

GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

NO. 7877

4 September 2026

NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT, 2004 (ACT NO. 10 OF 2004)

THE DRAFT NATIONAL LEOPARD CONSERVATION STRATEGY AND ACTION PLAN, 2026 FOR PUBLIC COMMENT

I, David Maynier, Minister of Forestry, Fisheries and the Environment, hereby publish the draft National Leopard Conservation Strategy and Action Plan, 2026, in terms of sections 99 and 100 of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), for public comments, as set out in the Schedule hereto.

The draft National Leopard Conservation Strategy and Action Plan, 2026, (draft Strategy and Action Plan) proposes a shared national vision that *"leopards thrive in living landscapes, support cultural traditions and local livelihoods through inclusive, community-driven conservation."* It seeks to offer direction that aligns with the aspirational Vision of the White Paper on Conservation and Sustainable Use of South Africa's Biodiversity 2023 and the values and hopes of South Africans concerning leopards, and how leopards can benefit both society and the environment.

It envisions acknowledging leopards as a vital component of the nation's natural heritage, valued across cultures for their ecological, cultural and symbolic significance. By protecting leopard habitats and biodiversity, this Strategy and Action Plan could catalyse sustainable development and transformation within South Africa. The draft Strategy and Action Plan is also supported by goals and strategic activities that are based on the species a) ecological role, b) social and cultural values, and c) the livelihoods and impacts of leopards.

Members of the public are invited to submit written comments on the draft Strategy and Action Plan within 30 (thirty) days from the date of publication of this Notice in the *Government Gazette* or in the newspaper, whichever date is the last date, to the following addresses:

By post to: The Director General: Department of Forestry, Fisheries and the Environment
Attention: Ms Asnath Hlungwani/Ms. Mashudu Mahada
Private Bag X447
PRETORIA
0001

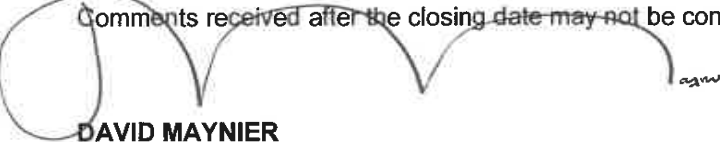
By hand at: Environment House, 473 Steve Biko Road, Arcadia, Pretoria, 0083

By email: ConservationManagement@dffe.gov.za.

Electronic copies of the Government Notice can be downloaded from the following link:
https://www.dffe.gov.za/legislation/gazetted_notices.

Any enquiries in connection with this Government Notice can be directed to Ms Asnath Hlungwani / Ms Mashudu Mahada on 076 819 3783 / 060 602 6560, or via email: MMahada@dfre.gov.za / Ahlungwani@dfre.gov.za.

Comments received after the closing date may not be considered.

A handwritten signature in dark ink, appearing to read 'DM', is written over the text 'Comments received after the closing date may not be considered.'

DAVID MAYNIER
MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

SCHEDULE

A National Leopard Conservation Strategy and Action Plan 2026



Photo credit: Nikki Balme

The document was drafted by a team comprising representatives from The Department of Forestry and Fisheries (DFFE), South African National Parks (SANParks), The South African National Biodiversity Institute (SANBI), iSimangaliso Wetland Park, Panthera, Cape Nature, North West Provincial Government, Mpumalanga Tourism & Parks Agency, and Ezemvelo KZN Wildlife.

Table of Content

Abbreviations and Acronyms	5
ACKNOWLEDGEMENTS	7
FOREWORD	8
EXECUTIVE SUMMARY	9
1. Introduction	11
2. Species Background	12
2.1 Taxonomy – South African Context.....	12
2.2 Ecology and Distribution.....	12
2.3 Population and Trends	13
2.4 Cultural and Economic Significance.....	14
2.5 Threats	14
2.6 Current Conservation Measures and Gaps	15
3 Policy and Legislative Context	16
4 Principles	16
5 Consultation Process	21
5.1 Multiple values and costs, constraints and responses	24
5.2 Strategic Trade Offs	25
6 National Vision and Impact Statement	29
7 Strategic Framework	29
7.1 Ecological Role of Leopards.....	29
7.2 Social and Cultural Values	30
7.3 Livelihood Impacts of Leopards.....	31
8 Enabling Conditions	31
1) Sustainable Finance	31
2) Participation, Communication, Education and Awareness	32
3) Legislation & Policy Reform	32
9 Strategic Framework Table (Table 4. Strategic Framework Table).....	33
10. Strategic Action Plan (Table 5. Strategic Action Plan Table).....	37
11. Implementation, Revision, Monitoring, and Evaluation	45
12. References & Further Reading	46

LIST OF TABLES

Table 1. Summary of key threats to leopards in South Africa. 15

Table 2. Stakeholders that participated in the consultation workshops. 21

Table 3. Summary table of the key points captured during feedback on values, costs, and constraints from the 31 national stakeholder workshops conducted in all provinces in South Africa from August to December 2024. 26

Table 4. Strategic Framework Table**Error! Bookmark not defined.**

Table 5. Strategic Action Plan Table.....**Error! Bookmark not defined.**

LIST OF FIGURES

Figure 1. Distribution of Leopard (*Panthera pardus*) within South Africa 13

Figure 2. Locations of the 28 in-person stakeholder workshops held across all provinces of South Africa in relation to surveys of key leopard populations. 24

Abbreviations and Acronyms

BGIS	Biodiversity Geographic Information System
BMPs	Biodiversity Management Plans
CATHSSETA	Culture, Art, Tourism, Hospitality, and Sport Sector Education and Training Authority
CHASA	Confederation of Hunting Associations of South Africa
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CLT	Cape Leopard Trust
CMS	Convention on the Conservation of Migratory Species of Wild Animals
COGTA	Department of Cooperative Governance and Traditional Affairs
CPHC	Custodians of Professional Hunting and Conservation South Africa
CSIR	Council for Scientific and Industrial Research
DALRRD	Department of Agriculture, Land Reform, and Rural Development
DCA	Damage Causing Animal
DFFE	Department of Forestry, Fisheries and the Environment
DIRCO	Department of International Relations and Cooperation
DTIC	Department of Trade, Industry and Competition
EAP	Environmental Assessment Practitioners Association of South Africa
ECDC	Eastern Cape Development Corporation
ECPTA	Eastern Cape Parks and Tourism Agency
EIA	Environmental Impact Assessment
EMS	EMS Foundation
EWT	Endangered Wildlife Trust
HWC	Human-Wildlife Conflict
HSI	Humane Society International
IDP	Integrated Development Plan
IKSHA	Indigenous Knowledge for Heritage: Animal Council
IUCN	International Union for Conservation of Nature
GBF	Kunming-Montreal Global Biodiversity Framework
GEF	Global Environment Facility
GIS	Geographic Information System
LCF	Leopard Consultative Forum
LEMA	Limpopo Environmental Management Act
LICC	Leopard Implementation Coordination Committee
MOU	Memorandum of Understanding
NBF	National Biodiversity Framework
NBSAP	National Biodiversity Strategy and Action Plan
NEMA	National Environmental Management Act
NEM: BA	National Environmental Management: Biodiversity Act
NEM: PAA	National Environmental Management: Protected Areas Act
NGO	Non-Governmental Organization
NHBC	National Hunting and Biodiversity Council
NSPCA	National Society for the Prevention of Cruelty to Animals
PA	Protected Area
PHASA	Professional Hunters Association of South Africa
PDI	Previously Disadvantaged Individuals
SANBI	South African National Biodiversity Institute

