind, a global call to action—sustainable ecological action.

As one of the world's largest automobile manufacturers, our commitment to the environment extends throughout every aspect of our business in the more than 150 countries in which we operate—not only protecting the environment and cornerstone species, but integrating the value of important environmental benefits into business decision-making. In the modern global economy, it is necessary to align our actions with the economics of the surrounding ecosystem, to ensure the security of our supply chain and the prosperity of the communities in which we operate.

### PARTNERS:

Conservation International  
The Welcome Wolf Project  
Wilderness Foundation's  
Forever Wild Rhino  
Protection Initiative

### PROJECT SITES:

Chattanooga, Tennessee  
Brandenburg and  
Saxony, Germany  
Eastern Cape, South Africa

### WEBSITE:

volkswagengroupamerica.com

### Where We Work and Live

In South Africa, Volkswagen Commercial Vehicles has partnered with the Wilderness Foundation's Forever Wild Rhino Protection Initiative to aid in proactive rhino conservation and anti-poaching activities. This initiative is concerned with maintaining populations of free ranging rhino within state and privately managed conservation areas.

In Germany, Volkswagen Group is a proud supporter of The Welcome Wolf Project that is helping to establish a volunteer wolf protection network in the Lusatia region. Since wolves require large territories, Volkswagen and the Nature and Biodiversity Conservation Union (NABU) are committed to preserving these areas and educating the public about wolves.

### Where We Build Our Cars

We scrutinize every step in the manufacturing and transportation process, beginning with site selection. We avoid locating new facilities on sites where unique or sensitive ecosystems exist and require minimal environmental impact and maximum safety during construction. Volkswagen's Chattanooga manufacturing plant has received a Platinum LEED Certification from the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) program. The facility is the first and only automotive manufacturing plant in the world to receive the Platinum LEED Certification. The plant was built on a brownfield property with no destruction

Protected wolf in Brandenburg and Saxony



The Jetta Hybrid, powered by a high-tech turbocharged gasoline engine mated to a zero-emissions electric battery

of untouched nature. In building the plant, Volkswagen protected 100-foot wide creeks and established wetlands to create natural habitats. Water conservation is achieved by limiting waste and recycling through filtration systems where possible. The ultra-clean paint shop alone will save 50 million gallons of water in ten years and is 20% more efficient than industry standards.

**Our commitment to the environment extends throughout every aspect of our business in the more than 150 countries in which we operate—not only protecting the environment and cornerstone species, but integrating the value of important environmental benefits into business decision-making.**

### The Cars We Build

In January 2012, Volkswagen unveiled the Jetta Hybrid, a new member of the Think Blue family. The Jetta Hybrid uses a clutch to decouple the gas engine from the drivetrain, which allows the engine to shut off and the car to “coast” on electricity at speeds up to 84 mph. Additionally, the driver can select an electric-only E-mode via a button next to the shift lever; this forced gas-free propulsion is limited to 1.2 miles and a maximum of 44 mph. This type of innovation will help make the Jetta Hybrid the most fuel efficient Volkswagen in our U.S. fleet. Similar to the TDI Clean

Diesel vehicles Volkswagen has on the road today, the Jetta Hybrid is big on performance and light on carbon footprint. Increased mobility creates challenges as well as opportunities. With more than 80 percent of the world's population dependent on fossil fuels and demand on the rise, it is increasingly important to national security and human well-being to provide responsible energy alternatives. As citizens of the world, we take our responsibility seriously and welcome the opportunity to make a difference. We are a responsible partner, on the road and in your community.

Rain water collection tank at Volkswagen Group of America Chattanooga Operations, LLC



## NATURE NEEDS HALF™

At the 9th World Wilderness Congress ("WILD9") in Mexico in 2009, The WILD Foundation and 25 early organizational endorsers launched "Nature Needs Half" ("HALF")—a global vision and call to protect and interconnect at least half of Earth's lands and seas in order to support all life. A new "social movement for nature conservation" is growing, as people begin to understand what scientists have told us for a decade—that safeguarding approximately half a land or water ecosystem is required to support a healthy and prosperous human society with "services" such as: adequate biodiversity; quality water; raw materials; genetic resources; sufficient rainfall; and healthy, well-cycled nutrients and soils. These ecological services ("life support") simply cannot withstand degradation and fragmentation beyond half of their pre-industrial size.

