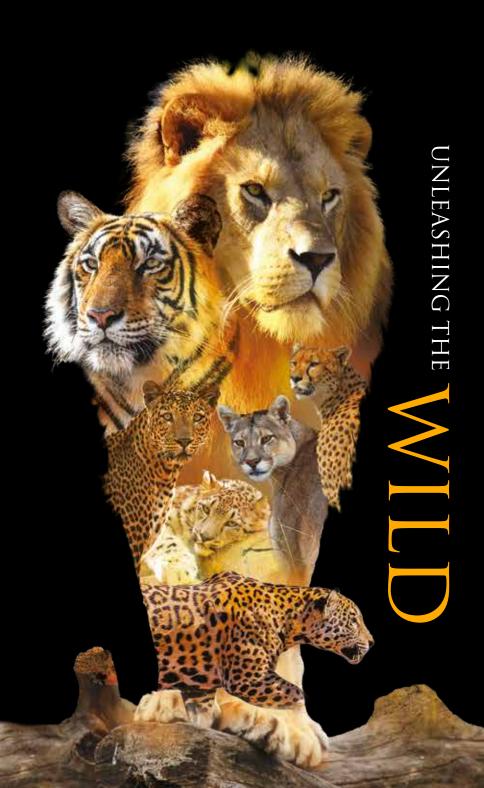
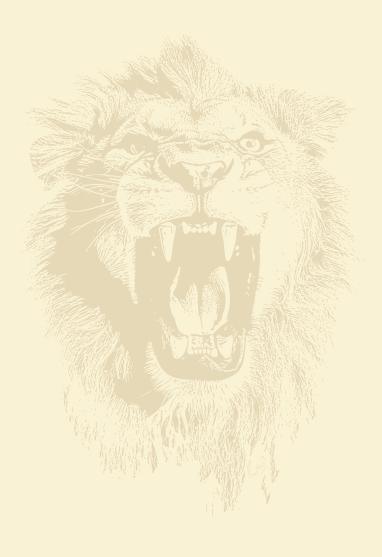
INTERNATIONAL **Big cat** alliance





INTERNATIONAL **Big Cat** Alliance (IBCA)



UNLEASHING THE

<u>BACKGROUND</u>

Big cats, as apex predators, are vital for biodiversity conservation, serving as flagship species. There is growing global concern for their conservation, but habitat destruction and prey depletion persist, endangering big cat populations worldwide. The rapid development of natural landscapes further fragments wilderness habitats, necessitating innovative approaches beyond traditional Protected Areas. Preserving these habitats not only safeguards ecosystem services but also helps control pandemics and supports climate adaptation. There is a gap at present in the availability of resources, optimum utilization of available practices and processes which are based on sound science and converged with field craft in many big cat range countries. This gap arises primarily from the need to strengthen systematic and institutionalized delivery of capacity building and implementation measures and a shortage of suitable financing arrangements to apply fundamental tenets of big cat conservation on ground besides execution of innovative and novel technologies.

Management challenges and ecological requirements for big cats are unique and novel from other species. This necessitates a specialised targeted conservation efforts for securing the future of big cats globally. Although, currently a number of inter-governmental agencies, United Nations Agencies across the globe are working on a wide array of biodiversity conservation, sustainable resource management and livelihood securities; there is a dearth of an appropriate agency/platform, exclusively dedicated towards conservation of big cats. Establishment of International Big Cat Alliance (IBCA) is, therefore, crucial since it aims to unite big cat range countries, non-range countries interested in conservation, conservation partners, scientific organizations, and business groups willing to support big cat conservation. Overall, IBCA has been envisaged to play an overarching role in global big cat conservation efforts, providing leadership, expertise, and coordination to address pressing environmental challenges and promote the sustainable management of natural resources in big cat range countries. Its framework encompasses scientific research, policy advocacy, capacity building, and collaborative partnerships to achieve big cat conservation goals at local, national, and global scales.

The IBCA's multi-pronged approach will enhance linkages, promote knowledge sharing, capacity building, networking, advocacy, finance, research, technical support, insurance against failures, education, awareness, employment, and sustainable local livelihoods. Establishment of IBCA will, thus, neither duplicate nor undermine the efforts what other cross-national bodies are already doing, but will establish and develop synergies and strengthen further collaboration with them and bridge the gaps in the arena of big cat conservation.

The ecosystem approach envisioned under IBCA framework will not only benefit big cats, but also other endangered species dwelling in these habitats. With the conservation of big cats and their ecosystems, the International Big Cat Alliance will also support efforts towards climate mitigation and adaptation, water and food security, and livelihood and well-being of millions of people who depend on these habitats.

<u>Genesis</u>

IBCA aims at conserving seven big cats that include Tiger, Lion, Leopard, Snow Leopard, Puma, Jaguar and the Cheetah. Out of these, five big cats viz. Tiger, Lion, Leopard, Snow Leopard and Cheetah are found in India. With 3,682 tigers, India has emerged as one of the global leaders in tiger conservation. India is the only country harbouring wild Asiatic lion population with approximately 800 individuals thriving in Gujarat. India supports about 13,874 leopards, 718 snow leopards and 27 cheetahs with 13 adult (African) and 14 cubs born on Indian soil.

Acknowledging India's leading role in conserving tigers, other big cats and many of its endangered species, the Hon'ble Prime Minister of India during his speech on the occasion of Global Tiger Day, 2019 called for an Alliance of Global Leaders to enhance protection for big cats in Asia. On the occasion of Commemorating 50 years of India's Project Tiger on April 9, 2023, the Prime Minister formally announced launch of an International Big Cat Alliance aiming at securing the future of big cats and landscapes they thrive.

In pursuance of the decision of the Government, the Cabinet approved the establishment of IBCA with its headquarter in India on February 29, 2024.

IBCA will leverage successful conservation models to globally safeguard major big cat species. The proposed partnership consisting of countries majority of whom face similar challenges resulting in decimating big cat populations besides poor status of prey and degraded habitats. The Alliance calls for *Big Cat Diplomacy*, a demonstrative step in leadership position on big cat agenda, to bring range countries and others on a common platform.



MISSION & VISION

- Partnership initiative to focus on protection and conservation of seven major big cats – Tiger, Lion, Leopard, Jaguar, Puma, Snow Leopard and Cheetah
- Membership- 95 range countries harbouring BIG CATS, non-range countries, conservation partners and scientific organizations, business groups and corporates interested to support big cat
- Establish multi country, multi-agency partnership organization

KEY FOCUS AREAS

- Synergy through a collaborative platform for increased dissemination of gold standard big cat conservation practices
- Provide access to a central common repository of technical know-how and corpus of funds
- Strengthen the existing species-specific intergovernmental platforms, networks and transnational initiatives on conservation and protection
- Secure our ecological future and mitigate adverse effects of climate change

THE FRAMEWORK

- **Global Issue, Local Impact:** Wildlife conservation, a global concern, requires international alliances to address local and global challenges
- **Unified Effort for Big Cats:** Aims to unite countries, partners, and businesses for big cat conservation
- **Centralized Resource Hub:** Strengthens conservation to protect big cats by establishing a centralized repository for best practices, personnel, and finances
- Efficient Resource Utilization: Efficient sharing minimizes costs, leverages best practices
- **Multi-Faceted Approach:** building links, advocacy, finance, education, and sustainable livelihoods
- **Public Awareness and Support:** Crucial role of ambassadors, raising public awareness for big cat conservation
- **Green Economy and Collaboration:** IBCA collaboration drives green economy for all stakeholders, transforming the conservation landscape