SANParks	South African National Parks
SAPS	South African Police Service
SAHGCA	South African Hunters Game & Conservation Association
SAVA	South African Veterinary Association
SDF	Spatial Development Framework
SDG's	Sustainable Development Goals
TOPs	Threatened or Protected Species Regulations
WAPFSA	Wildlife Animal Protection Forum South Africa
WP	White Paper on the Conservation of the Sustainable Use of South Africa's Biodiversity
WRSA	Wildlife Ranching South Africa
WWF-SA	World Wide Fund for Nature – South Africa

ACKNOWLEDGEMENTS

Individuals from the following groups are acknowledged for their contributions to the development of this National Leopard Conservation Strategy and Action Plan.

The core revision team with representatives from:

- DFFE
- SANBI
- SANParks
- Panthera
- iSimangaliso
- Cape Nature
- North West Provincial Government
- Mpumalanga Tourism & Parks Agency
- Ezemvelo KZN Wildlife

Groups and individuals participating in the consultations, including representatives from the:

- National and provincial houses of traditional leaders
- Traditional health practitioners
- National committee of People and Parks
- Leopard specialists and academics
- Conservation NGOs which have interests in leopard and animal welfare
- Officials from national and provincial State departments and entities with conservation mandates
- Provincial People and Parks committees representing communities living adjacent to:
 - Hluhluwe-iMfolozi Park
 - uMkhuze Game Reserve (a section of the Isimangaliso Wetland Park)
 - Kruger National Park
 - Great Fish River Nature Reserve
 - Addo Elephant National Park
 - Pilanesberg Provincial Nature Reserve

Community members living with leopards that congregated for the 28 workshops held in:

- | | |
|-----------------|---------------------|
| - Musina | - Hluhluwe-iMfolozi |
| - Awelani | - Bloemfontein |
| - Tshipise | - Taung |
| - Malamulele | - Kuruman |
| - Phalaborwa | - Upington |
| - Polokwane | - Keimoes |
| - Mogalakwena | - Springbok |
| - Bushbuckridge | - Alice |
| - Hazyview | - Addo |
| - Mbombela | - Humansdorp |
| - Pilanesberg | - George |
| - Pretoria | - Paarl |
| - Dinokeng | - Hout Bay |
| - uMkhuze | - Cape Town |

FOREWORD

Leopards are an ecologically important apex predator, a source of deep cultural pride and a bridge between South Africa's natural heritage and its diverse peoples. This assertion is supported by the feedback received from the nearly 2,000 individuals consulted across 31 workshops in all nine provinces during the preparation of this National Leopard Conservation Strategy and Action Plan. In addition to this contemporary understanding, the leopard's significance is entrenched in South African society, reflected in indigenous traditions where the leopard (Ingwe, nkwe, nngwe, yingwe, luiperd) symbolises strength, nobility, and royal lineage - a connection that has endured for centuries.

Contemporary history places South Africa at a critical juncture in leopard conservation, with leopards having experienced substantial range loss and extirpation across an estimated 67% of the country. Today, leopards persist in fragmented populations, with robust numbers mainly within formally protected fenced areas, while the majority of suitable habitat occurs outside these areas on private and communal land. Leopards remain the last truly free-roaming large predators in South Africa, yet they face mounting pressures from habitat loss and fragmentation, human-wildlife conflict, illegal killing, and declining prey availability.

Despite these challenges, South Africa still holds viable leopard populations across seven of its nine provinces. The country's leopard landscapes, from the mountainous Western Cape to the savannahs of Limpopo and the thickets of KwaZulu-Natal, retain the potential to support healthy, connected populations. A key element of this Strategy is a focus on managing leopards across different land tenure arrangements (state, private, and community-owned) in a more coordinated and inclusive manner, recognising that most leopards live outside of formally protected areas.

Escalating human-wildlife conflict, driven by livestock predation and competition for space, remains a significant concern. Retaliatory killings, often in response to livestock losses, poisonings, and snaring, pose direct threats to leopard populations. These pressures are compounded by a complex array of stakeholder values, ranging from cultural and spiritual significance to trophy hunting and ecotourism, that must be balanced through equitable, transparent, and evidence-based governance.

Efforts within South Africa to develop an inclusive biodiversity economy, and to ensure that an increased number of South African citizens, particularly previously disadvantaged communities, value leopards as living assets, are seen as essential to reducing human-leopard conflict and building tolerance. This Strategy includes specific activities to achieve these objectives, from community-led ecotourism and benefit-sharing mechanisms to livestock guarding programmes and rapid-response conflict mitigation frameworks. Coordinated and structured efforts by government, the private sector, traditional leaders, and communities are urgently needed to address the challenges facing leopard conservation. This Strategy therefore aims to introduce an approach to leopard stewardship such that a leopard provides ecological, cultural, and economic benefits to the people who live alongside them.

This National Leopard Conservation Strategy and Action Plan provides a strategic framework and detailed action plan for conserving leopards in South Africa. It consolidates previous policy and planning work on leopard management into a single, integrated tool, drawing on the White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity, the Policy Position on Elephant, Lion, Leopard and Rhinoceros, and most importantly, the values, costs, constraints, and aspirations expressed by stakeholders during the national consultation process. The Strategy uses a whole-of-society approach in the interest of both leopards and the people of South Africa, grounded in transformation, equity, and sustainable coexistence.

EXECUTIVE SUMMARY

Leopards are a highly adaptable apex predator and the most widespread of all large carnivore species. Yet in South Africa, they have experienced substantial range loss, estimated at 67% of their historical distribution. Leopards remain the last truly free-roaming large predators in the country, occurring both inside and outside formally protected areas, with the majority of suitable habitat on private and communal land. This presents both an opportunity and a challenge: leopards can persist across multi-use landscapes, but they face escalating pressures from habitat loss and fragmentation, human-wildlife conflict, illegal killing, declining prey availability, and governance gaps.

