

DOUBLING WILD TIGERS 2020 Annual Report

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AGLOBAL **MSSON TO SECURE THE FUTURE OF THE WORLD'S MOST THREATENED BIG CAT.**

2020 THREW A SPOTLIGHT ON OUR FRAGILE RELATIONSHIP WITH NATURE.

BUT DESPITE ITS CHALLENGES, 2020 REAFFIRMED THAT PERSISTENT CONSERVATION CAN HELP SECURE A FUTURE FOR TIGERS.

REDUCED TO JUST 5% OF THEIR RANGE, THE YEAR OF THE TIGER WILL BE AN OPPORTUNITY TO REDOUBLE EFFORTS AND SECURE A FUTURE FOR WILD TIGERS.

NOW IS THE TIME TO Step up.

WWF'S TIGERS ALIVE INITIATIVE Looking Back at 2020

As we approach the Year of the Tiger in 2022 and the goal to double wild tigers, known as TX2, we are seeing the culmination of long term conservation interventions leading to some extraordinary results.

It has often been said that TX2 represents one of the most ambitious conservation targets ever set for a single species. So it figures that progress towards achieving this target must represent one of the most ambitious programs ever delivered for a single species.

November 2020 marked the 10th anniversary of the 2010 Tiger Summit and WWF, together with partners, launched the inaugural TX2 Awards to recognise sites that have achieved conservation excellence. India's Pilibhit Tiger Reserve won the TX2 Award for doubling its tiger populations over the last decade, estimated to be 65 tigers as of 2018. The winner of a further award for 'Conservation Excellence' was the transboundary partnership created in 2011 between Bhutan and India - the Transboundary Manas Conservation Area. Data from the last survey in 2018 estimates tigers in both sites to have more than doubled since 2010.

These successes prove it is possible for large carnivores to survive in human dominated landscapes, provided safehavens and human-tiger interactions are managed. But in some countries the road to tiger recovery remains fraught with challenges.

One of the root causes of the extinction wave that is sweeping across much of Southeast Asia was revealed in a WWF report, *Silence of the Snares: Southeast Asia's Snaring Crisis.* The report is a stark reminder of how a simple but deadly contraption can eradicate both wildlife and hard-earned conservation gains in the absence of rangers and supportive legislation.

WWF-Malaysia's Project Stampede continues to demonstrate the effectiveness of conservation when working in partnership with indigenous peoples. The data from their dedicated snare removal patrols shows massively reduced levels of snaring in Royal Belum State Park. New legislation was also introduced in Russia, prohibiting the use of snares in any areas occupied by tigers, snow leopards and Amur leopards.

Global Tiger Day 2020 was marked with the announcement of India's adoption of the Conservation Assured | Tiger Standards (CA|TS) across all of the country's 50 Tiger Reserves, which cover 65% of its wild tigers. WWF-India is now partnering with the Global Tiger Forum to implement CA|TS in all Tiger Reserves.

Tigers are also on the move as evidenced by the record for the highest altitude tiger in Nepal being broken twice in a year. Early in 2020 a tiger was recorded in the far west of Nepal at 2500m, which was surpassed in November with a tiger recorded at 3165m in the far east of the country. At the heart of this range expansion are core protected areas, connected by corridors and the presence of adequate prey species in the wider landscape.

Sometimes, tigers need a helping hand to recolonise their former range. After more than a decade of planning by WWF-India and partners, tigers have been released in the western part of the Rajaji Tiger Reserve in December 2020. Progress to reintroduce tigers



to Kazakhstan is also on track with the return of the tiger set for 2024!

2022 will represent both the lunar Year of the Tiger and a Global Tiger Summit - a once in 12-year opportunity to measure progress towards TX2 and set new and ambitious goals.

There is no doubt that the global trend for tiger numbers is on the rise. But will TX2 be realised? There will be a number of new estimates from tiger range states released during next year that will piece together the story of tiger numbers.

Beyond 2022, and looking into the next 12 year cycle, what does the future hold for the species? Tigers are found in less than 5% of their historic range. What if TX2 could be reimagined to represent a doubling of tiger range by 2034? Expanding tiger range both within and outside existing range and bending the curve with the recolonisation of tigers in places where the conditions for tiger recovery can be recreated.

This is an exciting prospect, and we can't wait for you to join us on the journey to 2022, the Year of the Tiger!

Stuart Chapman Leader of WWF's Tigers Alive Initiative



FIRST COVID-19 CASE RECORDED OUTSIDE OF CHINA Thailand was the first country to confirm COVID-19 outside

China.

RUSSIA **TIGERS CONTINUE TO RECOVER IN** RUSSIAN FAR EAST PROVINCE

WWF-Russia and the Amur Tiger Centre estimated a population of 20 tigers within Evreiskaya Province, including the Heartland site of Pompeerski National Park. Since 2013 WWF has been supporting translocations of tigers in Evreiskaya, an area that had no tigers when the project started.

FEBRUARY

COVID-19 GLOBAL PANDEMIC DECLARED

On the 11th March the World Health Organisation officially declared the COVID-19 outbreak a global pandemic. A large number of countries entered national lockdowns during March, closing their borders and put heavy restrictions preventing the movement of people.

MARCH

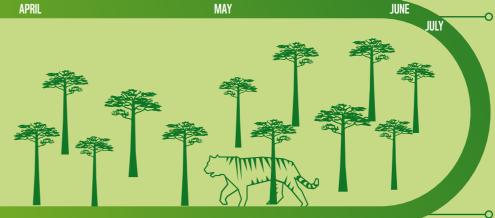
NEPAL **RECORDS ARE BROKEN!** Camera trap images

reveal the highest altitude sighting of a tiger in Nepal, captured at over 2500m. This evidence of a tiger supports the notion that high altitude habitats may provide refuge for tigers and help connect their territory between Nepal and India.

NEPAL **INCREASING PRESSURES ON** PROTECTED AREAS

Data from 11 protected areas in Nepal found that human entry into protected parks rose significantly during the national lockdown due to COVID-19. The first month of the lockdown (24 March – 24 April) saw more cases of illegal extraction of forest resources such as illicit logging and harvesting than the preceding 11 months combined.

A SNAPSHOT OF 2020



BHUTAN

TIGER RECOVERY

Bhutan since 2010.

During 2020 Bhutan recorded six

previously unrecorded tigers across

Jomotshangkha Wildlife Sanctuary,

Forest Division. WWF-Bhutan has

extended its support to areas outside

of Protected Areas and these sightings highlight the amazing tale of tiger recovery that has been unfolding in

Phibsoo Wildlife Sanctuary and Sarpang

MYANMAR

WILDLIFE MONITORING UNIT TRAINED With the support of WWF-Myanmar, 29 community members were trained as part of a Wildlife Monitoring Unit

and has begun occupancy surveys in remote areas of the Dawna Tenasserim Landscape.

SEPTEMBER

KENZO PARTNERS WITH WWF

French fashion house KENZO inaugurates a new capsule collection, in support of tiger conservation. This collaboration forms part of a broader partnership between KENZO and WWF.



INDIA

DECEMBER

NEPAL

GOVERNMENT EXPANDS CAITS

A new tiger sighting at 3165m

marks the highest altitudinal

is 250km away from Nepal's

presence of tigers in Nepal and

previously known eastern limit

for tigers. The sighting of the tiger

linkages between Nepal and India.

in Ilam points to existing habitat

The announcement by the National Tiger Conservation Authority of India's adoption of the CA|TS across all of the country's 50 Tiger Reserves is a significant step forward. These 50 Tiger Reserves and are home to 65% of India's wild tiger population.



USA RECORDS ARE BROKEN... AGAIN! TIGERS IN USA

The US House of Representatives passed the Big Cat Public Safety Act. This legislation will help prevent captive tigers from ending up in the illegal trade in tiger parts and products, the primary threat to the species in the wild. WWF's Tigers Alive Initiative will work to ensure its passage in both the House and Senate.

Q

MALAYSIA

TIGER SIGHTING BRINGS HOPE A tigress and three cubs were captured on camera traps in Malaysia earlier this year. With the ongoing poaching crisis still plaguing many of the world's wild tigers, this discovery offers a message of hope for Malaysia's tigers.

NOVEMBER

BHUTAN & INDIA TX2 AWARD CELEBRATES SUCCESS

India's Pilibhit Tiger Reserve, Manas Tiger Reserve and Bhutan's Royal Manas National Park received the inaugural TX2 Award and Conservation Excellence Award for their outstanding contribution to tiger conservation.

6 CHINA

A real-time surveillance system is piloted to monitor tigers, prey, and human disturbance in Huangnihe National Nature Reserve. In the first month of deployment, one case of forest resources being illegally extracted and the presence of one tiger was recorded. The images were immediately transferred to the authorities to be reviewed.

TRIALLING NEW TECHNOLOGY

IMPACTS OF TRAVEL BANS HIT ECO-TOURISM

Homestay owners and tourism operators are severely impacted by COVID-19 lockdowns and the halt to travel across the globe. This places financial stress on communities and increases pressures on protected areas. For example, India's Corbett Tiger Reserve receives an estimated US1,00,000 in park entrance fees annually.



SOUTHEAST ASIA

SNARING: SOUNDING THE ALARM

A WWF report warns of a snaring crisis threatening wildlife in the protected areas of Cambodia, Lao PDR, and Viet Nam. Snaring threatens tigers and tiger prey. One of Southeast Asia's most important remaining tiger landscapes, Belum-Temengor in Malaysia, experienced a 50% decline in tiger numbers from 2009-2018 largely due to snaring.

THAILAND

THAILAND'S TIGER ESTIMATE

Thailand's Department of National Parks releases an updated tiger population estimate for Thailand of between 130 and 160 tigers across the country.

BIG STEP FORWARD FOR CAPTIVE

6 INDIA

TIGER TRANSLOCATION STARTS

A wild tigress was translocated from the Corbett Tiger Reserve to Rajaji Tiger Reserve in an effort to repopulate tigers in the area. This was done by a joint team of the National Tiger Conservation Authority, Uttarakhand Forest Department and WWF-India.

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From the boreal forests in the Amur Heilong Eco Region where temperatures can reach -40°C to the tropical forests of the Dawna Tenasserim Landscape, tigers inhabit a diverse range of landscapes.

WWF's tiger conservation is carried out across 14 key landscapes and within these landscapes are 50 tiger Heartlands which have been identified as having the highest potential for tiger recovery. WWF is working to secure these critical habitats and to also restore sites in Kazakhstan and Cambodia so that tigers can be returned to part of their historic range.

As well as harbouring the entire global wild tiger population, the majority of the world's people live in Asia. Tiger landscapes spread across forests, grasslands, shrubland and mangrove swamps and provide invaluable ecosystem services to billions of people. This high population pressure presents one of the greatest threats to tigers, but with it a unique opportunity to demonstrate that co-existence with large carnivores is possible.

Freedom to move

More than half of WWF supported tiger landscapes straddle international borders, and facilitating cooperation between tiger range countries is a crucial component of the global goal to double wild tigers.

When the world decided to double wild tigers in 2010, a major part of WWF's commitment was to set up the Tigers Alive Initiative to work with Tiger Range Countries to drive forward the TX2 goal.

