



Big Cats

A WCS Progress Report





We Stand for Wildlife.SM

As some of the most iconic, enigmatic, and acutely threatened species on Earth, big cats embody the extremes of power and fragility. These animals are among the most recognized and revered in both modern and traditional cultures—yet their future is increasingly uncertain. All big cat species are currently in decline.

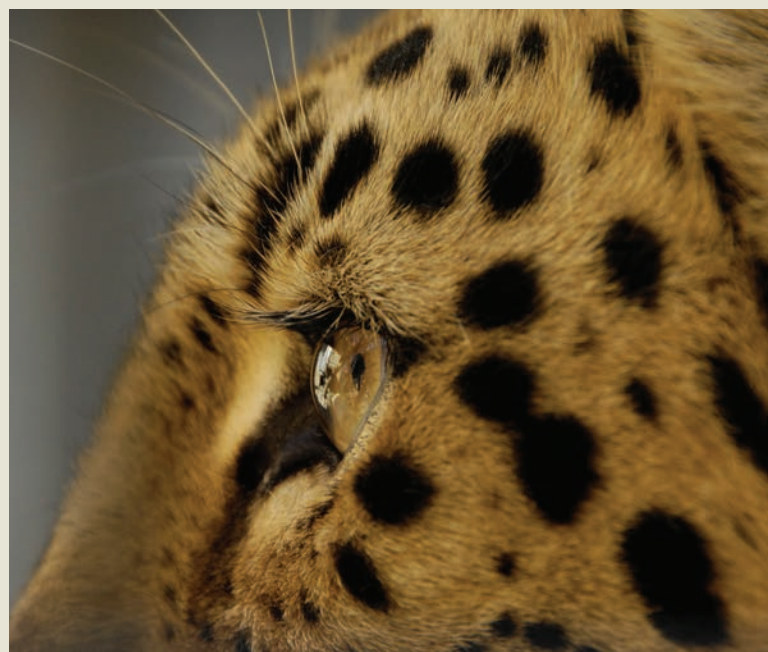
As apex predators, big cats are critical in maintaining the ecological balance of the landscapes in which they live. By saving these species, we also protect their habitats and prey species, and hence their entire ecosystems. Big cats are culturally and ecologically irreplaceable, and we have an urgent responsibility to conserve them.

This WCS Progress Report provides our generous supporters with select updates and insights on recent big cat conservation activities across the globe, in some of the most critical habitats. In this edition, we will share stories about our efforts to protect the world's tigers, lions, jaguars, leopards, and more.