This National Leopard Conservation Strategy and Action Plan responds to these challenges. It is the first nationally coordinated strategy for leopards in South Africa, developed through a whole-of-society approach that consulted 1,980 participants across 31 workshops in all nine provinces. Stakeholders included traditional leaders, traditional health practitioners, religious leaders, community members (including People and Parks programmes), academics, conservation and welfare NGOs, wildlife industry representatives (farmers, reserve managers, hunters, tourism operators), and national and provincial government authorities.

A situational analysis was conducted to translate the Strategy into actionable components. The analysis examined current realities, identified implementation obstacles and key gaps, and specified resourced actions needed to make the Strategy implementable. It confirmed that while ecological and policy foundations exist, the absence of a coordinated, legally grounded, and adequately resourced implementation plan is the single greatest barrier to effective leopard conservation in South Africa. The analysis directly informed the Strategic Action Plan by addressing gaps in governance, data, funding, and inclusion.

While not a formal Biodiversity Management Plan (BMP) as contemplated in Section 43 of NEMBA, this National Leopard Conservation Strategy and Action Plan follows the same rigorous process framework. It is developed to guide the conservation, sustainable use, and inclusive governance of leopards (*Panthera pardus*) across South Africa. Like a BMP, it establishes measures to ensure the protection, conservation, and sustainable management of the species, enables evaluation of progress, and forms part of a dynamic, continuous management planning process that allows for review and monitoring of actions to accommodate changing priorities and emerging issues.

This Strategy has been developed to ensure the long-term survival of viable leopard populations across their range in South Africa, recognising that most suitable leopard habitat occurs outside of formally protected areas. It consolidates and integrates prior national initiatives, scientific assessments, and stakeholder inputs into a single national framework for leopards, in alignment with the White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity and the Policy Position on the Conservation and Sustainable Use of Elephant, Lion, Leopard and Rhinoceros. The persons, organisations, or organs of state responsible for implementing the interventions, including monitoring and reporting of progress, are identified. It serves as a tool to guide the management of leopards in the country, considering the concurrent responsibilities of National and Provincial spheres of Government as they relate to environmental and nature conservation matters.

This Strategy was drafted by a Core Team comprising officials of the DFFE, SANParks, SANBI, and iSimangaliso Wetland Park, with the support of provincial conservation authorities. Importantly, this Strategy took a whole-of-society approach through engagements with traditional leaders, traditional health practitioners, religious leaders, community members (including People and Parks programmes), academics, conservation and welfare NGOs, wildlife industry representatives (including game and cattle farmers, reserve managers, hunters, and tourism operators), and members of national and provincial government concerned with leopards.

Strategic imperatives and plans that have been considered in the development of this Strategy include the National Leopard Monitoring Framework, the Leopard Consultative Forum (LCF) processes, and the findings of the national stakeholder consultation conducted across all nine provinces involving 1,980 participants. The Strategy also draws on the White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity, the Policy Position on the Conservation and Sustainable Use of Elephant, Lion, Leopard and Rhinoceros, and the report of the High-Level Panel of experts (2020). Furthermore, this Strategy considers provincial legislative frameworks, CITES obligations, South Africa's standing reservation for leopards under CMS, and relevant international commitments including the Kunming-Montreal Global Biodiversity Framework (GBF). Critically, the Strategy is grounded in the values, costs, constraints, and aspirations expressed by traditional leaders, traditional health practitioners, religious groups, community members, landowners, and conservation stakeholders during the consultation process. In this respect, this Strategy serves as the national species recovery plan for leopards in South Africa, addressing issues of habitat loss and fragmentation, human-wildlife conflict, illegal killing, declining prey availability, and governance gaps, amongst other priorities such as advancing transformation, community empowerment, cultural heritage preservation, and livelihood improvement through predator-based economies.

The Strategy articulates a Vision: *Leopards thrive in living landscapes, support cultural traditions and local livelihoods through inclusive community-driven conservation.* It is structured around three core Goals:

1. **Ecological Role of Leopards** – Conserve leopards and their landscapes by strengthening ecological resilience, connecting habitats, and reducing threats.
2. **Social and Cultural Values** – Preserve cultural heritage, promote sustainable practices, and ensure safe and inclusive access to leopards and protected areas.
3. **Livelihood Impacts of Leopards** – Increase fair opportunities for people to benefit from leopards while reducing the challenges they pose to livelihoods.

The Strategy explicitly recognises that it is not possible to simultaneously accommodate all stakeholder needs. Strategic trade-offs are required, particularly between consumptive use (trophy hunting, traditional use of derivatives) and non-consumptive use (tourism, intrinsic value). A strategy focused exclusively on preservation will alienate a large proportion of stakeholders. Conversely, unregulated consumptive use will lead to rapid extirpation. This Strategy aims to balance these competing objectives through equitable, transparent, and evidence-based governance.

The Strategy establishes **enabling conditions for success: sustainable finance; participation, communication, education and awareness; legislation and policy reform.** It provides a detailed Strategic Action Plan with nineteen key activities assigned to priority levels, a phased ten-year timeline, and clear lead institutions and accountability mechanisms. A Leopard Implementation Coordination Committee (LICC) will oversee implementation, with annual reporting to the Minister of DFFE, a five-year Action Plan review cycle, and a ten-year review of the Vision and Goals. This ensures the same level of commitment, accountability, and adaptive management expected of a formal BMP, while retaining the strategic flexibility appropriate to a national conservation strategy.

The Strategy requires provinces, protected area management authorities, and relevant stakeholders to revise or develop institutional plans for leopards aligned to this Strategy. This Strategy serves as the national species recovery plan for leopards in South Africa, addressing both conservation imperatives and the aspirations of the country's diverse peoples, advancing transformation, community empowerment, cultural heritage preservation, and livelihood improvement through predator-based economies.

1. Introduction

The African leopard *Panthera pardus pardus* derives its name from the Greek word *leopardus*, a combination of *leon* (lion) and *pardus* (panther). Leopards are a highly adaptable species and are therefore widespread across their range. Leopards are listed as Vulnerable on the IUCN Red List of Threatened Species and on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Across the region, in Botswana, Namibia, Mozambique, Zimbabwe, and Zambia, leopard range is relatively contiguous and populations exist at low densities across large areas. Within South Africa, they live in smaller, fragmented, higher density populations within formally protected fenced areas. However, most suitable leopard habitat in South Africa occurs outside of protected areas and thus a substantial proportion of the national leopard population occurs outside of these areas. Transboundary movement does occur and as such, important transboundary leopard landscapes are a focal point for conservation and coexistence initiatives. With reference to the transboundary nature of leopards, since 2017, leopards have been listed on Appendix II of the Convention on the Conservation of Migratory Species of Wild Animals (CMS). South Africa however, currently has a standing reservation for leopards under CMS, meaning that the country is not bound by the obligations that would normally apply to leopards under CMS; for example, adopting certain conditions around consumptive use.