HORN WE

© Emmanuel Rondeau / WWF-US

WWF has three goals to help secure a future for tigers. Each requires a bold vision, exceptional leadership, and commitment from governments, communities, and conservation investors.

BETTER TOGETHER



Avoiding extinction: protecting, connecting and restoring critical tiger landscapes, as well as stopping the trade and reducing demand for tiger products.

Living with tigers: managing conflicts with tigers, and strengthening public, private and community support for tiger conservation.



Bringing back the roar: planning for reintroductions and expanding the tiger's range.

In each of our 14 priority landscapes WWF partners with governments, local communities and grassroots organisations to benefit tigers, people and ecosystems. We work with technical partners to deliver critical protection tools such as Spatial Monitoring and Reporting Tool (SMART) to inform and help improve anti-poaching patrols.

Likewise, the implementation of tiger specific protected area management standards (CA|TS), as well as our approach to reducing poaching through the Zero Poaching Toolkit and efforts to reducing trade would not have been possible without collaboration with our partners.

AN INNOVATIVE APPROACH

Despite the challenges created by the COVID-19 pandemic in the last year tiger conservation has continued. WWF continues to facilitate and support innovative interventions across tiger range countries, such as patrol prediction and infrastructure forecasting using artificial intelligence, eDNA testing for biodiversity monitoring, and a new SMART functionality that can help in understanding the poaching network in an area.

Throughout this report you'll read more about our innovative approaches to securing a future for tigers and how we've adapted to creating positive impact amid the COVID-19 pandemic.



ADAPTING TO THE GLOBAL PANDEMIC

Families and communities suffering, daily life disrupted, and businesses failing. Many staff and WWF partners have not escaped these impacts, and vulnerable communities have felt them even more acutely.

This has also presented a number of unique challenges to tiger conservation.

Beyond the day-to-day challenges common to most organisations, the COVID-19 pandemic forced us to evolve and constantly adapt. Priorities and funding across NGOs, governments and local partners shifted in response to the immediate impacts of the pandemic and travel restrictions prevented staff from meeting for training or conducting field work, and reduced interaction with local communities.

Restriction on movement has not always impacted protected areas in predictable ways. In Nepal, these restrictions brought increased illegal entries into protected areas, while in other tiger range countries such as China, poaching pressures sharply decreased.

Ecotourism has been one sector severely impacted by the enforcement of lockdowns across the globe, especially impacting tiger landscapes and communities in Nepal, Bhutan and India. The decline in tourism revenues poses a direct threat to the livelihoods of community rangers, park revenue and income streams for local communities. Nepal's tourism industry for instance generates 95% of park revenue, 30-50% of which is channeled back into the development of local buffer zone communities by law.

COLLABORATION WITH COMMUNITIES IS More critical than ever.

WWF provided emergency relief to communities in some tiger landscapes with food parcels and hygiene equipment and continues to support these communities and local organisations to help them recover and build resilience to future threats. WWF-India contributed over US\$150,000 in immediate measures to support approximately 15,000 households across their tiger landscapes.

WWF will work with partners to increase the resilience of community-led conservation, including diversifying income opportunities, developing more resilient tourism, strengthening legal frameworks, and working with communities to co-create sustainable livelihood development solutions.





CALLING FOR INCREASED INVESTMENT IN RANGERS AND PROTECTED AREAS

A survey of people charged with managing 40 protected areas in tiger range countries, released in June 2020, revealed that half of respondents claimed funding has been reduced since the global pandemic began. The survey, led by WWF's Tigers Alive Initiative in collaboration with Ranger Federation of Asia and CA|TS, also showed that the ability of rangers to effectively work has been compromised by additional responsibilities, salary cuts and disruption of essential supplies and equipment.



HIGHLIGHTING LINK BETWEEN ZOONOTIC DISEASES AND SNARING IN SOUTHEAST ASIA

The COVID-19 outbreak has attracted strong attention to a growing number of examples of wildlife-sourced diseases. In June 2020, WWF released a report showing the scale of the snaring crisis decimating wildlife in Southeast Asia, including tigers and tiger prey. These rudimentary traps, often made from wire or cable, also increase close contact between humans and wildlife and the likelihood of zoonotic disease spillover - further evidence that investment in tiger conservation is an investment in a healthier planet.







Local communities in the Sundarbans receiving support during COVD-19 pandemic

SUPPORTING RESILIENT COMMUNITIES IN Myanmar's Dawna tenasserim landscape

WWF-Myanmar provided support to the Dawei Civil Society Organisation's COVID-19 Committee which was set to mitigate the spread of COVID-19 in the Dawna Tenasserim Landscape. WWF volunteers and community educators assisted with raising awareness of COVID-19, and provided direct funding of around US\$18,000 to support public health initiatives. WWF-Myanmar also provided funding to members of the Conservation Alliance of Tanawthari providing personal protective equipment, and supporting community initiatives to monitor those coming in and out of their region.

CALLING ATTENTION TO RISING PRESSURES ON NEPAL'S TIGER HABITATS

Human entries into protected parks increased significantly since Nepal's lockdown, according to a preliminary review of data from 11 protected areas in Nepal conducted by the Department of National Parks and Wildlife Conservation and WWF-Nepal. The first month of the lockdown (24 March – 24 April 2020) saw more cases of illegal extraction of forest resources—such as illicit logging and harvesting—than the preceding 11 months combined. Human disturbances within parks across the country more than tripled compared to the month before the lockdown. The threats are particularly evident in Nepal's tiger-bearing habitats.

WWF-INDIA LAUNCHED AN EMERGENCY APPEAL To support the sundarbans

COVID-19 lockdowns followed by cyclone 'Amphan' have impacted livelihoods in the Indian Sundarbans where the ecosystem directly supports the local communities through subsistence activities such as fishing, and collection of nontimber forest products like honey. To support them during this challenging period, WWF-India and the West Bengal Forest Directorate, through the Joint Forest Management Committees in Sundarbans, reached out to over 1400 households to provide hygiene and food supplies.

WWF-CAMBODIA SUPPORTED COMMUNITIES AFFECTED BY COVID-19

WWF-Cambodia distributed resources such as food and hygiene supplies, worth around US\$50,000, to over 3,500 families from 14 Community Protected Areas situated in Srepok and Phnom Prich Wildlife Sanctuaries. The effort is part of a long-term commitment to support the local community's wellbeing and assist them in sustainable forest management following the COVID-19 pandemic.

AVOIDING EXTINCTION

From perhaps 100,000 at the beginning of the 20th century, wild tigers dropped to a low of 3,200 in 2010. Reduced to just a few remaining pockets of their historical range, the tiger is now a conservation-dependent species.

Interventions are needed to ensure tiger landscapes contain the necessary components for them to thrive, but given good quality habitat, sufficient prey, and adequate protection, tigers can increase their numbers relatively quickly.

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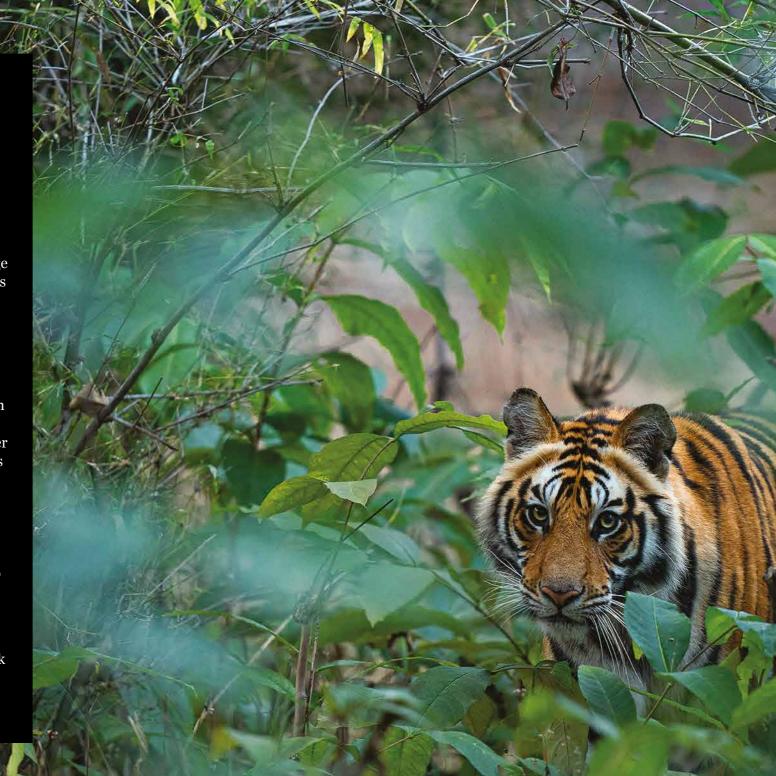
Tiger walking at night in Kanha National Park, Central India

CAITS: SETTING THE STANDARDS For tiger conservation

The Conservation | Assured Tiger Standards (CA|TS) is a framework designed to measure and improve the management of tiger conservation areas. It also provides an opportunity for sites to showcase their commitment to, and success in, protecting tigers. What started as a small project is now a global partnership comprising tiger range governments, inter-governmental agencies, NGOs and conservation areas.

2020 was a record breaking year with 55 newly registered CA|TS sites, taking the total of registered sites to 125. In addition, 24 Parganas Forest Division, which is located in West Bengal in India, was officially approved as a CA|TS site in 2020. Tiger conservation areas taking part in the system are either registered or approved. Whether these areas meet the criteria is based on a process which starts with registering and carrying out a self-assessment. From there a national audit is conducted followed by an independent review, finally an international executive committee will review the site and if successful they'll be listed as a CA|TS approved site. The CA|TS partnership aims to have 150 tiger sites registered by 2022 which will protect ~90% of the global tiger population.

The innovative 'Conservation Assured' framework is also being developed to improve and monitor conservation standards for jaguars, lions, and freshwater dolphins.



125 SITES REGISTERED ACROSS 7 COUNTRIES



CAITS APPROVED SITES

2015 CHITWAN NATIONAL PARK, NEPAL 2015 SIKOTE-ALIN NATURE RESERVE, RUSSIA 2017 LANDSDOWNE FOREST DIVISION, INDIA 2018 RAMNAGAR FOREST DIVISION, INDIA 2019 ROYAL MANAS NATIONAL PARK, BHUTAN 2019 JIGME SINGYE WANGCHUCK NATIONAL PARK, BHUTAN 2020 24 PARGANAS FOREST DIVISION, WEST BENGAL, INDIA

i / WWF-Internation









50 NEW CAITS SITES IN INDIA

India is home to over 60% of the world's tiger population and in 2020 the National Tiger Conservation Authority and the Government of India gave a major boost to tiger conservation in the country by announcing the adoption of CA|TS across all 50 of its Tiger Reserves. This is a significant step in tiger conservation and proves that the Indian government recognises the importance of the CA|TS tool for effective management of Protected Areas. Over the last three years the Indian government has also allocated additional funds to key registered and approved CA|TS sites outside of Tiger Reserves.



TIGER SITES PROTECTED ACROSS NEPAL

As of 2020 all five tiger bearing protected areas in Nepal are now CA|TS registered or approved. Nepal's efforts in tiger conservation over the last decade have clearly had a positive impact as tiger numbers have bounced back in the country with their national population nearly doubling since 2010. Bardia National Park alone has increased almost five-fold, from 18 tigers in 2008 to 87 in 2018.