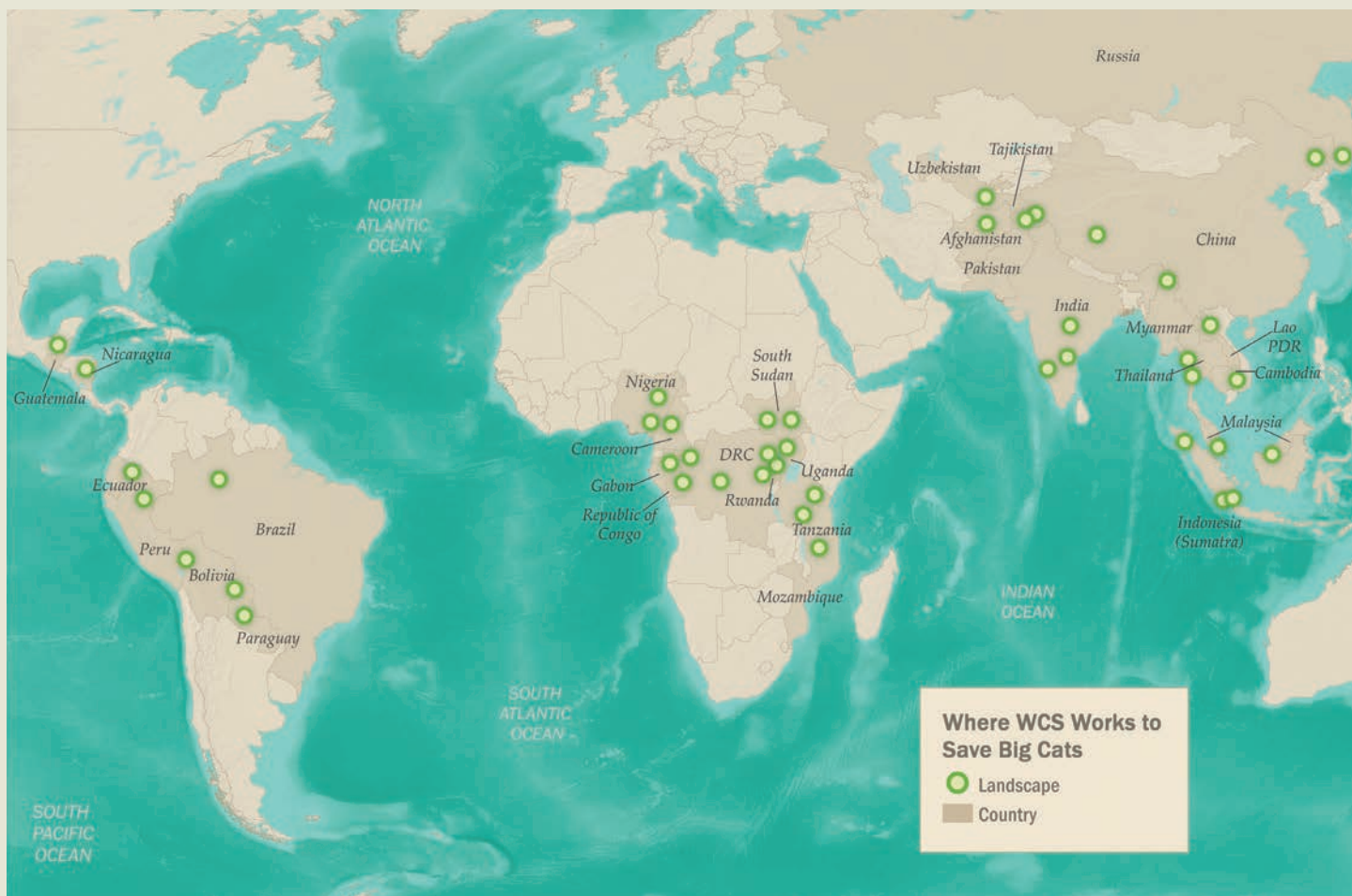
WCS Responds to Big Cat Threats

Big cats are among the most beloved, yet threatened species on earth. The downward trend in their populations is driven by a multitude of threats. Big cats require large wild spaces to roam and prey to hunt, making them highly vulnerable to habitat loss and degradation. If populations of their prey become depleted, these animals are deprived of their vital food sources. Because big cats sometimes prey on livestock, they often become victims of retaliatory killing or poisoning. Some are also subject to hunting for their fur and body parts, which are used in traditional medicine and as souvenirs and talismans.

WCS combines expertise in biology, ecology, protected area management, conflict mitigation, law enforcement, carnivore health, and strategic collaboration to address the diverse needs of big cats with unique approaches in each site. WCS works to conserve all big cat species, with long-term programs in 44 landscapes across 30 countries spanning Africa, Asia, and Latin America. We have more boots on the ground in more locations than any other organization doing big cat conservation.



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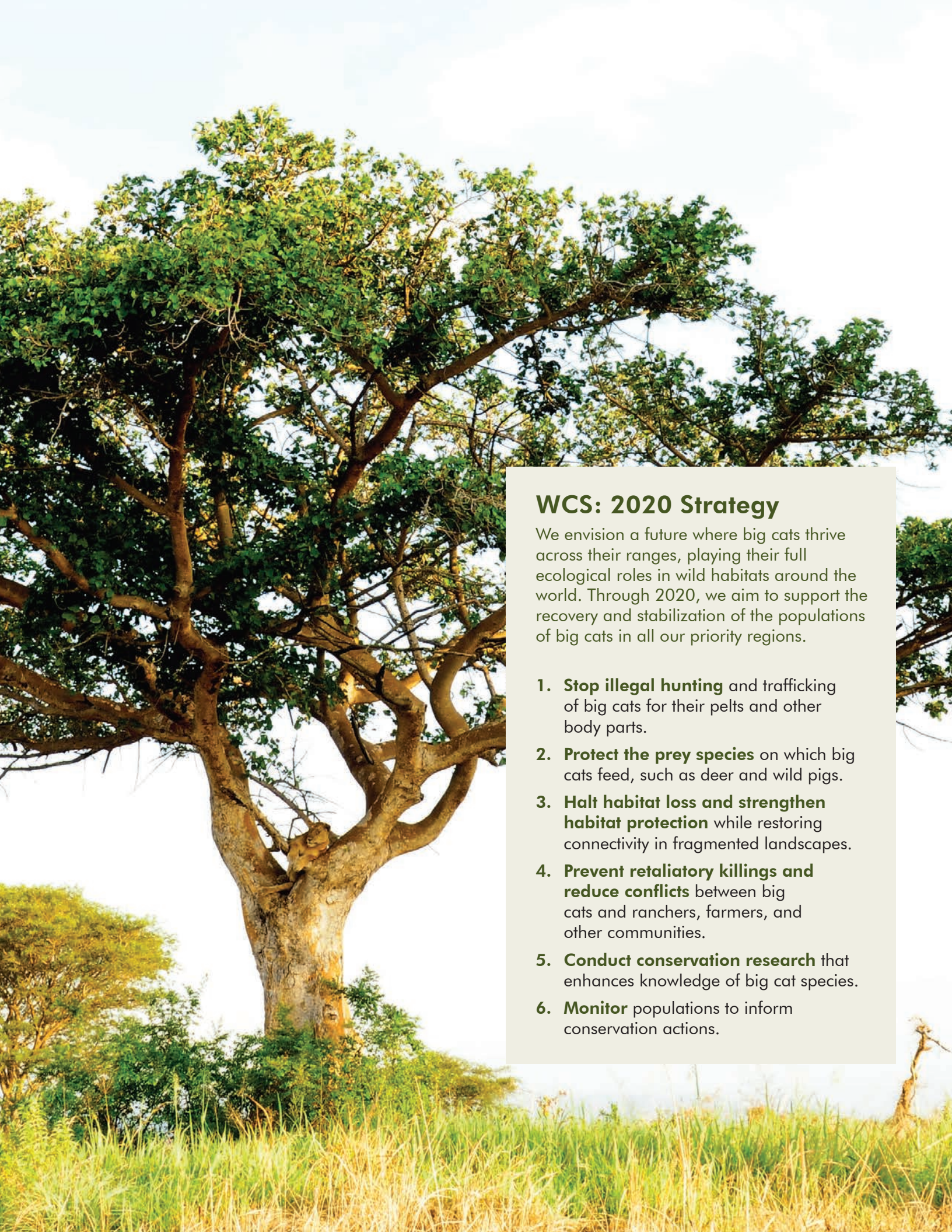
Big Cat Species Spotlight