The decline and disappearance of wildlife and plant species is increasingly apparent and widely acknowledged. There's a strong correlation between the persistence of poverty and the overexploitation of nature: the people who suffer the most when you lose forest or wetlands are those in developing countries. There are between 1 and 1.2 billion people around the world who are directly dependent on natural ecosystems for their survival, where 50 to 90 percent of their total livelihood income is derived directly from nature. HALF places overt emphasis on the effect of ecosystem destruction on human health and livelihoods, particularly on those poorest communities most directly dependent on nature.



### PARTNERS:

Conservation International  
Frankfurt Zoological Society  
Naturalia (Mexico)  
PanParks (Europe)  
Rewilding Europe  
Sanctuary Asia  
Wilderness Foundation (South Africa)  
Wilderness Foundation (UK)

### PROJECT SITES:

Global

### WEBSITE:

wild.org



"Nature Needs Half applies to the waters of the world as well as the land, from the tops of mountains to the greatest depths of the sea. More than half of the world is ocean, the blue heart of the planet. You decide: How much of your heart do you need to stay alive?" —Dr. Sylvia Earle, 2011

Scientists have developed "HALF" by using four principles "to maintain biodiversity and ecological processes":

- **Representation**—All the native ecosystems should be represented in a protected areas system.
- **Viability**—Viable populations of all native species should be maintained and allowed to fluctuate in a natural way.
- **Intact Processes**—Ecological and evolutionary processes, such as free-flowing rivers, wind, fire, herbivory, and carnivory, must be ensured.
- **Resiliency**—The system should be designed and managed so that it is resilient to both short-term impacts and longer-term change.

Nature Needs Half means we must scale up our thinking, policy, and action, and strategize among stakeholders to address these four principles to create a land or seascape of intact wild nature and areas suitable for "rewilding." HALF envisions each strategy encompassing a mosaic of land ownership types, integrating with seascapes, so that publicly designated protected areas, working lands, and productive marine areas all play a role in ensuring the flow of ecological life support to humans and wildlife alike.

The World Wilderness Congress (WWC), the longest-running environmental program, founded by WILD in 1978, is fostering the progression of HALF as a practical conservation solution for policy, field work, and the sustainability of communities. Illustrating the need and possibility for HALF is a key objective of WILD10—the 10th WWC—in Salamanca, Spain (4–10 October 2013). All WILD's projects explore and illustrate the HALF concept. For example, the Mali Elephant Project protects the large landscape and corridors required for the long annual migration of these

desert elephants. The Marine Wilderness Project promotes and assists designation of new marine protected areas (MPAs), or zones within established MPAs, to maintain or restore the natural structure and function of ocean, coastal and inland marine ecosystems. The Native Lands & Wilderness Council is composed of indigenous people (traditional communities own nearly a quarter of Earth's land and inhabit over 85% of protected areas) generating conservation strategies among tribes and across cultures.

"People also come first" under HALF, which aims to protect ecological services to humankind as well as wildlife.



Photo credit: Cristina Mittermeier/Kayapo

## FOREVER WILD RHINO PROTECTION INITIATIVE



### PARTNERS:

Africa Wildlife Foundation  
The WILD Foundation  
Volkswagen Group of South Africa

### PROJECT SITES:

South Africa

### WEBSITE:

wildernessfoundation.org.za



Forever Wild Rhino Initiative goal = Sustainable and genetically diverse populations of free ranging rhino are maintained within state and privately managed conservation areas in South Africa as part of functioning natural ecosystems.

The criminal activity of killing rhinos for their horn results in almost two rhinos lost per day in South Africa. Poaching is expanding, hitting public parks and privately owned reserves. An alarming 434 rhinos were poached last year, the horn brutally removed with the animal often still alive; the devastation is escalating in 2012. At this rate and given the unselective nature of poaching (killing breeding/pregnant cows, calves and young bulls), South Africa faces negative population growth by 2016.