<u>IBCA IN BIODIVERSITY</u> <u>Conservation</u>

- Shared responsibility: Multi-stakeholder approach, collective efforts
- **Diverse expertise:** Broad perspectives and resources, comprehensive problem solving
- **Resource mobilization:** Funding from donors, Public sector and business group support
- **Capacity building:** Knowledge and skill exchange, inclusion of traditional knowledge, centre of excellence and training programs
- **Research & innovation:** Scientific contributions, evidence based strategies, global scientific partnership
- **Policy advocacy:** Conservation policies and legal frameworks, Decadal National Action Plans for big cats
- Community engagement: Cultural alignments, shared benefits
- Private sector engagement: Sustainable practices, corporate responsibilities
- **Transboundary collaboration:** Endorsement and support, strengthening protection, Species Recovery Plan
- **Conflict resolution:** Addressing competing interests, negotiations and agreements
- Monitoring & evaluation: Robust progress tracking, adaptation of strategies
- Sustainability integration: Biodiversity in Development Plans, longterm focus
- **Global framework integration:** Aichi biodiversity targets and Kumming-Montreal global framework for biodiversity conservation and Climate adaptation and well-being

ACTION PORTFOLIOS

- Big cat conservation strategy, plans and policies culminating in a National level Plan for 10 years and strategic planning
- E-Portal for 24x7 real time suggestions for big cat conservation projects
- Sharing of best-practices and successful case studies
- Assist members in designing financing instruments to augment resources
- Share perspectives on transmission of research outcomes to an onground situation
- Development of standards, specifications and protocols in different thematic areas in big cat conservation
- Generate and diffuse key learning on new practices and experiences
- Encourage collaboration in identifying and deploying available resources in range countries and developing strategies
- Encourage industry cooperation among IBCA members

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- Forge cooperative linkages on development of Centre of Excellence for R&D in range countries
- Designing training programs for field officials/wildlife researchers/policy makers and organizing workshops, focused meetings and conferences

GOVERNANCE STRUCTURE

The governance structure for IBCA envisaged as-

- Assembly of Members
- Steering Committee
- Secretariat comprises of Director General and other officers/Staff
- Lean and Efficient Administrative setup
- Modalities and details of verticals (operational & programs)
- Secretariat working HR, Finance, IT, Communication & outreach, Legal and Programs & Technical and Subject Matter experts

FINANCIAL IMPLICATIONS

- Government of India's initial support of Indian Rs. 150 crores (approximately 18 million USD) for 5 years (2023-24 to 2027-28)
- For augmented corpus, contributions from bilateral and multilateral agencies; other appropriate institutions
- Mobilizing financial support from public sector organizations, national and international financial institutions and donor agencies.

<u>Sustainable future</u> <u>For Big Cats and Local</u> <u>Communities</u>

- Well integrated with Aichi biodiversity conservation targets and Kumming-Montreal Global Biodiversity Framework (GBF)
- Aligns with existing inter-governmental platforms like IUCN, CITES, GTF, GEF, UNDP, UNEP
- Ensuring sustainable use of natural resources and mitigating challenges emanating from climate change
- By safeguarding big cats and their habitats, the IBCA contributes to natural climate adaptation, water and food security and well-being of communities reliant on these ecosystems

KNOWING THE BIG CATS



TIGER

Phylum: Chordata Class: Mammalia Order: Carnivora Family: Felidae Genus and species: Panthera tigris

Tigers, known scientifically as *Panthera tigris*, stand as the largest among the living cat species. Recognizable by their distinctive dark vertical stripes on orange fur with a white underside, they serve as apex predators. Tigers, the top predators in an ecosystem, are vital in regulating and perpetuating ecological processes. Ensuring the conservation of this top carnivore guarantees the well-being of forested ecosystems, the biodiversity they represent as well as water and climate security.

Subspecies

The classification of tiger subspecies has evolved over time. Initially, several subspecies were described based on physical characteristics. However, a 2015 study and subsequent revisions by the IUCN Cat Specialist Group proposed recognizing only two subspecies:

Panthera tigris tigris: This subspecies includes the Bengal, Malayan, Indochinese, South Chinese, and Siberian tiger populations in mainland Asia.

Panthera tigris sondaica: This subspecies includes the Javan, Bali, and Sumatran tiger populations of the Sunda Islands.

These two groups further constitute clades within themselves. This twosubspecies classification is still debated, with genetic analysis supporting the distinction of six monophyletic clades corresponding to the living subspecies; Bengal Tiger (*P. t. tigris*), Siberian Tiger (*P. t. altaica*), South China Tiger (*P. t. amoyensis*), Indochinese Tiger (*P. t. corbetti*), Malayan Tiger (*P. t. jacksoni*) and Sumatran Tiger (*P. t. sumatrae*).

Evolution

Tigers and snow leopards are connected through a shared evolutionary lineage, having diverged from other *Panthera* species about 2.88 million years ago. The origin of this lineage can be traced to northern Central Asia, and over time it dispersed into Southeast Asia during the Miocene period. This elaborates their evolutionary ties and their geographical range expansion.

Size and Physical Characteristics

The body weight of male tigers ranges from 100 to 261 kg (200-575 lb), with individuals in captivity reaching up to 325 kg (716 lb). Females typically weigh between 75 and 177 kg (170-390 lb). In terms of head-body length, male tigers measure from 189 to 300 cm (6.20-10 ft), while females range from 146 to 177 cm (4.79-5.81 ft). The shoulder height of these big cats is approximately 80-100 cm (3 ft), and their tail length spans from 72 to 109 cm (2.4-3.58 ft). Tigers exhibit a distinctive pelage characterized by black or brown stripes on a red-orange to golden-yellow background, contributing to their iconic and recognizable appearance.

Population in the wild

Globally, the tiger population stands at 5,574 in 2023, experiencing a notable increase. India and Nepal played a significant role in this growth, with both countries effectively doubling their tiger numbers during a period to 2016 to 2023. India is home for more than 70% of world's wild tiger population.

Distribution

Over the past century, global tiger numbers have drastically declined. A 2006 habitat study revealed that the remaining tiger population now occupies 40 percent less area than they did just a decade ago, limiting them to only seven percent of their historic range. There are 13 range countries in Asia where tigers are found namely; Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Russia, Thailand and Vietnam. While the wild tiger status is good in South Asia, it is alarming in the South East Asia. Cambodia, Lao-PDR and Vietnam have lost their tigers. The situation is grim in other Tiger Range Countries of the said region.

Habitat

Tigers exhibit a broad ecological range, populating diverse habitats that span evergreen forests, rainforests, temperate forests, deciduous forests, grasslands, and mangrove swamps. Their adaptability extends to tropical deciduous, semi-evergreen, and evergreen forests, as well as montane forests, peat swamps, and the remaining blocks of lowland rainforest. This versatility in habitat preferences underscores the tiger's ability to thrive across various landscapes, showcasing their adaptability to a wide array of environmental conditions.

Reproduction and Life Cycle

Tigers reach sexual maturity at different ages, with males typically achieving it between 4 to 5 years, and females at 3 to 4 years.

Average gestation period: 103 to 106 days

Average Litter size: 2 to 3 cubs

Average life expectancy: 12 to 16 years (both in wild and captivity)

Behavior

Tigers exhibit varying activity patterns, being active both day and night unless they face human threats. Their social behavior is predominantly solitary, with the exception of females nurturing cubs and temporary associations during mating. Females maintain smaller, distinct territories while males encompass ranges that include multiple (3-5) female territories without overlapping with other males. They typically hunt alone, relying on a stalkand-ambush strategy to capture prey, often killing by biting the back of the neck or using throat bites for strangulation. Tigers communicate through a variety of vocalizations. Scent-marking is a common behavior across their territorial range, complemented by visual signals involving posture and facial expressions to convey intentions, particularly in close interactions.