| SPECIES | CONSERVATION STATUS | CURRENT RANGE | GLOBAL POPULATION ESTIMATE* | NUMBER OF COUNTRIES WHERE WCS WORKS |
|--|------------------------------|--|---|-------------------------------------|
| Tiger (<i>Panthera tigris</i>) | EN ENDANGERED | South and Southeast Asia, Russian Far East | 3,200 | 8 |
| Jaguar (<i>Panthera onca</i>) | NT NEAR THREATENED | Mexico to northern Argentina | 60,000** | 7 |
| Leopard (<i>Panthera pardus</i>) | NT NEAR THREATENED | Wide range, primarily sub-Saharan Africa and tropical Asia | Range-wide estimate not currently available | 18 |
| Snow leopard (<i>Panthera uncia</i>) | EN ENDANGERED | High mountains of Central Asia | 4,000–6,000 | 5 |
| Lion (<i>Panthera leo</i>) | VU VULNERABLE | Primarily in sub-Saharan Africa with one small population in India | 23,000–39,000 | 5 |
| Cheetah (<i>Acinonyx jubatus</i>) | VU VULNERABLE | Eastern, central, and southwest Africa as well as a small population in central Iran | 6,400–6,800 | 4 |
| Indochinese clouded leopard (<i>Neofelis nebulosa</i>) | VU VULNERABLE | Himalayan foothills in Nepal through mainland Southeast Asia into China | Range-wide estimate not currently available | 5 |
| Sunda clouded leopard (<i>Neofelis diardi</i>) | VU VULNERABLE | Islands of Sumatra and Borneo | 4,000–5,000 | 2 |

*Source for status, range, and population estimates: IUCN Red List of Threatened Species, supplemented by WCS data

**No reliable global estimate available from IUCN; this estimate comes from WCS data across various field sites as well as data from partners



WCS: 2020 Strategy

We envision a future where big cats thrive across their ranges, playing their full ecological roles in wild habitats around the world. Through 2020, we aim to support the recovery and stabilization of the populations of big cats in all our priority regions.

1. **Stop illegal hunting** and trafficking of big cats for their pelts and other body parts.
2. **Protect the prey species** on which big cats feed, such as deer and wild pigs.
3. **Halt habitat loss and strengthen habitat protection** while restoring connectivity in fragmented landscapes.
4. **Prevent retaliatory killings and reduce conflicts** between big cats and ranchers, farmers, and other communities.
5. **Conduct conservation research** that enhances knowledge of big cat species.
6. **Monitor** populations to inform conservation actions.

Reintroduced Tiger Zolushka: “Cinderella” Becomes a Mother



ZOLUSHKA STANDING UNDER A HUGE KOREAN PINE TREE WITH TWO SMALL CUBS HUDDLED BENEATH HER.



TIGERS

In December, the conservation community celebrated the exciting news that Zolushka (Russian for Cinderella)—the orphaned tiger that WCS helped rehabilitate and release back into the wild—had become a mother. After years of hard work, tenacity, and hope, WCS and partners received camera trap footage from the Bastak Reserve, a 162-square-mile protected area in the Pri-Amur region of the Russian Far East, that showed Zolushka with 2 healthy cubs. This marks the first time that a rehabilitated tiger has mated and given birth in the wild. Not only is this good news for tiger reintroduction efforts, but it also represents the beginning of a new generation in former tiger range.

Zolushka's story began in February 2012, when hunters found her as a starving and freezing four-month-old tiger cub. After 16 months of careful rehabilitation, biologists decided that she was ready for reintroduction into the wild. The team of

“The discovery of Zolushka’s cubs is real proof that conservation on the ground, conducted by groups working in partnership, can and does work. Zolushka and her cubs are proof that tiger habitat lost long ago is coming back in the Russian Far East.”

—CRISTIÁN SAMPER, WCS PRESIDENT & CEO



ZOLUSHKA RECEIVES MEDICAL TREATMENT BY WCS AND PARTNERS AFTER BEING FOUND ORPHANED IN THE FOREST. THE TEAM HAD TO AMPUTATE A PORTION OF HER FROSTBITTEN TAIL.

scientists strategically picked the Bastak Reserve for her release not only because it is suitable tiger habitat with plenty of prey, but because this former tiger territory had been devoid of these animals for over 40 years. Zolushka's second chance was a rare opportunity to re-establish tiger populations in wild lands where they once thrived.

On her own, Zolushka successfully acclimated amid the abundance of badgers, wild boar, and red deer, but one problem still lingered. With tigers missing from this landscape for decades, Zolushka remained a solitary Cinderella. This dilemma was miraculously solved when a lone wild male arrived, apparently making the 124-mile journey west from the northern-most portions of current tiger range in Russia. Soon after, tracks of Zolushka and her "prince" were found together, but Zolushka still required time to mature and become ready for motherhood.