CAJTS-GREEN LIST PILOT LAUNCHED IN BHUTAN

IUCN Green List and CA|TS are the first global sustainability standards that are specifically designed for Protected and Conserved Areas. Linking Green List with CA|TS will bring further credibility, assurance and transparency to the management of the tiger conservation areas. The first site in discussion is Royal Manas National Park in Bhutan as it is a key tiger conservation area and a good example of transboundary conservation.





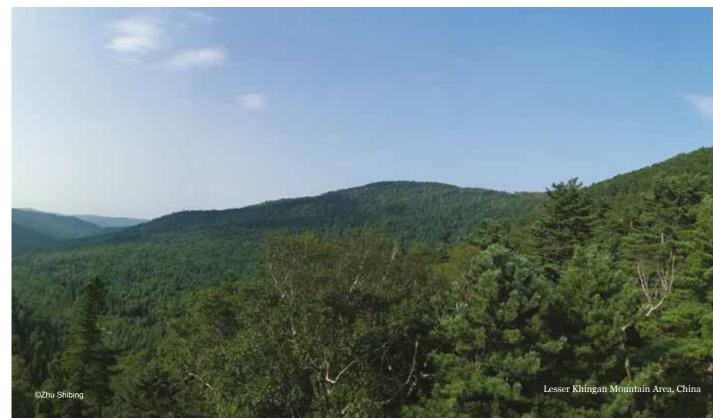
AWARDS CELEBRATE OUTSTANDING TIGER CONSERVATION

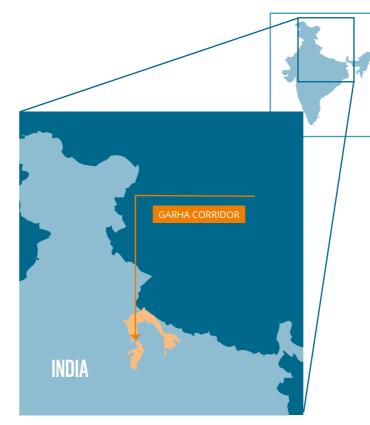
Pilibhit Tiger Reserve in India, situated within the Terai Arc Landscape, won the inaugural TX2 Award in November 2020 for doubling its population of wild tigers since 2010. A second Conservation Excellence Award was also presented to a transboundary partnership between The Royal Manas National Park in Bhutan and Manas Tiger Reserve in India, known as the Transboundary Manas Conservation Area - two sites that have managed a rare highly successful transboundary partnership for tiger conservation. The CA|TS tool is being implemented across all three winning sites. The awards, which include a financial grant to assist ongoing conservation, were presented by CA|TS, IUCN, Global Tiger Forum, UNDP, The Lion's Share, and WWF's Tigers Alive Initiative.

NEW THINKING ON HABITAT CONNECTIVITY

Habitat connectivity is key to enable the movement of tigers and other wildlife but findings from a WWF report released this year, Landscape Connectivity Science and Practice: Ways Forward for Large Ranging Species and *Their Landscapes*, shows the need for fundamental changes in current thinking and approaches. The WWF report shows there needs to be a shift away from linear "A to B" tiger corridors, to a broader focus on maintaining overall connectivity between tiger habitats, as well as through unused space, agricultural land or forestry concessions. It also highlighted the need to engage communities to ensure long term success.







CHINA: ADDRESSING LACK OF CONNECTIVITY

Habitat fragmentation is a major threat to tiger recovery in China and building corridors for tigers and other wildlife is an urgent conservation need. WWF-China's "Tigers Need Corridors" campaign on social media reached 200 million people, calling on the government and conservationists to build corridors for tigers and other wildlife.

WWF and the Institute of Nature and Ecology of Heilongjiang Academy of Sciences surveyed tiger habitat and corridors in Lesser Khingan Mountain Range during 2020. Survey results showed that there are two to four tigers in the area and identified 11 corridors which provide a foundation to restore Amur tiger habitat in China. There are also exciting opportunities for tiger recovery within the Lesser Khingan Mountain Range due to connectivity with the newly established population of translocated tigers in adjacent areas of Russia.

NEW STRATEGY FOR THE GARHA CORRIDOR

The Garha Corridor in the Indian part of the Terai Arc Landscape is critical connectivity for Pilibhit Tiger Reserve. In 2020 WWF-India jointly prepared a Corridor Conservation Strategy with the Uttar Pradesh Forest Department. WWF-India has been intensively monitoring this corridor since 2011 and results show it is being used by tigers, leopards, sloth bears and tiger prey species. Recommendations to secure the corridor include a declaration of an Eco-Sensitive Zone which involves working with local groups and government to regulate land-use change and reforest roughly 100 hectares with the community's involvement.

LOOKING FOR A CONNECTION IN SOUTHERN **SUMATRA**

Since 2020, WWF-Indonesia has shifted their focus to work outside conservation areas under the Ministry of Environment and Forestry's authority, which is identified as potential tiger habitat. WWF-Indonesia also expanded its network and facilitated more partners such as local government, corporations, and communities, to be involved in tiger protection efforts.

The Forest Management Unit in Kaur, Bengkulu Province, conducted a preliminary study on tiger movements and potential connectivity in Bukit Barisan Selatan National Park and Bukit Balai Rejang Selatan. WWF provided capacity building for the staff. An occupancy survey has also been carried out by Kaur's Forest Management Unit, which found evidence of tigers in the area. It also found that the area faces connectivity threats due to road construction, which will potentially increase the risk of wildlife roadkill and increase access for poachers. The findings provide insights for authorities to improve management and protection of potential wildlife crossing areas.

WWF has also engaged communities in six villages in Muara Saung and Nasal Sub District in Bengkulu in order to secure wildlife in the buffer zone area of Kaur by providing technical assistance in livelihood, microfinance, and strengthening local community participation in ecosystem-based village planning.

PROTECTION FROM POACHING

Poaching is one of the biggest threats to tigers, both in and outside of protected areas. Rangers have an integral and indispensable role in protecting tigers, their prey as well as the people who share their habitats.

O POACHING

WWF continued the implementation of SMART (Spatial Monitoring and Reporting Tool) across key tiger habitats in 2020. There are currently 67 sites in 10 tiger range countries where WWF works using SMART. In addition there are also 14 SMART Connect Sites in tiger range countries that use real-time monitoring technology. The predictive patrol planning plug-in uses artificial intelligence to predict poaching hotspots which helps to allocate limited resources to the right areas. This plug-in has been fully integrated with SMART and is currently being field tested across tiger landscapes in Bhutan, Cambodia and Malaysia.

In 2020 WWF supported the publication of eight white papers which delivered the first comprehensive analysis of rangers and the challenges they face. The recommendations from these white papers will be crucial to inform positive change and lobby governments.

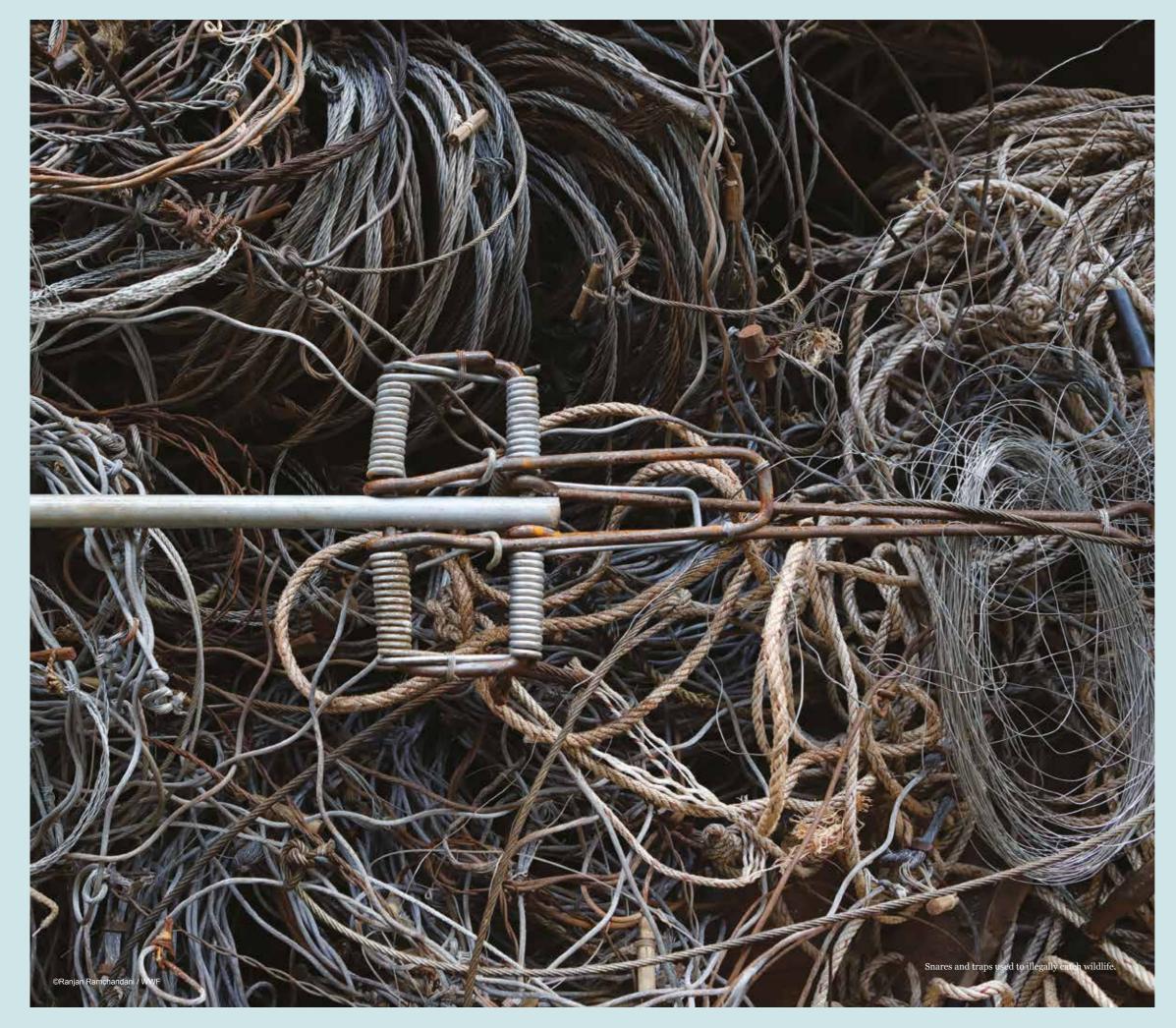
WWF has continued its support towards the

institutionalisation of ranger training in tiger range countries to ensure sustainability. In 2020, WWF worked on a project supporting the eight key training colleges in India and the only ranger training institution in Bhutan. The project will develop the curriculum to address the current needs of frontline staff, strengthen trainer capacity and streamline the current training. A similar project is also initiated in Myanmar. However the restrictions of the COVID-19 pandemic have slowed progress.

