

Big Cats, Big Impact:

A Vital Link to Achieving
the Global Biodiversity
Framework



TRAFFIC



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Why Cats*?

1. **Umbrella species;** protecting wild cats also protects vast ecosystems thanks to their enormous, biodiverse ranges: they roam across 74% of the earth's landmasses, overlapping with 75% of currently identified terrestrial Key Biodiversity Areas (KBAs).
2. **Indicator Species;** They are clear and compelling indicators of biodiversity. Big cats indicate the overall health of their ecosystems, while robust small wild cat populations signal a balance within their specialized habitats
3. **Keystone Species;** At the top of the food chain, big cats are key components of functioning high integrity ecosystems, initiating complex responses from prey populations and smaller carnivores, that sustain overall biodiversity.
4. **Cultural Keystone Species;** Billions of people already feel an intrinsic connection with wild cats due to their socio-cultural significance
5. **Flagship Species;** Wild cats are well-known, charismatic species that can serve as conservation ambassadors - rallying support from the public, policymakers and other influential supporters.

* Here we use the term "big cat" to include all large cat species; lion, leopard, tiger, jaguar, snow leopard, mainland and sunda clouded leopard, cheetah and puma. Some organizations refer to big cats to include only the Panthera genus which are the first five listed species.



Beyond the Big Cats

Conserving big cats means conserving so much more;

- Big cats are wide ranging and play a vital role in their environments which makes them clear and compelling indicators of biodiversity.
- Big cats such as tigers and lions are among some of the best-monitored species on earth. They can be measured in a timely way, and their numbers can help to paint a broader picture of biodiversity, climate, and humans' relationship with nature.
- The ranges of the 40 species of wild cats overlap with 75% of currently identified terrestrial KBAs.
- Additionally, big cats help preserve nature's contributions to people through their vast habitats, from food, water, and livelihoods to buffers against disease and carbon storage.
- Tackling illegal trade in big cats can help expose and dismantle wider crime networks.¹
- Big Cats have mobilized intergovernmental conservation cooperation more than any other group of species - as demonstrated by the launch in recent years of the Global Tiger Initiative (14 countries); Global Snow Leopard & Ecosystem Protection Program (12 countries), and the Jaguar 2030 Roadmap (16 countries).
- The existing interest in and focus on big cats can help inform science-based decision-making which is vital in a rapidly transforming and developing world.

The Footprint of Big Cats 🐾

LEGEND (IUCN Extant and Possibly Extant)

Jaguar (2016) 
Puma (2014) 

Cheetah (2024) 
Lion (2023) 
Leopard (2023) 
Snow Leopard (2016) 
Tiger (2021) 

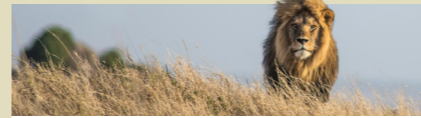
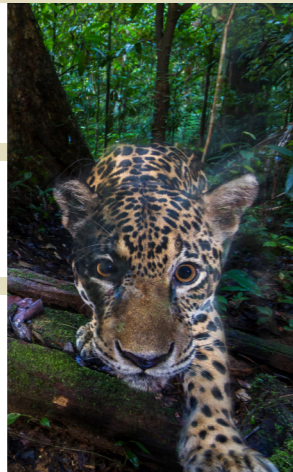


Pumas are “ecosystem engineers,” whose interactions with hundreds of other species profoundly influence the structure and function of their habitats and the wildlife therein. For example, puma kills feed all kinds of wildlife, from elk to birds to beetles, creating intricate webs that help to hold ecosystems together.¹³

Jaguar range provides 17% of the world's carbon storage and sequestration, directly benefiting 53 million people in Latin America, with additional global benefits.³

Jaguar range encompasses 9% of the world land surface area but supports nearly 28% of the world's biodiversity.⁴

Jaguars are proven umbrella species: the network of jaguar conservation units (JcUs) and corridors performs better than random networks in protecting high-quality, interior habitat, benefitting co-occurring mammals.⁵



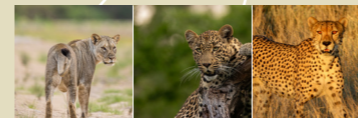
Lionscapes (landscapes with **lions**) provide more ecosystem services than the average landscape across Africa, such as hazard risk reduction and carbon sequestration, water and medicine, and cultural identity.⁹



Where **leopards** in their Asian range do not overlap with **tigers**, they are among apex predators performing that critical role in the ecosystem.¹²



More than 2 billion people live in the river basins that overlap **snow leopard** range across Asia, and these headwaters are important water sources to communities living downstream.²



Lions, leopards and cheetahs have a major impact on Africa's GDP through tourism. Foreign tourists contributed over US\$30 billion to the countries of sub-Saharan Africa in 2017 and these big cats are a favorite with visitors to protected areas.⁶



Two thirds of **cheetahs** live outside of protected areas, where their survival depends on coexistence with local communities, leading to landscape scale conservation initiatives that support connectivity across multiple-use landscapes.¹¹



Tiger habitat overlaps with 4 global biodiversity hotspots, 332 Key Biodiversity Areas and 10 Natural World Heritage Sites.⁷

Tigers play a significant role in resilience to and in mitigating climate change. The remaining forest habitats where tigers live are also forests that have comparatively high carbon sequestration and storage.⁷

Tiger habitats overlap nine globally important watersheds, which supply water to as many as 830 million people.⁸

A large-scale habitat monitoring system has demonstrated a correlation between the local extinction of tigers and an accelerated loss of forest cover in those areas, reinforcing the importance of tigers as an incentive to more effectively protect the habitats they are found in.⁹

Cat-scapes; A world without cats?