Due to their extensive range, leopards form an important component of many ecosystems and therefore they can be considered an umbrella species, whose protection also conserves other species and systems. Occurring widely both inside and outside of formally protected areas, African leopards are highly representative of the human-wildlife nexus, as such, carry cost, and benefit values for people living with them. With landscapes between many protected areas containing human settlements and associated highly modified habitat, leopard-human conflict presents a significant cost for communities and landowners and poses one of the most difficult challenges facing their conservation. Conversely, leopards are also revered by many South African cultures and religions and are frequently upheld nationally and internationally as a flagship species for the country. Their skins and body parts are valued for use in religious ceremonies and for traditional medicine, and hold great intergenerational spiritual value. The species is also considered an important asset for attracting international tourism and revenue from photographic safaris and trophy hunting, and consequently, is associated with local job creation and more broadly, local livelihood improvement. As a result, stakeholder agendas, attitudes, and values placed on leopards are diverse and complex, requiring creative and dynamic whole-system approaches to their conservation.

In South Africa, leopards are managed through a combination of legal, policy, scientific, and governance frameworks. This multifaceted approach is grounded in a broad legal and policy framework that includes national legislation, species-specific regulations, and strategic biodiversity planning (see section 3). The framework is designed to ensure the long-term survival of leopards through regulated activities, scientific monitoring, and adaptive management. It also integrates provincial regulations, international commitments, and collaborative governance structures to support implementation across different jurisdictions and conservation contexts.

The National Constitution (1996) recognises that South Africa belongs to all people who live in it and makes reference to the objective of establishing a society on, amongst others, fundamental human rights. These human rights include the right to environmental protection and indirectly, the protection of animals. Other rights, however, protect ownership of property, the exercise of cultural and religious rights and allow for the use of animals such as leopards. However, a shared vision for managing and conserving leopards amongst South Africa's citizens is lacking. The country is a nation of diverse cultures, with a historical and ongoing legacy of social injustices. Many of its citizens have no access to cultural and other values of leopards and do not have opportunities to participate in decision-making processes concerning the species.

2. Species Background

2.1 Taxonomy – South African Context

Kingdom: Animalia

Phylum: Chordata

Class: Mammalia

Order: Carnivora

Family: Felidae

Genus: *Panthera*

Species: *P. pardus* (Linnaeus, 1758)

2.2 Ecology and Distribution

Although the smallest of the five big cat species found within the genus *Panthera* (including tigers - *Panthera tigris*, lions - *Panthera leo*, jaguars - *Panthera onca*, and snow leopards - *Panthera uncia*), leopards have a body mass ranging from 20-90 kg for males and 17-60 kg for females. They are generalist apex predators considered the most adaptable among the big cats. Leopards prey upon a wide range of species and can inhabit many diverse environments. They are a solitary, territorial species, with males defending an exclusive territory that typically contains the territories of several females. Leopards are not migrant but disperse across large areas, which facilitates sufficient gene flow to ensure genetic viability within the population.

The home ranges of male and female leopards differ significantly, with males having much larger ranges than females (generally at least double the size). The average home range size of male leopards in the species global distribution was found to be 161.1 ± 39.2 km², with females having an average home range of 68.1 ± 12.7 km² (Rodríguez-Recio *et al.*, 2022). Home range size can vary greatly depending on multiple factors such as prey availability, landscape productivity, human activity, seasonality, and the presence of other large carnivores (including other leopards). In the Waterberg, Limpopo region of South Africa, male leopards have range sizes of around 290 km² (Swanepoel, 2008). In the arid Kgalagadi, male and female home ranges averaged 2,182 km² and 488 km² respectively (Bothma, 1998). Male leopards in the Soutpansberg Mountains, have shown a home range of approximately 100 km², whereas female ranges in the same area were approximately 20 km² (S. Williams unpubl. data). Interspecific interactions can have a large influence on leopard ecology and survival affecting their movement and home ranges.

Leopards are the most widespread of all large carnivore species, yet have still experienced a substantial loss (28–51%) of their historical range in Southern Africa, with South Africa experiencing the greatest range loss; leopards have been extirpated across 67% of the country (Jacobson *et al.*, 2016) (Figure 1). Unlike other apex predators in South Africa, leopards are not restricted by fences and are the last truly free-roaming, large predators; however, in regions with high human density or significant habitat modification, the species has gone locally extinct. With the exception of the Free State Province and the larger Karoo basin in the Northern and Western Cape, leopards are widely distributed in all provinces in South Africa (Figure 1). They also occur in all biomes of the country, but to a lesser extent in the Nama Karoo and Succulent Karoo biomes. Although leopards were historically found in Lesotho and the Free State Province, they are now extremely rare or non-existent in these regions.

