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Big Cats

A magazine by IBCA on wildlife conservation

Tiger Land

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Story of Tiger
Recovery

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Kenya

Game at the Savannah



A cheetah takes down a topi in the heart of the savannah in Kenya. A cheetah's streamlined body, shaped for speed, and acute vision make it the ultimate predator. This photograph was shortlisted for the Global Big Cats Photography Competition 2025 organised by the International Big Cat Alliance.

PHOTOGRAPH BY PRASAD HAMINE IN MASAAI MARA, KENYA



Coexistence is Conservation



Wildlife conservation is long-drawn and replete with challenges. But across the world, both small innovations and big strategies are being deployed to make a difference. Like the presence of water

buffalos in Bolivian ranches that prevent jaguars from attacking livestock. As livestock losses drop, coexistence with the predator becomes more acceptable to the communities. The use of depredation-resistant livestock, like the water buffalo, has given favourable results in countries like Colombia and Costa Rica too.

These simple changes now offer better chances to jaguar population (in decline for two decades) to survive and grow in parts of South America. In this issue, we carry a special story focussed on how the human-wildlife conflict narrative is changing towards a story of coexistence in South America where cattle ranching has severely threatened the jaguars.

Perhaps there is no better example than India's success in tiger recovery of how strategic planning coupled with scientific interventions can help a threatened species thrive again. Globally, India is home to largest number of tigers in the wild. Fifty years ago, tigers were on the brink of extinction. Our cover story describes the conservation model India adopted, blending scientific approach with a decentralise governance framework that resulted in a fabulous recovery. India recently reported 3,682 tigers; that's almost 70% of the world's tigers in the wild.

Our exclusive photo feature from north Kenya is a marvellous account of how lions and communities coexist. Here women take the lead in reducing the mounting threats to lions by digging water pans and supplying water for the wildlife. They are true conservation warriors.

Our issue also talks about a quiet revolution that has taken place in conservation — the creation of the Conservation Assured | Tiger Standards (CA|TS), a framework that aims to achieve excellence in tiger conservation and also study how it can be scaled-up for other Big Cats. We also examine new trends in wildlife trade in this issue, besides covering new research findings about vulnerable species across the world.

The Global Big Cats Summit in New Delhi will take place this year. As human expansion continues to threaten big cats' habitats, the news of a summit at the beginning of the year gives hope that the world is thinking of living with big cats for long. Coexistence will be part of Conservation. 🐾

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Cover Image: A family of the Bengal tiger in Corbett Tiger Reserve, India.
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Dr S P Yadav, pg 08

Dr S P Yadav is the Director General of the International Big Cat Alliance (IBCA). In his 35-year long career,

he has worked for more than a decade at the National Tiger Conservation Authority and at the Global Tiger Forum. He has also served as Director of Wildlife Institute of India, Member Secretary of Central Zoo Authority. He has recently been conferred the International Crystal Compass Award by the Russian Geographical Society for his contribution to Project Tiger in India.



Dr John Polisar, pg 14

Dr John Polisar is currently Environmental Coordinator Sierra National Forest, Senior Adviser Panthera, Research Associate Zamorano University, and formerly was Coordinator of the Wildlife Conservation Society's Jaguar Conservation

Program. During forty years of work in wildlife and wildland conservation across the Western Hemisphere, Dr Polisar has worked in remote field sites, in ranches and indigenous territories, and has had impacts in the international environmental policy arena.



MKS Pasha

-pg 18
MKS Pasha is a wildlife conservation professional with Wildlife conservation professional with 20 years of experience in leading and managing large teams and

large-scale conservation projects with multiple agencies across Asia Pacific, and Latin America. He is currently working on Conservation Assured approach, designed to provide a set of Standards for shared conservation objectives that can be used to achieve excellence in effective conservation of a certain species and/or habitat and their contribution to a collaborative target.

Our Contributors for this Issue



Dr Vinod B Mathur

pg 18
Dr Vinod B Mathur has spent nearly four decades in forest, wildlife, and biodiversity conservation.

He served for 33 years at the Wildlife Institute of India, including as Dean and later as Director, and went on to chair the National Biodiversity Authority of India from 2019 to 2022.



Dr Shivani Bhalla

pg 28
Kenya-born Shivani Bhalla founded Ewaso Lions, a conservation organisation working to ensure the continued coexistence between people and lions. Based in Samburu since 2002, she and

her team lead community-led programmes monitoring lion populations across northern Kenya. A National Geographic Explorer, Shivani holds a PhD in Zoology from University of Oxford and has won several awards including the Whitely Gold Award for securing the future for lions in Kenya.



Victoria Wanjohi

pg 28
Victoria Wanjohi is a Wildlife Conservation Scientist, natural world filmmaker, storyteller, and speaker, based in Nairobi, Kenya. With over a decade of experience

advancing conservation initiatives across Africa, she combines science with the power of narrative to spark change. She is passionate about reimagining how stories shape human connections to nature.



Prasad Hamine, pg 02 An IT consultant by profession, but a wildlife photographer at heart, Prasad Hamine travels through forests and remote landscapes, capturing stories of biodiversity, emotion, and the quiet power of nature. Photography is his way of connecting beyond the screen. From leopards to birds at sunrise, he turns moments into visual stories for art lovers and conservationists alike.



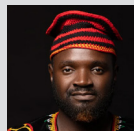
T Narayan , pg 08 T Narayan is a renowned photojournalist with over four decades of diverse experience. He has developed expertise in capturing a wide range of subjects, covering pivotal socio-political events such as the Kashmir conflict, the Cricket World Cups, and the COVID-19 pandemic. Narayan began his career with the national daily *The Times of India* and has been the National Photo Editor with publications like *Outlook*, *India Today*, *The Week* and *the Hindustan Times*. He has served on the jury of numerous national and international photography competitions.



Capt. Vishwas Patwardhan pg 21 A retired mastermariner, Capt. Vishwas Patwardhan is a passionate. He is a passionate photographer, traveller and calls himself 'an absolute nature and wildlife lover'. He has travelled 115 countries and 7 continents, chronicling the wild. One of his successful exhibitions showcased the fascinating wildlife in the Antarctica.



Mayank Jaiswal, pg 22 Mayank Jaiswal is an engineer-turned-wildlife photographer known for powerful visual storytelling from India's forests and Africa's savannahs. His work blends artistic minimalism with authentic animal behaviour. He promotes ethical wildlife photography and conservation awareness. From his rich collection of pictures of the giant tusker Craig, he has contributed one to this edition.



Anthony O. Onyango , pg 28 Anthony Onyango is an award-winning wildlife ecologist, educator, National Geographic Explorer, and International League of Conservation Photographers (iLCP) Emerging League Fellow. Based in Nairobi, Kenya, he is also a conservation and underwater photographer and filmmaker dedicated to creating powerful content that inspires people of all ages and backgrounds.



‘Let’s Collaborate, not Compete to Save the Big Cats’

BY **BHUPENDER YADAV**, MINISTER OF ENVIRONMENT, FOREST AND CLIMATE CHANGE, INDIA

As the world confronts accelerating biodiversity loss, climate instability, and rising demands on natural landscapes, we are reminded that our ecological challenges are deeply interlinked. And equally interlinked are our solutions. Big cats—tigers, lions, snow leopards, cheetahs, leopards, and jaguars—are more than charismatic animals. They are apex predators, regulators of ecological balance, and sentinels of ecosystem health. Where big cats thrive, forests are healthier, grasslands regenerate, water systems function, and carbon is stored efficiently in living landscapes. When big cats decline, ecosystems destabilise, leading to soil erosion, altered fire regimes, loss of carbon sinks, and weakened climate resilience. Thus, big cat conservation is not only about wildlife, it is about climate mitigation, climate adaptation, and safeguarding the natural infrastructure that underpins human well-being.

India is privileged to be home to five of the world’s seven big cat species. Our cultural ethos, policy frameworks, science-based management, and community partnerships have enabled us to achieve conservation outcomes once considered impossible.

India doubled its tiger population ahead of the target timeline, becoming a global hope for species recovery. Our Asiatic lion population continues to grow well, a result of strong political commitment, intensive monitoring and community support. We have undertaken nationwide population assessments of tigers, leopards, lions, and snow leopards—building one of the world’s most comprehensive wildlife databases. India has expanded protected areas, secured corridors, and integrated local communities as stakeholders in conservation and eco-based livelihoods. Our approach—science-led, community-anchored, and institutionally supported—has demonstrated that biodiversity conservation can coexist with development aspirations.

Aligning National Development with Global Goals

India has proactively strengthened its Nationally Determined Contribution (NDC) and climate strategy to align national development with global mitigation and adaptation goals. In its updated NDC, India commits to reduce the emissions intensity of GDP by 45% by 2030, and to expand cumulative electric power installed capacity from non-fossil resources to about 50% by

2030. Such measures are designed to cut carbon intensity while supporting continued economic growth. Complementing these near-term pledges, India has announced a long-term objective of achieving net-zero by 2070 and published a Long-Term Low Emissions Development Strategy to map pathways for deep decarbonisation across sectors.

To deliver on these targets, India is rapidly scaling renewables (with an ambitious non-fossil capacity target of ~500 GW by 2030), accelerating energy efficiency and electric mobility, investing in green hydrogen, and strengthening forest and landscape restoration to enhance carbon sinks and resilience.

These achievements are not endpoints—they are pathways we wish to share with the world.

Guided by this vision, India has taken green leadership in establishing International Solar Alliance, Global Biofuel Alliance, Coalition for Disaster Resilient Infrastructures over the past few years. The most recent addition to this is the International Big Cat Alliance (IBCA)—a global initiative that seeks to bring together all 95 big-cat range countries, partner governments, scientific institutions, conservation organisations, youth networks, and local communities under one collaborative framework for safeguarding big cats like tiger, lion, leopard, snow leopard, cheetah, jaguar and puma.

Let us remember:
When big cats roam
freely, ecosystems
breathe. When
ecosystems thrive,
societies flourish



Indigenous event at COP30 in Belém, Brazil

Today, 17 countries are formally associated with IBCA, and more than 30 additional countries have expressed willingness to join. We welcome each of them. But our ambition is greater—to ensure that every nation with big cats, and every nation that values biodiversity and climate security, finds a place within this Alliance.