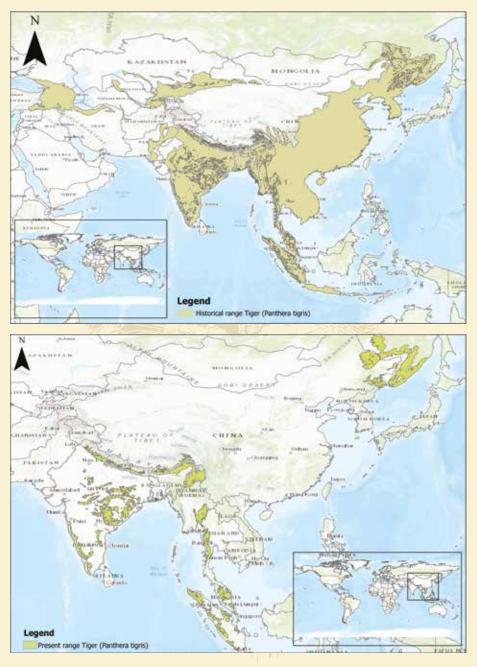
Diet

Tigers, being the largest carnivore species on land in their regions, primarily consume large and medium-sized deer, wild pigs, antelope, water buffalo, and sometime domestic livestock. They exhibit a preference for large ungulates, making them the mainstay of their diet across diverse ecosystems, constituting nearly 75% of a tiger's diet by mass. Tigers display opportunistic behavior, occasionally consuming a variety of other animals, including primates, birds, reptiles, amphibians, fish, and even invertebrates. Tigers tend to target larger prey more frequently than smaller prey, with an average prey size of 97 kg (214 lb) for tigers, in contrast to 28 kg (62 lb) for leopards.

Conservation Status

IUCN has listed tigers as Endangered in 2021 although sub-species level listing is under review. The tiger is protected over most of its range and commercial trade is long prohibited.

Maps Depicting Historical and Present Distributions of Tigers (Data Source: IUCN)



Threats

Major threats include:

- » Habitat loss and fragmentation
- » Illegal demand of illegal body parts
- » Loss of wild prey
- » Conflict with humans
- » Shared resources with humans

LION

Phylum: Chordata Class: Mammalia Order: Carnivora Family: Felidae Genus and species: *Panthera leo*

Often depicted as the "King of the beasts", lions are among the one of the most iconic big cats in the world. It is an apex predator and is second only to tigers in size among felids.

Subspecies

Historically upto 11 subspecies of lions were proposed based on their physical characteristics like mane size and color. However, the last Felidae taxonomic revision in 2017 has consolidated these into two main subspecies:

1. Northern lion (*Panthera leo leo*): Populations of this subspecies are found in North, Central, and West Africa. This subspecies also includes the Asiatic lion and regionally extinct Barbary lion.

2. Southern lion (*Panthera leo melanochaita*): Covers the East and South African lion populations.

Size and Physical Characteristics

Lions are known for their muscular, broad-chested bodies, short, rounded heads, round ears, and a distinctive hairy tuft at the end of their tails. Coat colour varies from nearly white, buff yellow, orange-brown, or silvery grey to dark brown. Size and appearance vary considerably between the sexes. Adult male lions, distinguishable by their prominent manes, are larger than females. The size and weight of adult lions vary by region:

- Female lions: Head-and-body length of 160–184 cm, tail length of 72–89.5 cm, and weight ranging from about 118 to 180 kg.

- **Male lions:** Head-and-body length of 184–208 cm, tail length of 82.5–93.5 cm, and weight ranging from about 160 to 230 kg.

Asiatic lions can often be morphologically differentiated from African lions based on (a) skull characteristics, wherein the Asiatic lions have an extra infraorbital foramen, (b) a typical loose fold of skin on the abdomen known as the belly-fold which is absent in African lions, (c) facial characteristics of Asiatic lions, with a more elongated snout and a more sloping forehead; giving them a longer profile in lateral view in comparison to the African lions and, (d) males having sparser manes, never covering their ears The mane in the adult lion has the typical "mohawk" style look.

Population in the wild

Estimated 23,000 – 39,000 individuals in Africa. About 700 individuals of Asiatic lions in Saurashtra peninsula of western Indian state of Gujarat.

Distribution

Historically lions ranged across all of North America and Africa, through most of the Balkans, and across Anatolia and the Middle East into India. Current stronghold for lions are sub-Saharan Africa and an isolated population of Asiatic lions in Saurashtra peninsula of India.

Habitat

Lions are adaptable to a variety of habitats but show a preference for grasslands, savannas, dense scrub, and open woodlands. They are primarily nocturnal and generally avoid thick canopied forests.

Reproduction and Life cycle

Both sexes are polygamous and breed throughout the year.

Average gestation period: 3 to 4 months.

Average litter size: 2 to 4 cubs, but may vary from 1 to 6 cubs Average lifespan: 12 to 16 years in wild, more than 20 years in captivity

Social Structure

Lions are the most social of large cats and uniquely live in large groups called "prides." A pride consists of several generations of related and unrelated lionesses which may be adults, sub-adults and dependent cubs and a smaller number of breeding males. Pride size varies from 3 to 40 individuals and depends on distribution and availability of major prey species.

Females usually stay in their mothers' prides for life while young males are driven from their prides usually between the ages of 2 to 4 years. They create coalitions, usually with brothers and cousins, and search for a pride to take over; or spend the entire life as nomads.

Diet

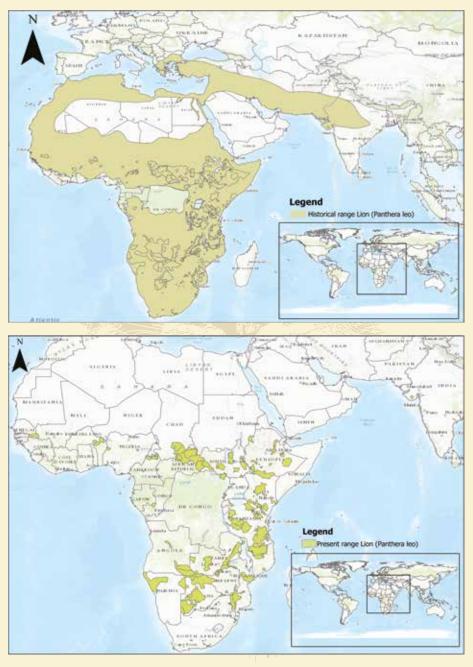
Lions predominantly hunt medium- to large-sized ungulates such as wildebeests, zebras, and antelopes. In Gir forests, they mostly hunt on ungulates such as sambar, chital, wild pig and nilgai. Lions are known to scavenge or forcefully steal kills from other predators such as leopards, hyenas, cheetahs or wild dogs.

Conservation Status

African lions are listed as Vulnerable on the IUCN Red List due to a significant decline in their populations. This decline is attributed to habitat loss and conflicts with humans. Populations are largely untenable outside protected areas.

Population of Asiatic lions, on the contrary, are increasing over the recent years and therefore they have been downlisted by IUCN from 'Endangered' to 'Vulnerable'.

Maps Depicting Historical and Present Distributions of Lions (Data Source: IUCN)



Threats

Lions face several conservation threats that contribute to their declining populations in the wild. Some of the key threats include:

- » Habitat loss and fragmentation
- » Conflict with humans
- » Poaching and trophy hunting
- » Prey depletion
- » Diseases
- » Climate change

LEOPARD

Phylum: Chordata Class: Mammalia Order: Carnivora Family: Felidae Genus and species: Panthera pardus

Leopards, known scientifically as *Panthera pardus*, are one of the five extant species in the *Panthera* genus, which also includes lions, tigers, and jaguars. The term "leopard" finds its origins in the Greek language, specifically from the combination of "leon" (meaning lion) and "pardus" (referring to a panther), reflecting the unique characteristics and features of these large feline predators. Their stealth, agility, and ability to adapt to various environments make them formidable predators.

Sub-species

Historically, many leopard subspecies were recognized based on geographical distribution and physical characteristics. However, with advancements in genetic studies, 8 sub-species of leopards have been identified:

Panthera pardus pardus – Africa

Panthera pardus tulliana – South West Asia (Turkey, Caucasus, Turkmenistan, Uzbekistan, Iran, Iraq, Afghanistan and Pakistan)

Panthera pardus fusca – Indian subcontinent, Myanmar and China Panthera pardus kotiya – Sri Lanka Panthera pardus delacouri – SE Asia and probably south China Panthera pardus orientalis – Eastern Asia from Russian Far East to China Panthera pardus melas – Java Panthera pardus nimr – Arabian peninsula

Evolution

Fossil evidence indicates that leopards originated in Africa, and they were present in Eurasia during the Early Pleistocene. However, DNA analysis suggests a more recent shared ancestry of Asian and African leopards, dating back to the Middle Pleistocene. The ancient European leopard is considered a sister group to Asian leopards, indicating a common out-of-Africa dispersal that led to the formation of Asian lineages. Mitochondrial lineage coalescence aligns with the earliest confirmed fossils in Eurasia. Mainland Asian leopards show a relatively recent ancestry, implying a significant population bottleneck during the Pleistocene.