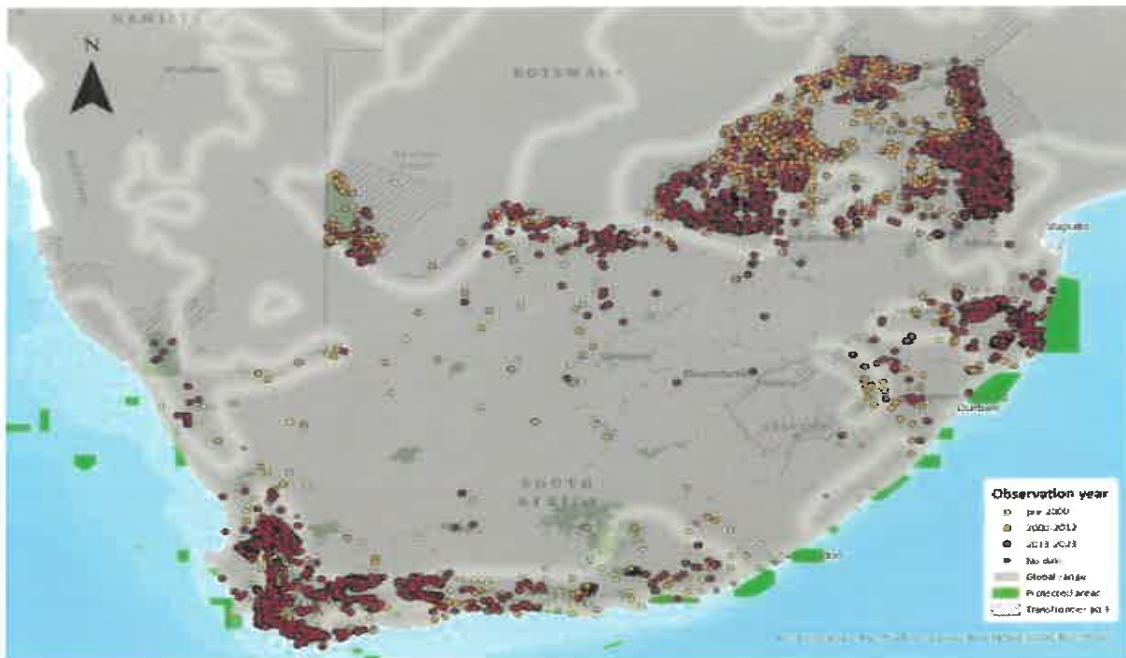


Figure 1. Distribution of Leopard (*Panthera pardus*) within South Africa (Mann et al., 2025)

2.3 Population and Trends

There are no rigorous estimates for the size of the South African leopard population and published estimates vary greatly from 2,185 - 23,400 individuals. However, the National Leopard Monitoring project showed a ~2.6% annual population increase (Woodgate et al., 2025). This contrasts with a previously reported national decline of ~3% per year up to 2022 (Garbett et al., 2023) and an ~8% decline in earlier assessments (Mann et al., 2017).

Provincially, leopard population trends vary. The most recent data for Limpopo and North-West provinces showed more positive or stable long-term trends than KwaZulu-Natal (KZN) and Mpumalanga, with KZN showing a ~3% annual decline. In Limpopo, leopard densities declined from 2013-2015 but appeared stable from 2017 onward (Mann et al., 2017). By 2021, Limpopo's populations were more stable than KwaZulu-Natal's (KZN), possibly due to fewer threats or greater resilience. KZN's leopard populations appeared to continue on a downward trend: three of five long-term sites (Eastern Shores, Hluwe-iMfolozi Park, Ithala) showed declines, whilst Tembe and uMkhuze are recovering (Garbett et al., 2023).

Populations in Kruger National Park (KNP), adjacent private reserves, and Loskop Dam Nature Reserve (Mpumalanga) remain stable, with high densities in Sabi Sands (Mann et al., 2017). Timbavati (Mpumalanga) showed a sharp 2018-2019 decline, possibly due to COVID-19 survey disruptions, but 2021-2022 estimates appear to have rebounded (Garbett et al., 2023). Data for the Eastern Cape are scarce, but suggest that leopard densities are also low in this province, with a recent density estimate of 1.07 leopards/100 km² in the Baviaanskloof and a seemingly stable population in Kwandwe (Eastern Cape) (Woodgate et al., 2024). In the Western Cape leopards are fairly widely distributed but exist at extremely low densities ranging from 0.35 leopards/100 km² in the Overberg, Langeberg, and Garden Route regions to 1.96 in the Piketberg and the Olifantsrivier Mountains leopards/100 km².

Little Karoo sites increased from 0.6 to 1.1 leopards/100 km² (2012–2017) (Mann et al., 2017). Trends elsewhere in South Africa are unknown due to insufficient data; large, protected areas are probably stable, but this is speculative.

2.4 Cultural and Economic Significance

Leopards carry deep cultural and spiritual importance in South Africa, particularly among Indigenous communities and traditional religious groups. Within Zulu culture, the leopard (Ingwe) symbolises strength, nobility, and royal lineage, and its derivatives (mainly skins) are worn by traditional chiefs during important ceremonies. Similarly, leopard skins and parts are used by religious leaders and practitioners in the Nazareth Baptist Church, as well as in traditional healing and spiritual practices. These uses are rooted in longstanding Indigenous Knowledge Systems (IKSs) and represent an enduring cultural connection between people and wildlife.

Leopards contribute both directly and indirectly to national and local economies. In the formal wildlife economy, they are a high-value species in regulated trophy hunting operations, which can generate income for private and communal landowners and fund conservation efforts. Leopards are also a significant ecotourism draw, especially in iconic reserves such as Sabi Sands, where their elusive nature and charisma attract local and international visitors, supporting jobs in guiding, hospitality, and wildlife management.

At the community level, leopards affect livelihoods in complex ways. On one hand, they can provide income opportunities through community-based conservation initiatives, citizen science projects, and wildlife-based enterprises. On the other hand, they are also a source of human-wildlife conflict, particularly in livestock-farming areas where they may prey on small stock. These losses can undermine tolerance and lead to retaliatory killings. Addressing this tension is critical: integrating leopards into benefit-sharing schemes, improving livestock protection, and co-developing coexistence frameworks can enhance both rural livelihoods and long-term species conservation. Thus, leopards are not only an ecologically important species, but also culturally symbolic and economically impactful species whose conservation must consider both cultural identity and human well-being.

2.5 Threats

Leopards in South Africa face a complex array of threats, primarily driven by human activities, habitat changes, and ecological pressures (Table 1). One of the most pressing issues is habitat loss and fragmentation caused by expanding agriculture, urban development, and infrastructure projects. This reduces the availability of suitable leopard habitat and disrupts natural movement corridors, isolating populations and affecting genetic flow. Human-wildlife conflict is another significant threat, as leopards frequently come into contact with livestock in farming areas. In response, they are often killed in retaliation, especially where preventative measures like livestock guarding or secure enclosures are not in place. Illegal killing also poses serious risks. Leopards are targeted for their skins and body parts, which are used in traditional medicine, ceremonial attire, and spiritual practices.

Declining prey availability in some regions, driven by habitat degradation and overhunting, further forces leopards into high conflict areas or marginal habitats. Over time, habitat fragmentation and isolation can lead to genetic bottlenecks, reducing population viability. These threats are often compounded by governance gaps, where inconsistent policies, weak coordination between jurisdictions, and limited enforcement capacity undermine effective leopard conservation. The below table provides a summary of the key threats to national leopard populations.

Table 1. Summary of key threats to leopards in South Africa.