South Africa is caretaker of 90% of the world's rhinos, and as the country's largest conservation NGO, the Wilderness Foundation (WF) launched Forever Wild to sustain biodiversity and free-ranging numbers. WF was founded in 1972 by Dr. Ian Player and Zulu trail guide Magqubu Ntombela—two visionaries who together discovered the power of wilderness to dissolve ethnic and economic inequalities and forge one path toward social and environmental sustainability. Dr. Player led "Operation Rhino" as an iMfolozi Game Reserve ranger in the 1960s, sparing the White Rhino from extinction.

Illegal trade in rhino horn is driven by economic growth in China and Vietnam, transiting through Thailand, Malaysia, India and Nepal. Despite that under CITES obligations, China banned the trade in 1993, centuries-long belief in curative properties prescribed in traditional Chinese medicine as well as social prestige continue to fuel the trade. It is impossible to project the consumer demand for horn if legalized.



The ever-increasing threats to the survival of this cornerstone species threaten rhinos as well as the stability of the entire ecosystems in which they reside.

At great risk are the Black, Indian and Sumatran rhinos, which are few in number compared to the recovered Southern White Rhino.

Supply, transit and final disposal of horn follow routes and modus operandii of organized crime. Ever emboldened (and well-financed) foreign criminal syndicates find ready recruits among the poor and unemployed in South Africa lacking a conservation ethic, and are enabled by inadequate security in protected areas. Rangers are overwhelmed by the sophisticated weaponry and scouting technology of well-trained poaching gangs deploying expensive equipment like light aircraft, helicopters, tranquilizer guns and night-vision goggles to pursue rhinos. Poachers caught are often not duly prosecuted due to lacking evidence, and corruption also exists.

WF generated a factual case for protecting rhinos, addressing issues of legalizing the trade in rhino horn, rhino farming, and sport hunting. It utilizes this case to attempt to neutralize the current commodity value of the horn by confronting demand side policy-makers and consumers with education, marketing and persuasion.

WF meanwhile bolsters the training, equipment, supplies and technology of protective forces to outmatch the quality and quantity of poaching teams, plus veterinary medical treatments for injured rhinos and supplies to fortify fencing and tagging of rhinos with GPS chips and alarms. WF supports channeling resources into the DNA profiling of rhinos on the national database at Onderstepoort as a vital tool in forensic investigations and successful prosecution in poaching cases. WF deploys social media tools—an interactive website with a petition soliciting signatures, YouTube video, and Facebook and Twitter pages. WF also fosters a national plan for managing rhino biodiversity.

The ever-increasing threats to the survival of this cornerstone species threaten rhinos as well as the stability of the entire ecosystems in which they reside.

WF is working toward not only rhino protection and species preservation, but also toward conservation of ecosystems and the wellbeing of communities and individuals which depend on the many services these ecosystems provide.

WF's Umzi Wethu Programme's dynamic poverty and HIV/AIDS alleviation model tied to conservation in rhino range areas has transformed the lives of over 140 youth now in sustainable jobs as rangers and in ecotourism in the Eastern Cape.





## CLEAN COOKSTOVES IN AFGHANISTAN BRING ENVIRONMENTAL, SOCIAL AND ECONOMIC BENEFITS



### PARTNERS:

USAID

### PROJECT SITES:

Bamyan Province and the Wakhan Corridor, Afghanistan

### WEBSITE:

wcs.org

As the only international conservation organization working in Afghanistan, the Wildlife Conservation Society (WCS) sees sustainable resource management as key to improving livelihoods and providing long-term stability in a country where 80 percent of the people depend economically on the natural resource base for their survival, and with an environment that has been badly degraded through 30 years of conflict.

USAID funding for work in Afghanistan is supporting a WCS initiative to introduce fuel-efficient cookstoves to villages in Bamyan Province and the Wakhan Corridor. The project aims to conserve diminishing natural resources while creating alternative livelihoods, improvements in people's health, and other benefits.

The currently used tandoor ovens require large amounts of wood for fuel, which affects Afghanistan's already degraded forests and shrublands, endangering a critical resource for rural people, livestock, and wildlife. WCS is working with local women and artisans to introduce new fuel-efficient stoves that can reduce the amount of local timber collected for fuel by up to 75 percent. Thus far, more than 550 fuel-efficient stoves have been distributed in Bamyan and Wakhan villages, and this number is going up daily.