As Parties revise and enhance their NDCs for the coming cycle, nature-based climate solutions must be central to our strategies. Conserving big cat landscapes directly contributes to: carbon sequestration in forests and grasslands, watershed protection for rural and urban communities, climate adaptation through resilient ecosystems, disaster risk reduction by stabilizing soils and preventing erosion and sustainable livelihoods through ecotourism and community enterprise.

What we often call ‘wildlife conservation’ is, in fact, climate action in its most natural form.

Global Big Cats Summit

I believe IBCA can help member countries translate big-cat and landscape conservation into measurable contributions to the SDGs, NDCs, and Global Biodiversity Framework targets and other climate commitments by providing technical assistance, standardised tools, capacity building, training and exchange programmes, and guidance for designing nature-based solution

projects. The Alliance can also convene South–South cooperation and public–private partnerships, and can help mobilise blended finance, carbon/biodiversity credit mechanisms and community-centred implementation models so countries can scale high-integrity, equitable conservation outcomes that count towards national and global climate and biodiversity goals.

In 2026, India shall be hosting a Global Big Cats Summit in New Delhi, inviting all range countries to participate and share their experiences and strategies to save big cats and their habitats.

Today, we stand at a moment of global re-alignment, where we have the opportunity to build a nature-positive, climate-resilient, and community-empowered future. To achieve this, we must collaborate, not compete. We must learn from each other without boundaries. We must find strength not in isolation, but in solidarity.

It is time to share our strengths, to learn from each other, and to contribute to a global partnership that protects species, safeguards ecosystems, and builds climate resilience for generations to come.

Let us remember: When big cats roam freely, ecosystems breathe. When ecosystems thrive, societies flourish. When nature is protected, climate goals become achievable. 🐾

Excerpted from the minister's address delivered during COP30, on 17 November, 2025, in Belém, Brazil.

Ranthambore Tiger Reserve, one of India's celebrated tiger reserves, offers a unique habitat to the big cat: the ruins provide shelter and shade in the dry deciduous forest



Photo: Nirmalya Chakraborty

Tiger Land

India's Success Story of Tiger Recovery

Globally, the largest number of tigers in the wild live in India. Almost 50 years ago, India's tiger population faced threats of extinction. Today, India shares a remarkable model of scientific strategies and governance framework that have led to a roaring success in tiger recovery

BY SP YADAV AND PRAMOD K YADAV



India is home to the world's largest number of tigers in the wild. An assessment put the figure to 3,682 (with lower limit of 3167 and upper limit of 3925), which is almost 70% of the global wild tiger population. Barely 50 years ago, India was staring at extinction of a species with less than 19,00 tigers reported in the wild. This transformation, both remarkable and unique, saw a convergence of scientific strategies and policy frameworks that resulted not only in species recovery but offered a model of human-wildlife coexistence.

In the early 1900s, it is claimed that approximately 58,000 tigers roamed India's forests, but by the 1970s, hunting and habitat destruction resulted in almost eliminating the species. So, in 2022, when India counted its tigers, conservationists and policymakers had a reason to rejoice. India now had 3,682 tigers. Tiger numbers have increased two-fold since 2010. This is a remarkable achievement, considering that India has only 18% of global tiger habitat. India can now be considered Tiger Land.

Way back in 1969, India hosted the 10th General Assembly of the International Union for Conservation of Nature (IUCN) highlighting the vulnerability of tigers in South Asia. It expressed its commitment to save the tiger. Within three years of the IUCN assembly, tiger hunting was banned and within four years the Indian government launched Project Tiger (in 1973) to support tiger recovery in the wild. The Indian Parliament amended the Wildlife (Protection) Act, 1972, in 2006 to create two statutory bodies: National Tiger Conservation Authority (NTCA) and Wildlife Crime Control Bureau (WCCB). The Forest (Conservation) Act of 1980 reduced forest diversion, and the Environmental (Protection) Act of 1986 regulated land use near forests—both crucial legislations underpinning India's tiger recovery. Such policies equipped the forest managers with a more protectionist conservation approach, enhancing the governance mechanism that kept the tiger at the centre of conservation.

Science-based Monitoring

The NTCA has been at the forefront of tiger conservation in India. Its mandate includes in-situ protection initiatives, as well as science-based monitoring of tiger population and their habitats, utilising the latest technological tools. The NTCA is also responsible for providing financial and technical support to tiger reserves, creating an inviolate space for wildlife while ensuring community development and international cooperation. To gauge the success of conservation efforts and guide management inputs, NTCA uses the Management Effectiveness Evaluation (MEE) framework. After every four years, independent experts conduct MEEs to evaluate how well India's tiger reserves are managed.

The WCCB, as an intelligence and enforcement agency, has combatted crimes involving tigers and other endangered species. India has developed a robust technique to monitor wildlife crime, utilising foot patrols by frontline forest staff while adhering to the Monitoring System for Tigers'-Intensive Protection and Ecological Status (M-STripES) framework.

Further, scientific monitoring of tiger populations and incentive-driven voluntary relocation of human settlements from tiger reserves were adopted to recover tiger populations in the wild. These reforms transformed Project Tiger from a mere central government scheme into a state-led commitment model with chief wildlife wardens (in the states), and field directors in tiger reserves (in various districts) empowered to take decisions for protecting the tiger.

Currently, this governance structure (See Figure 1) is operationalised through a legally binding Memorandum of Understanding among the three parties (i.e., NTCA, Chief Wildlife Wardens, and Field Directors), and policies are developed and implemented through stakeholder involvement. The state governments prepare Tiger Conservation Plans (TCPs) for each tiger reserve with objectives to manage tiger reserves by providing site-specific habitat inputs to support viable tiger and co-predator populations, and address the

India's 58 Tiger Reserves

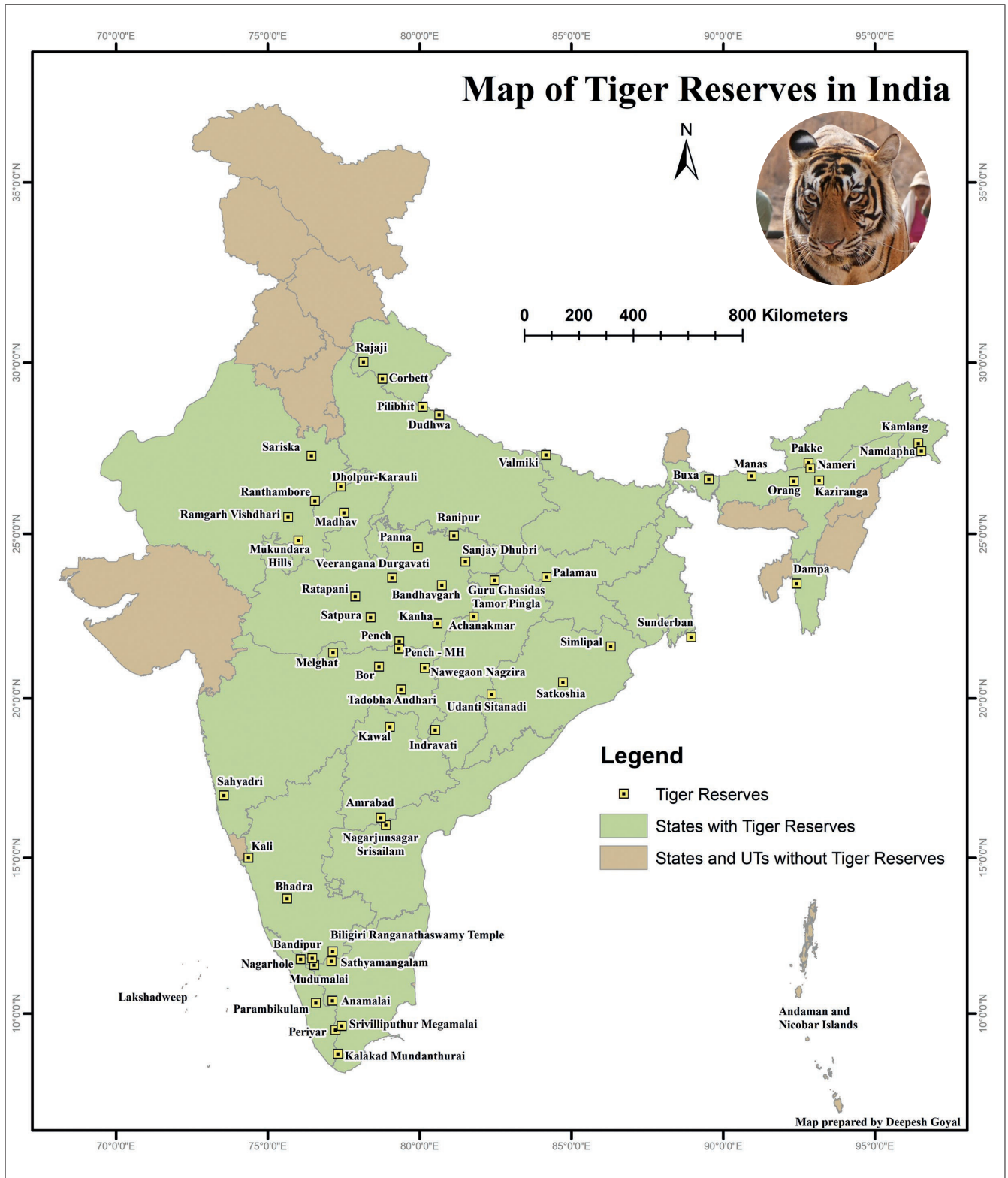
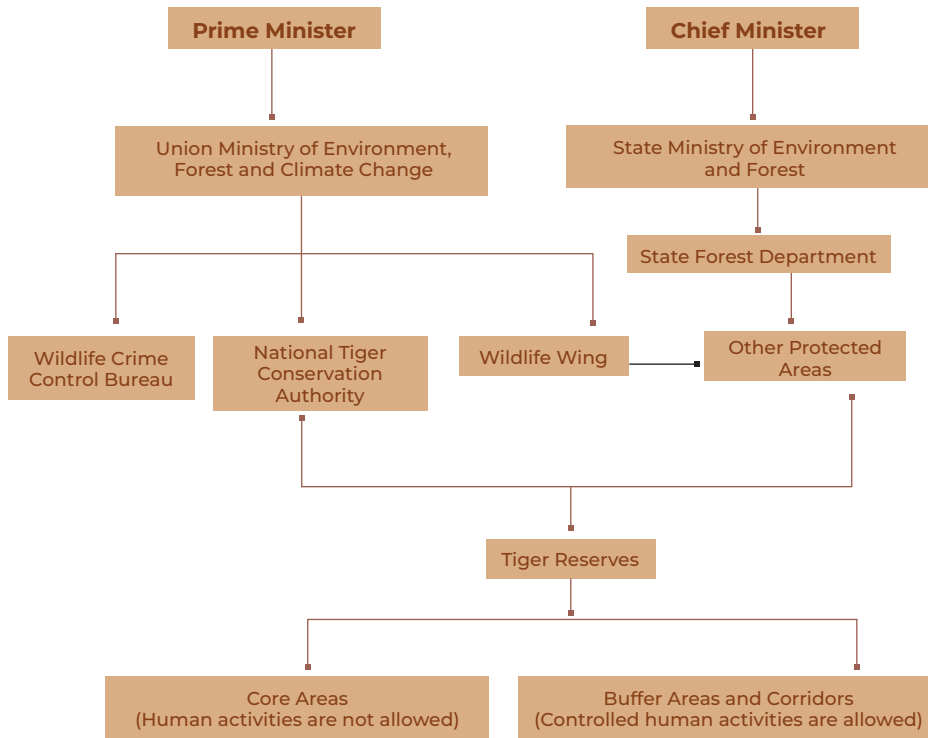