Size and Physical Characteristics

Male leopards typically weigh between 37 to 90 kg (82 to 198 lb), while females weigh around 28 to 60 kg (62 to 132 lb). Their body length ranges from 91 to 191 cm (3.0 to 6.3 ft), with a tail length of 58 to 110 cm (1.9 to 3.6 ft). The leopards' coats vary, featuring bodies adorned with rosettes—small black spots surrounding a central spot slightly darker than the background color. The background color itself can be pale cream, buff-gray, orangish, tawny-brown, or dark rufous. This spotted pattern provides excellent camouflage in their natural habitats, helping them ambush prey.

Population in the wild

Reliable and scientific population estimate of leopard over the continent of Africa is not available till date but the available resources point towards the following figures:

700,000+ in Africa (Henschel et al. 2008) 13,874 in India (Qureshi et al. 2024) Amur leopard - <60 (IUCN CSG) Arabian leopard - 45-200 (IUCN CSG) Javan leopard - <250 (IUCN CSG) Persian leopard - 800-1000 (IUCN CSG) Sri Lankan leopard - 700-950 (IUCN CSG) North China leopard - <500 (IUCN CSG) South-east Asia - <2,500 (IUCN CSG)

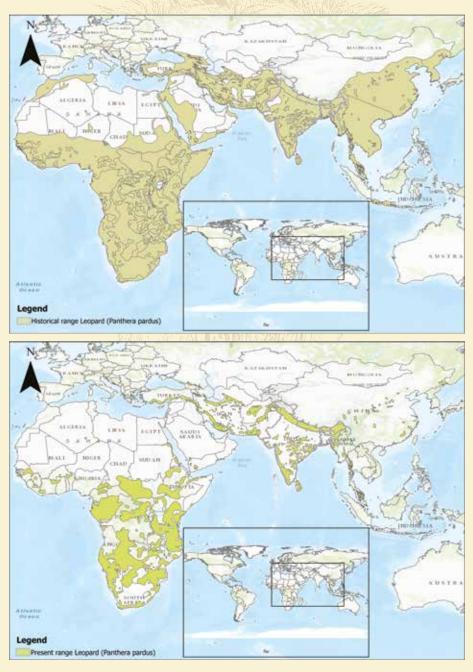
Distribution

The leopard boasts a broad geographic range, spanning across Africa and Asia. From sub-Saharan Africa, the Arabic peninsula, and southwestern and eastern Turkey, it extends through southwest Asia, the Caucasus, up to the Himalayas, South Asia, Indochina, Peninsular Malaysia, China, and the Russian Far East. Additionally, leopards are found on the islands of Java and Sri Lanka.

Habitat

Leopards are highly adaptable, thriving in diverse ecosystems from tropical rainforests to alpine regions, encompassing habitats such as savannahs, deserts, and Mediterranean scrub. In the Indian subcontinent, they inhabit forests, tea gardens, and rocky landscapes, while in southwest and central Asia, they are primarily found in remote mountainous areas and rugged foothill regions. Remarkably, leopards have been recorded at elevations up to 5200 m in the Himalayas, showcasing their versatility in varied landscapes.

Maps Depicting Historical and Present Distributions of Leopards (Data Source: IUCN)



Reproduction and life cycle

Both males and females reach sexual maturity between 24 and 28 months, with reproduction typically uncommon before 33 to 36 months of age.

Gestation: 90-106 days **Inter-birth interval:** 14-39 months **Litter Size:** 1-3 **Average life expectancy:** 12 to 15 years

Behaviour

Leopards are predominantly nocturnal, frequently hunting and traveling during the night, while resting on the ground under cover or in trees. Human activity may impact their activity patterns. Typically solitary, leopards rarely interact except for mating or raising cubs. They establish and defend territories marked with urine and claw marks on tree bark, and male leopards may engage in territorial disputes if their ranges overlap.

Diet

Leopards have an extensive diet, consuming over 90 different prey species in sub-Saharan Africa alone. They primarily target large to medium-sized ungulates but are known to commonly prey on primates in certain African regions. Additionally, they frequently scavenge for food.

Conservation Status

The leopard, listed under CITES Appendix I, is widely protected, with hunting prohibited or restricted in several nations like Armenia, Georgia, Iran, Israel, Jordan, Pakistan, Russia, Saudi Arabia, Oman, Turkmenistan, and Uzbekistan. International trade is limited to an annual quota for sport hunting skins and trophies. However, legal safeguards are absent in Lebanon, Tunisia, Turkey, and the United Arab Emirates. Information gaps persist for countries like Azerbaijan, Iraq, Libya, Kuwait, Syria, Tajikistan, and Yemen. Afghanistan recently protected leopards by adding them to the nation's Protected Species List. Across the globe, all leopard subspecies face threats, especially those outside Africa. The Amur Leopard, found in eastern Russia, is alarmingly scarce, with an estimated wild population of around 30 individuals.

Threats

Major threats include:

- » Habitat loss and fragmentation
- » Persecution by humans
- » Poisoning of carcasses
- » Illegal trophy hunting
- » Demand for illegal body parts
- » Other anthropogenic factors such as road and rail kills, electrocution etc.

PUMA

PUMA or COUGAR or MOUNTAIN LION

Phylum: Chordata Class: Mammalia Order: Carnivora Family: Felidae Genus and species: *Puma concolor*

The puma, also known as the cougar or mountain lion, is a large cat species with the widest distribution of any New World mammal, spanning from southeastern Alaska to the southern tip of Chile. This remarkable range makes it one of the most widespread terrestrial mammals in the Western Hemisphere.

1

Sub-species

Although the puma is a large animal, it is believed to be more closely related to small cat species because it lacks the elastic hyoid and enlarged vocal folds of the Pantherines. The puma's long spinal column is similar to the closely related cheetah, and provides increased lumbar flexion. Thirty-two subspecies have been described, but on the basis of a phylogeographical study six subspecies were suggested:

- » Puma concolor cougar in North America
- » Puma concolor costaricensis in Central America
- » Puma concolor capricornensis in eastern South America
- » Puma concolor concolor in northern South America
- » Puma concolor cabrerae in central South America and
- » Puma concolor in southern South America.

However, based on a more recent study of mtDNA, tentatively two subspecies are recognised:

- » Puma concolor concolor in South America
- » Puma concolor cougar in North and Central America

Evolution

The cougar (*Puma concolor*) evolved from a common ancestor with the American jaguarundi and African cheetah around 300,000 BC. Molecular and morphologic studies suggest that the puma's origin dates back to the late Miocene, 5–8 million years before the present.

Size and Physical Characteristics

Pumas are the fourth-largest cats in the cat family. Adult males can reach about 7.9 feet (2.4 meters) in length from nose to tail tip, and weigh between 115 and 220 pounds (52 and 100 kg). Females are slightly smaller, with a body length of around 6.7 feet (2.0 meters) and a weight range between 64 and 141 pounds (29 and 64 kg). They have a distinctive appearance with round heads, erect ears, powerful forequarters, necks, and jaws, which are essential for grasping and holding prey. They also have retractable claws on both their fore and hind paws.

Pumas residing in more mountainous regions have a thicker fur coat to retain body heat in freezing winters. Their fur color varies from brown-yellow to grey-red, depending on their subspecies and habitat location. Pumas are known for their incredible strength, speed, and agility. They are excellent leapers, able to jump as high as 18 feet (5 meters) vertically and 40 to 45 feet (12 to 14 meters) horizontally. They can reach speeds of up to 50 miles per hour (80 km/h), making them formidable predators.