In Afghanistan, women are learning about new fuel-efficient cookstove technology that will provide benefits for human health, the economy and the environment.

The new technology has also brought health and social benefits as well. Because of the chimney features on the new stoves, smoke and particulates created by the cooking process no longer linger inside small enclosed living spaces, where women and children spend much of their time. The increased air quality is expected to offer a lessened risk of upper respiratory disease due to reduced exposure to smoke. In addition, as primary fuel collectors, women will benefit from the decreased need for fuel, freeing up time for education or microenterprise.

The project is facilitating the training of 920 women in the use of the new stove technology in Bamyan and Wakhan. These women now visit nearby communities, teaching other women of the many benefits of using environmentally-friendly stoves. Interest in and adoption of the technology is also growing virally through word-of-mouth in neighboring villages.

The new stove technology is also being used as a way to bolster economic development in the region. Rather than simply importing the stoves, the program brings craftsmen into Afghanistan from Pakistan, where the technology was developed. The Pakistani craftsmen train artisans in the methods of manufacturing the stoves so that people who live in Afghanistan can produce and sell them locally, creating additional economic benefit to communities.

**Clean cookstoves are part of a larger WCS effort in Afghanistan to help local people co-manage their own landscapes and natural resources with the Afghan Government, and create a foundation for economic stability and growth.**



Photo credit: WCS Afghanistan

Clean cookstoves are part of a larger WCS effort in Afghanistan, supported by USAID, to help local people co-manage their own landscapes and natural resources with the Afghan Government. Reducing the harvesting of fuel wood insulates villages from increased occurrence of mudslides and other disasters, which would increase scarcity and destroy economic stability. Linking these communities with the provincial and central government also increases the reach and rule of law into distant rural areas, all of which positively affects U.S. national security.





**PARTNERS:**

Nearly 700 including:

Gabon National Agency of National Parks

Fauna & Flora International

International Rhino Foundation

Mexico Ministry of Environment and Natural Resources

National Protected Areas Agency of Mexico

National University of Córdoba

National University of Costa Rica

Society for the Conservation and Study of Caribbean Birds

Wildlife Conservation Society

World Wildlife Fund

**PROJECT SITES:**

Worldwide

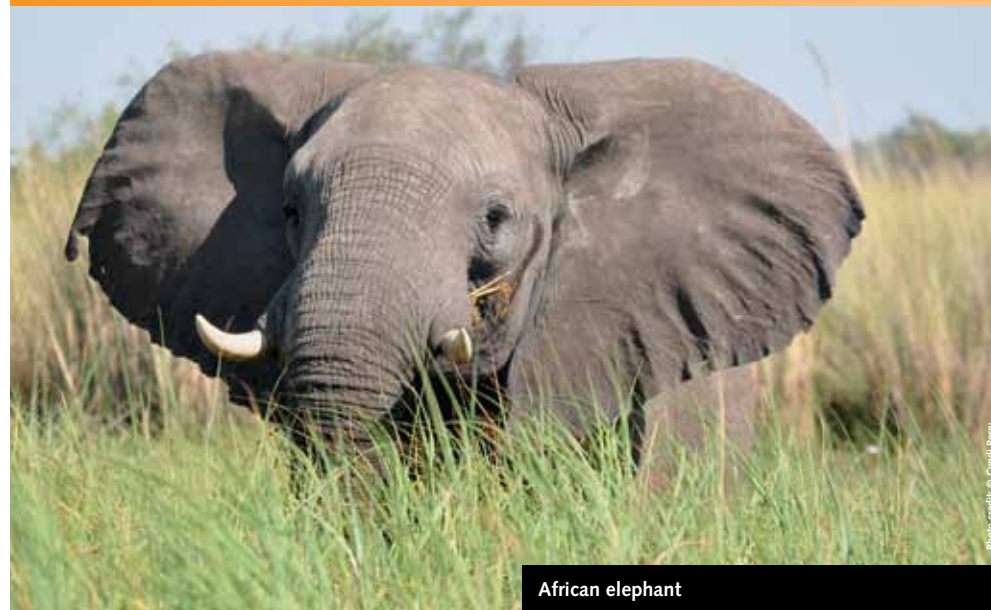
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fws.gov/international

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African elephant

## WILDLIFE WITHOUT BORDERS: WORKING WITH PEOPLE TO CONSERVE NATURE

The U.S. Fish and Wildlife Service's Wildlife Without Borders program builds the capacity of local people to value and conserve the world's most treasured wildlife and habitats.