Figure 1: Governance Mechanism to Protect the Tiger in India



livelihood concerns of local people. Management interventions in tiger reserves are codified through the TCP mandated under the Wildlife (Protection) Act of 1972.

Under Project Tiger, states receive 60% budgetary assistance for expenditure on all non-recurring items, while the states offer the matching grant. In the Northeastern and Himalayan states, 90% of the budgetary assistance is provided by the government.

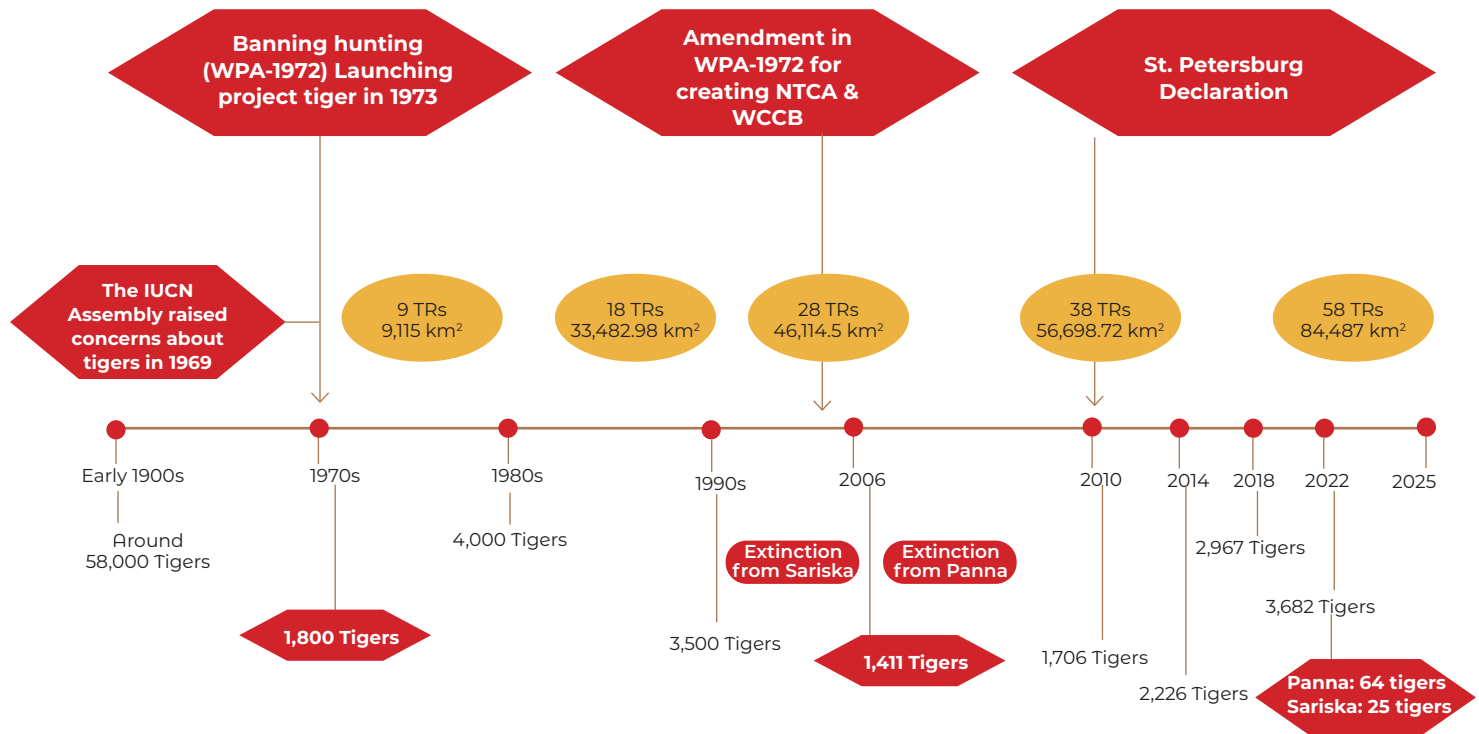
India's polycentric governance model has enhanced the effectiveness of multiple organisations by clearly defining responsibilities and decision-making authority. In addition, it has enabled several independent trial-and-error exercises in policymaking at the central, state, and tiger reserve levels, fostering the system's adaptability and reducing the risk of complete system failure. For example, many situations involving small- and medium-sized common-pool resources (e.g., the Tiger Conservation Foundation and the Eco-development Committees) are best suited for decentralised, bottom-up institutional arrangements.

Tigress with her cub in Ranthambore Tiger Reserve

Within three years of the IUCN assembly, tiger hunting was banned and within four years the Indian government launched Project Tiger (in 1973) to support tiger recovery in the wild

Photo: Aditya Dicky Singh

Figure 2: How Tiger Recovery Happened: A Timeline



World's Most Ambitious Project

Project Tiger is considered as one of the world's most ambitious conservation projects. Estimates conducted every four years indicated that tiger numbers rose from approximately 1,800 to nearly 4,000 between 1972 and 1989. Between 1993 and 1995, the international trade in tiger body parts emerged as a significant factor in the decline in tiger numbers. The All India Tiger Estimation (AITE) survey methodology was developed and implemented in 2005 as India's new official tiger monitoring approach after the ambiguities of the previous 'pugmark census' method. So far, four periodic all-India tiger estimation surveys (in 2006, 2010, 2014, 2018, and 2022) have taken place and the tiger population has increased on an average of 6% per year since 2014.

India's 1988 forest policy was a landmark as for the first time it recognised the development importance of local people's involvement in forest management to build resilient communities by providing

alternative livelihood opportunities while protecting forest resources. The principal aim of the policy was to provide economic benefits from nature, encourage environmental sustainability, and maintain ecological balance.

In a follow-up document issued in 1990, the government provided guidelines to all state governments, instructing them to implement the Joint Forest Management (JFM) system by transferring forest management and use rights to local communities. In the tiger reserves, eco-development projects have also been implemented using a JFM approach to conserve tiger habitats and provide livelihood opportunities to local communities.

To build resilience among local communities, the Indian government has prioritised resettlement for households in high-tiger-occupancy areas to avoid conflicts with tigers. Several tiger conservation and human development goals have been met by securing vast regions in tiger habitat through community resettlement to better locations outside

tiger reserves. The NTCA resettlement policy requires families wishing to relocate (including each adult family member over 18 as a unit) from a protected area to choose between receiving INR 1 million (US\$15,517, with 1 US\$ = INR 67 in 2018) or a land-based package. Benefits enjoyed by those who moved earlier have created a positive feedback loop, encouraging other villages to relocate from tiger reserves.

Since 1973, 257 villages with 25,007 families have been relocated from tiger habitats. Meanwhile, 591 villages housing 64,801 families are still within the notified core zones of tiger reserves. The acceptance of monetary compensation and signing of relocation agreements by villagers living in tiger reserves is hailed by conservationists as a 'win-win' for both tigers and communities.

Project Tiger has grown into a resilient, well-institutionalised programme. There has been a strong political will in India that transcends party lines, resulting in policy and institutional reforms as well as increased funding to support tiger conservation. Therefore, from a network



Photo: Nirmalya Chakraborty

Tourists watch in awe the tiger cubs in Tadoba-Andhari Tiger Reserve, Maharashtra

When Hunters are Protectors

India's tiger population grew during the recovery programme's early years, reaching more than 4,000 by the 1980s. However, new threats emerged – poaching and illegal trade. Tiger body parts (bones, skin, and claws) were in demand for use in traditional Chinese medicine. Between 1994 and 1995, tigers in the renowned Ranthambore Tiger Reserve (in western Indian state of Rajasthan) were reduced to a handful due to incessant poaching. Within a decade, further shock came when in another Rajasthan tiger reserve, Sariska, no tigers were left. By 2009, another reserve in central India, Panna, reported absence of tigers.

India appeared to be experiencing a national conservation crisis. It established

a Tiger Task Force that aimed to reform institutional arrangements and governance. Policymakers and conservationists agreed that they needed a finger on the pulse of tiger populations and the existing ecosystems to preserve the species.

There were some key lessons in this debacle: There was need for a participatory philosophy of institution-building. Also, there was need for improved Centre-state collaboration. Most critical was the involvement of local communities who were more equipped to protect the tiger. The tiger crisis motivated policymakers and conservationists to be more innovative – hunters can be protectors too. In some tiger reserves (state of Arunachal Pradesh, Kerala) such a turnaround has been witnessed.

of nine reserves covering a total area of 9,115 km² in 1973, Project Tiger now spans 58 reserves, covering over 84,487 km² across the country (see map on p.10).