Population in the wild

The puma was eliminated from most of the eastern half of the US over the 200 years following European colonization. In Florida, only an isolated remnant Endangered subpopulation persists which is estimated at 100-180 individuals. Records of pumas in northeastern Canada, the Midwest, and the eastern US are on the rise, indicating possible recolonization. In the early 1990s, the puma population in Canada was estimated to be 3,500-5,000, and to be 10,000 in the western US. The populations in Central and South America are lesser known, and it is not clear how abundant pumas are in the dense rainforest of the Amazon basin. In Uruguay, the puma is thought to be highly endangered. Densities vary between 0.5 and 7 individuals per 100 km². The

lowest densities have been reported from arid regions.

Distribution

The puma has the largest geographic range of any native terrestrial mammal in the Western Hemisphere. It occurs from British Columbia in Canada and US throughout Central and South America to the southern tip of Chile.

Habitat

Pumas are incredibly adaptable and can thrive in a wide variety of habitats. They are primarily found in the mountains of North and South America, inhabiting rocky crags and pastures, forests, tropical jungles, grasslands, and even arid desert regions. Their preference for areas with dense underbrush and rocky terrains aids in their hunting strategies. Despite this adaptability, the expansion of human settlements and land clearance is pushing pumas into smaller and more hostile areas.

Reproduction and life cycle

Pumas breed throughout the year, with a summer peak in births at higher latitudes. The interval between births is about two years, but it is less if a litter dies or disperses early.

Average gestation period: 90 days

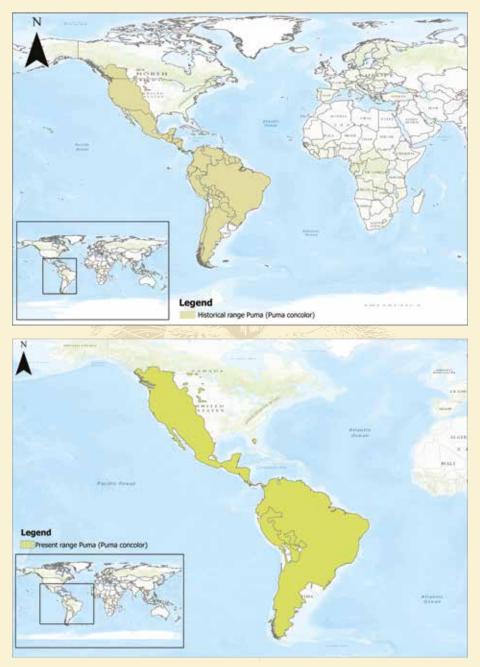
Average litter size: 1-5 cubs (usually 2-3) Average lifespan: 8-12 years, rarely more than 12

Behavior and Adaptability

The puma cannot roar but is capable of a variety of vocalizations, including chirps, hisses, growls, and whistles. Pumas are solitary and primarily nocturnal and crepuscular, with activity peaks at dusk and dawn. The puma is mostly terrestrial and hunts on the ground. However, it is a good climber and often escapes up trees when hunted by dogs. The puma hunts by stalking and attacking prey at close range and from behind. It can travel extensive distances while hunting.

Home ranges of pumas vary across their distribution. Average home ranges vary from 50-1,031 km². Male home ranges are typically twice the size of female's in the same area, and overlap with several females. The largest home ranges have been found in arid environments. Communication between pumas appears to be primarily olfactory. Pumas "scrape" with their hind feet, first with one foot and then the other. They repeat the process several times to create a neat pile of debris and/or soil and parallel swaths of exposed earth.

Pumas are noted for their high adaptability, which is likely to help them survive despite the ongoing challenges of habitat loss and human encroachment. They can live in a range of environments, from the cold mountainous regions of the Americas to tropical jungles and deserts. This adaptability has been a key factor in their survival across a broad geographical range.



Maps Depicting Historical and Present Distributions of Pumas (Data Source: IUCN)

Diet

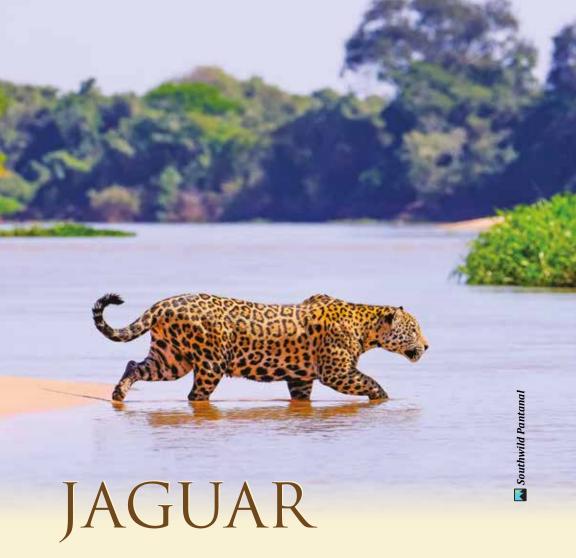
The prey of the puma varies from insects, birds and mice to porcupines, capybaras, pronghorn, elk, bighorn sheep and moose. In North America, pumas feed primarily on ungulates, such as deer and elk, but elsewhere on smaller animals like feral pigs, raccoons, beavers, and armadillos. In Washington state and Wyoming, females kill more mule deer than males, and males kill more elk than females. In areas where puma co-exists with jaguar (interspecific competition), it seems to prey more on small to medium-sized animals such as pikas, hares, agoutis, marsupials, wild pigs, feral pigs, raccoons, and armadillos.

Conservation Status

The puma is listed as Least Concern in the IUCN Red List. The Eastern cougar (*Felis concolor cougar*), a previous described subspecies, is now considered extinct and the Florida panther is classified as Endangered in North America. In Argentina, Brazil, Colombia and Peru, the puma is classified as Near Threatened. In Brazil, subspecies outside the Amazon basin are classified as Vulnerable. In Chile its status is unknown and the puma listed as Data Deficient.

Threats

- Legal and illegal hunting- it is estimated that approximately 4,000 pumas a year are killed through hunting and conflict with humans in the USA and Canada.
- Habitat loss and fragmentation- puma habitat is destroyed due to human developments across much of their range. Populations are also isolated by such developments.
- Human- wildlife conflict- this can be in retaliation to livestock losses, or may even be pre-emptive killing. Across much of their range pumas are either considered as vermin or are thought to be very aggressive so a danger to live in close proximity too.
- Decline in prey- in some parts of the Americas puma prey populations are in decline due to overhunting.



Phylum: Chordata Class: Mammalia Order: Carnivora Family: Felidae Genus and species: Panthera onca

Jaguars are the largest big cats native to the Americas and recognized for their strong build and distinctive coat pattern. The word 'jaguar' probably originates from *yaguara*, a Tupí-Guaraní word of South America meaning "true, fierce beast who kills with one leap." They are the largest cats in the Americas and the third-largest globally, following tigers and lions.

Sub-species

Historically, upto 9 sub-species of jaguars have been recognized. It is still distinguished from two extinct fossil subspecies, *Panthera onca augusta* and *Panthera onca mesembrina*. This classification reflects the genetic and morphological research indicating north-south variation among populations but not enough evidence for subspecific differentiation. The latest Felidae taxonomy revision in 2017 proposed that the jaguar is a monotypic species (with no sub-species).

Evolution

Analyses of mt-DNA suggested origin of jaguars in northern South America approximately 280,000 – 510,000 years ago. The ancestors of the modern jaguar likely entered the Americas from Eurasia during the Early Pleistocene via the land bridge that once spanned the Bering Strait. Morphological and genetic research has shown that jaguars share several features with leopards (*P. pardus*), leading to the inference that they are closely related. Genetic analyses also suggest a significant gene flow among jaguar populations in the past, particularly in Colombia.

Size and Physical Characteristics

Head and body length, without the tail may be up to six feet (1.85m), and the tail can measure 30 inches (75cm) more. Height at the shoulder may be up to 30 inches (75cm). Male jaguars are larger than females. The weight varies 100 to 160 kg. South American jaguars are larger than those of Central America and the largest jaguars have been recorded from Brazilian Pantanal region.