Wildlife and natural resources all over the world are under pressure from human activities such as poaching, human-wildlife conflict, illegal harvesting of bushmeat, resource extraction, wildlife diseases, habitat destruction and pollution. To have any hope of saving these important animals and habitats from extinction, we have to work across broad landscapes, including international borders. These international conservation efforts are of strategic importance to the United States because degraded environments can limit development opportunities and cause economic instability in regions key to American interests.

The U.S. Fish and Wildlife Service's Wildlife Without Borders program supports vital efforts across the globe to conserve the planet's rich diversity of wildlife for generations to come. Its unique approach builds the capacity of local people to value and conserve the world's most treasured wildlife and habitats, through Species, Regional, and Global programs.

The Species Program conserves some of the world's most at-risk and iconic animals and their natural landscapes. Regional Signature Initiatives work with key stakeholder groups to develop innovative solutions to shared conservation problems. The Global Program addresses cross-cutting threats to wildlife and landscapes, increasing awareness, networking, and implementing international agreements and treaties.

These programs allow the U.S. Fish and Wildlife Service to address conservation threats around the globe that impact our own wildlife populations.

**We work across borders to relieve stress on natural resources in regions key to American interests.**



We work to reduce threats to wildlife by supporting anti-poaching, conservation education, habitat restoration, population monitoring, and increasing awareness and appreciation of wildlife. Major efforts are directed towards public-private partnerships at all levels, from grassroots capacity building to applied conservation research, to wildlife management training and conflict mitigation.

Wildlife Without Borders—Species, Regional, and Global—has provided over 2,700 grants for international conservation totaling more than \$100 million from 1989 to the present. We have worked with nearly 700 partners worldwide, who have contributed more than \$200 million in matching support for projects, tripling the impact of our funding. All this is accomplished at the cost of only 5 millionths of each taxpayer dollar.

### 2011 Wildlife Without Borders Project Highlights

**Tigers:** Wildlife Without Borders will fund basic equipment for rangers to conduct anti-poaching patrols in a newly declared Russian national park inhabited by tigers. *Partner: The Phoenix Fund*

**Great Apes:** Wildlife Without Borders funding will enable Indonesian authorities to conduct wildlife crime investigations and prosecute poachers, to protect Sumatran orangutans. *Partner: Wildlife Conservation Society*

**African Elephants:** Wildlife Without Borders will continue support for the successful Elephant Trade Information System, analyzing ivory trade data to identify smuggling routes in elephant range states and illegal consumer markets. *Partner: TRAFFIC International*

**Critically Endangered Animals:** To prevent endangered white-backed vultures from being harmed by veterinary drugs in the carrion they consume, Wildlife Without Borders will support a free livestock vaccination program for local Pakistani communities, and investigation of drug alternatives. *Partner: World Wildlife Fund*

**Marine Turtles:** Working with local Ngobe Indian communities in Panama, Wildlife Without Borders will support long-term partners to restore the Chiriqui Beach nesting of hawksbill sea turtles, once the largest in the western Caribbean. *Partner: Sea Turtle Conservancy*

**Amphibians:** In Ecuador, poison arrow frogs will be housed in an assurance colony supported by Wildlife Without Borders, to prevent them from being exterminated by the spread of the deadly chytrid fungus. *Partner: Fundación Ontaga*

**Monarch Butterflies:** At the Monarch Butterfly Biosphere Reserve in the state of Michoacan, Mexico, Wildlife Without Borders will support training for local people to protect resources both they and monarch butterflies depend on during the winter. *Partner: ALTERNARE, A.C.*



Poison arrow frog



Ngobe Indian children watch as a hawksbill turtle is released.