India has also been collaborating with Nepal, Bhutan, Bangladesh, Russia, Myanmar, and China on transboundary tiger conservation through bilateral agreements. This cooperation is crucial for managing cross-border tiger populations, sharing wildlife crime intelligence, and maintaining habitat connectivity. Additionally, India is supporting the tiger reintroduction programme in Cambodia. Since the launch of Project Tiger, India has succeeded in reinvigorating institutional governance and building more responsive mechanism to ensure the tiger stays forever. 🐾

Dr S P Yadav is the Director General of IBCA.
Dr Pramod K Yadav is Programme Associate with Sankala Foundation.

Jaguars in Porto Jofre
region, Northern Pantanal
Mato Grosso do Sul, Brazil



Photo: Brent Surton

Pathways to **Jaguar** Return

BY JOHN POLISAR

Pantanal cattle



Photo: Brent Stirton



Livestock management workshop in Bosawas Biosphere Reserve, Nicaragua

Photo: Braden Gurnem

In the last 25 years, the jaguar, the largest feline in the Americas and an icon of tropical biodiversity, has faced multiple threats to its habitat and existence. Between 2001 and 2020, more than half a million km² of forest was lost within the jaguar's South American range alone, an area larger than Spain. Satellite images from Amazon Basin, Gran Chaco, Cerrado, and other key ecosystems reveal unprecedented deforestation indicating rapid decline of the species.

The jaguar's historic range, that once stretched unbroken from the southwestern United States through Mexico, Central America, and deep into the South American continent well into Argentina, has now shrunk by 51%. In recent decades this loss of range has been largely attributed to rapid deforestation caused by the expansion of cattle ranching, soy and other industrial agriculture,

mining operations, construction of dams and roads, and also direct killing of jaguars.

A jaguar (*Panthera onca*) needs extensive territory that provides sufficient prey, but in recent decades, rapidly increasing fragmentation of landscapes has isolated populations, and increased human-jaguar encounters. Such factors have collectively pushed the species into decline. An example from the Greater Amazon region (including Brazil, Peru, Colombia, Bolivia, Ecuador, French Guiana, Guyana, Suriname and Venezuela) highlights the severity of the threat. Between 2009 and 2019, the loss of habitat alone—before considering poaching or conflicts—was projected to have eliminated 1,700–2,300 jaguars. In Mesoamerica, which is a smaller land mass, a Wildlife Conservation Society (WCS) team estimated that the last five remaining large wild areas decreased by 5% to 30% between 2000 and 2015, potentially eliminating 340–511 jaguars, simply due to habitat loss.

Studies (like one by Włodzimierz Jedrzejewski and others, estimating species distribution changes due to human impacts in South America and another by Quigley and others, on past, present and future of jaguars), have come with a warning. A 23% loss in jaguar range in South America between 2000 and 2020 means reductions in biological diversity and diminished ecological function in formerly high-quality habitats. These studies were based on remote sensing analysis and species distribution modelling. Range contraction and fragmentation often precede the collapse of specific sub-populations. Once jaguars were one range-wide connected population, from the southern United States into Argentina, but sub-populations have been lost, and many remaining jaguar sub-populations are increasingly vulnerable to isolation and genetic bottlenecks and even extirpation.

Range-wide, the IUCN has classified the jaguar as Near Threatened, but this status does not accurately represent the

How Anti-depredation is Working

- In the Chaco (Paraguay), use of electric lights and maternity pastures have reduced livestock loss by 100%.
- In the Colombian Llanos, night enclosures protect young livestock, resulting in substantial reduction of livestock losses on ranches.
- Introduction of water buffalo by a farmer in Bolivia has prevented jaguars from attacking livestock. The use of depredation-resistant livestock, like the water buffalo and criollo cattle, has offered favourable results in Colombia and Costa Rica also.

Photo: David Medina



Bi-National Heart of the
Corridor Jaguar Conservation
Unit, Mosquitia, Mesoamerica,

" The jaguar community has been testing anti-depredation tools to improve human-jaguar coexistence. "

critical situation of the species across much of its range. In El Salvador and Uruguay, the jaguar is listed as Extinct in the Wild, it is Critically Endangered in Argentina, Costa Rica, Nicaragua, and western Ecuador, listed as Endangered in Guyana, Honduras, Mexico, Panama, Paraguay, eastern Ecuador, and the United States, as Vulnerable in Bolivia, Brazil, Colombia, and Venezuela, and as Near Threatened in French Guiana and Peru.

Clearly tools to counter these trends have been urgently needed – and the jaguar conservation community has been developing them.

In recent years, conservation scientists and carnivore experts have worked to establish pathways of recovery for the jaguar that included achieving a balance between economic priorities and the protection of biodiversity. The jaguar community has been testing anti-depredation tools to improve human-jaguar coexistence. These include combinations of installing electric

fences and lights, techniques to improve livestock management (especially the vulnerable younger animals), increased vigilance, and maintaining natural prey. Innovations that aim to maintain jaguars and their habitat include managing forests that provide economic benefits for local communities, and correspondingly, their commitments to conservation.

Forest-based Conservation Models

Between 2000-2015, the tri-national Guatemala-Mexico-Belize Selva Maya lost 25% of its forest cover, primarily due to extensive cattle ranching, and partly due to other forms, land encroachment, and forest fires.

Today, across the Maya Biosphere Reserve (MBR) in Guatemala's portion of the Selva Maya, a remarkable conservation model is unfolding based on the principle of using certified sustainable logging. Communities here selectively harvest timber

Illegal Trade in Jaguar Parts is a Growing Threat



Jaguar and puma canines

A jaguar tooth gilded in gold. A claw strung in a necklace. Rugs made of jaguar skin as home décor. The illegal trade in jaguar parts has grown enormously, both offline and online. A recent study by the Wildlife Conservation Society (of 241,722 online posts, conducted by 23 researchers across seven languages) found that substantial volumes of illegal jaguar parts circulating across digital

platforms. Over the 10 years that were sampled (2009-2019) teeth were the most traded body part, with the greatest numbers in Mexico, Brazil, Bolivia, and China.



A seized jaguar skin

Breaking the trade chain before more jaguars are killed and parts are sold is essential. All the trade, even when it becomes international, starts within a country and at a specific location. Proactive interventions – to eliminate all trade in jaguar parts, through combined education and enforcement efforts needs to take place within each country.

jaguar densities comparable to those recorded in some protected parks, a 2025 report in *Conservation Biology* by Perera Romero and others stated.

This approach has generated socio-economic benefits with income generated from high-value, low-impact timber, non-timber forest products, and sustainable tourism. Such returns present an alternative to deforestation for low-productivity and ecologically destructive deforestation for pastures. The forest management economic benefits incentivise and strengthen monitoring activities. When livelihoods are aligned with ecological goals, conservation of a species becomes more effective.

Coexistence with Jaguars Economically Viable

Effective conservation requires years of investment and collaborations. The foundations for the success in the MBR were started over 25 years ago. A 2017-2020 WCS study that examined the relationships between jaguar trends (using camera trapping) and investments in conservation interventions across multiple (18) large jaguar conservation landscapes discovered important patterns. The multiple areas the team examined included Bolivia's Madidi National Park (Bolivia) and its surrounding management areas.

The study highlighted that landscapes sites with stable or increasing jaguar populations practiced combinations of: 1) wildlife and wildlands law enforcement through patrols conducted by national protected area agencies, indigenous communities, and local communities; 2) complemented by local socio-economic benefits from sustainable extraction of forest products, eco-friendly agriculture that included shade crops that thrive under forest cover, and wildlife-compatible tourism.

Conservationists often struggle to address human-wildlife conflict mitigation in the rapidly changing landscapes occupied by the big cats. In one of the largest evaluations of jaguar–livestock conflict (conducted across 11 countries) conducted by my team in 2025, 45 researchers and ranchers tested jaguar anti-depredation techniques—including electric fences, improved night enclosures, deterrent lighting, adjusted grazing strategies, protected natural prey, and predation-resistant races if livestock. These strategies led to 80%–100% reductions in livestock losses. Such savings due to reduction in monetary losses prove that long-term coexistence with jaguars is ecologically and economically viable.

There is hope that in the next decade increased uptake and application of these models will transform the human-wildlife conflict narrative into an expansive story of coexistence achieved. Tools have been developed that can accomplish pragmatic win-win solutions for jaguar habitat conservation, improved livestock management, and reduced human-jaguar conflict and trade in jaguar parts. Through these tools human-jaguar coexistence is possible, but application of these tools needs to increase. Conservation of the magnificent landscapes that jaguars inhabit can advance the conservation of biological diversity and maintain multiple ecosystem services upon which humanity depends. 🐾

Dr John Polisar is Environmental Coordinator Sierra National Forest, Senior Adviser Panthera and Research Associate, Zamorano University Zamorano, Honduras.

at low intensity, maintain canopy structure, protect watersheds and wildlife, and keep fires and illegal encroachment at low levels. The preservation of the forest is intrinsically linked to the sustainable resource management practices of local communities who have contributed for decades in protecting and nurturing the landscapes.

Camera-trap monitoring deployed across 1,287 km² in the MBR, including the Uaxactún Community Forest and the adjacent Mirador–Río Azul National Park, showed that jaguars in the forest management area displayed consistent reproduction patterns and

Photo: Damian Rumiz

Photo: Omar Torrico, WCS, Bolivia

From Tigers to All Big Cats

How (CA|TS) is Raising the Bar in Conservation Excellence

BY MKS PASHA AND VINOD B MATHUR



Photo: Vinod Sharma

Lioness with her cubs in Masai Mara National Park, Kenya

At dawn, when the first light brushes the forests of Asia, a tiger rises from its rest. Its breath hangs in the cool air, its stride silent and certain — the embodiment of power and grace. Across the world, a lion's roar rolls across the African savanna, claiming the golden plains with authority that has echoed for millennia. In the icy mountains of Central Asia, a snow leopard moves ghost-like among the rocks, while far away in the Pantanal of the Amazon, a jaguar slips into dark waters with the ease of a shadow.

These are not just animals. They are symbols of the Living Planet — strength, stealth, mystery, and balance interlaced in the cultures across the mesmerising landscapes. They are the guardians of ecosystems, keeping the natural order intact. But their survival now depends not only on the fences that protect them, or the laws that defend them, but on something far more enduring: how we manage, govern, and sustain the places, actually spaces, they call home.