The jaguar's coat color ranges from pale yellow to reddish brown, with a much paler (often white) underbelly and with black spots arranged in rosettes with a black spot in the centre. The jaguar resembles the leopard of Africa and Asia, but the leopard lacks the black centre spot. Along the midline of the jaguar's back is a row of long black spots that may merge into a stripe.

Population in the wild

With an estimated world population of 173,000, jaguars can be found in 18 countries.

Distribution

The jaguar's historic range, around the turn of the 20th century, was estimated at 19 million square kilometres, stretching from the southern United States to southern Argentina. By the 21st century, this range had decreased significantly to about 8.75 million square kilometres, with notable declines in the southern United States, northern Mexico, northern Brazil, and southern Argentina.

Jaguars have a wide range in the Western Hemisphere, extending from the southwestern United States across Mexico and much of Central America to South America, as far south as Paraguay and northern Argentina. Brazil holds around half of the wild jaguars in the world with approximate 89% of the global population living in the Amazon River basin.

Habitat

Habitat is variable for the species. It is found from lowland jungle to montane forest, at altitudes of up to 2,000m but is seen in wet grassland and arid scrub as well. Their preferred habitats include tropical and subtropical moist broadleaf forests, wetlands, and wooded regions. Jaguars are adept swimmers

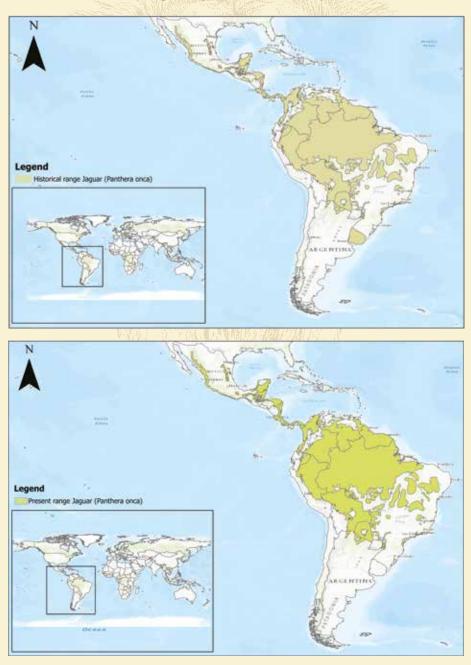
and often found living near water bodies like rivers, streams, lagoons, and swamps.

Reproduction and life cycle

Females have an estrous cycle of approximately four weeks, and can breed at any time of year.

Average gestation period: 93 to 105 daysAverage litter size: 2 (upto 4 cubs)Average lifespan: 13-14 years in wild, upto 23 years in captivity

Maps Depicting Historical and Present Distributions of Jaguars (Data Source: IUCN)



Behaviour

Jaguars have a land tenure system similar to tigers and cougars. Females home ranges vary in between 25 km² to 40 km². Ranges overlap somewhat, and resident males inhabit territories about twice that size, patrolling through the ranges of several females at a time. Basically solitary, they come together for breeding.

Diet

Its primary dietary sources are capybara and peccaries, but it also preys on fish, crocodilians, birds, snakes, tapirs, and several other small animals. The jaguar is known for killing the prey by crushing bites to the skull. Even though they are active throughout the day, jaguars mostly hunt on the ground at night.

Conservation Status

IUCN has listed jaguars as Near Threatened as per 2016 assessment of Red Data Book.

Threats 🖇

Major threats include

- » Habitat loss and fragmentation
- » Conflict with humans
- » Illegal hunting

Jaguars are emblematic of the rich biodiversity of the Americas and are significant both ecologically and culturally. Their presence across a wide range of habitats underscores their adaptability and the importance of various ecosystems they inhabit. However, their decreasing range highlights the urgent need for conservation efforts to protect these majestic animals and their habitats.



CHEETAH

Phylum: Chordata Class: Mammalia Order: Carnivora Family: Felidae Genus and species: Acinonyx jubatus

The cheetah is a large feline recognized for its speed and distinctive physical characteristics. The name "Cheetah" is derived from a Sanskrit word "Chitra" means spots. The cheetah and humans have coexisted since at least 3000 BCE, when an official seal from the Sumerians included a hooded, leashed cheetah on its head. The cheetah was regarded as a royal symbol at this time in Egypt, where it took the form of the cat goddess Mafdet. Many well-known historical personalities, like Genghis Khan, Charlemagne, and Akbar the Great of India, kept cheetahs as pets.

Subspecies

The cheetah is the only surviving species of the genus *Acinonyx*. Originally, five subspecies of cheetahs were recognized, but recent genetic studies suggest that only four subspecies can be acknowledged:

Southeast African cheetah (*A. j. jubatus*): This is the nominate subspecies, with the largest population found in Angola, Botswana, Mozambique, Namibia, South Africa, and Zambia.

Asiatic cheetah (*A. j. venaticus*): Confined to central Iran, this subspecies represents the only surviving cheetah population in Asia.

Northeast African cheetah (*A. j. soemmeringii*): Found in the northern Central African Republic, Chad, Ethiopia, and South Sudan.

Northwest African cheetah (*A. j. hecki*): Occurs in Algeria, Benin, Burkina Faso, Mali, and Niger, and is listed as Critically Endangered on the IUCN Red List.

Evolution

The cheetah's closest relatives are the cougar (*Puma concolor*) and the jaguarundi (*Herpailurus yagouaroundi*). Together, these three species form the Puma lineage, one of the eight lineages of extant felids, diverging from other lineages around 6.7 million years ago. Up to 11,700 years ago, during the end of the last ice age, when many mammals vanished from the Northern Hemisphere, cheetahs were widespread over North America, Europe, and Asia. Cheetahs disappeared from all of North America, Europe, and much of Asia. Around this period, there appears to have been a significant decline in cheetah populations—possibly the first and worst of several demographic bottlenecks. Cheetahs that exist now appear to be extremely inbred which is reflected with increased susceptibility to infectious diseases (such as feline infectious peritonitis, or FIP), increased infant mortality, and high levels of abnormal spermatozoa.

Fossil Record

The oldest cheetah fossils, found in eastern and southern Africa, date to 3.5–3 million years ago. The modern cheetah appeared in Africa about 1.9 million years ago. Their fossil record shows that they were larger but less cursorial (adapted for running) than today's cheetahs. Cheetah-like cats existed as late as 10,000 years ago in the Old World.

Size and Physical Characteristics

The cheetah is a large, sleek feline with a thin, long-legged body and a light skeletal frame. Their head is small, with high-set eyes, a black "tear mark" that extends from the inside of each eye to the mouth, and big nostrils that facilitate a greater intake of oxygen. The tear marks may aid in hunting by minimizing the sun's glare. Their robust arteries and adrenal glands, together with their sizable lungs and hearts, form an intricate circulatory system that functions in unison to effectively transport oxygen throughout their blood. Cheetahs have a tawny to creamy white or pale buff fur marked with evenly spaced, solid black spots. Adults can reach a shoulder height of 67–94 cm with a body length of 112 to 142 cm with another 66 to 84 cm tail length. The weight varies between 21 and 72 kg.

Cheetahs are famous for being the fastest land animals, capable of running at speeds of 90 to 112 km/h, with adaptations such as a light build, long thin legs, and a long tail for speed. In under 2.5 seconds, a cheetah can speed from zero to forty-five miles per hour (zero to seventy-two kilometers per hour). No other land mammal surpasses their short sprints.

Population in the wild

Only 9% of the cheetah's former global range and 13% of its historical African range remain today. The estimated global population is 7100 in wild, of them, about 2,300 (or 32%) reside in eastern Africa and 4,300 (or 61%) in southern Africa. North, Western, and Central Africa are home to the 420 cheetahs that make up the remaining 7%. 33% of cheetah population in Africa reside within Protected Areas.

Population of Asiatic cheetah in Iran is precariously low (believed to be less than 20 individuals).