**PARTNERS:**

- Centre for Research Action in Africa (CRIAA)
- Integrated Rural Development and Nature Conservation (IRDNC)
- Millennium Challenge Corporation (MCC)
- Namibian Association of Community Based Natural Resource Management Support Organisations (NACSO)
- Namibia Development Trust (NDT)
- Namibian Ministry of Environment and Tourism (MET)
- Namibian Nature Foundation (NNF)
- Nyae Nyae Development Foundation of Namibia (NNDFN)
- University of Namibia (UNAM)
- U.S. Agency for International Development (USAID)

**PROJECT SITE:**

Namibia

**WEBSITE:**

worldwildlife.org

## COMMUNITY BENEFITS FROM WILDLIFE CONSERVATION IN NAMIBIA

In Namibia, World Wildlife Fund (WWF) and its partners have helped rural communities gain control and management over their wildlife as part of a sustainable development approach that has led to remarkable economic growth in some of the country's poorest areas and one of the greatest wildlife recovery stories ever told.

Prior to independence in 1990, heavy commercial poaching and uncontrolled hunting had driven Namibia's wildlife populations to historical lows—in some communal areas, large game animals had been completely eradicated; in others, only fragmented populations remained. From 1993 to 2008, in partnership with the Namibian Ministry of Environment and Tourism (MET) and working with private companies and the Namibian Association of Community Based Natural Resource Management Support Organisations (NACSO), WWF implemented USAID's Living In a Finite Environment (LIFE) Program to develop a Community-Based Natural Resource Management (CBNRM) approach that has improved the quality of life for rural Namibians by helping them sustainably manage their communal wildlife resources and facilitating the development of natural resource-based business opportunities through partnerships with the private sector, including joint venture lodges and safari hunting operators.

**Community management of natural resources, which devolves power from the central government and allows locally created community councils to own, manage, and profit from their wildlife, is key to effective conservation and ensuring natural assets are sustainable resources as it creates financial incentives for communities to protect wildlife.**

Elephants in Caprivi Region



MET rangers and community game guards patrol together in Babwata National Park, Caprivi Region, during the annual game count.

In 1996, the Namibian government gave communal areas the right to manage their wildlife through the formation of communal "conservancies," based on the premise that conservation successes outside of state protected areas depend on the benefits that local people gain from the natural resources being conserved. As a result of the ground-breaking legislation and the CBNRM program developed by WWF and MET, wildlife populations have rebounded from historic lows and are generating annually-increasing benefits to conservancies, which are often located in areas far removed from traditional economic hubs. Namibia now shelters the largest population of free-ranging black rhino in the world; elephant numbers have increased from approximately 7,500 in 1995 to an estimated 20,000 in 2011; and lions are expanding their numbers and their range, in contrast to trends elsewhere in Africa.

There are now 71 registered conservancies engaging over 240,000 community members—1 in 8 Namibians—and covering 37 million acres, or 18.2% of the country. The total annual benefits from CBNRM activities to conservancy members grew from a negligible amount in 1994 to US \$6.0 million in 2010. The largest portion of this was generated by joint-venture tourism agreements between national and/or regional private sector companies and individual conservancies. Forty such agreements now exist, a scale and number greater than found in any other country in the world. Namibia's CBNRM program has generated over \$25 million in private investment and provided significant employment opportunities for conservancy residents: in 2009 alone, 1,669 formal jobs were in place and approximately 7,115 people benefited from seasonal employment opportunities.

The U.S. government is continuing its partnership with Namibia through the Millennium Challenge Corporation's MCA-Namibia Conservancy Development Support Services Project (CDSS), which builds on USAID's remarkable success. Implemented by WWF and its national partners, the CDSS project is helping develop the capacity of communal conservancies to attract investments in ecotourism and capture a greater share of the resulting revenue.



Game guards in Sorri-Sorris Conservancy collate information from their event books, which are used to monitor wildlife.

*Tea farmers in Munnar, India*



The magnitude and interrelated nature of the natural capital concerns highlighted in this book present an unprecedented threat to human well-being. ICCF's Partners in Conservation are committed to working together to address these challenges in order to achieve prosperity and security for all.

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As a project-driven organization, iLCP's goal is to translate conservation science into compelling visual messages targeted to specific audiences. It works with leading scientists, policy makers, government leaders and conservation groups to produce the highest-quality documentary images of both the beauty and wonder of the natural world and the challenges facing it.

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