More than a decade ago, this understanding led to a quiet revolution in conservation — the creation of the Conservation Assured | Tiger Standards (CA|TS), a framework born of hope and necessity, designed to answer a question at once simple and profound: What does excellence in tiger conservation truly look like and how it can be scaled up for other Big Cats?

When the world's tiger population plummeted to an alarming low in 2010, the leaders of 13 tiger range countries gathered with one goal: TX2, to double wild tiger numbers by 2022. But ambition alone could not guarantee success. Conservation needed credibility — a way to show that commitments were being met with capability.

From this need came CA|TS — a system of assurance, not just statement.

CA|TS was built drawing inspiration and on the foundation of the IUCN Green List of Protected and Conserved Areas — the world's first and only global sustainability standard for effective management and equitable governance. The Green List's four

How has CA|TS Made a Difference

- ✓ Defined goals and robust governance, replacing ad-hoc management with purposeful, evidence-driven management interventions grounded in accountability.
- ✓ Rangers and managers are empowered, equipped with a guiding framework, and a path to recognition.
- ✓ Communities are engaged, livelihoods, safety, and pride are linked to conservation success.
- ✓ National pride renewed, as governments celebrate not just tiger numbers but tiger stewardship.



Dushak Erekdag, in Turkmenistan's Kopetdag Mountains, is a juniper-dominated forested landscape, home to leopards

Photo: Tanya Rosen

pillars.

Good Governance, Sound Design and Planning, Effective Management, and Successful Conservation Outcomes, became the compass points of CA|TS.

Through those principles, CA|TS adapted global sustainability into the tiger's world. It translated ideals into action, becoming a living framework of seven pillars and 17 standards. It gave site managers a roadmap, communities a voice, and governments a policy framework — reflecting both strengths and shortcomings with integrity and precision.

CA|TS became more than a tool; it became a language of trust and conservation action.

Across Asia, over 160 tiger conservation areas now speak one language on tiger conservation through CA|TS. From Nepal's lowland Terai to the mangroves of the Sundarbans (India and Bangladesh), from Thailand's forested hills to Russia's snow-covered taiga, these landscapes form a network of measurable excellence.

IBCA, the Next Big Leap

With tigers on a recovery path, the spirit of CA|TS has grown into something larger — a movement for all big cats. The newly formed International Big Cat Alliance (IBCA) builds on this legacy, aspiring towards expanding the framework to encompass seven of the world's great cat species: Tiger (Asia's enduring emblem of wilderness), Lion (the pride of Africa's savannas), Leopard (adaptable and enduring across continents), Jaguar (the water-walker of the Amazon and Mesoamerica), Snow Leopard (the ethereal guardian of mountain summits), Puma (the solitary sentinel of the Americas), and Cheetah (the swift and vulnerable). The cheetah is now reintroduced in India, marking not only a historic restoration but a renewal of ecological courage and pragmatic commitment.

Together, these seven species span nearly every major biome on Earth — from deserts and forests to grasslands and tundra. The combined ranges of these seven iconic big cats span nearly 12% of the planet's land—roughly equivalent to the combined size of Brazil, India, and South Africa. Each faces unique pressures, but

they share one reality: their future depends on the quality of the spaces we safeguard.

The Alliance envisions a world where every big cat landscape — from a transboundary park in Africa to a forest corridor in Asia — is a safe haven, managed with skill, inclusivity, and integrity of a dedicated manpower and competent frontline staff.

Under IBCA's leadership, the new Big Cat Standards can be nested within the IUCN Green List framework, uniting the universal principles of sustainability with the specific needs of big cats. The Green List defines what excellence in area-based conservation looks like: governance that is just, management that is effective, outcomes that endure. The Big Cat Standards will translate these universal pillars into species-specific realities. For example, for tigers and leopards focus on landscape connectivity, prey recovery, and protection integrity. Similarly for lions and cheetahs, promote coexistence models that balance wildlife, people, and livestock. This nesting creates a common language of assurance — where a reserve in Bhutan, a conservancy in Kenya, and a corridor in Brazil can all measure success through the same shared principles of excellence, adapted to their local realities. Primarily, the Big Cat Standards will help move conservation from reaction to readiness, from firefighting to being farsighted — building confidence that investments in the wild are strategic, equitable, and sustaining.

This evolution from CA|TS to the Big Cat Standards aligns seamlessly with the Kunming–Montreal Global Biodiversity Framework (KMGBF) — the shared global roadmap for living in harmony with nature. Through IBCA's assurance model, big cat conservation contributes directly to 1) Target 1 that integrates biodiversity into planning and governance; and planning conservation at a spatial scale; 2) Target 3 (30x30) that ensures 30% of the planet's land and sea are not just protected, but also effectively managed; 3) Target 23 that promotes inclusive, gender-responsive, and equitable management. Each verified site under the Big Cat Standards will become a part of a living network of sites globally — part of a mosaic of well-governed landscapes that together represent measurable progress for both biodiversity and people.

Male leopard in Bars Canyon, Kopetdag mountains, border of Turkmenistan-Iran



No big cat landscape can coexist without its people. From farmers in Nepal's buffer zones to herders in the Andes, from the Maasai rangelands to the Himalayan valleys, communities are both custodians and cohabitants of the wild. These big cats are woven into their culture, spirit, and landscapes, embodying the heritage and myths of the regions they roam.

The new Big Cat Standards will help to place coexistence at their core. They will guide to measure not only ecological outcomes but also social ones — participation, fairness, and shared benefits.

Because coexistence is not a compromise; it is a covenant — a mutual agreement that life, in all its forms, has space and value. When communities see that conservation uplifts their livelihoods and honours their stewardship, the relationship between people and big cats shifts from tension to trust.

A lion's roar, a leopard's pawprint, a tiger's trail through a village forest — these become not threats, but signs of balance restored.

The story of CA/TS is a story of practice turned into evidence. It began in the shadows of crisis and grew into a global network of trust. It taught us that standards can provide pathways and build the stories of hope.

Now, under IBCA, this legacy is all set to expand beyond tigers — to lions and leopards, jaguars and cheetahs, snow leopards and pumas. Each roar, each rustle, each fleeting pawprint will become part of a shared promise: that excellence in management and justice in governance securing the wild and building assurance for future.

These Big Cat Standards will not be just checklists; they will be

The health of
big cats mirrors
the health of
our planet —
that thriving
predators
mean thriving
ecosystems

the spatial maps and dashboards for the future, helping nations find direction, managers and communities finding purpose. They will help to demonstrate that the health of big cats mirrors the health of our planet — that thriving predators mean thriving ecosystems.

Through these standards, IBCA will be able to help build a future of safe havens — landscapes where conservation is credible, coexistence is possible, and hope is measurable. The return of the cheetah in India is no longer an anomaly, but a sign of what's possible when assurance and ambition walk hand in hand. It is also a reflection of what good governance backed by thoughtful implementation can deliver both at the policy and practice levels.

They will further help the world benchmark its investments, ensuring that every patrol, every policy, every partnership strengthens the

very foundation of conservation. And in doing so, these standards will advance commitments to quality, to equity, and to help create pathways of coexistence and assurance.

As we look to the next decade, one truth endures: Assurance drives recovery. Governance sustains it. Coexistence makes it last.

This is not just the story of the tiger.

It is the story that will be of all big cats — and through them, the story of our planet, where nature and people thrive in harmony. Let's join our forces and march ahead purposefully to take IBCA to a higher trajectory of excellence. 🐾

MKS Pasha is Regional Coordinator for Protected, Conserved, and Heritage Areas at IUCN Asia.

Vinod B Mathur is former chairperson of National Biodiversity Authority of India.



Keeping Vigil

Female leopard Vamos watches from a vantage point for some prey in Etosha National Park, Namibia. Mother of a eight-month-old-cub, her last kill was stolen by the hyenas.

PHOTOGRAPH BY CAPT. VISHWAS PATWARDHAN

Goodbye Super Tusker

PHOTOGRAPH BY MAYANK JAISWAL

Craig died on 3 January 2026. A male African bush elephant, Craig lived in Amboseli National Park, Kenya, beneath the majestic Mount Kilimanjaro. He gained global fame for his extraordinarily large tusks—they weighed 45 kg and almost touched the ground.

Photographer Mayank Jaiswal spent hours watching him in Amboseli—he moved with quiet dignity, often alone,

feeding slowly, dust-bathing, testing the wind. "At times, he felt less like an elephant and more like a moving landscape," recalls Mayank.

Craig was more than a giant tusker. His long life was celebrated as evidence of effective anti-poaching patrols, habitat protection and collaborative conservation efforts. His death in old age (54) is rare for a tusker, who historically have been killed for ivory.





Photos 1,2,3 & 6: Wikimedia Commons



BIG CATS TRADE IN ASIA

Thriving, Expanding

BY RAVINA YADAV

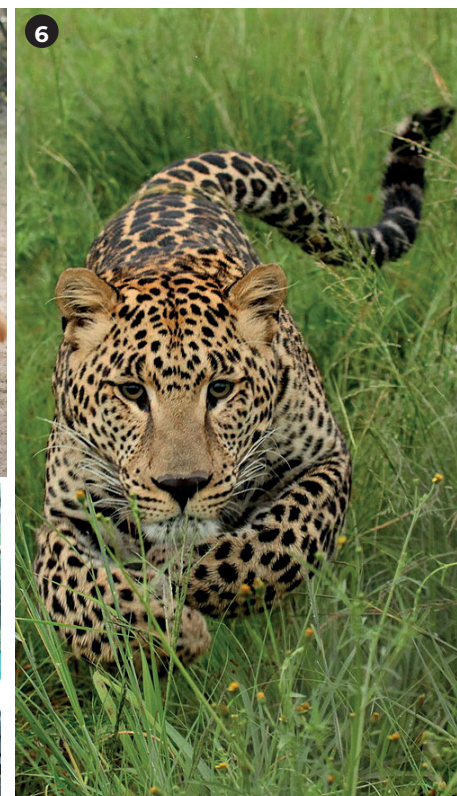
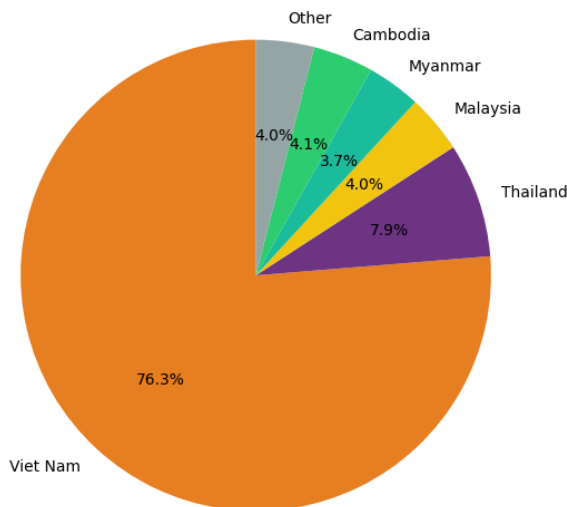


Photo courtesy (5) Bandhavgarh Tiger Reserve, Madhya Pradesh, India

Photo: WWF India

Geographic distribution of online advertisements for tiger parts identified on social media platforms



Source: TRAFFIC, Skin and Bones (2022)

Over the past four decades, international agreements and national wildlife laws have sought to end the illegal trade in big cats. Big cats are listed under the highest level of protection of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), while national laws such as India's Wild Life (Protection) Act, 1972, and China's Wildlife Protection Law prohibit hunting, trade and possession.