SOUNDING THE ALARM ON SOUTHEAST ASIA'S SNARING CRISIS

Snares are the biggest threat to Southeast Asia's terrestrial wildlife, including tiger and tiger prey, with an estimated 12 million snares within protected areas in Cambodia, Lao PDR, and Viet Nam. This was one of the startling conclusions from the report *Silence of the Snares: Southeast Asia's Snaring Crisis*. Supported by WWF's Tigers Alive Initiative, WWF-Singapore, and WWF-Greater Mekong, the report also warned that snares are decimating wildlife and increasing the risk of zoonotic disease transmission to humans.

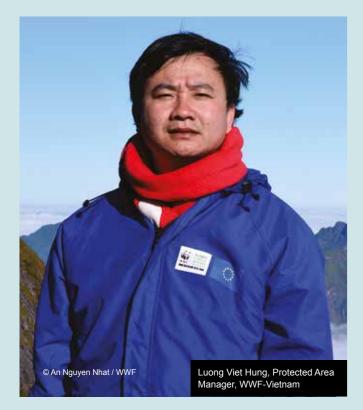
To tackle the snaring crisis governments and civil society need to look beyond simple patrols removing snares and push for legislative reform more effectively banning snares while also delivering targeted evidence based demand reduction for wildlife meat consumption. Since launching the report dialogues have begun with governments in Cambodia, Viet Nam, and Myanmar on some of the legislative changes required. WWF's Tigers Alive Initiative is now developing a new report that will look further into how snaring is directly impacting tigers and other Big Cat species across Asia.





THE STORY THE SNARING CRISIS IN SOUTHEAST ASIA

Southeast Asia is home to some of the world's rarest and most charismatic animals, but during the 20th century it suffered more global extinctions of mammals and birds than any other continental area. The primary threats? Habitat destruction and hunting; a larger proportion of which is done by snares. Driven by a demand for illegal wildlife trade products, these cheap and indiscriminate traps are silencing the forests. Urgent action needs to be taken to put an end to it. This is what the snaring crisis looks like on the ground, and what needs to be done according to two conservationists.



"THERE WERE TIMES WE REMOVED THOUSANDS OF SNARES OVER A SEVEN-DAY PATROL TRIP"



ciety's Malaysia Program

When he started work with WWF-Viet Nam in 2010, Protected Area Manager Luong Viet Hung spent much of his time in the forest piloting a community-based forest guard model focused on removing snares in the Central Annamites Landscape. Every month, he accompanied the teams for 15 days at a time in the forest, where he faced snares in daunting numbers. Often Hung and his team would find snares set along fences (drift-fences) which hunters built to funnel all animal movement towards their lethal snares.

"The drift fence was hundreds or thousands of meters long. I was shocked and upset to see so many dead bodies of wildlife on the traps. The other members had the same reaction; their faces were saddened."

After a moment of silence, the team knew what they had to do. "Without exchanging a single word we took action, destroying the drift fence, collecting the wires, and recording the field data on our datasheet. There were times we removed thousands of snares over a seven day patrol trip."

From 2011 to 2019, the community-based forest guard model removed and destroyed over 100,000 snares in just two nature reserves. In the short-term removing snares likely prevents some deaths. "Can you imagine what would have happened if these snares had not been removed and destroyed? Would 100,000 animals have been trapped and killed?"

However snares often return and Hung points out the need for a more comprehensive approach to combat snaring. "Poaching is not an independent activity, it is a chain consisting of many links including local communities, protection agencies, traders, restaurants, markets and consumers. To end poaching, we need a comprehensive solution promoting sustainable livelihoods to local communities and changing the behaviors and awareness surrounding wildlife hunting. We need to use community engagement to strengthen protected area management and wildlife trade."

"THIS IS NOT HOW I IMAGINED MY FIRST ENCOUNTER WITH A WILD MALAYAN TIGER WOULD BE."

Dr Mark Rayan Darmaraj has been working on tiger conservation with WWF for 16 years, and now leads Wildlife Conservation Society's Malaysia Program. In 2009, WWF patrol teams discovered a tiger within the Belum-Temengor Forest Complex. It had been caught in a snare, but was still alive. Mark reached the snare site by late evening, and parked up on the road just 600m from where the tiger lay. It's risky to attempt to release a trapped tiger at night in case the tiger escapes from the snare, so they waited until sunrise. They stood guard all night, waiting in case the poachers returned for the tiger. They did not.

At the break of dawn, the rescue operation sprung into action. Personnel from the Department of Wildlife and National Parks tranquilised the tiger, and heaved it on to a stretcher.

"I had the privilege of getting close to the animal before it was tranquilised, but I will never forget the roars of anguish and



the fear in its still menacing eyes. As the paw was released from the snare I could see the deep wound it had inflicted. The bone was visible. To see the king of the jungle reduced to this vulnerable state of suffering invoked a sense of disgust and shock in me."

A week or so later, Mark was informed that the tiger had died. He says he felt numb on hearing the news.

"It took me a while to uplift my battered soul and regain motivation, but eventually I did and I vowed to give my best to protecting tigers." And Mark was not alone. In response to the crisis that caused the country's tiger population to drop below 200 individuals, in 2018 local communities joined WWF to flood the forest to remove snares and deter poachers. It was an urgent, stop-gap initiative nicknamed "Project Stampede".

"We now have 75 indigenous anti-poaching personnel helping us remove snares and deter poachers in Belum-Temengor Forest Complex and in 2020 only seven active snares were found."

"My conversations with indigenous people have taught me that the forest is inextricably linked to their lives. They regard tigers to be the guardian of the forest, and although they hunt some small mammals, certain primates and birds for consumption, they value and respect all wildlife so this

indiscriminate, cruel snaring is seen as a vicious way of wiping out wildlife."

The community patrols are already playing a huge role in making the forests safe for tigers. Active snare encounters have reduced but Mark believes everyone has a role to play in stopping poachers using snares, from indigenous communities and enforcement agencies to government and key decision makers.

"Malaysia needs more enforcement personnel to guard the forest. Efforts to work with communities to be part of the solution need to be explored and expedited. And ultimately, political will to prioritise efforts in reducing this threat need to be invoked so that in years to come we will still have wildlife in our forest."

WWF urges governments in Southeast Asia to strengthen enforcement and legislation to act as an effective deterrent against snaring, and engage indigenous peoples and local communities as partners to stop this threat. Protected areas need more and better resourced patrols. In addition to reducing urban demand for wildlife meat, governments must also prevent the purchase, sale, transport and consumption of wildlife species which are of high risk for zoonotic disease transmission. This will include most of the ungulates and carnivores that are major targets for snaring.





MALAYSIA'S ANTI-POACHING TEAMS MAKING Gains

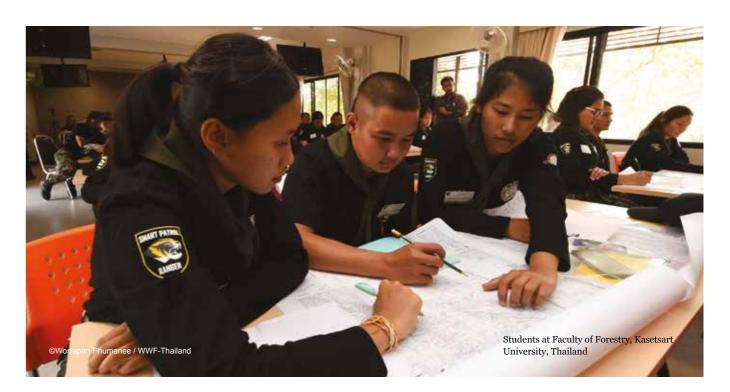
WWF-Malaysia's initiative Project Stampede was established in 2018 when there were only three patrol teams. As of 2020 there are now 15 patrol teams operating in Royal Belum State Park and Temengor Forest Reserve. Belum-Temengor Forest Complex in Malaysia is one of Southeast Asia's most important tiger landscapes, yet it experienced a 50% decline in tiger numbers from 2009-2018 largely due to widespread snaring. However, since 2017 there has been a drastic increase in the number of patrol teams and a sharp decline in snares, which is good news for tigers and other wildlife in this region.

During 2020 a total of 15 patrol teams logged 1723 patrol days

covering 11,183km on foot, finding a total of just seven active snares and 31 old snares that were removed by the team. These are promising results.

MALAYSIAN GOVERNMENT COMMITS FUNDING

During the end of 2020 the Malaysian government announced it was allocating MYR20million (nearly USD5 million) under the 2021 National Budget for the Biodiversity Protection and Patrolling programme. Under this programme more than 500 retired army personnel and indigenous people will be employed to patrol protected areas, including tiger habitats. This increased patrolling presence has been strongly pushed for by WWF-Malaysia and will help to safeguard Malaysia's remaining wildlife.



THREE LITTLE SIGNS OF HOPE IN MALAYSIA

Four tigers were captured on camera traps in Malaysia earlier this year. The camera traps revealed a female tiger walking through the forest followed closely by three cubs! Belum-Temengor Forest Complex in Malaysia is one of Southeast Asia's most important tiger landscapes. Since 2017 there has been a drastic increase in the number of patrol teams and a sharp decline in snares which is good news for tigers and other wildlife in this region.

HABITAT MONITORING IN BATANG HARI, Central Sumatra

In Central Sumatra, in Indonesia WWF has been supporting the Forest Management Unit in Batang Hari Protected Forest by conducting SMART patrols and documenting illegal mining operations, illegal logging sites, land conversion activities, and newly illegally planted areas for palm oil, rubber, and bamboo. The information has been shared with relevant authorities and law enforcement agencies for improving better protection and management effectiveness. WWF-Indonesia is supporting authorities to reform existing poachers in Riau province.

SMART GETS SMARTER

This year in Cambodia the Protection Assistant for Wildlife Security software was fully integrated into SMART and is now being used by law enforcement in Srepok and Phnom Prich Wildlife Sanctuaries. This artificial intelligence has greatly helped protected area managers identify forest and wildlife crime hotspots. The software generates poaching risk maps and patrol routes which assist rangers by better informing their patrol strategies. Thanks to the technology rangers were successful in identifying 402 illegal logging and 251 illegal hunting cases.