The team's patience was ultimately rewarded on December 9, 2015, when Ivan Polkovnikov, the reserve inspector responsible for monitoring Zolushka, returned from the field with historic photos: Zolushka standing under a huge Korean pine tree, with two small cubs huddled beneath her.

Zolushka is one of five tigers that have been reintroduced into former tiger territories within Russia. Despite a setback with one tiger who was transferred back

after roaming into human communities and repeatedly preying on livestock, the remaining tigers all appear to be doing well. With another female and male from

"This is a watershed event not just for Zolushka, but for the entire population of Amur tigers."

—DALE MIQUELLE, WCS RUSSIA DIRECTOR

this group recently pairing up, we have hope for even more cubs in the future. Zolushka's story is truly a sign of hope for tigers everywhere.

WCS Russia Director Dale Miquelle and WCS President and CEO Cristián Samper were both encouraged by the good news. According to Dale Miquelle, "This is a watershed event not just for Zolushka, but for the entire population of Amur tigers." Said Dr. Cristián Samper, "The story of this Cinderella is no fairy tale. The discovery of Zolushka's cubs is real proof that conservation on the ground, conducted by groups working in partnership, can and does work. Zolushka and her cubs are proof that tiger habitat lost long ago is coming back in the Russian Far East." 🐾

Effective Protection in Thailand Leads to Tiger Recovery

The largest remaining source population of tigers in mainland Southeast Asia is rebounding, thanks to enhanced protection measures supported by WCS. Working closely with the Thai government, our conservation efforts in Huai Kha Khaeng Wildlife Sanctuary in western Thailand have resulted in a surge in the population of wild tigers by 50 percent over the last 10 years. This is largely because we have supported a 33 percent increase in patrol coverage geographically and a 600 percent boost in patrol effort, measured in ranger days spent patrolling. This steady, measurable success is due in part to a 75 percent increase in government investment in the management, salaries, and infrastructure of the protected area.

Huai Kha Khaeng and the surrounding Western Forest Complex of protected areas in Thailand is the single most important site for recovering wild tigers in Indochina. It provides a contiguous area of tiger habitat of 6,950 square miles covering a whopping 17 protected areas. The number of wild tigers in this entire region is currently estimated at 100 individuals, which is much lower than the 2,000 tigers the vast habitat could potentially support with sufficient protection.

Fully cognizant of the biological importance of this landscape, WCS has been working to protect wild tigers in Huai Kha Khaeng since 2004. To safeguard and grow the park's tiger population, WCS supports and strengthens the effectiveness of ranger patrols in reducing the poaching of tigers and their prey by providing equipment and operational and financial support to patrol missions. We provide technical support through the SMART system, which collects and analyzes patrol data, monitors patrolling performance, and improves the tactical planning of patrols. In 2008, our model for protecting wild tigers was extended to neighboring protected areas.

To assess the impacts of patrols on tiger conservation, WCS has collaborated with the Thai government to complete tiger population surveys in the Huai Kha Khaeng Wildlife Sanctuary every year since 2006. Our 2015 surveys estimated about 60 tigers. These results demonstrate the effectiveness of our approach and the WCS team is confident that even better days are ahead for Thailand's iconic big cat. 🐾



WCS's support and training has dramatically increased the extent of ranger patrolling within Huai Kha Khaeng and its neighboring protected areas. These parks are some of the best protected sites in Thailand.

HUAI KHA KHAENG WILDLIFE SANCTUARY

22 patrol teams

1,243 mi covered per month

1,060 mi² sanctuary covered

THUNG YAI EAST & THUNG YAI WEST WILDLIFE SANCTUARIES

28 patrol teams

1,243 mi covered per month

1,430 mi² sanctuaries covered

UMPANG WILDLIFE SANCTUARY

435 mi covered per month



Hope for Critically Endangered Malayan Tigers

The Malayan tiger is a rare tiger subspecies that was declared Critically Endangered in July 2015. Due in large part to poaching and habitat loss, the entire population had declined by more than 25 percent in a single generation. According to the IUCN, fewer than 250 individuals currently remain in the wild, 80 to 120 of which are mature breeding adults.

WCS is working in Malaysia to halt the decline of these tigers. The core focus of our work is in the Endau-Rompin Landscape, where our activities have advanced our understanding of this tiger subspecies and its prey,

While the total population of Malayan tigers has been on the decline, the population within WCS's landscape has been stable.

prevented harmful encroachment and land conversion, engaged local audiences in conservation, and significantly increased on-the-ground protection of the animals. While the total population of Malayan tigers has been on the decline, the population within WCS's landscape has been stable.

Within the Endau-Rompin Landscape, WCS's key activities include supporting and increasing anti-poaching enforcement patrols, installing of covert camera trap and surveillance technology, and working with the nearby palm oil company to control access to the area and ensure that no poached animals are transported out of it. In our camera-trapping surveillance, 15 individual tigers were recorded, including 6 newly recorded individuals. Two of the new tigers were cubs; however, many of the other tigers were familiar to scientists and deemed to have survived for more than four years. The longest surviving camera-trapped individual is six-and-a-half years of age.