Enforcement across Asia has expanded steadily since the early 2000s. Yet, illegal trade continues to thrive. It has remained persistent over the past 25 years and has become increasingly adaptive to laws and restrictions.

One of the most comprehensive assessments of this trade is the report *The Trade in Asian Big Cats* by Go Insight, a regional analysis of documented poaching, seizures and prosecutions between 2000

and 2024. It records at least 3,564 incidents of illegal trade involving Asian big cats across range countries. While annual totals fluctuate, the long-term pattern is clear. Illegal trade persists despite long-standing bans.

Wildlife trade in big cats is highly uneven. The analysis shows that just eight countries account for more than 90% of documented illegal trade incidents, indicating that detected trade is concentrated in a relatively small number of landscapes rather than spread evenly across the region. When seizure data for tigers, leopards and snow leopards are examined together, India and China account for a large share of documented

cases, followed by a second tier of countries in South and Southeast Asia and the Russian Far East. Central Asian countries such as Mongolia, Kyrgyzstan and Tajikistan appear primarily through snow leopard trade, while a small number of non-range states feature due to isolated but unusually large seizures.

Importantly, higher numbers of documented incidents do not necessarily indicate higher levels of illegal activity. Differences in seizure records often reflect variation in enforcement capacity, monitoring effort and reporting transparency. Countries with stronger wildlife laws, active enforcement agencies and systematic reporting are more likely to detect and record illegal trade, while under-detection remains a significant challenge elsewhere.

This concentration nevertheless has important implications. It suggests that illegal trade is shaped by geography, market access and enforcement intensity, and

that targeted action in a limited number of countries can yield disproportionate conservation outcomes.

Changing Trafficking Behaviour

Changes are also evident in how illegal trade operates. Over time, recorded cases show a shift away from large consignments towards smaller, more frequent seizures, with recent incidents tending to involve fewer animals per case than those documented in earlier years. This pattern reflects changes in trafficking behaviour rather than a simple increase in poaching pressure, with traffickers increasingly favouring fragmented transactions that reduce detection risk.

Adaptation is particularly clear at the species level. Early records from the 2000s are dominated by tigers. As enforcement strengthened and wild tiger populations declined, sourcing tigers became increasingly risky. Over time, leopards have increasingly entered trade networks historically associated with tigers, supplying comparable commodities such as skins, bones and claws. Snow leopards, although traded at much lower volumes, also appear consistently in records from Central and East Asia.

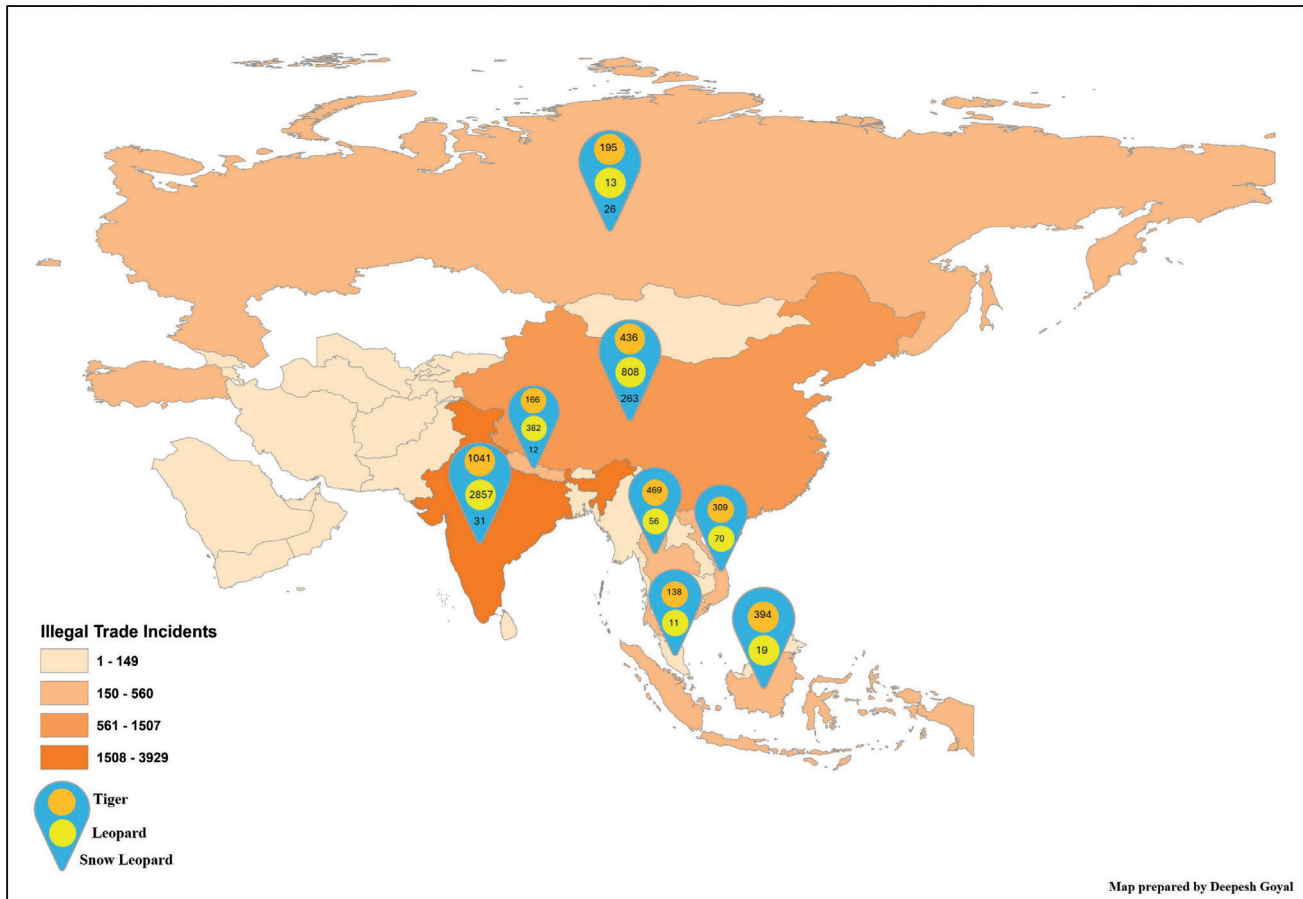
Together, these patterns indicate that illegal big cat trade is commodity-driven rather than species-specific, with demand often focused on particular products rather than individual species.

Tiger-specific analyses further show shifts in supply sources. The wildlife trade monitoring network TRAFFIC's *Skin and Bones Report 2025* suggests that early seizure records were dominated by wild-sourced tigers, while more recent cases increasingly involve tigers linked to captive facilities. These include seizures connected to registered captive-breeding operations, privately held facilities and farms operating under legal frameworks, particularly in parts of East and Southeast Asia.

This growing overlap between legal captive systems and illegal trade complicates

1. Tiger skins on display at the Kunming Natural History Museum of Zoology, Yunnan, China.
2. Tiger paw and body parts displayed for sale in Mông La, Shan State, Myanmar.
3. Seized big cat skins being documented by enforcement authorities at the US Fish and Wildlife Service's wildlife evidence laboratory in Valley Stream, New York, USA.
4. Handler conducting a scent-detection exercise with a trained dog.
5. Handler conducting a tracking exercise with his trained dog.
6. A young leopard in South Africa.

Estimated illegal trade in big cats across Asian ranges (2000-2024)



Source: Duran & Stoner (2025), Go Insight

enforcement and raises concerns about oversight, traceability and the potential for laundering within regulated frameworks.

Illegal trade has also expanded beyond traditional narratives of forest poaching. Trade networks now operate through long and complex supply chains, often spanning multiple countries and involving informal transport routes, urban centres and online platforms.

Monitoring described in *Skin and Bones* shows this shift clearly. Across Indonesia, South Africa, Thailand and VietNam, more than 6,000 online advertisements involving big cats were detected, revealing both shared patterns and country-specific differences in how illegal trade operates in digital spaces.

These listings indicate attempted trade rather than confirmed transactions, but they underscore the growing role of online

Over time, leopards have increasingly entered trade networks historically associated with tigers, supplying comparable commodities such as skins, bones and claws. Snow leopards, although traded at much lower volumes, also appear consistently in records from Central and East Asia

platforms in facilitating illegal wildlife markets.

Taken together, long-term trade monitoring across Asia points to a clear conclusion. Conservation measures have altered the operating environment for illegal big cat trade, but they have not eliminated it. Instead, the trade has adapted by concentrating geographically, fragmenting shipments, shifting between species, drawing on captive-linked supply and extending its logistical reach.

The challenge ahead is not simply to intensify existing approaches, but to recognise illegal big cat trade as a dynamic system. Responses that do not evolve alongside it risk addressing yesterday's problem rather than today's reality. 🐾

Ravina Yadav a Staff Writer with BigCats magazine.



Hide, and Seek

A puma kitten looks for danger while hiding amongst the pine tree branches in Yellowstone National Park, USA. Pumas appear in high density in the park and are integral to the Yellowstone ecosystem.