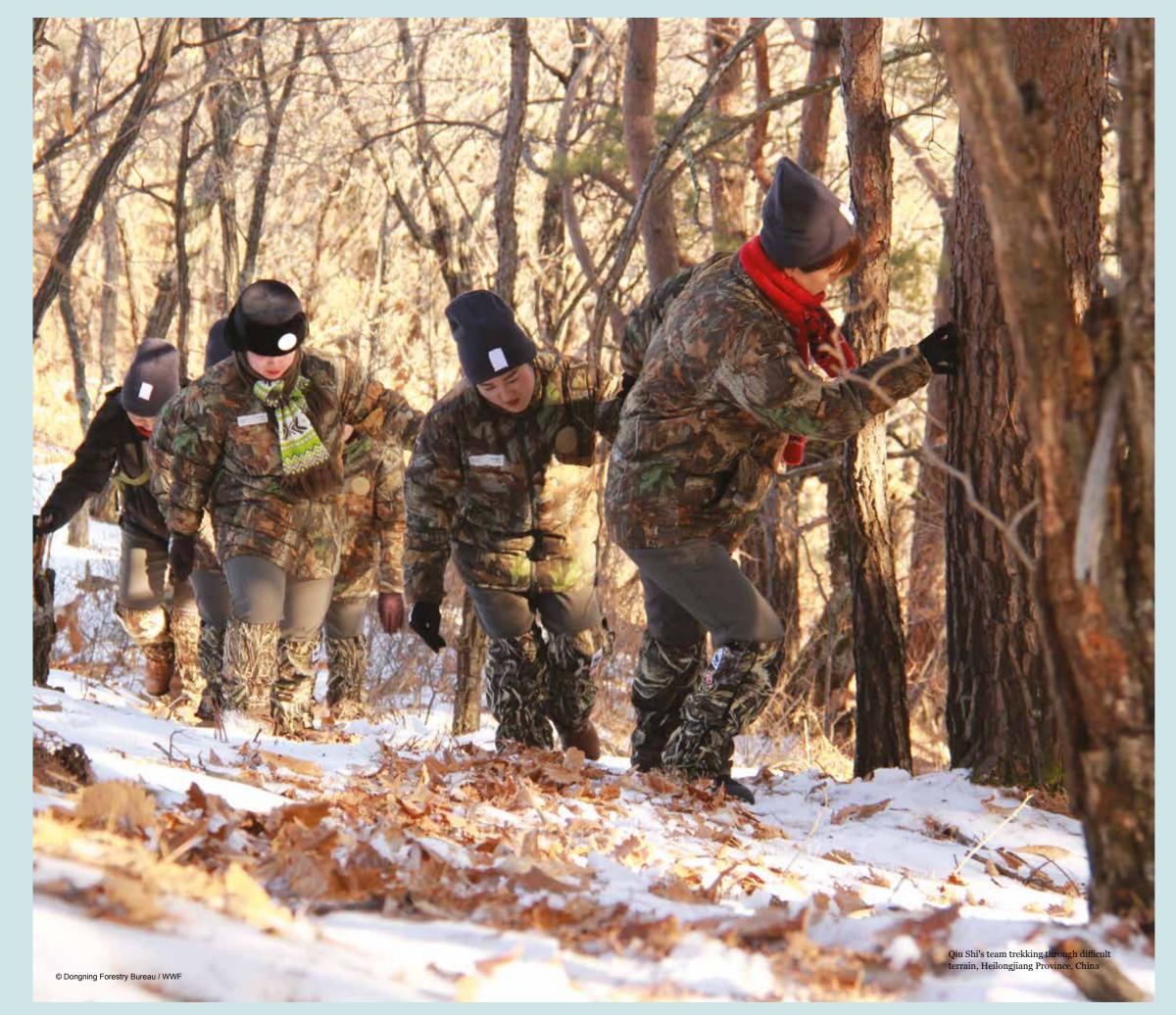
THAILAND: EMPOWERING THE YOUNG GENERATION IN CONSERVATION

A "Smart Patrol for Protected Area Management" course was added to the curriculum for fourth-year students at the Faculty of Forestry at Kasetsart University. The programme is supported by the Department of National Parks, Wildlife and Plant Conservation, the Faculty of Forestry at Kasetsart University, Wildlife Conservation Society, and WWF.

Under this programme, annual SMART patrol training for students of the Faculty of Forestry at Kasetsart University has been taught since 2014. The WWF-Thailand Tiger Project is the host for this program and their staff train the students. The training will build the capacity of future Protected Area managers, for long term stewardship of wildlife and national resources in Thailand.

TRAINING WILDLIFE MONITORING UNITS IN MYANMAR

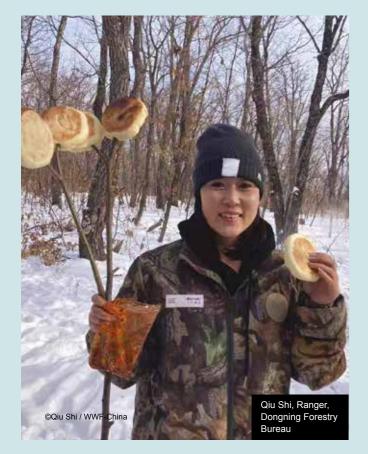
With the support of WWF-Myanmar, 29 community members were trained as part of a Wildlife Monitoring Unit and has begun occupancy surveys in remote areas of the Dawna Tenasserim Landscape. The data they collect as part of their surveys has been helping in building a picture of the status of tigers and prey in one of the most poorly understood tiger landscapes globally.





FEATURE STORY MEET THE ALL-FEMALE RANGER TEAM PROTECTING CHINA'S TIGERS

The ranger profession around the world is male dominated. A survey of public-sector rangers across 28 countries in 2019 found that just 7.5% of respondents were female and only half of the female rangers felt that their efforts were being fairly rewarded.



Qiu Shi's team is unique in that they are China's only allwomen patrol team. They play a crucial role in helping double tiger numbers.

Dongning Forestry Bureau, Heilongjiang Province. This is tiger range territory, deep in the mountains of Northeast China. At first light, six rangers set out on patrol, their breath fogging in freezing air. They will trek for hours across unforgiving terrain, snow underfoot. Their job? To patrol, record data, remove deadly snares and set up camera traps.

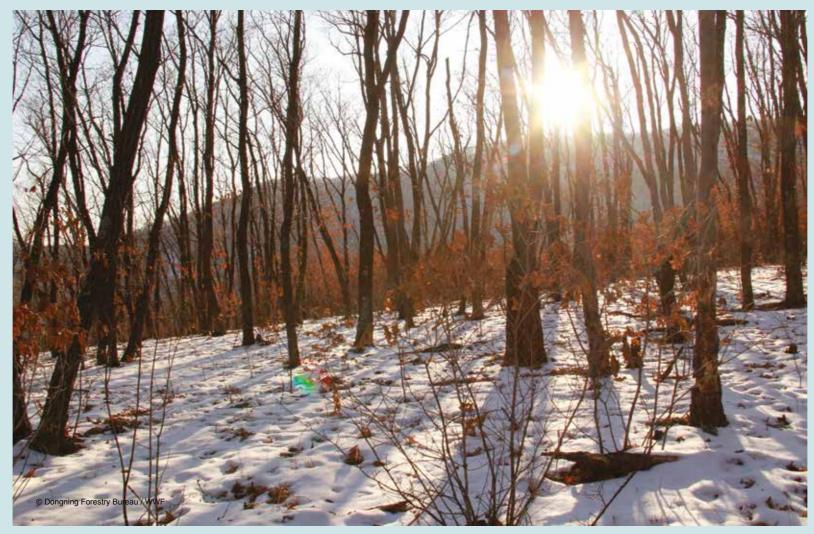
My name is Qiu Shi. I am a ranger for the Dongning Forestry Bureau, and today I invite you to join our team of six on patrol. Wrap up, it's very cold. Where we are is bordering Russia's Primorsky region, and during the winter even daytime temperatures can reach below -20°C. Amur tigers and leopards live here, roaming between China and Russia. We are here to safeguard them and their forest home.

Most of the team here are second or third generation forestry people. Our fathers and grandfathers walked these forests before us. As a child I couldn't understand why my father was always away, always busy. Some of my teammates feel the same way.

We walk quietly in the snow, paying close attention for signs of footprints and snares. The snares – metal wire traps set to catch wildlife – are often well-covered. Over the years poachers have grown more cunning. We are continually learning too, but sometimes an accident is unavoidable.

In this unforgiving wilderness with steep mountains and dangerous animals around, even the most simple tasks are difficult. Not long ago one of my peers encountered a wild boar and suffered a bad wound to the thigh. He needed a number of stitches, but fortunately he is recovering.



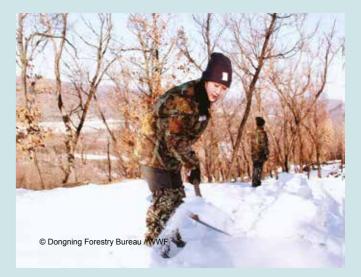


After three hours of walking we arrived in Tubaogou. My colleague, Li Gang, points toward a steep mountainside. One more hour passes before we finally reach the cameras to download the data and change the batteries. Afterward, we pause for a quiet moment, taking in the beautiful, silverbrown landscape of Tubaogou before us. Have you heard of this place? This is the home of the Amur tigers and leopards.

We eat a quick lunch of cold bread prepared that morning and move on, chatting about our families, neighbours and life at home to keep us from feeling tired. After half an hour or so Wu Tong calls out, she has found a set of footprints! Everyone hurries forward and gathers around the pug marks in the snow. Xu Chunmei takes out a tape measure to record the diameter of the prints. After analysing the footprints she concludes it's a leopard and must be searching for food. We take some photos of them as a record and log the coordinates where we found them, recording data like this is a crucial part of our job.

These moments are the highlights of our days; every trace of a wild animal is a thrill. It may be unforgiving, but when we see roe deer walking among the trees, this landscape feels like a fairy tale.

We march onward, chatting excitedly and singing with new spirit. In quiet moments, bird song and the occasional calls of wild animals keep us company. As light falls we head down the mountain toward home. One by one, we help each other down the slippery slope before reaching the old, right-hand drive car. Our feet are freezing and faces are red as we bundle into the seats. It has been a long day, but everyone is smiling.



Safeguarding nature for generations to come

Our fathers dedicated their youth to these mountains. They loved nature and animals, and they were not afraid of hardship or fatigue. Many people born in the mountains yearn for urban life, but we have a love of nature, and we have inherited the spirit of our fathers. Now we are the protectors of wildlife for the young generation.





US HOUSE PASSES MAJOR MILESTONE FOR Captive tigers

In 2020 the popular Netflix docu-series Tiger King: Murder, Mayhem and Madness brought the plight of captive tigers in the US to the screens of millions across the world. It shined a spotlight on the reality for thousands of tigers bred for entertainment across the country and highlighted there are more captive tigers in the US than there are left in the wild.

In a timely moment this same year the US House of Representatives passed the Big Cat Public Safety Act. This would require facilities to obtain a federal permit for big cat ownership thus ensuring transparency of where captive tigers are in the country, in addition to who owns them, when they are sold or traded and what happens to their valuable parts when they die. The passage of this bill marks long-awaited progress and WWF's Tigers Alive Initiative will continue to work to ensure its passage in both the House and Senate under the current Congress so that it finally becomes law.





EU'S ROLE IN THE GLOBAL TIGER TRADE

A joint report from WWF and TRAFFIC '*Falling Through the System: The role of the European Union captive tiger population in the trade in tigers*' in September 2020 highlighted that weak legislation and limited checks on private captive tiger facilities across the EU and the UK provide significant opportunity for tiger parts, such as skins and bones, to enter illegal trade. The report recommends immediate action to improve government oversight of the management of captive tigers, collecting DNA samples and stripe pattern photos, and to ban the commercial trade of captive tigers and their parts within and outside of the EU and UK.

The matter was raised, quoting the report, at the December CITES EU Expert Group meeting, and Member States were invited to volunteer to draft a guidance document on further controls for tiger trade, which was a recommendation from the report.