Threat Type	Description	Citations
Anthropogenic mortality	Retaliatory killings, poaching, snaring, cultural/spiritual demand for body parts/skins, and illegal trade.	(Naude et al., 2020; Müller et al., 2021; Viollaz et al., 2021; Greyling et al., 2023; Tensen et al., 2022; Naude et al., 2020; Amin et al., 2022).
Habitat loss/fragmentation	Agricultural expansion, land transformation, and loss of corridors.	(Hinde et al., 2023; Greyling et al., 2023; McManus et al., 2022; Amin et al., 2022).
Human-wildlife conflict	Livestock predation leading to conflict and retaliatory killings.	(Müller et al., 2021; Viollaz et al., 2021; J.E.T. et al., 2024; Greyling et al., 2023).
Genetic isolation	Inbreeding due to disrupted dispersal and habitat fragmentation.	(Naude et al., 2020; Morris et al., 2022; Tensen et al., 2022; McManus et al., 2022).
Prey depletion	Overhunting and poaching of prey species.	(Greyling et al., 2023; Searle et al., 2020; McManus et al., 2022).
Governance gaps	Uneven provincial capacity, inconsistent permits/enforcement, fragmented monitoring, ineffective conflict response.	(Mercugliano et al., 2025; McManus et al., 2022; Falayi et al., 2021; Viollaz et al., 2021).

2.6 Current Conservation Measures and Gaps

A range of conservation measures have been implemented to manage leopard populations in South Africa, but these efforts are largely fragmented, inconsistent, and limited in scale or impact.

Key approaches include adaptively managed trophy hunting, management of damage-causing animals, conflict mitigation measures, and research-based monitoring. These interventions are guided by a comprehensive national legislative and policy framework that regulates wildlife use and conservation, with national monitoring and reporting systems providing coordination. However, implementation may vary across provinces, conservation authorities, and private reserves in response to differing ecological and management contexts.

A significant gap is the limited amount of standardised, long-term population monitoring, which hinders evidence-based decision-making and undermines the ability to set sustainable hunting quotas or assess conservation outcomes. Furthermore, while leopards occur widely outside protected areas, especially on private and communal land, there is little formal support or incentive structure in place to promote their conservation in these landscapes. Human-wildlife conflict remains a major issue, with limited access to support mechanisms for affected communities and inconsistent application of mitigation strategies.

Some legal and policy frameworks are misaligned or poorly enforced, and limited inter-agency coordination and insufficient resources make conservation interventions challenging. There are also few formal benefit-sharing mechanisms to ensure communities have incentives to tolerate and protect leopards. Despite the species' ecological, cultural, and economic importance, efforts remain disjointed, and national level coordination often fails to drive strategic and inclusive conservation.

These gaps demonstrate the need for a comprehensive, nationally coordinated strategy that aligns conservation actions, strengthens governance and enforcement, builds local capacity, and ensures equitable benefits. A national

leopard strategy provides an opportunity to unify diverse stakeholders under a common vision for safeguarding the species and its habitats across the country.

3 Policy and Legislative Context

The National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and its Specific Environmental Management Acts (SEMA's) thereunder, such as the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEM: BA) and the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) (NEM: PAA) and their regulations, provide legal support for South Africa's environmental management regime, which is based on the environmental right outlined in Section 24 of the Constitution. A combination of regulatory tools is grounded within the national environmental framework, which complement international commitments and collaborative governance to support implementation across a broad spectrum of contexts. Each province with concurrent competence has its own set of legal frameworks that apply to it. Aspects of leopard protection and sustainable use are also governed by laws from other branches of government. The below provides an overview of South Africa's environmental legal and policy framework.

3.1 National Legal and Policy Frameworks

a. National Environmental Management: Biodiversity Act (NEM:BA, Act 10 of 2004)

- Provides for the protection of species and ecosystems at national level through listing as Threatened or Protected Species (TOPS).

b. TOPS Regulations (2007) and List of critically endangered, endangered, vulnerable and protected species

- Leopards are listed as Vulnerable, and permits are required for any restricted activity, such as hunting, catching, killing, capturing, moving or keeping, as defined in NEM:BA, 2004.
- Further regulate the permit system set out in Chapter 7 of the NEM: BA in so far as that system applies to restricted activities, as defined in NEM: BA involving specimens of listed threatened or protected species.
- Provide for the registration of captive breeding operations, commercial exhibition facilities, game farms, nurseries, scientific institutions, sanctuaries and rehabilitation facilities and wildlife traders.
- Provide for the regulation of the carrying out of a restricted activity.
- Provide for the prohibition of restricted activities involving specific listed threatened or protected species.
- Provide for the protection of wild populations of listed threatened or protected species.

c. CITES Regulations:

- It is a requirement of CITES that Parties must regulate international trade through national legislation, hence the promulgation of the CITES Regulations in 2010 under NEMBA, to give effect to the provisions of CITES.

d. National Biodiversity Framework (NBF) and National Biodiversity Strategy and Action Plan (NBSAP)

- Set national priorities for species conservation, including leopards as part of carnivore conservation and landscape-level planning.

e. *The White Paper*, published in Government Gazette No. 48785, under Government Notice No. 3537, of 14 June 2023 for implementation, provides a foundation for conservation and sustainable use in terms of its four goals, namely:

- 1) Enhanced Biodiversity Conservation (All biological diversity and its components conserved);
- 2) Sustainable Use (The sustainable use of biodiversity contributes to the thriving of terrestrial landscapes and ecosystems, local livelihoods, and human well-being, while a duty of care avoids, minimises, or remedies adverse impacts on biodiversity);
- 3) Equitable Access and Benefit Sharing (Benefits derived and shared from the use and development of South Africa's genetic and biological resources should not compromise the national interests); and
- 4) Transformed Biodiversity Conservation and Sustainable Use (Effect is given to the environmental right as contained in Section 24 of the Constitution which facilitates redress, and promotes transformation).

As well as two crosscutting Enablers:

- 1) Enabler 1: Integrated, Mainstreamed and Effective Biodiversity Conservation and Sustainable Use: Integrated policy and practice across government and the effective implementation of Multilateral Environmental Agreements; and
- 2) Enabler 2: Enhanced Means of Implementation: Expanded and developed ability to effectively conserve biodiversity, to manage its use and benefit sharing, whilst addressing factors threatening biodiversity.

The White Paper sets out the vision: *"An inclusive, transformed society living in harmony with nature, where biodiversity conservation and sustainable use ensure healthy ecosystems, with improved benefits that are fairly and equitably shared for present and future generations"*, with the Mission: *"To conserve and manage South Africa's biodiversity, and ensure healthy ecosystems, ecological integrity and connectivity, with transformative socio-economic benefits to society for current and future generations through ecologically sustainable, and socially equitable use of what people values from nature"*. The White Paper impact statement is *"Thriving People and Nature"*.