Our anti-poaching efforts covered a distance of nearly 3,100 miles between July 2015 and January 2016. This strengthened protection led to the removal of approximately 155 snares and 16 traps. WCS and partners deployed 259 camera trap stations and 50 surveillance camera traps throughout the region. Information from these patrols and camera traps helps us assess poaching access points into tiger territory and identify and thwart threats to their survival. 🌿





Saving Uganda's Largest Population of Lions

LIONS

Queen Elizabeth National Park is one of Uganda's key strongholds for elephants and large carnivores, particularly lions. Yet while Uganda's elephants have recently seen population growth, lion populations have been on the decline for the past 15 or more years. The county's largest population of lions, currently estimated at approximately 140, lives within Queen Elizabeth National Park. Unfortunately, their numbers are around 30 percent less than 2 decades ago.

To address poaching within Queen Elizabeth National Park, WCS collaborated with the Uganda Wildlife Authority to introduce SMART patrols, which strengthen monitoring of threats and inform law enforcement activities. WCS has trained 60 wardens and senior rangers here to use SMART, specifically to collect data and upload patrol information rapidly into databases.

WCS also worked with the pastoralists outside the park to provide water sources so that they no longer need to bring their cattle into the park. WCS rehabilitated a water channel that brings water from the Kanyampara River through the pastoralist region to a valley dam. This water channel now provides clean water to 33,000 people

QUEEN ELIZABETH NATIONAL PARK

Approximately 140 lions

Key threats: poaching, poisoning, and snaring

60 wardens and senior rangers trained

15 solar lights installed

1 water channel for 33,000 people and 20,000 cattle



The project not only prevents human-wildlife conflict linked to the presence of cattle in the park, but it has strengthened WCS's relationship with the local communities.

and 20,000 cattle in the Nyakatonzi and Munkunyu subcounties. The project not only prevents human-wildlife conflict linked to the presence of cattle in the park, but it has strengthened WCS's relationship with the local communities and generated support for our conservation work in and around the park.

WCS then installed 15 solar lights in 5 target villages where lions attack livestock most frequently so that villagers are protected and future lion attacks are deterred. Since the lights have been in operation, there have been no attacks on

livestock and no lions have been poisoned. This has been well received by both the park management authorities and the communities.

WCS is looking to undertake a lion census and continue improving the pastoralists' land management to further reduce the need to bring livestock into the park. Additionally, we are considering establishing a lion radio-tracking tourism initiative as an innovative way of raising local funds to help pastoralists manage lion predation on their livestock. 🌿

Lions Added to the U.S. Endangered Species Act

Lions face the same threats as many other big cats, but they also face the added danger of poorly-regulated recreational hunting. This activity was brought into the international spotlight after the death of Cecil the lion. It is estimated that only 23,000 to 39,000 lions remain in the wild. Five of WCS's country programs work on lions, including Mozambique, Nigeria, South Sudan, Tanzania, and Uganda.

In December 2015, the African lion received a boost when it was added to the U.S. Endangered Species Act. This listing makes it more difficult to bring lions into the country that were killed in trophy and other hunts. Additionally, this designation will help to raise awareness for the plight of wild lions and will improve lion

for Conservation and Science John Robinson, "The U.S. government's actions are necessary to allow the recovery of one of the most iconic top predators on the planet. At WCS, we are committed to improving the conservation and management of lions in reserve areas and across the broader landscape." 🌿

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conservation programs. WCS overwhelmingly supported the U.S. government's decision to elevate the species' conservation status and believes this listing will encourage better management of lion populations. According to WCS's Chief Conservation Officer and EVP





WCS Protects Jaguars in Critical Landscapes

The jaguar offers a conservation opportunity rare among big cats. This powerfully-built, elusive predator still occupies over 50 percent of its historic range and persists at reasonable densities across many large landscapes. Evidence suggests that many populations remain connected. However, those connections, and even the strongholds, are fragile and under constant threat. In response, WCS's field staff and partners protect key locations that are critical to range-wide jaguar conservation.

WCS expertise in human-jaguar conflict and jaguar-prey population assessment goes back 20 years. To conduct monitoring and outreach at this scale, we collaborate with national and local institutions to ensure results on the ground.

In 2015 and 2016, our programs have been concentrated in seven landscapes in Guatemala, Nicaragua, Ecuador, Brazil, Peru, Bolivia, and Paraguay. The following stories highlight our recent work in three of these countries.



A BOY PADDLING THROUGH HABITAT SHARED BY BOTH HUMANS AND JAGUARS IN NICARAGUA. WCS WORKS ON HUMAN-JAGUAR COEXISTENCE FROM GUATEMALA TO PARAGUAY.

GUATEMALA

WCS is the leader in jaguar research and conservation in Guatemala, with particular strengths in population surveying and human-jaguar coexistence. Our close collaboration with the Guatemalan Ministry of Agriculture and Ranching has elevated our impact in the buffer zone of the Maya Biosphere Reserve, effectively reaching and working through hundreds of ranchers and building a strong constituency for jaguar conservation.

To date, WCS has helped educate almost 300 ranchers representing 10 communities along 2 access routes into the Reserve, a total of approximately 30 percent of the southeastern portion of the Reserve's buffer zone.