Distribution

The strongholds of the species are in Southern and Eastern Africa, though there has been considerable range reduction in these areas as well. Much is still unknown about the current distribution in a number of nations (e.g. Sudan, Somalia, Eritrea, Angola, Mozambique and Zambia). It is known that cheetahs have disappeared from substantial portions of Tanzania, Malawi, South Africa, Zimbabwe, and Uganda. They are widely distributed in various regions of Southern Africa (such as Botswana and Namibia) outside of protected areas on commercial ranches.

- The Iranian population is believed to be distributed in Khorassan, Semnan, Tehran, Isfahan, Yazd, Kerman provinces.
- In 2022 and 2023, twenty African cheetahs (*A. j. jubatus*) from Namibia and South Africa have been introduced in Kuno National Park, central India as world's first intercontinental wildlife translocation. The current population of cheetah in Kuno is 27 individuals (13 adults and 14 cubs).

Habitat

Cheetahs thrive in a variety of habitats, including grasslands, savannas, shrublands, and even in mountainous areas and valleys. Notably adaptive, cheetahs can also be found in temperate to hot deserts. They prefer environments with lush vegetation for camouflage, such as tall grass or bushes.

Reproduction and life cycle

Sexual maturity at 18-23 months. Breed throughout the year.

Average gestation period: 90-98 days Average litter size: 3 to 4 Average lifespan: 8 to 12 years in wild, 12 to 20 years in captivity

Social structure

Cheetah's social system with solitary females and social males is unique among felids. Cheetah females are solitary and have vast home ranges, cheetah males are social and live in coalitions, holding smaller territories. While females allow other cheetahs in their home range, which frequently overlaps with other cheetahs' home ranges, males scent-mark their territory and protect it from invaders. Because they are very promiscuous, females have the ability to roam across multiple male territories each year and may give birth to a litter of cubs from different fathers.

A cheetah cannot roar like other big cats, however, its vocalizations include purring, chirping, growling and hissing.

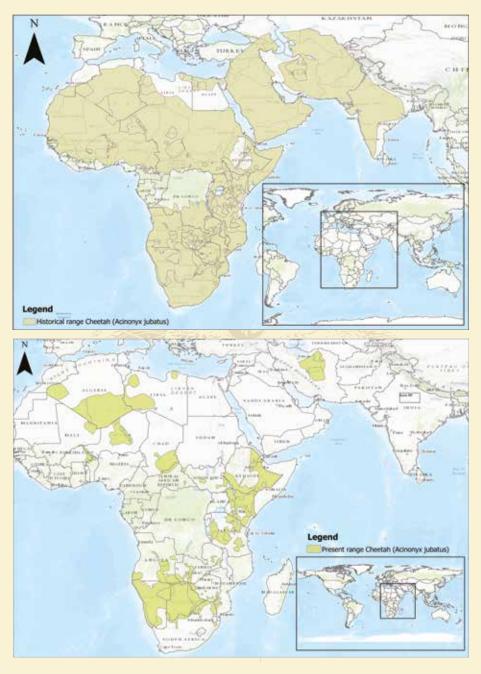
Diet

Being diurnal, cheetahs hunt throughout the day, mostly during early mornings and late afternoons. Medium-sized antelopes (15–30 kg) are the main prey for adult cheetahs, however they sometimes consume small game such as hares and birds. Because of their small canines, they kill prey by suffocation. A cheetah can eat 14 kg of meat at one sitting. About 50% of cheetah's kills in Africa get stolen by other predators and vultures (kleptoparasitism).

Conservation Status

African cheetahs are listed as Vulnerable on the IUCN Red List in 2015 due to a significant decline in their populations. This decline is attributed to habitat loss and conflicts with humans. Populations are largely untenable outside protected areas.

Maps Depicting Historical and Present Distributions of Cheetahs (Data Source: IUCN)



Threats

Cheetahs face several conservation threats that contribute to their declining populations in the wild. Some of the key threats include:

- » Loss of habitat and isolation of existing habitat patches
- » Prey depletion
- » Conflict with humans
- » Diseases
- » Interspecific competition with other large predators
- » Demand of body parts for illegal wildlife trade

SNOW LEOPARD

Phylum: Chordata Class: Mammalia Order: Carnivora Family: Felidae Genus and species: Panthera uncia syn. Uncia uncia

The snow leopard, also known as the ounce, is a large cat species native to the mountain ranges of Central and South Asia. Also known as the "Ghost of the Mountains," snow leopard is an elusive big cat that serves as ambassadors for the planet's highest places and are revered by the local communities. The presence of this big cat, as an apex predator, indicates a healthy ecosystem.

Sub-species

Taxonomically, snow leopards were initially classified in the monotypic genus *Uncia*. However, phylogenetic studies have since placed them within the *Panthera* genus. Although two subspecies were described based on morphological differences, genetic differences between these two have not been confirmed. Thus, the snow leopard is generally regarded as a monotypic species.

In 2017, phylogeographic analysis suggested three subspecies:

- 1. *P. u. uncia*: Western group (Tian Shan, Pamir, trans-Himalaya region)
- 2. P. u. irbis: Northern group found in Altai region of Mongolia
- 3. *P. u. uncioides*: Central group inhabiting the Himalayas and Qinghai (Tibetan Plateau).

This classification has seen both support and contestation among researchers. Additionally, an extinct subspecies, *Panthera uncia pyrenaica* (Arago or European Snow Leopard) was described in 2022 based on fossil materials found in France.

Evolution

Despite its name, the snow 'leopard' is more closely related to the tiger than the leopard. According to genetic studies, the common ancestor of snow leopards and tigers diverged from the lineage of big cats about 3.9 million years ago, and snow leopards diverged from tigers about 3.2 million years ago.

Size and Physical Characteristics

An adult snow leopard measures 1,000 to 1,300 mm from nose to tail, with a tail length of 800 to 1,000 mm equalling roughly 75% to 90% of total body length. This extremely long tail is used for balance in the steep and rocky terrain in which they live, but it can also be used to cover their extremities during harsh winter weather.

Adults weigh 35 to 45 kg on average, with a total range of 25 to 75 kg across the species. It stands about 0.6 metre (2 feet) high at the shoulder. The species has no obvious sexual dimorphism, but males may be slightly larger than females in general. Snow leopards have extremely large paws in comparison to other felids, which serves as an adaptation for walking on snow (often known as snowshoes).

The base fur color can vary from light gray to smoke gray to cream-yellow, with a white tint on the underbody. Greyish black spots and rosettes cover the entire body. Rosettes are larger rings that encircle smaller spots that only appear on the body and tail, whereas solid spots appear on the head, neck, and lower limbs.

Population in the wild

No one has exact count of snow leopards in wild because of their elusive nature and harsh terrain. As estimated population of 3,500-7,000 snow leopards exist across 12 range countries of Asia.

Distribution

Snow leopards have a large geographic range of about 2.3 million square kilometres and are widely but sporadically distributed throughout Central

Asia's high mountain ranges. Their range extends through various countries including Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyzstan, Mongolia, Nepal, Pakistan, Russia, Tajikistan, and Uzbekistan, with China holding approximately 60% of their ranges.

Habitat

Snow leopards prefer bedding areas that are steep, rocky, and broken, especially near a landform edge with natural vegetation. For daytime resting, cliffs and major ridgelines are preferred. Snow leopards live in alpine and subalpine zones at elevations ranging from 900 to 5,500 meters or higher, but mostly between 3,000 and 4,500 meters (9,800–14,800 feet). Their preferred habitats include rocky outcrops, cliff sides, and ridges, which provide excellent camouflage and hunting grounds for these cats.