ANALYSING WILDLIFE TRADE IN RUSSIA

In recent years Russia has undertaken steps to counter the illegal wildlife trade. However according to WWF's report *'Wildlife Trade in the Russian Federation'*, released in 2020, Russia remains an active player in the global wildlife market. Illegal trade in different Amur tiger parts and derivatives is fuelled by the demand for traditional Asian medicines, decorative items and luxury products. As Russia doesn't have a system for monitoring and enforcing wildlife trade on the internet the report recommended there is an urgent need to develop a set of measures towards raising public awareness of restrictions in wildlife trade.

TRAFFIC LAUNCHES CAMPAIGN IN VIET NAM

Despite a global ban on trade in tigers, demand for tiger products in Viet Nam is strong and the country remains one of the main destination markets for illegal tiger trade. TRAFFIC launched a three year social marketing programme aimed at reducing the medicinal use of tiger products in Viet



©Keith Arnold / WWF-US

Tiger bone wine from the Illegal Wildlife Trade

Nam. Tiger bone glue was revealed to be the most popular tiger product and will be the focus of the project. TRAFFIC will address individual demand through a multimedia behaviour change campaign, while calling on government partners, such as the National Assembly, Ministry of Health, and Central Committee of Propaganda and Education, to strengthen their policies towards wildlife protection.

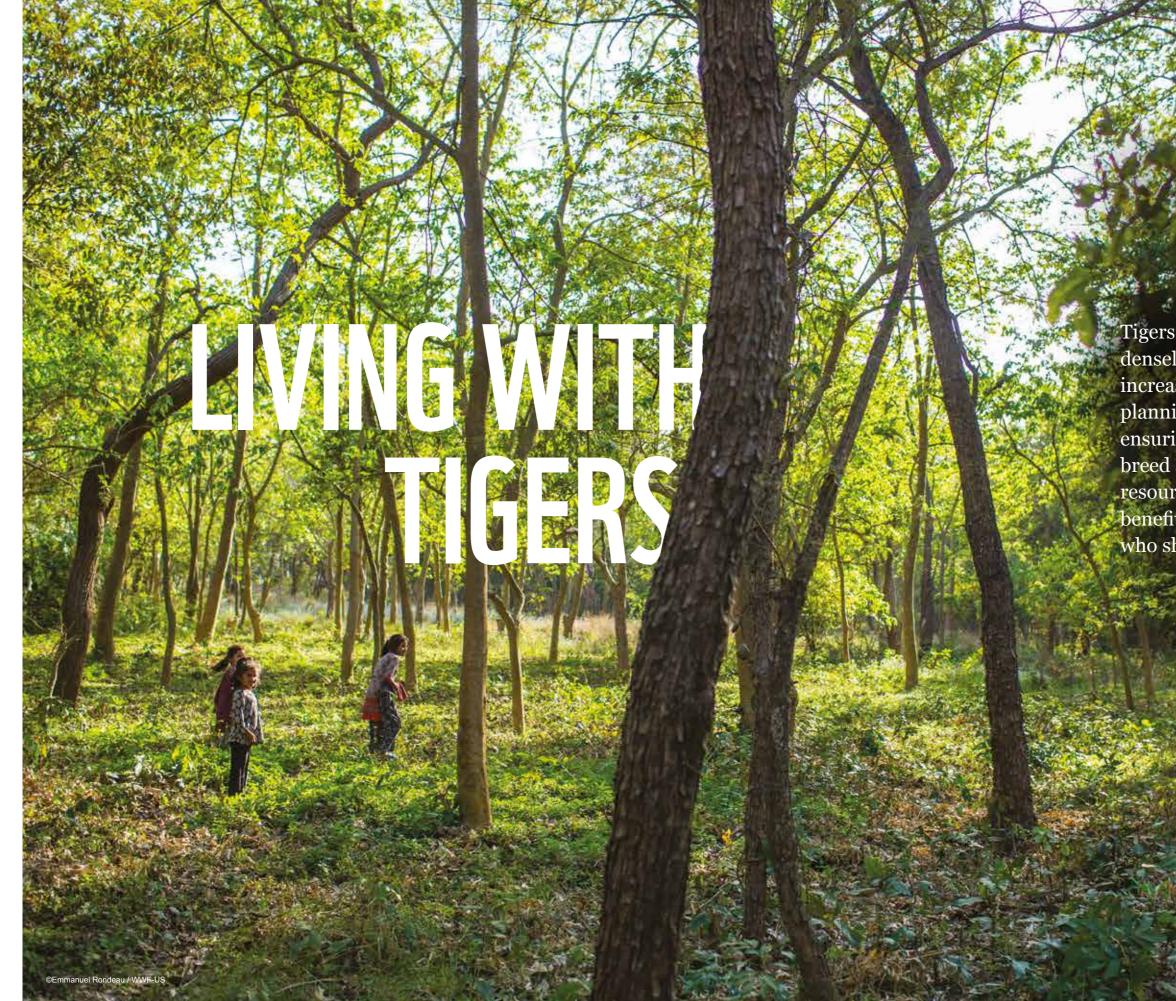
CALLING FOR AN END TO TIGER 'FARMS' IN THAILAND

WWF-Thailand and World Animal Protection jointly advocated to phase out tiger 'farms' in Thailand, jointly submitting a petition to parliament signed by 10,000 people, asking that the Wildlife Law be amended to ban the commercial breeding of tigers in captivity. Subsequently, the CEO of WWF-Thailand presented the negative impacts that commercial breeding has on wild tiger conservation and WWF's recommendations for phasing out tiger farms to the Minister of Natural Resources and Environment, who then prioritised the tiger farm issue in the ministry.

TIGER SEIZURE AT THAILAND ZOO

Five live tigers and a tiger head were seized from Mukda Tiger Zoo and Farm after tests showed the animals declared to be born there had no links to older tigers in the facility. The seizure refocuses the spotlight on the troubling ties between captive tigers and illegal trade involving Thailand's zoos. Thailand's Department of National Parks, Wildlife and Plant Conservation has said checks on tigers in these facilities would continue.

There needs to be a strong and transparent database that provides a foundation for consistent monitoring and reviewing of non-compliance. WWF-Thailand is committed to assisting Thailand's Department of National Parks, Wildlife and Plant Conservation in its ambitious goal to conduct DNA tests on the over 1500 tigers currently being held in 39 facilities across the country in the coming years and months.



Tigers live in some of the world's most densely populated countries. Amid increasing competition for resources, planning for tiger recovery means ensuring tigers have space to roam, breed and that their prey have the resources to flourish, in ways that benefit rather than hinder the people who share the landscapes with them.



PEOPLE-CENTRED TIGER CONSERVATION

Communities must be partners in tiger conservation, rather than simply actors. That's the fundamental shift proposed in WWF's Tigers Alive Initiative People-Centred Tiger Conservation approach.

Across the tiger's range, people-centred approaches are already underway, from citizen science initiatives in Nepal, to partnerships with hunting estates in Russia, employment of indigenous patrol teams in Myanmar, Malaysia and Indonesia, to creation of local multi-stakeholder management bodies in Thailand, engagement with plantation managers for staff safety in Indonesia, to linking farmers in Central India with buyers of sustainably produced cotton.

What all of these approaches have in common is the greater engagement and ownership of communities in the planning, implementation and shared outcomes. This requires significantly more time and a diversity of skills to better understand the attitudes, perceptions and aspirations of communities; to be able to develop a shared vision and common ground; and, to identify and implement a range of conservation incentives that go beyond just economic benefits.

This requires a shift in the way we approach community based or inclusive conservation. In many places this is happening or ongoing and WWF's Tigers Alive Initiative aim to learn, build upon and scale up People-Centred Tiger Conservation across tiger range countries.

Birsana Yogi walking near her homestay



NEPAL'S PEOPLE-CENTERED APPROACH

Nepal's Khata Corridor, a significant functional corridor, connects Nepal's Bardia National Park to India's Katerniaghat Wildlife Sanctuary. During the country's last tiger survey in 2018, it was estimated that at least 34 tigers use the Khata Corridor. With increasing tiger movements, human tiger conflict in the area has also increased. In 2020, between August - September, four people were killed by a tiger around the corridor. Although these tragic incidents created terror and panic among the local government and the communities living in and around the area, there are surprisingly no records of retaliatory killings of tigers. Apart from increased tolerance, the approach with which the community took proactive steps to address the issue also exemplifies community ownership to conservation and how communities and other stakeholders in the area are embracing tiger conservation.

After the human tiger conflict incidence, the Khata Community Forest Coordination Committee, a community based organisation formed by WWF-Nepal two decades ago, and the Divisional Forest Office brought all the stakeholders (community representatives, forest officials, national park, district administrative authorities, local government and WWF-Nepal's Terai Arc Landscape Programme) together to address the issues and proposed immediate compensation to the families through the Community Forest Coordination Committee's endowment fund. The community based Rapid Response Team were immediately present in the site to support concerned authorities in managing the conflict. To immediately minimise such conflicts, the Community Forest Coordination Committee in partnership with the Community based Anti-Poaching Unit, Rapid Response Team and the Bhalmansas (leaders in the indigenous Tharu communities), organised various awareness programs in and around the corridor. Khata is an example of how people-centred approaches operate in practice.





BUILDING KNOWLEDGE OF SAFE

WWF continues to build knowledge around the science and practice of human wildlife conflict management. New research and reports in the SAFE series continue to develop:

- Human Wildlife Conflict Index
- Economic Impact Assessment of Human Wildlife Conflict in India and Nepal
- The SAFE Rapid Assessment How to Guide
- Human Wildlife Conflict Information Systems
- The 6 Elements of Conflict

PROPOSAL FOR UNIVERSAL HUMAN WILDLIFE CONFLICT INDEX

The proposal for a global Human Wildlife Conflict Index led by WWF's Tigers Alive Initiative was finalised in 2020 and is being put to the Convention on Biological Diversity as a potential indicator for the human wildlife conflict target.

MITIGATING HUMAN WILDLIFE **CONFLICT IN NEPAL**

In 2020 the first Public-Private Partnership Insurance Mechanism for Human Wildlife Conflict in Chitwan National Park was introduced. The insurance covers wildlife damage including loss of human life or injuries, damage to property, loss of livestock and crop damage.







IMPLEMENTING SAFE IN NORTHEAST CHINA

WWF applied the SAFE tool to support Huangnihe National Nature Reserve in Jilin Province and Dajiahe Provincial Nature Reserve in Heilongjiang Province to conduct an assessment to better understand the challenges of human wildlife conflict. From 2019 to 2020, WWF and Jilin University conducted a survey on environmental conservation awareness of communities in Huangnihe National Nature Reserve. Pilot sites were selected and a human wildlife conflict rapid response team was formed.

COMMUNITY RESPONSE GROUPS IN INDIA

A team referred to as Bagh Mitras, which translates to Friends of Tigers, has been trained in an area with high human tiger conflict in Pilibhit Tiger Reserve and South Kheri Forest Division in Uttar Pradesh. The team is formed by volunteers from the local community and their main role is to provide support to the Uttar Pradesh forest department during instances of human tiger conflict. The team is the first line of support to manage a conflict situation until the forest department is available. To date 75 Bagh Mitras in Pilibhit Tiger Reserve and 50 Bagh Mitras in South Kheri Forest Division have been trained by WWF-India. Pilibhit Tiger Reserve was awarded the inaugural TX2 Award for doubling their wild tiger population, in the following feature we find out how it was achieved.