The program trains ranchers on the following: production techniques for small areas, livestock nutrition, pasture management, silage storage, establishment of carefully placed waterholes, and night enclosures to protect calves. Improved livestock management decreases the need for more ranching land, and thereby lowers deforestation rates. These measures also prevent jaguar attacks on cattle, reducing retaliatory killings of the cats.

Using the expertise and methods from our surveys in the Maya Biosphere Reserve, WCS will perform a national evaluation of the status and conservation needs of jaguars in Guatemala in 2016.

PARAGUAY

WCS has been conducting jaguar conservation in Paraguay since 2012, concentrating on medium to large properties in the northern Chaco region of the country where cattle ranches are many times larger than the small operations in the area surrounding Guatemala's Maya Biosphere Reserve. Currently we are working with 10 properties that total 178,000 hectares and include 75,000 cattle. We are working with ranch

owners and ranch hands testing jaguar deterrent techniques including LED lights, electric fences, and improved livestock management. Thus far, we have achieved 100 percent success in eliminating jaguar conflicts in the areas where we have installed these measures without interruption. We are collaborating with Paraguay's national government and other NGOs on national planning and legal measures to protect jaguar populations.

ECUADOR

The jaguar is an integral part of the lush lowland ecosystems on both sides of Ecuador's Andes Mountains within the Amazon Rainforest and the Chocó Forest. In response to the risks facing jaguars there, the Ecuador Ministry of the Environment requested that WCS share its expertise and knowledge in planning jaguar conservation at the national level.

Working with partners from government agencies, NGOs, local universities, local communities, and timber companies, WCS evaluated the conservation status and geographic distribution of the species on both sides of the Andes, then identified threats and corresponding

conservation actions to counter them. The resulting Action Plan for Conservation of Jaguars in Ecuador was approved and signed by the Ministry in October 2015.

The plan defines the activities needed to maintain and restore viable populations of jaguars as critical inhabitants of ecosystems and landscapes across Ecuador. It was designed as a guide for land-use planning for the national environmental authority and local governments, as well as an attractive way to educate the public and decision makers on jaguars and how to integrate their conservation in national development plans. 🌿



A Conversation with Dr. Krithi Karanth

Dr. Krithi K. Karanth received her PhD in Environmental Science and Policy from Duke University where she is now an Adjunct Assistant Professor. Her research in India has spanned over 17 years, encompassing a broad range of issues examining human dimensions of wildlife conservation. Krithi was selected as a National Geographic Emerging Explorer in 2012 and recognized by Elle India among their 2013 Women of the Year. In 2015, Krithi was awarded the title of Young Global Leader by the World Economic Forum and was listed by them as one of the 15 women changing the world.

How long have you been involved in conservation and how has your outlook evolved over your career?

DR. KRITHI KARANTH: I have been working professionally in conservation for almost 17 years now. While I was originally drawn to scientific and conservation research, as my career has progressed, I have come to the realization that for me scientific research alone doesn't cut it. Ultimately,

as conservationists, our science must have a greater impact on the world. Last year, I began a project called Wild Seve which helps mitigate the issues of human-wildlife conflict in India while conserving species like tigers. In only 7 months, we have assisted more than 3,000 families in India that have been impacted by wildlife conflict. The personal and conservation results of this project make me prouder than all of the scientific papers I have published.

Can you tell us more about your human-wildlife conflict experience and the Wild Seve project?

KK: During my research on human-wildlife interactions across seven states in India, it quickly became clear that every region has incidents of conflict. Big cat predation is sometimes met with human retaliation in the form of poisoned carcasses used as bait. When agriculturalists lose livestock or crops to wildlife, it is a huge economic burden. The government offers compensation for this loss; however, the process of receiving this assistance is long and complicated. As a response, I created the Wild Seve project with my WCS team to help families around Nagarhole and Bandipur National Parks receive compensation and in turn, reduce their retaliatory actions against wildlife.

Since Wild Seve began on July 1, 2015, we have helped over 3,000 families in 170 villages file for compensation. We created an accessible toll-free number which farmers can call to report incidents and have a local WCS team respond immediately. Ultimately, this program's success should effectively reduce retaliatory killings of wildlife.

What distinguishes WCS in our work with big cats?

KK: WCS's work is not just conservation based on emotion, it is grounded in proven science. The WCS India program, led by my father, founded innovative techniques to count big cats. We have been leaders in determining the number of big cats, understanding these populations,



and tracking them. This information has helped identify conservation challenges and determine the best strategies to protect tigers and leopards. The WCS India program has linked cutting-edge science with conservation management. Our commitment is demonstrated through our long-term presence and unwavering persistence. This sets our organization apart. WCS has been resilient through decades of pressures on conservation.

What is your vision for conserving big cats?