The White Paper explicitly recognises that responsibility rests with a range of stakeholders, including, but not limited to, the state, traditional leaders, traditional health practitioners, communities, private landowners, industry, academia, non-government organisations and civil society. Building partnerships, particularly community – private partnerships, between these constituencies will be important, and this National Strategy for Conserving Leopards in South Africa takes this approach.

f. Policy Position on the Conservation and Sustainable Use of Elephant, Lion, Leopard and Rhinoceros:

The Policy Position on the Conservation and Sustainable Use of Elephant, Lion, Leopard and Rhinoceros (Policy Position) was published for implementation on 24 April 2024 and was based on the Rhino COI, the HLP Report, and the White Paper. The Policy Position contains two objectives pertinent to leopards which fall under two policy objectives. Each policy objective has associated Actions for Implementation some of which are relevant to this strategy. The policy objectives are:

Policy objective 3: to ensure that the use of leopard is sustainable and incentivises and enhances their conservation in the wild:

- I. An integrated, shared and strategic approach to leopard conservation and management implemented;

- II. Incentives for leopard conservation through, inter alia creating zones for the management of leopard on private and communal land implemented, with mechanisms to mitigate the illegal harvesting of leopard;
- III. Norms and Standards for hunting leopard implemented;
- IV. Revised leopard hunting off-take allocations to enhance, broaden, and transform benefits from leopard hunting implemented;
- V. Interventions for mitigating the creation of damage causing leopards, and, through mitigation, transitioning from Damage Causing Animal destruction to evidence-based sustainable harvesting of leopard through hunting, where appropriate; and
- VI. Mechanisms to collaborate with traditional and spiritual leaders and traditional healers, and to ensure legal, equitable, and sustainable access to, and benefits derived from, leopard parts and derivatives, e.g. skins for traditional, cultural, and spiritual needs, that enhances the dignity and freedoms required for such traditional and spiritual practices.

Policy objective 4: To promote live export of the five species only to range states or any other appropriate and acceptable destinations with suitable habitats on the African continent:

- I. Develop enabling regulatory tools to prevent the introduction of wild specimens of the five species into captivity, to prevent the export of specimens of the five species, except to range states or any other appropriate and acceptable destinations with suitable habitat on the African continent, for reintroduction into the wild;
- II. At the time of export, to ensure commitment from the Management Authority of the importing country to prevent (i) export to third countries other than appropriate and acceptable destinations with suitable habitats on the African continent; and (ii) international commercial trade of parts and derivatives.

g. National Biodiversity Economy Strategy

The revised National Biodiversity Economy Strategy (NBES) (Government Gazette, No. 50279, published for public comment on 8 March 2024) was developed to optimise biodiversity-based business potentials across the terrestrial, fresh water, estuarine, and marine and coastal realms, and to contribute to economic growth with local beneficiation, job creation, poverty alleviation, and food security, whilst maintaining the ecological integrity of the biodiversity resource base, for thriving people and nature.

The NBES focuses on using South Africa's rich natural resources to support both conservation and economic development. It promotes inclusive growth in areas like ecotourism, sustainable wildlife and marine use, and bioprospecting, with an emphasis on benefiting local communities and previously disadvantaged individuals. By strengthening policies, building capacity, encouraging innovation, providing financial support, and improving market access, the strategy aims to create a thriving biodiversity economy that supports both people and nature.

Consistent with the policy context of the White Paper, the NBES is founded on the key pillars of conservation, sustainable use and beneficiation of biodiversity business value chains which will promote sustainable and inclusive socio-economic development. This requires growing and sustaining conservation land and seascapes while promoting and facilitating inclusive biodiversity-based businesses that drive a thriving and inclusive biodiversity sector. Importantly, broadening the NBES in revision provides increased opportunity to contribute to achieving more elements of the National Development Plan and the Sustainable Development Goals. This emphasises the importance of sustainable use of biodiversity as key to inclusive socio-economic development, especially when effectively mainstreamed into cross-sectoral planning.

3.2 Provincial Legislation and Implementation Frameworks

Each province manages leopards through provincial biodiversity legislation and permitting systems, aligned to NEM:BA. Key provinces include:

- **Limpopo:** The Limpopo Environmental Management Act, 2003 (Act No. 7 of 2003).
- **Mpumalanga:** The Mpumalanga Nature Conservation Act 10 of 1998 (Act No. 10 of 1998).
- **KwaZulu-Natal:** KwaZulu-Natal Nature Conservation Management Act (Act 9 of 1997).

- **Eastern Cape:** The Ciskei Nature Conservation Act No.10 of 1987 (Act No. 10 of 1987); The Transkei Decree No 9 of 1992.
- **North West:** North West Biodiversity Management Act, 2016 (Act No. 4 of 2016).
- **Western Cape:** Western Cape Biodiversity Act 6 of 2021.
- **Free State:** Free State Nature Conservation Ordinance 8 of 1969.
- **Gauteng:** The Gauteng Provincial Environmental Management Framework (GPEMF), 2021.
- **Northern Cape:** Northern Cape Nature Conservation Act, 9 of 2009.

Provinces are also responsible for monitoring leopard populations and evaluating hunting applications, under guidance from national structures.

3.3 International Agreements

a. The Convention on Biological Diversity (CBD)

South Africa is a signatory to the CBD, and this imposes an international responsibility on the country to conserve its leopard populations. The objectives of the CBD are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising from the utilization of genetic resources. The programmes of work developed under the CBD encourage Parties to take a wide range of actions to biodiversity conservation and sustainable use.

b. The Global Biodiversity Framework (GBF) and relevant targets

The Global Biodiversity Framework emanated from the CBD Conference of Parties held in 2022. The outcome of the COP resulted in the generation of 23 targets aimed at addressing critical issues affecting biodiversity conservation. Parties to the CBD are obligated to adapt and domesticate these targets in order to enable optimal implementation. There are several targets that will play an indirect role for the Leopard Conservation Strategy, in its implementation, specifically:

Target 3 which is to “*Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories*”. Target 3 supports improved protection and connectivity for leopard through potential expansion of habitats.

Target 4 which is to “*Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence*”

c. CITES (Convention on International Trade in Endangered Species)

- Leopards are listed on Appendix I: international commercial trade is highly restricted.
- South Africa receives an annual export quota for leopard trophies (currently 150), subject to scientific review and population status.

b. IUCN Red List Assessments

- Guides conservation priorities; South African leopards are nationally listed as Vulnerable, although local extinctions are occurring.