At the landscape-scale...

When cats are present	When cats are absent
Indicates high ecological integrity; that there is sufficient prey, sufficient biodiversity to support wild cat populations, i.e. a more fully functioning ecosystem protecting carbon, biodiversity and water resources. Landscapes of fear; predators induce fear in prey species, and change their behaviour. This can help protect critical habitats from overgrazing.	Top-down influence of cats lost, resulting in degradation and potential collapse of wildlife communities and habitats, loss of ecological integrity, requiring expensive rewilding for recovery, if possible. Missing predators may result in overpopulation of "grazers", "browsers" and other species performing regulatory services. Degraded vegetation cover, degraded carbon sequestration and storage potential, etc.
Full complement of wild cats (i.e., large + medium + small wild cat species) act as ecosystem and biodiversity regulators and guardians of equilibrium; key to ecological integrity.	Less incentive for governments and communities to protect, further accelerating deforestation and degradation.
Because cat species are highly charismatic, they are a major tourism draw (i.e. increased ecotourism revenue = financially performing asset, benefits to local communities).	Less attractive, less authentic ecosystem for visitors, therefore lowering tourism revenue (i.e. underperforming asset).
Increased economic benefits to people by unlocking the value of big cats and their landscapes.	Rapid loss of habitat integrity and connectivity due to loss of incentive and funds to protect.



Big Cats and the Global Biodiversity Framework

Efforts to conserve big cats contribute to multiple Targets under the CBD's Global Biodiversity Framework. Even the basic steps needed to conserve big cats (examples below) are aligned or partially aligned with 14 of the 22 targets, while also contributing towards the SDGs and the Paris Agreement goals. Overall, focusing on big cat conservation has significant benefits for biodiversity, people and climate.

		Global Biodiversity Framework	2030 Sustainable Development Agenda (SDGs)	Paris Climate Agreement (Treaty of UNFCCC)
Big cat conservation objectives (examples)	Mobilize support: through partnerships, building the will and increasing the funding	☑ - Aligned to at least one GBF target (4,5,14,19,22)	☑ - Partially aligned to at least one SDG Goal	☑ - Partially aligned to Paris Agreement
	Support wildlife area management	☑ - Aligned to at least one GBF target (1,2,3,4,9,20)	☑ - Partially aligned to at least one SDG Goal	
	Reduce illegal wildlife trade	☑ - Partially aligned to at least one GBF target (1,5,9,18,20)	☑ - Partially aligned to at least one SDG Goal	
	Promote evidence-based decision making	☑ - Aligned to at least one GBF target (14,21)	☑ - Partially aligned to at least one SDG Goal	☑ - Partially aligned to Paris Agreement
	Reduce human-big cat conflict	☑ - Aligned to at least one GBF target (4,10,11,20,22)	☑ - Partially aligned to at least one SDG Goal	
	Enhance and maintain connectivity	☑ - Aligned to at least one GBF target (1,4,9,10,20,21,22)	☑ - Partially aligned to at least one SDG Goal	☑ - Partially aligned to Paris Agreement

*All marked as "partial" due to fitting against separate targets rather than entire goals

! *The How; Big cats in National Biodiversity Strategies and Action Plans (NBSAPs).* You can leverage big cats to help your country meet the Goals and Targets of the GBF. **For some guidance, see our Big Cats in NBSAP Guidance Document available soon.**

Sources:

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² [Fragile Connections Snow Leopards, People, Water and the Global Climate \(WWF Report 2015\)](#)

³ Panthera, UNDP, WCS, and WWF. (2018). Jaguar 2030 Conservation Roadmap for the Americas. Presented at the 14th Conference of the Parties of the Convention on Biological Diversity (CBD COPI4). Available at [Panthera.org](#) and through various UN reports.

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⁵ Thornton, D. H., Branch, L. C., & Sunquist, M. E. (2016). The influence of landscape, patch, and within-patch factors on species presence and abundance: A review of focal patch studies. *Biological Conservation*, 194, 61-68. DOI: 10.1016/j.biocon.2015.12.038.

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⁸ Global Tiger Initiative Secretariat. 2011. Global Tiger Recovery Plan. The World Bank, Washington DC.

⁹ Sanderson, E. W., Miquelle, D., & Fisher, K. (2023). Tiger Conservation Landscapes 3.0: A Near Real-Time Habitat Monitoring System. *Wildlife Conservation Society*. Published in *Frontiers in Conservation Science*.

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¹² Kittle, A. M., Watson, A. C., Fernando, T. S. P., & Kumara, I. A. (2017). Forest cover and level of protection influence the island-wide distribution of an apex carnivore and umbrella species, the Sri Lankan leopard (*Panthera pardus kotiya*). *Mammal Research*, 62(4), 413-422. <https://doi.org/10.1007/s13364-017-0323-9>.

¹³ Ripple, W. J., Abernethy, K., Betts, M. G., Chapron, G., Dirzo, R., Galetti, M., ... & Wolf, C. (2022). The status and ecological effects of the world's largest carnivores. *Mammal Review*, 52(2), 259-292. <https://doi.org/10.1111/mam.12281>