KK: Personally, I would like to help eliminate the disconnect between those who express interest in conservation and those who are actually taking action. So many people voice their opinions online and through social media, but rarely take active steps to make an impact. Here I see a lot of urban residents voicing the need for recovering big cats; however, in reality it is the people living among the wildlife who are left with the responsibility of conservation. On one hand we say we must save tigers and save leopards,

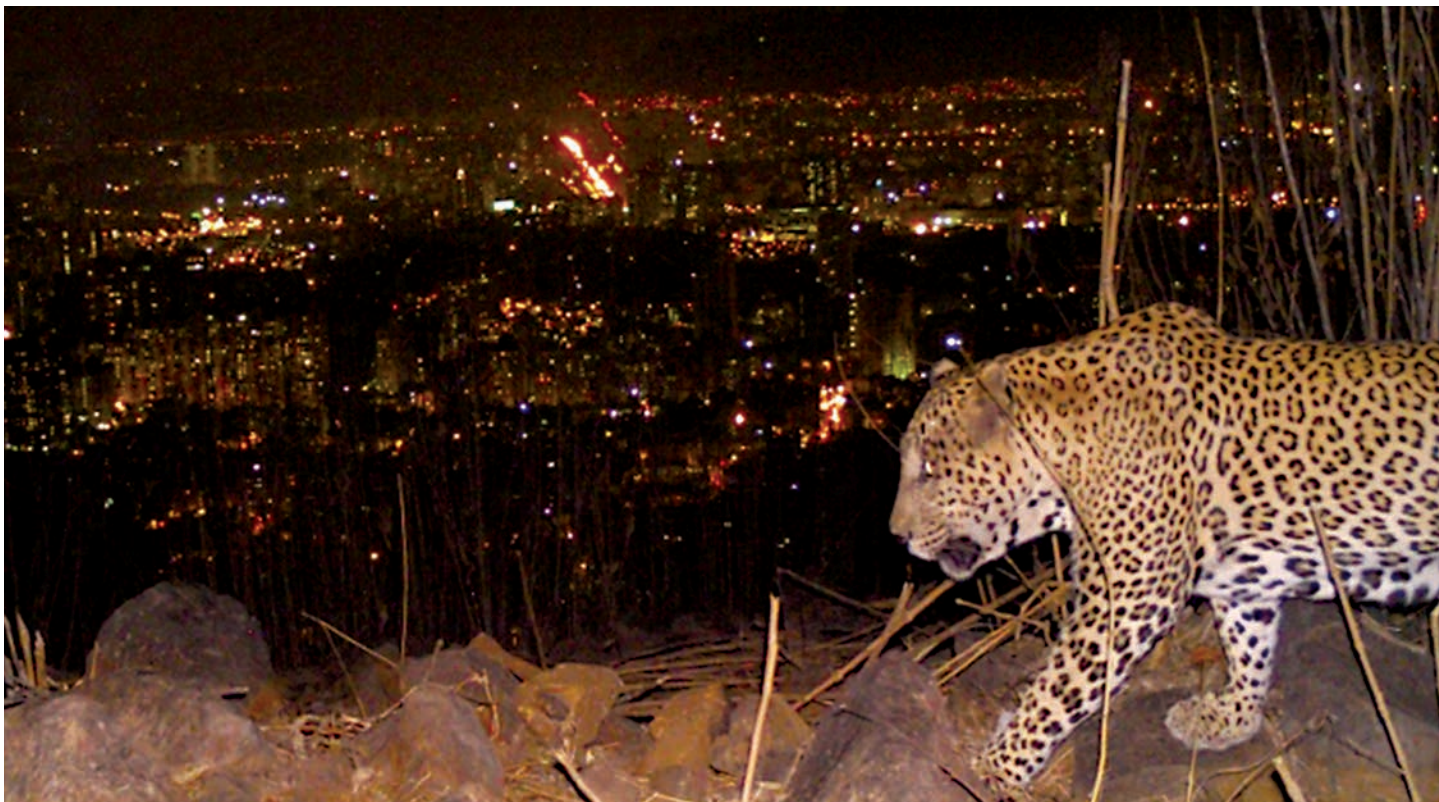
but most of us don't really face the consequences of living in close proximity to them. I would like to bridge this divide, inspiring more people, particularly those in cities, to better understand our work and take meaningful action for the conservation of these animals.

What do you see as the future of big cats, and why are you hopeful?

KK: Worldwide, we have a long way to go. The fact that lions and cheetahs are in trouble in Africa is worrisome to me because we once had huge numbers of these cats. When you look at tigers you are already dealing with a much smaller natural population. But I am hopeful because tigers have come back in some places, specifically in places where WCS India has been present over the long term. So I do think it is possible to recover these species; there is just a lot of work left to do. Fortunately, we now better understand what these animals need and can address the many threats they face in practical ways, through science and conservation action. 🐾

“Personally, I would like to help eliminate the disconnect between those who express interest in conservation and those who are actually taking action.”

—DR. KRITHI KARANTH



Scientists Use Media Reports to Study Leopards

A CAMERA TRAP PHOTO OF A LARGE LEOPARD ROAMING THE OUTSKIRTS OF MUMBAI, INDIA.

In a novel study that monitored and tracked newspaper reports of leopard conflict incidents, scientists from WCS recently published the first-ever regional assessment of leopard populations in human-use areas across the southwestern state of Karnataka in India.

Within Karnataka, scientists with WCS's India program and the Centre for Wildlife Studies reviewed hundreds of media accounts of human-leopard interactions. These data were paired with wildlife occupancy modeling results in order to map leopard distribution patterns and leopard interactions with humans and livestock. During the 14-month study period, 245 cases of human-leopard incidents were reported, including 32 instances of attacks on humans. The media reports also documented the capture and translocation of 56 leopards, over 90 percent of which were in response to attacks on livestock or public sightings of leopards.