PHOTOGRAPH BY DIANE RENKIN, NPS



In the Warrior Watch programme, traditional knowledge meets modern tools. With each scan, the man with the binoculars is not just looking for lions, but he's also watching over his people's livestock, preserving peace, and protecting Kenya's last wild lions

A Story of Coexistence in

TEXT BY **SHIVANI BHALLA**
AND **VICTORIA WANJOHI**

PHOTOGRAPHS BY
ANTHONY OCHIENG ONYANGO



Northern Kenya



L

ooking through the lens at the northern Kenyan horizon, we don't just see wildlife. We see stories of transformation, of people reclaiming their connection to the land, and of lions finding safety in places once marked by conflict. In this landscape, lions face mounting threats: habitat fragmentation, human-wildlife conflict, and the steady disappearance of prey due to land degradation. But amid these challenges, we also witness hope.

Through community-led conservation, these struggles are being met with resilience, and continued coexistence is slowly becoming possible.

We share the journeys of two powerful community-led conservation movements, Warrior Watch and Mama Simba (Mother of Lions), anchored by Ewaso Lions in the heart of Samburu, northern Kenya. These are leading examples of how conservation can be led by the community. The Samburu warriors, men who were once seen only as potential threats to wildlife, are today the protectors.

The programme idea came from a Samburu warrior himself, Jeneria Lekilelei. Armed not with weapons, but with smartphones, binoculars, notebooks, and a resolve. Today they



Above and right :

Our Mama Simba Manager, Munteli, first woman from a village to drive in Samburu. Mama Simba was also her brainchild (together with Mparasaroi)

Mama Simba members digging water pans along the dry Ewaso Nyiro River bed, to supply water at home and even for the wildlife around the area, supporting wildlife during the dry season





Mama Simba members
involved in restoration
efforts in the landscape



track lion movements, alert herders of approaching lions, and prevent livestock loss. Today they traverse thorny terrain, sometimes on foot, sometimes by vehicle, covering hundreds of kilometres not for glory, but to keep the peace. They've moved from the periphery to the centre of the conservation story.

In 2013, a group of Samburu women from Westgate Conservancy approached Ewaso Lions, expressing a desire to be actively involved in conservation.

Their request led to the founding of Mama Simba, a pioneering initiative that empowers women to protect lions, educate their communities, and advocate for

continued coexistence. These women are not just mothers; they are matriarchs of change.

They bead, they teach, they monitor lions, and they meet drought with dignity by growing grass and digging water pans for wildlife. Their mantra, "bringing back wildlife to women," isn't a slogan. It's a return to balance. 🐾

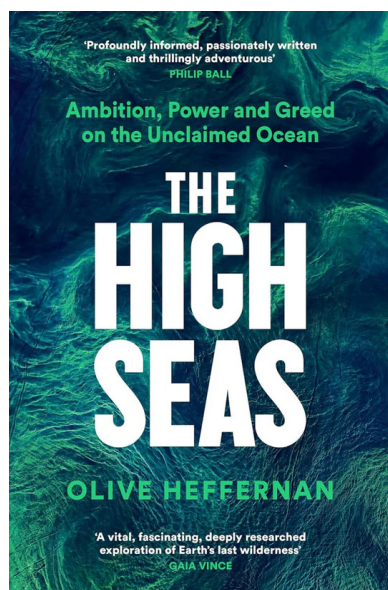


As part of Ewaso Lions' Warrior Watch programme, these men walk in rhythm with the land, bridging ancient traditions with modern conservation. Each step across this rugged terrain is a step towards continued coexistence



The High Seas: Ambition, Power and Greed on the Unclaimed Ocean

AUTHOR OLIVE HEFFERMAN



“The book defines High Seas as the modern-day tragedy of the commons, in which the resources of the unclaimed ocean are being exhausted by a few at the expense of all

”

The High Seas are home to some of the most minerally rich and biodiverse environments on the planet. But today they are one of the most contested sites of corporate greed and deep-sea mining ventures. Olive Heffernan's *The High Seas: Ambition, Power and Greed on the Unclaimed Ocean* is a fascinating book on how the ocean is being despoiled, by pirates, deep sea miners and even old space station dumps. It is also a wake-up call about the threat to one of the most overlooked ecosystems: the oceans.

The paperback edition of *The High Seas* was released in 2025 by Profile Books, London. Olive is an award-winning science journalist trained in marine biology and has written extensively on climate change. Olive has been the founding chief editor of the journal *Nature Climate Change*. She lives by the sea in Ireland.

Olive presents in *The High Seas* a lyrical document about the history, present and future of the largest realm of the planet. Written partly as a first-person account, the book appears like a forensic survey of diverse but powerful forces that are causing irreparable harm to the ocean and its life forms. Different groups and people stake claim to the ocean, sometimes protecting and plundering at the same time. Countries like Norway want to switch to an economy not dependent on oil and is forced to work towards aquaculture, increasing production of its coastal salmon farms. This kind of conflicting actions are the cause of deep crisis and have forced the author to define the high seas as “modern-day tragedy of the commons, in which the resources of the unclaimed ocean are being exhausted by a few at the expense of all”.

The ocean occupies 70% of the earth's surface and two-thirds of this are ‘high seas’, nearly 4,000 metres deep and mostly unclaimed. Olive emphasises that the

ocean contains places and life forms we cannot imagine even in our dreams. The seas nourish and protect diverse creatures — great whales to tiny plankton — and continue to feed millions of people. But activities of trawl fishery (with hundreds of trawlers fishing in the same area) can turn underwater habitats like corals and seamounts into heaps of rubble. What the fisheries target is the slow-growing, long-lived and late-to-mature species, like the orange roughy, a fish that can live for 150 years. Organisations like Greenpeace and many scientists have in the past demanded a moratorium on high seas bottom trawling. Olive says trawling has caused more severe harm to deep sea habitats than any other fishing practice.

The ocean, once a place of inexhaustible resources, is now experiencing catastrophic damage. It is often called the watery Wild West, vulnerable to plunder for its many riches. Fishing and shipping take place while scientific research (for new medicines) is carried out and oil and gas exploration is conducted in seas that are already awash with plastic. In some of the most gripping chapters on ocean diversity, Olive explains how this Blue Acceleration will impact life on the planet. If we continue to go deeper and further offshore, life will become unsustainable for all of us.

What can be done? The High Seas Treaty (which comes into force in early 2026) offers a global legal framework for Marine Protected Areas on the High Seas. Close to 145 countries have signed the Treaty. The treaty aims to safeguard 30% of the ocean by 2030. But the author doubts the treaty may still not be able to keep a check on overfishing, deep-sea mining and Arctic shipping.

Considering that the deep sea is our greatest buffer against climate change, its health needs immediate attention. For most of us the ocean is out of sight. This book forces us not to put it out of our minds. 🐾

Reviewer **Malvika Kaul**

Wild



World News

A Win for the Oceans

The ocean and its creatures may now have a voice. One of the winners of the Earthshot Prize 2025 is The High Seas Treaty that offers, for the first time, a global legal framework for Marine Protected Areas on the High Seas. Also called the Biodiversity Beyond National Jurisdiction, this treaty aims to prevent overfishing, conserve ocean life and promote fair participation for developing countries.

Close to 145 countries have signed the Treaty, and more than 70, including the EU, have ratified it. The Treaty comes into force in January 2026.

Around two-thirds of the world's ocean does not come under jurisdiction of any one country. These waters are unregulated and unprotected. However, they are the planet's life support system and have increasingly become vulnerable to overexploitation.

Photo: Sascha Fonseca



Representative picture of an Amur tiger in Birsky Sanctuary, Sikhote-Alin Mountains

China Records 1st Wild Siberian Tigress, Five Cubs

Camera traps in Northeast China Tiger and Leopard National Park have recorded China's first confirmed footage of a wild Siberian tigress with five cubs. The footage was captured in November 2025 and shows a nine-year-old female moving through forest habitat with her cubs, each estimated to be six to eight months old.

Wild Siberian tigers usually give birth to one to four cubs. A litter of five is extremely rare, even in areas with abundant prey. Conservation experts say the survival of all five cubs to this age is particularly notable in Northeast China, where prey populations are still recovering.

According to the World Wide Fund for Nature (WWF), the tigress is different from another female with four cubs recorded earlier in 2025. Multiple breeding females suggest sustained reproductive success within the park. This trend is linked to improved habitat protection, better prey availability, and increased landscape connectivity.

Siberian tigers, also known as Amur tigers, were reduced to just 12–16 individuals in the region in the late 1990s. Today, around 70 wild tigers live within the park, the world's largest protected area for the species. Conservationists say the sighting highlights what long-term, science-based conservation can achieve.

Read more: <https://www.globaltimes.cn/page/202512/1351537.shtml>



Photo: Adobe Stock

Bonelli's Eagles Recorded Peak Breeding During COVID-19

A temporary drop in human activity during COVID-19 lockdowns revealed how strongly everyday disturbance limits Bonelli's eagle reproduction. Using continuous monitoring data collected over more than three decades in southern Spain, researchers from the University of Granada found that breeding success peaked in 2020, with the highest average number of chicks per pair recorded in 31 years.

During this period, disturbance from hunting, traffic, hiking and mountain biking near nesting cliffs fell sharply. Analysis shows that reduced human presence had a stronger positive effect on breeding success than natural factors such as weather variation or prey availability.

Researchers argue that regulating access around nesting sites during critical months, rather than imposing permanent restrictions, could significantly improve breeding outcomes, showing how seasonal management of human activity can deliver rapid gains for sensitive raptor populations.

Read more: <https://doi.org/10.1016/j.biocon.2025.111603>

**Herd of Wildebeest at
South Serengeti National
Park, Tanzania**



Fencing Reduced Wildebeest Migration by 90%

After mapping the Great Wildebeest Migration from space, scientists are now confronting a harder truth on the ground: in Kenya, migration itself is collapsing in parts of the Maasai Mara ecosystem.

Fences and land subdivision are rapidly severing long-established routes linking seasonal grazing areas across the Kenya-Tanzania border. GPS tracking studies led by Jared Stabach of the Smithsonian Institution in Washington, DC, working with the Global Initiative on Ungulate Migration, draw on collar data collected since 2010 to track changes in herd movements.