THE COST OF CONFLICT

The report 'Economic Impact Assessment of Human Wildlife Conflict in India and Nepal' in selected sites in India and Nepal was completed in 2020. The report, supported by WWF, is the first globally to test and apply a method for assessing economic costs of human wildlife conflict, and highlights that the relative cost of tiger conflict is highest where human tiger contact is highest. In the Sundarbans, human mortality due to tigers represents 100% of the annual cost to society, while in the Terai Arc Landscape in India it represents 96% of the total cost of human wildlife conflict. In contrast, the cost of tiger conflict in the Terai Arc Landscape in Nepal is only 28% of the total conflict cost, due to crop and property losses by elephants and herbivores being the dominant conflict at 72%. The findings are critical for us to be able to tailor human wildlife conflict management responses to the specifics of the conflict profile locally.

TIGER EDUCATION IN THAILAND

In 2020 WWF along with multiple agencies collaborated with a key school near Khlong Lan National Park, a WWF Heartland site, to build a "Tiger Learning Center". This Center will provide local students with the opportunity to experience and learn about tigers and other wildlife found in Thailand. It will help the younger generation to understand the importance of tigers and wildlife in maintaining healthy ecosystems that humans also depend on. Increased awareness and appreciation by local people will contribute to saving this keystone species.





FEATURE STORY HOW PILIBHIT TIGER RESERVE IN INDIA MORE THAN DOUBLED ITS TIGER POPULATION

Located in northern India, Pilibhit Tiger Reserve is one of the narrowest tiger reserves in India. The surrounding areas support among the highest human population densities of all tiger conservation landscapes globally. Yet the tiger population of Pilibhit Tiger Reserve doubled over the last decade and stands at 65 as of 2018. In recognition of this success Pilibhit Tiger Reserve was presented with the inaugural TX2 Award, for its remarkable contribution to tiger conservation.



The forest lies in a heavily populated landscape where grasslands and agricultural land blend with the edge of the forest. Pilibhit's forests are frequented by people all year round, so it can be difficult to find a balance between wildlife and people. But with every challenge lies an opportunity.

There have been a number of key successes to Pilibhit doubling it's tiger population. Like every animal, tigers need to eat. To increase the number of prey in the reserve for tigers, habitats such as forests and grasslands have been greatly improved. Another key success is the investment of technology to improve patrolling and monitoring. Better equipping them reduces the threat of poaching and ensures the habitat is a safe haven for tigers and other wildlife moving through it.

Even with these solutions there remains challenges. Because of its location the agricultural areas that surround Pilibhit act as an extension of natural habitats. This means tigers and other species often move beyond forest boundaries. It is an immense challenge, there is a real risk of close encounters between people and tigers which tragically results in both human fatalities and retaliatory killing of tigers. WWF-India is working closely with the government, other agencies and communities to better manage the impacts of conflict, making the landscape safer for both people and tigers.

The increase of tiger populations in Pilibhit demonstrates that committed efforts and investment in conservation can quickly yield results in areas where tigers thrive.







Tigers inhabit just 5% of their historic range. Since 1700s tigers have been lost from half of their former Range Countries including, most recently, Lao PDR and Cambodia. In many other places remaining tigers are reduced to a few small pockets of habitat.

Expanding the global range of tigers will be crucial to both building a resilient global wild tiger population and effectively meeting the global 30x30 goals to protect 30% of the planet by 2030. Together with indigenous peoples and local communities, WWF supports tiger range recovery through both active tiger translocations and reintroductions and creating the conditions on the ground for natural tiger dispersal and colonisation of new landscapes.

BRINGING

Reintroducing tigers to an area takes years of planning and preparation, and we are attempting the first international reintroductions ever for wild tigers.



NEPAL'S TIGERS REACH NEW HEIGHTS

In early 2020 camera traps situated at 2500m in the Mahabharata Range of Nepal captured a tiger only a week after they were installed. This record breaking capture was the highest known sighting of a tiger in Nepal and provides solid evidence for tiger conservation in the Mahabharata Range, while expanding Nepal's known tiger distribution outside the Terai Arc Landscape.

For a second time in 2020 the record for Nepal's highest altitude tiger sighting was broken. Camera traps set by the Red Panda Network in Ilam spotted a tiger at an incredible height of 3165m, marking the new high altitude presence of tigers in Nepal. The sighting was significant for another reason: it was also the farthest east a tiger had been sighted in the country, making the Kangchenjunga Landscape the land of the tiger. "Tigers are on the move, and we need to prepare for the conservation challenges and opportunities this brings," Stuart Chapman, Tigers Alive Initiative Lead at WWF.

THAILAND: TIGERS ON THE MOVE

In 2019 WWF-Thailand expanded their tiger conservation work to two new protected areas: Khlong Wang Chao National Park and Umphang Wildlife Sanctuary. These two protected areas combined with Mae Wong and Khlong Lan cover 4,500km² of high quality tiger habitat in the Upper Western Forest Complex.

From January to June 2020, the fifth biannual camera trap survey was conducted in Mae Wong and Khlong Lan, as well as the first survey for Khlong Wang Chao and Umphang. The team spent 10 months for field work during January -October 2020.

15 tigers, including six adult males, eight adult females, and one juvenile were identified, and camera trap surveys in Mae Wong National Park and Umphang Wildlife Sanctuary identified a new female tiger who had dispersed from the adjacent Huai Kha Khaeng Wildlife Sanctuary. This finding further demonstrates the significance of Upper Western Forest Complex for landscape scale tiger recovery. However, increasing the number of tiger prey in the Upper Western Forest Complex is needed to ensure dispersing tigers settle in the landscape.

REINTRODUCING TIGERS TO KAZAKHSTAN

WWF is working to reintroduce tigers back to Kazakhstan's Ili-Balkhash Landscape. The last record of a tiger from Kazakhstan was in 1948 but today with the leadership of the Government of Kazakhstan long-term tiger recovery is within our grasp. Progress is continuing in 2020 with the total density of ungulates in the 250,000 hectare release site recorded at more than 12 individuals per 1000 hectares, more than doubling since 2018-2019. Other activities include the construction of a new ranger center, providing human rights training to rangers, organising water wells for goitered gazelles and establishing 28 winter feeding areas for wild pigs.



COVID-19 hindered some parts of the reintroduction programme. The communication plan with local communities and the lack of internet in villages meant it wasn't possible to reach them virtually through online platforms. COVID-19 also affected the deer translocation meaning 47 deer were translocated instead of 50.

BRINGING TIGERS BACK TO THE WESTERN TERAI

In December 2020, WWF supported the National Tiger Conservation Authority, Uttarakhand government and local partners with the release of a tiger into the western part of Rajaji Tiger Reserve, in the Indian section of the Terai Arc Landscape. The aim is to translocate a total of five adult tigers to the area. The western part of the reserve provides a tremendous opportunity to recover the tiger population, estimates predict it could hold up to 30 tigers. Read the feature story on the next page for the full story.

TIGER PREY DECLINES IN CAMBODIA

Tiger reintroduction to Cambodia remains a long-term conservation goal for WWF and partners. One of the key requirements for tiger reintroduction are sufficient numbers of ungulate tiger prey species.

A report on ten years of monitoring ungulate tiger prey in the Eastern Plains Landscape was released by WWF-Cambodia this year. The report demonstrated worrying declines in the populations of all tiger prey species including the globally endangered banteng. The report attracted wide media pickup particularly within Cambodia. As a result, there is evidence of the government increasing commitment to dealing with snaring and wildlife meat consumption – the primary drivers of the decline in ungulate densities in the landscape. The Royal Government's Ministry of Environment and WWF have embarked on the development of a Wildlife Recovery Zone concept which is currently in the process of formal ministerial approval. The implementation of this intensive Wildlife Recovery Zone in the core of Srepok Wildlife Sanctuary is the next priority. This remains the best opportunity for securing the globally irreplaceable wildlife of this landscape and ultimately readying the site for tiger reintroduction in the future if all the conservation conditions and government support are secured.



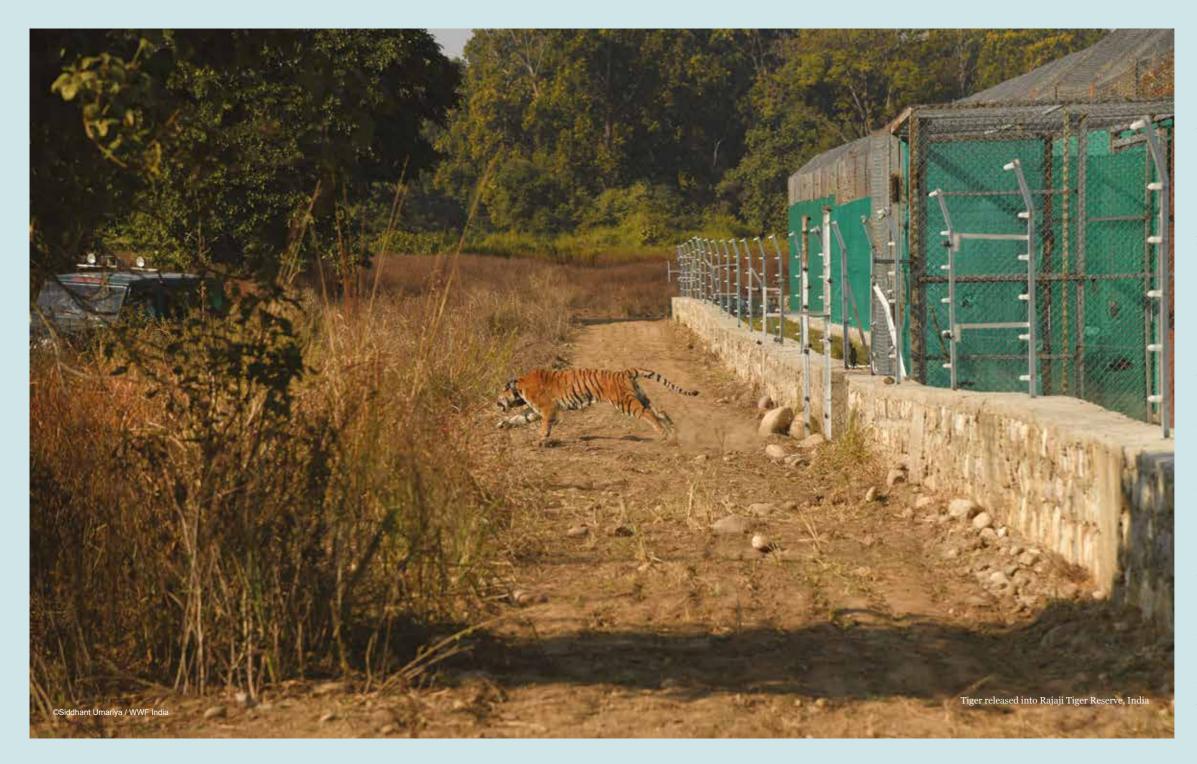




FEATURE STORY

BRINGING TIGERS BACK TO INDIA'S WESTERN TERAI ARC LANDSCAPE

There appeared to be little hope for tigers in the west of Rajaji Tiger Reserve until a landmark translocation plan was introduced to bring tigers back from the brink of extinction. But how exactly do you translocate a tiger?