Results indicated that leopards were distributed over 32,430 square miles of unprotected area in Karnataka, representing approximately 47 percent of the state's

total geographic area. The presence of free-ranging dogs, concealed shelter, rocky ridges, and irrigated crop fields emerged as the factors most likely to increase leopard presence. Surprisingly, the correlation between livestock and leopard presence was not as strong. Contrary to the popular notion that leopards in human-dominated areas are wandering animals that are atypical residents, the study recorded 19 reports of cubs born in agricultural fields, indicating the presence of breeding resident females. Poaching and road kills account for the highest number of reported leopard mortalities in the region.

Based on the study's findings of where leopards are ranging, WCS researchers suggest a shift in management approach from reactive measures such as capture and translocation to proactive, community-based actions that ensure the safety of people and livestock. They recommend prompt and fair compensation for losses caused by leopards to prevent retaliations, and awareness campaigns to enhance people's understanding and acceptance of these highly adaptable cats. 🐾

Surveying Snow Leopard Strongholds in Afghanistan

The high, remote Wakhan Corridor of northeastern Afghanistan is one of the last remaining strongholds of the elusive and enigmatic snow leopard. Over the last year, WCS has expanded its snow leopard conservation efforts here using a broad range of strategies including scientific research, legal protection, and threat mitigation.

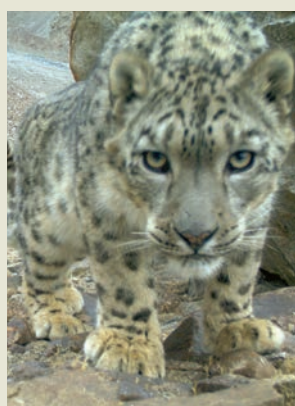
WCS is currently working with more than 50 community rangers to survey the region. Retaliatory hunting in response to livestock loss is the biggest threat to snow leopards, and ranger survey results have informed on-the-ground interventions, enabling WCS to prioritize sites for livestock protection. During 2015, WCS reinforced more than 122 corrals to provide complete protection from snow leopards and other predators. With a clear benefit to both herders and wildlife, the corrals reduce the loss of livestock and snow leopards.

During the same period, WCS also developed a habitat preference model for snow leopards based on satellite-tracking data from four animals which had been fitted with GPS collars. The model provides

vital information on the ecology of snow leopards including home range, habitat use, and predation behavior. These insights will help WCS and our partners identify prime areas for future conservation action and protection.

Nearly 5,000 camera trap photos, collected by a specialized team of snow leopard rangers since 2010, were examined by our experts. Using computer software designed specifically for this purpose, this information enabled the first scientifically robust estimate of snow leopard populations in this region, which is currently being calculated.

WCS is now collaborating with local communities and government agencies to develop a management plan for the 4,421-square-mile Wakhan National Park. Effective management of the park will facilitate enhanced protection for snow leopards across 70 percent of its confirmed range in Afghanistan. 🌿



WCS USES TRADITIONAL SURVEYING TECHNIQUES AS WELL AS CAMERA TRAP TECHNOLOGY TO MONITOR SNOW LEOPARDS.



Camera Traps Improve Conservation Efforts in Uzbekistan

The Uzbekistan snow leopard is the western-most population of snow leopards in the world. As the top predator in a region likely to experience some of the greatest impacts of climate change, the Uzbekistan snow leopard population provides an important natural laboratory to learn more about how environmental threats like global warming impact wildlife survival. In an effort to deepen our understanding of these animals and improve protection efforts, WCS has been working with local rangers and reserve biologists to update monitoring methods and conservation strategies.

Recent initiatives have involved training the country's field practitioners on the use of camera traps within snow leopard habitat. WCS also instructed rangers on how to use GPS devices and collect scat samples for DNA analysis. During 2015, WCS concentrated on Uzbekistan's largest snow leopard population, estimated at 25 individuals, located in the country's Gissar Reserve. We conducted seven trips throughout the year to service camera traps and retrieve data. Over 30,500 pictures were collected,

with 8 "captures" of snow leopards. We have built national skills and capacity for snow leopard research through training in the classroom and field, and have invested in a coordinated local research network that extends beyond Uzbekistan's borders and connects U.S. experts with Uzbek scientists for future collaboration. 🐾

THIS REGION IS ALSO IMPORTANT TO MANY OTHER SPECIES, INCLUDING THE RARE AND ELUSIVE EURASIAN LYNX.





WCS Big Cat Fund Launches

With a well-established track record, long-standing partnerships, and extensive field programs, WCS is securing a future for big cats around the world. Our decades-long commitments demonstrate that successful conservation takes perseverance.

As outlined in this report, our experts address threats to big cats using rigorous science and action. To sustain this work long into the future and meet the challenges of conservation with on-the-ground action, we have established the WCS Big Cat Fund.

This newly created Fund will support key conservation measures to protect the most imperiled big cats across the globe.

Without continued field conservation, these iconic, majestic animals face an uncertain fate. Tigers, jaguars, leopards, and others deserve a place on our planet as much as we do. 🐾

Contribute today at: e.wcs.org/SupportBigCats

Thank you for helping
us save wildlife and wild
places around the globe.

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