Between 2021 and 2024, the spatial footprint of the Mara wildebeest migration shrank by nearly 90% as fencing

expanded across Narok County in southwestern Kenya, bordering the Maasai Mara National Reserve. Where more than 100,000 white-bearded wildebeest once moved between wet- and dry-season ranges, most herds are now effectively resident. Wildlife agencies estimate the population has fallen to fewer than 25,000 animals.

The Maasai Mara supports around a quarter of Kenya's wildlife, making the loss of migration a broader ecological concern. Analyses published in 2025 identify fence segments where targeted removal could restore connectivity, though researchers warn that once migratory knowledge is lost, recovery becomes difficult.

Read more: <https://doi.org/10.3389/fevo.2022.846171>

**African lions in the
grasslands of Serengeti
National Park, Tanzania**



Cultural Demand: An Overlooked Threat to Africa's Wildcats

Habitat loss and poaching are widely recognised threats to Africa's wildcats. Less visible, but widespread, is cultural demand. A study published in 2025, supported by Panthera, a global organisation focused on the conservation of wild cats and their habitats, documents the continued use of wildcat parts across the continent, particularly in traditional ceremonies, healing practices and symbols of social status.

Drawing on nearly 600 historical sources and hundreds of online videos from 48 of Africa's 54 countries, researchers recorded the use of skins, bones, teeth and claws from at least 33 carnivore species. Leopards appeared most frequently, followed by lions, servals and cheetahs, many of which are already threatened or in decline. The findings show that cultural use is geographically widespread and spans religious, political and Indigenous contexts.

The authors stress that the aim is not to condemn cultural traditions, but to understand their scale and conservation impact. By recognising where and how wildcats are used, conservationists argue they can work more effectively with communities to design interventions that are locally relevant

Read more: <https://doi.org/10.1371/journal.pone.0315903>

All photos courtesy IBCA



Union Minister Mr Bhupender Yadav with international partners at a high-level IBCA–MoEFCC side event during UNFCCC COP30 in Belém, Brazil

IBCA Meet at COP30 in Brazil on Big Cats & Climate Change

The Union Minister of Environment, Forest and Climate Change (MoEFCC), India, Mr Bhupender Yadav, called for renewed global cooperation to conserve big cats and their habitats through integrated climate and biodiversity action at a high-level ministerial side event titled ‘Protecting Big Cats: Protecting Climate and Biodiversity’, organised by the International Big Cat Alliance (IBCA) and the ministry during UNFCCC COP30 in Belém, Brazil, on 17 November 2025.

Mr Yadav underscored the importance of big cat landscapes as nature-based solutions for climate resilience and highlighted India’s conservation achievements. He noted the growing membership of IBCA and reaffirmed India’s commitment to uniting all big cat range countries for coordinated conservation efforts. Emphasising the Alliance’s role, he outlined how IBCA can support range countries by aligning big cat

conservation with global frameworks such as the Sustainable Development Goals, Nationally Determined Contributions, and the Global Biodiversity Framework—through technical assistance, capacity

building, South–South cooperation, and knowledge sharing.

The minister also announced that India will host the Global Big Cats Summit in New Delhi in 2026, inviting countries to strengthen collaboration towards a shared ecological future.



Dr Tamali Mondal (right) with a fellow conservation professional at ACT Con 2025, Hanoi

IBCA at Technology Congress in Vietnam

The International Big Cat Alliance (IBCA) participated in the Applied Conservation Technology Congress (ACT Con) 2025, held from 3–7 November 2025 at the Hanoi Daewoo Hotel, Vietnam. Jointly hosted by SMART Partnership, Earth Ranger, and Save Vietnam’s Wildlife, the Congress convened global leaders from conservation, technology, governance, and research to explore innovative solutions for biodiversity protection. Dr Tamali Mondal, Programme Associate with IBCA, engaged with participants on application of emerging technologies for wildlife conservation.

ACT Con 2025 served as a global



South Africa's wildlife experts with NTCA and IBCA officials during a visit to IBCA headquarters, New Delhi, to discuss collaboration on big cat conservation

South Africa's Delegation Visits IBCA Office

Wildlife experts from South Africa, led by Mr Anthony Christopher Mitchell, Head of Office and Cabinet Liaison, along with representatives from the Embassy of South Africa in India and officials from the National Tiger Conservation Authority (NTCA), visited the IBCA headquarters in New Delhi on 8 November 2025.

Dr Vaibhav Mathur, Deputy

Inspector General, NTCA, presented an overview of India's tiger conservation initiatives, highlighting the role of community participation and sustainable management practices. Dr S P Yadav, Director General, IBCA, outlined the vision, objectives, and rationale behind the establishment of IBCA, and discussed potential avenues through which the Alliance can contribute to global big cat conservation.

The delegation appreciated India's conservation approach, particularly the effective functioning of tiger foundations and the involvement of local communities.

Expressing interest in further engagement, the delegation conveyed its intent to visit a tiger reserve to better understand the operational modalities of tiger foundations.

platform for conservation practitioners, government representatives, NGOs, researchers, and community leaders to examine how cutting-edge technologies are reshaping field-based conservation and management. Discussions at the November event focussed on translating technological tools into actionable conservation outcomes, strengthening on-ground implementation, and building long-term capacity among practitioners.

Joint Initiative for Big Cat Conservation

On 8 December 2025, Mr Bhupender Yadav (Minister of Environment, Forest

and Climate Change in India) chaired a high-level meeting on the Collaborative Initiative for Big Cat Conservation under the framework of IBCA in New Delhi. The meeting brought together ambassadors and high commissioners of big cat range countries, along with senior officials from the Government of India.

He emphasised that IBCA represents Indian Prime Minister's vision of conservation and is a partnership-driven global initiative anchored in trust, mutual respect, and shared responsibility. He highlighted the ecological importance of big cats—including cheetahs, jaguars, leopards, lions, pumas, snow leopards and

tigers—as apex predators and indicators of ecosystem health. Emphasising cooperation, he noted the importance of working collectively through capacity building and knowledge sharing to improve habitats and promote green growth across landscapes.

IBCA-PwC Collaboration for Big Cats

IBCA and PricewaterhouseCoopers (PwC) India signed an MoU to strengthen global efforts for the conservation of big cats and their habitats on 9 December 2025. The collaboration aims to enhance conservation finance, promote community



IBCA and PwC India sign an MoU to strengthen global cooperation on big cat conservation

stewardship, build awareness, and support international cooperation through innovative and scalable solutions.

The partnership will also facilitate global dialogue and enable the sharing of India's experience in big cat conservation with the international community, contributing to informed policymaking and effective conservation strategies across range countries.

Webinar on International Cheetah Day

A webinar to commemorate International Cheetah Day was organised by IBCA on 4 December 2025 bringing together conservation leaders, scientists, and partner representatives to reflect on global cheetah conservation efforts and emerging opportunities.

Mr Soumitra Das, Director (Programme), IBCA, delivered the welcome address, highlighting the importance of the day in strengthening global dialogue



Screen grab of IBCA webinar marking International Cheetah Day



Union Minister Mr Bhupender Yadav chairs a high-level IBCA meeting with ambassadors of big cat range countries to strengthen global cooperation on big cat conservation.

on cheetah conservation and IBCA's evolving role as a platform for scientific collaboration and policy support.

Dr Rajesh Gopal, Secretary General of the Global Tiger Forum and Chair of India's Cheetah Project Steering Committee, spoke on India's cheetah reintroduction programme, outlining progress since the arrival of cheetahs in Kuno National Park in September 2022. He highlighted new potential habitats in Rajasthan and Madhya Pradesh and emphasised the need for a landscape-level approach.

Dr Gobind Sagar Bharadwaj, Director, Wildlife Institute of India, discussed the cheetah's role as a flagship species for savanna and open woodland ecosystems, noting the strong institutional support for cheetah conservation in India and its potential to benefit local communities through ecotourism.

Dr Laurie Marker, Executive Director of the Cheetah Conservation Fund, shared a recorded message acknowledging global efforts to secure a sustainable future for the species. Mr Maxwell Nyounway, IBCA Focal Point for Liberia, emphasised the importance of awareness and sustained collaboration. Dr Amit Mallick, Director (International Cooperation), IBCA, delivered the vote of thanks, reaffirming the commitment to international cooperation and landscape-level conservation strategies.

Functional Corridors Primary Focus on International Jaguar Day

A special webinar was organised by IBCA on International Jaguar Day (29 November), bringing together conservation leaders working across the Americas to discuss science-based conservation, habitat connectivity, and community engagement.

Experts highlighted successful conflict-mitigation measures, the importance of functional corridors, and the growing threats from habitat loss and illegal trade. Presentations showcased regional strategies such as the Jaguar Corridor Initiative and WWF's Jaguar Strategy (2020–2030), emphasising habitat protection, sustainable livelihoods, and citizen science.

Representing IBCA, speakers underscored the ecological importance of jaguars as apex predators and highlighted the Alliance's role in fostering coordinated action, knowledge exchange, capacity building, and strengthened monitoring and enforcement frameworks. The webinar reinforced the value of partnership-driven conservation and IBCA's potential to support coordinated jaguar conservation efforts across range countries. 🐾

Compiled by **Dr Tamali Mondal**,
Programme Associate, IBCA

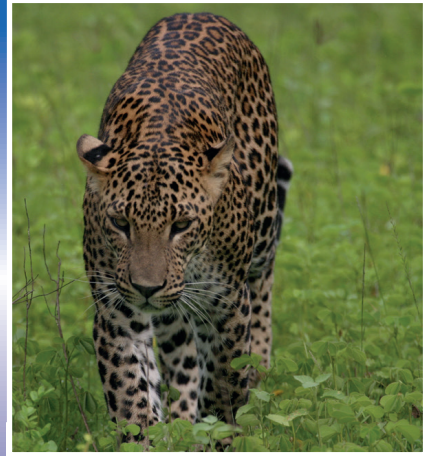
Countries with **SNOW LEOPARD, LEOPARD & JAGUAR** as National Animals



Leopard



Snow Leopard



Jaguar



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CHEETAH



JAGUAR



LEOPARD



LION



PUMA



SNOW LEOPARD



TIGER