Encompassing both India and Nepal the Terai Arc Landscape is a diverse region, home to an incredible array of wildlife, including tigers. However the towns and cities in the landscape are constantly growing, putting increasing pressure on the natural areas which surround them.

Rajaji Tiger Reserve in the west of the Indian Terai Arc Landscape has seen this impact more than most. A railway line and highway have sliced through the centre of the reserve making it near impossible for tigers to move between the eastern and western parts. There are estimated to be only two female tigers left in the western part and there have been no signs of tigers breeding since 2006.

At the heart of any successful conservation programme is a team of dedicated people. Dr. Pranav Chanchani, the National Lead for Tiger Conservation at WWF-India, tells us what's involved when translocating this iconic big cat.

Where are the tigers being translocated from?

The tigers are translocated from Corbett Tiger Reserve which is roughly 200km east of Rajaji Tiger Reserve and has the world's highest density of tigers.

Why is this translocation so important?

Infrastructure developments and urban growth have nearly severed the eastern and western parts of Rajaji Tiger Reserve. Tigers play an important role in ecosystems but their population has been severely depleted here. We're hoping the translocation will ensure the recovery of a viable breeding tiger population. While translocation is important, to hold onto the progress we will need to restore the connectivity between the two halves of Rajaji Tiger Reserve.

How do you translocate a tiger?

The preparation for the translocation happens over a long period of time. In Rajaji, multiple agencies including the Uttarakhand State Forest Department, National Tiger Conservation Authority, Wildlife Institute of India and WWF contributed to this effort.

Tigers are being translocated from Corbett Tiger Reserve so their population had to be monitored over time to see which individuals could be moved. Planning and carrying out the capture operation takes time, mainly because tigers aren't easy to catch. Once darted, the tiger is transported in a specially adapted cage which is designed to ensure there's nothing the tiger can bite or claw into. It's a good design! In western Rajaji Tiger Reserve, where the tigers are being translocated to, we engaged local communities in the programme, especially those who are in the translocation area. Baseline surveys were carried out of the area and prey numbers were monitored.

At the translocation site an enclosure was built to enable the soft release of the tiger (which lets it get used to its new surroundings and is then gradually released). A core team of 20 people have also been trained to track the tigers 24 hours a day, as well as the forest department who led the translocation and will protect these animals.

At both ends there is a dedicated team of veterinarians, biologists, conservation professionals and social scientists. It's a comprehensive effort to make sure the tiger, field teams and communities are as safe as possible.

How will the tigers be monitored after they're released into Rajaji Tiger Reserve?

There are several ways to monitor the translocated tigers. Firstly the tigers are fitted with a radio collar before being released into the reserve. The collar pings signals to a satellite that are relayed to ground teams who are tracking the tigers 24 hours a day. However, typically only a few individuals are radio collared and tigers are also monitored using networks of camera traps. Other methods of monitoring include tracking their pugmarks and analysing genetic material extracted from fur or scat.

How do we ensure communities are involved with this translocation and are able to raise their concerns throughout this process?

Prior to the project, there had been an engagement process with communities who live in the translocation area. We've also been working with communities in the corridor between the two halves of the reserve as this is another critical region within the landscape. There isn't a one size fits all solution. As the tiger population grows, our delivery of solutions, especially in the context of (human tiger) conflict, will need to be up to the mark so people aren't left feeling vulnerable or otherwise adversely affected.

What are your hopes for the future of tigers in Rajaji Tiger Reserve?

In eastern Rajaji Tiger Reserve the tiger population was severely depleted and is now thriving and supplying tigers to surrounding areas. I think western Rajaji has every bit of that potential. This is perhaps the most densely human populated landscape across the tiger's range and is one of the world's major food baskets with intense agricultural production. So if we can bring back tigers here we can do it anywhere, provided there is political will and social support.

THE PATH TO 2022 Year of the tiger

2022 is the Year of the Tiger and is a critical milestone on the TX2 journey. In the decade since the adoption of the Global Tiger Recovery Programme at the first Tiger Summit in St. Petersburg the evidence shows that a centurieslong trend of wild tiger decline has finally been reversed. Despite this positive short-term trend, it is important to acknowledge that these gains are fragile and have not been uniform across all tiger range countries.

There will be a number of key events and processes happening in the lead-up to the much anticipated second Tiger Summit in Vladivostok (September, 2022). The event will take place back-to-back with the 2022 edition of the Eastern Economic Forum, opening up opportunities to engage new partners for tiger conservation.

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OUR VISION FOR TIGER CONSERVATION...

...would see the second Tiger Summit as a transformative moment, in which global efforts for the species are greatly accelerated. To achieve this we will put our support behind a number of new approaches, including;



1 NEW GOALS

the adoption of a smaller set of measurable 'priority' goals for tiger range countries



MAPPING SOUTHEAST ASIA'S RECOVERY 2

the adoption of a focused and financed Southeast Asia Tiger **Recovery Plan**



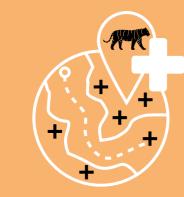
WORKING TOGETHER 3

increased collaboration between governments, local communities, NGOs, and public and private sectors on tiger conservation



4 SUPPORTING COMMUNITIES

a mechanism for tiger range countries to better address issues of humantiger coexistence in those countries that have greatly grown their tiger populations since 2010



5 RANGE EXPANSION

an ambitious plan to put tigers back in landscapes from which they have been recently lost, while also expanding the total number of countries involved in the Global Tiger Initiative beyond the current number of 13

KEY TX2 MOMENTS

2021

Finalise the People-Centred-**Tiger-Conservation concept** and its roll out in the tiger range countries and pilot of the approach across multiple sites to build the foundation for partnerships with communities.

Global Tiger Initiative led country-level consultations in seven Southeast Asian Tiger Range Countries - in order to create a Southeast Asian Tiger Recovery Plan.

2022

The Year of the Tiger

JULY

Senior Officials Meeting - hosted virtually by Malaysia this will set the agenda and priorities of the 4th Ministerial Meeting later in the year.

29 July: Global Tiger Day

OCTOBER/NOVEMBER

4th Ministerial Meeting - hosted by Malaysia, this will be the only major Global Tiger Initiative meeting to be held in Southeast Asia between the 2010 and 2022 Tiger Summits. It will provide a unique opportunity to focus on overcoming the problems that have led to a serious decline of wild tigers in this region.

FEBRUARY

JULY

29 July: Global Tiger Day

SEPTEMBER

Global Tiger Summit 2022 - Russia will host the second Tiger Summit in Vladivostok. This critical meeting will define the direction and priorities of global tiger conservation for the following decade or more - as well as the degree of political attention afforded to the species during that timeframe. It will also close the original Global Tiger Recovery Programme period (2010-2022) and determine whether the goal of 6,000 wild tigers has been met. The meeting is likely to include numerous Heads of State, the first such meeting since 2010.

1 February - Chinese Year of the Tiger

Tiger Art Trail 2022, Singapore - 40 life sized tiger art sculptures designed and decorated by an invited list of globally recognised artists will be placed in areas with backdrops of iconic landmarks, areas of Singapore's biodiversity and in tourist hotspots over six to eight weeks.

HANKSYN We could not do what we do without the

generosity of every one of our donors. Through your support, we edge closer to the goal of TX2. WWF would like to offer special recognition to the following partners that have provided key strategic support and investment in WWF's tiger programme.

Asian Tigers Group **B.** Grimm Barbara Holden **Dhanin Tawee Chearavanont** Bhutan for Life Foundation Department for Environment Food Illegal Wildlife Trade (IWT) Challenge Fund: Social marketing to end Tiger Markets in & Rural Affairs, UK Vietnam **Diane and Michael Moxness** Bhutan for Life Discovery, Inc. **Dr Bevan Jones Dr Rimington Legacy European** Union Francois and Sheila Brutsch German Cooperation via KfW **Development Bank and IUCN Global Environment Facility**

Green Climate Fund Hull City Tigers Humanscale Corporation KENZO/ **Linda Mars Mars** Petcare Maybank Foundation **Michael and Stacey Grealish** Nordens Ark Orientis Prince Albert II of Monaco Foundation **Richmond Football Club** Robert and Mayari Pritzker Family Tiger Conservation in Bhutan and the Eastern Himalaya Foundation **Segré Foundation** The Katherine J. Bishop Fund The Praxis Companies/American Bath Group **Pharus Foundation Contribute Foundation** The Silent Foundation **Tiger Beer U.S.** Agency for International Development **U.S. Department of State** U.S. Fish and Wildlife Service **VTB Bank**

World for Tigers Foundation Supporting Tiger Recovery in the Upper Western Forest Complex in Thailand

Aage V. Jensen Charity Foundation From Conflict to Collaboration - Biodiveristy as a bridge - Phase II Working Together to Help Double the Number of Tigers in the Wild Significant Support for Tiger Recovery in Upper Western Forest Complex in Thailand Advancing Tiger Monitoring and Protection through the Establishment of a Tiger Research Center in Royal Manas National Park, Bhutan Inclusive Green Economies in Developing Countries

Bhutan for Life Working in Partnership to Double Wild Tiger Numbers Restoration of the Eastern Plains Landscape, Cambodia Supporting Efforts to Double the Number of Tigers in the Wild Supporting Wild Tiger Conservation Supporting WWF's Work to Help Tigers Thrive Supporting Wild Tiger Conservation in Myanmar in Sumatra, Indonesia Working Together to Double Wild Tiger Numbers

Professionalising Ranger Training in India and Bhuta Myanmar Wildlife Ranger College Supporting Wild Tiger Conservation

Kazakhstan Tiger Reintroduction Project Kazakhstan Tiger Reintroduction Project Tackling the Malaysian Tiger Crisis Wildlife Sanctuary Support Program, Cambodia

Fighting Wildlife Trafficking in the Golden Triangle Supporting Wild Tiger Conservation **Conservation of Endanger**

- Supporting Collaborative Conservation in the Ler Mu Lar landscape in Myan
- Improving Management and Protection of Tiger Heartlands and Tackling Critical Threats
- Advancing CSO's Capacity to Ensure Sustainability Solutions (ACCESS) in Can
- Supporting Wild Tiger Conservation in Thailand and Myanmar
- Communities for Tiger Recovery in Rimbang Baling, Indonesia and T
- Strengthening National Biodiversity and Forest Carbon Stock Conservation through Landscape-based Collaborative Management of Cambodia's Protected Area System as
- Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors
- Strengthening Tiger Conservation in the Belum-Temengor Forest Comp
- Long term Persistence of the Amur Tiger at its' Northern Edge
- Supporting Efforts to Double the Number of Tigers in the Wild
- Welcoming Tigers back Home to Amur Heilong in Russia and China and Saving Thirty Hills

Investing in Efforts to Combat Illegal Wildlife Trade and Secure Vital Tiger Habitats

g Cat Species in Russia

TX2 IS THE GLOBAL GOAL TO DOUBLE WILD TIGERS BY 2022



Working to sustain the natural world for the benefit of people and wildlife.

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