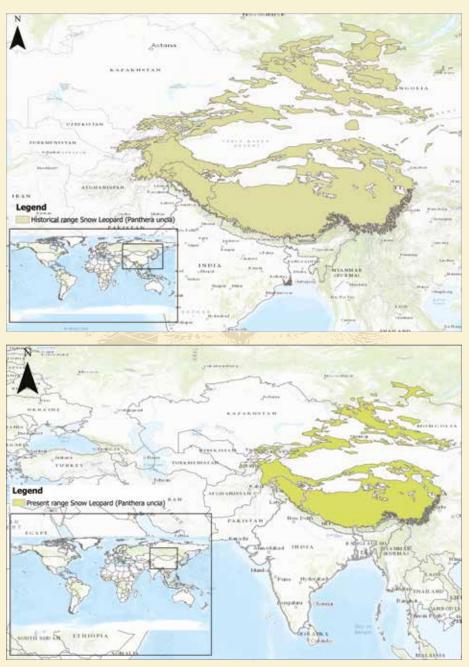
Reproduction and life cycle

Polygynous mating system. Breeding occurs in wild snow leopards during the late winter months of January to March.

Average gestation period: 90-105 days Average litter size: 2 (range 1 to 5) Average lifespan: 12-18 years in wild, upto 25 years in captivity



Maps Depicting Historical and Present Distributions of Snow leopards (Data Source: IUCN)



Behaviour

Snow leopards are solitary creatures, with females spending the majority of their time with their cubs. In Nepal, home range sizes range from 4.6-15.4 square miles to over 193 square miles in Mongolia. Snow leopards are crepuscular, which means they are most active at dawn and dusk. They are also highly mobile, moving from one location to another on a daily basis and changing their bedding site several times throughout the day. Snow leopards can travel up to 25 miles in a single night.

Snow leopards do not roar, but they have a diverse range of vocalizations, including purring. They also meow, moan, yowl, and chuff, also known as

prusten. When females are in heat, they yowl, and chuffing could be a way of greeting another snow leopard.

Diet

Snow leopards are carnivorous and can kill prey three to four times their own weight, but they will readily accept much smaller prey in times of need. The blue sheep is its preferred prey. Markhor, ibex, tahrs, musk deer, wild pig, wild donkeys and yaks, Tibetan antelope, and Tibetan gazelles are also taken. They also predate on voles, birds, marmots, and even mice. In areas with low density of natural prey, the snow leopard thrives on domestic livestock.

Conservation Status

The snow leopard is listed as Vulnerable on the IUCN Red List due to an estimated global population of fewer than 10,000 mature individuals, which is expected to decline by about 10% by 2040.

Threats

The snow leopard is threatened by:

- » Poaching
- » Habitat loss
- » Declines in natural prey species
- » Retaliatory killings
- » Climate change crisis
- » Lack of protection and monitoring
- » Lack of awareness and support

<u>UNIQUE LIST OF BIG CAT</u> <u>Range countries</u>

S. No.	Range Country	S. No.	Range Country
1.	Afghanistan	39	Guatemala
2	Algeria	40	Guinea
3	Angola	41	Guinea-Bissau
4	Argentina	42	Guyana
5	Armenia	43	Honduras
6	Azerbaijan	44	India
7	Bangladesh	45	Indonesia
8	Belize	46	Iran
9	Benin	47	Iraq
10	Bhutan	48	Kazakhstan
11	Bolivia	49	Kenya
12	Botswana	50	Kyrgyz Republic
13	Brazil	51	Lao PDR
14	Burkina Faso	52	Liberia
15	Burundi	53	Libya
16	Cambodia	54	Malawi
17	Cameron	55	Malaysia
18	Canada	56	Mali
19	Central African	57	Mexico
	Republic		
20	Chad	58	Mongolia
21	Chile	59	Mozambique
22	China	60	Myanmar
23	Colombia	61	Namibia
24	Congo	62	Nepal
25	Costa Rica	63	Nicaragua
26	Côte d'Ivoire	64	Niger
27	Democratic Repub-	65	Nigeria
	lic of the Congo		
28	Djibouti	66	Oman
29	Ecuador	67	Pakistan
30	Egypt	68	Panama
31	El Salvador	69	Paraguay
32	Equatorial Guinea	70	Peru
33	Eritrea	71	Russia
34	Eswatini	72	Rwanda
35	Ethiopia	73	Saudi Arabia
36	French Guiana	74	Senegal
37	Gabon	75	Sierra Leone
38	Ghana	76	Somalia

S. No.	Range Country	S. No.	Range Country
77	South Africa	87	Uganda
78	South Sudan	88	United State of America
79	Sri Lanka	89	Uruguay
80	Sudan	90	Uzbekistan
81	Suriname	91	Venezuela
82	Tajikistan	92	Vietnam
83	Tanzania	93	Yemen
84	Thailand	94	Zambia
85	Turkey	95	Zimbabwe
86	Turkmenistan		

Overarching role of International Big Cat Alliance: Conservation beyond Borders

The International Big Cat Alliance (IBCA) can play a crucial role in addressing climate change, biodiversity conservation and ensuring livelihood generation through its focus on big cats.

Impact on Climate Change:

- **Protecting Big Cat Habitats:** Big cats often act as umbrella species. By conserving their vast habitats, the IBCA can indirectly protect a wide range of other species and ensure healthy ecosystems that play a vital role in carbon sequestration.
- **Promoting Sustainable Practices:** The IBCA can advocate for sustainable land-use practices within big cat landscapes. This could include reducing deforestation, promoting responsible forestry, and encouraging wildlife-friendly tourism practices. These efforts can help mitigate climate change by reducing greenhouse gas emissions and protecting carbon sinks.

Impact on Biodiversity Conservation:

- Maintaining Healthy Ecosystems: Big cats are apex predators, playing a critical role in maintaining balanced prey populations and healthy ecosystems. By ensuring their survival, the IBCA contributes to the overall biodiversity of the landscapes they inhabit.
- Addressing Human-Wildlife Conflict: The IBCA can work with local communities to develop strategies for mitigating human-wildlife conflict. This can help reduce retaliation killings of big cats and promote coexistence, ultimately benefiting both wildlife and people.
- **Raising Awareness:** By raising global awareness about the importance of big cats and the threats they face, the IBCA can indirectly promote the importance of biodiversity conservation as a whole.



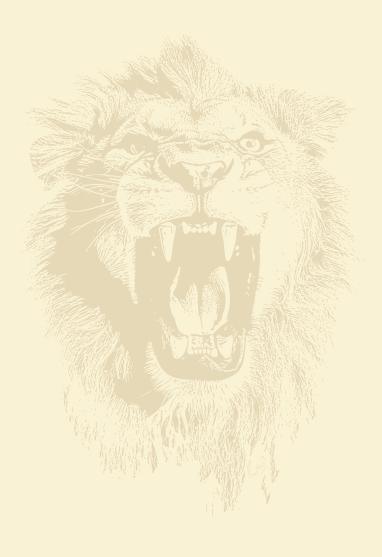


Fostering Community Participation:

- **Capacity Building:** Provide training and resources to empower local communities to participate actively in big cat conservation. This can include training in wildlife monitoring, protection patrols, and sustainable resource management practices.
- Alternative Livelihoods: Support initiatives that provide alternative income sources for communities, reducing their dependence on unsustainable practices that may harm big cats or their habitats.
- **Conflict Mitigation:** Help communities develop strategies to reduce human-wildlife conflict, fostering coexistence between humans and big cats.
- Awareness Campaigns: Collaborate with communities to raise awareness about the importance of big cat conservation and the role communities can play.

By focusing on big cat conservation, the IBCA has the potential to create a ripple effect that benefits a wider range of species and ecosystems. Healthy big cat populations can contribute to maintaining the delicate balance of nature, which is crucial for mitigating climate change and promoting overall biodiversity conservation. Overall, the IBCA has the potential to be a powerful force in addressing the twin challenges of climate change and ensuring the long-term survival of big cats through its focus on international collaboration, knowledge sharing, and community-centred conservation approaches.







JOIN HANDS 🥢 JOIN ALLIANCE

INTERNATIONAL BIG CAT ALLIANCE

118, Jor Bagh, First Floor New Delhi 110 003

Phone: +91 11 45063497, +91 8800304857

Email: ibcasectt@gmail.com https://twitter.com/IBCA_official