3.4 Scientific and Technical Frameworks

a. National Leopard Monitoring Framework

- Combines camera trapping, expert consultation, and structured models to inform trophy hunting quota setting.
- Involves collaboration between SANBI, DFFE, NGOs, Wildlife Industry organisations, researchers, and provincial authorities.

b. Research and Adaptive Management

- Scientific studies on density, connectivity, human-wildlife conflict, and genetic integrity are used to adapt management.
- Increasing use of spatially explicit population models to guide sustainable use decisions:

3.5 Governance and Stakeholder Platforms

a. Wildlife Forum

- Consultative platform between government, wildlife industry and conservation NGO stakeholders on matters related to wildlife industry and the biodiversity economy

b. Wildlife Wellbeing Forum

- Consultative platform between government, animal welfare and wellbeing organisations in support of the well-being of wild animals, including elements of conservation, protection, management and ecologically sustainable, responsible and humane use of wildlife

c. Leopard Consultative Forum (LCF)

- Consultative platform for government and non-government stakeholders in support of conservation and sustainable use of leopards to ensure equitable values and benefits within the legislative structure.

d. National Hunting and Biodiversity Council (NHBC)

- Coordinates between hunting industry, government, and conservation NGOs on policy implementation.

e. Stakeholder Consultations

- Public participation processes are required for major policy shifts (e.g., Norms and Standards updates, hunting quotas) as prescribed in section 99 and 100 of NEMBA.

4 Principles

The Strategy is embedded within South Africa's biodiversity conservation and sustainable use aspirations as outlined in the White Paper. As such, these are the backbone of the Strategy as well:

Transformation - The biodiversity sector must become more inclusive and equitable, addressing past injustices and empowering historically disadvantaged communities.

Sustainable Development - Conservation and use of biodiversity must integrate environmental, economic, and social objectives, ensuring present needs are met without compromising those of future generations.

Good Governance - Effective institutions, transparent decision-making, coherent legislation, and clear accountability are critical for managing biodiversity. Governance must be strong, integrated, and capable.

Evidence-Based Decision-Making - Policies, planning, and management must be informed by reliable scientific data, traditional knowledge, and monitoring. Decisions should be grounded in best available evidence.

Duty of Care - Individuals and organisations have a legal and moral responsibility to avoid, minimise, or remedy negative impacts on biodiversity. This duty supports long-term ecosystem health and ethical resource use.

Apart from these foundational principles, two additional ones are of importance.

Adaptive Management and Flexibility - Conservation must be responsive to changing socio-economic conditions and expectations. Management should remain flexible, guided by learning, evidence, and regular feedback to stay effective in a dynamic context.

Minimal Interference - Management should prioritise minimal intervention, allowing natural processes to guide carnivore dynamics unless action is necessary to prevent harm, support population viability, or resolve significant conflict.

This Strategy was thus developed and constructed within these principled aspects.

5 Consultation Process

A stakeholder mapping process was conducted to identify key stakeholders that would be important in the consultation process for the development of the Strategy. This process resulted in the identification of the stakeholders in Table 2.

Table 2. Stakeholders that participated in the consultation workshops.

Stakeholder Groups	Stakeholders
National Government Departments and their Entities	- Department of Forestry, Fisheries and the Environment (Biodiversity and Conservation; Regulatory Compliance and Sector Monitoring) - Department of International Relations and Cooperation (DIRCO) - Department of Sports, Arts and Culture - Department of Tourism - Department of Science, Technology and Innovation - South African National Biodiversity Institute (SANBI) - South African National Parks (SANParks) - iSimangaliso Wetland Park - South African National Police Services (SAPS)
Provincial Government and their Entities	- Eastern Cape Province: Department of Economic Development, Environmental Affairs and Tourism - Eastern Cape Parks & Tourism Agency (ECPTA)

	• Free State: Department of Economic, Small Business Development, Tourism and Environmental Affairs • Gauteng Province: Department of Environment • Limpopo Province: Department of Economic Development, Environment and Tourism • Northern Cape Province: Department of Environment and Nature Conservation • North West: Department of Economic Development, Environment, Conservation and Tourism • CapeNature • Ezemvelo KwaZulu-Natal Wildlife • Mpumalanga Tourism and Parks Agency • North West Parks and Tourism Board
Community Organisations and Programs	• People and Parks Programme • Traditional Health Practitioners and Healers Organisations • Traditional Leaders • Religious Leaders • Nature Speaks • IKSHA: Indigenous Knowledge for Heritage: Animal Council • National Unitary Profession Association for African Traditional Health Practitioners of South Africa (NUPAATHPSA) • Nature Heritage Alliance • Healers for Change
Academic Institutions	• African Leadership University • Nelson Mandela University • Tshwane University of Technology • University of Cape Town • University of Mpumalanga • University of Pretoria • University of Venda • University of Witwatersrand • Stellenbosch University
Non-Government Organisations; Industry; Research & Wildlife Sector	• Biodiversity Law Centre • Cape Leopard Trust (CLT) • The Confederation of Hunting Associations of South Africa (CHASA) • Custodians of Professional Hunting and Conservation South Africa (CPHC) • Endangered Wildlife Trust (EWT) • Elizabeth Margaret Steyn (EMS) Foundation • Humane Society International (HSI), now known as Humane World • Ingwe Leopard Project • Landmark Foundation • Leopard Consultative Forum - represents collective NGOs • Natural Justice • National Society for the Prevention of Cruelty to Animals (NSPCA) • Professional Hunters Association of South Africa (PHASA) • Predation Forum • Private Protected Area Managers and Landowners

	• South African Hunters and Game Conservation Association (SAHGCA) • South African Veterinary Association (SAVA) • TRAFFIC • The African Farmers Association of South Africa • The Agricultural Economics Association of South Africa • Wildlife ACT • Wildlife Animal Protection Forum South Africa (WAPFSA) • Wildlife Well-being Forum • Wildlife Ranching South Africa (WRSA) • WWF-SA • Tourism Operators
--	--

A series of 31 stakeholder consultation workshops were conducted at key locations, determined as leopard 'hotspot' areas where communities live near prominent leopard populations. These locations spanned all the nine provinces in South Africa and workshops were held between 28th August 2024 and 3rd December 2024. The Core Team running the workshops consisted of the DFFE, Panthera, SANParks, SANBI, iSimangaliso, and the Cheetah Advisory Group, with the support of all the provinces. The workshops were aimed at engaging with provincial structures and communities, including traditional leaders, traditional health practitioners, and People and Parks programs. The workshops introduced the project and the purpose and content of the workshop and then allowed participants to form breakout groups. These groups focused on discussing and giving feedback on the main workshop questions.

Individual questionnaires were also disseminated at the beginning of the workshop to gather additional information for stakeholder mapping. All feedback during a final plenary session was recorded and all completed written materials were collected. Three of the thirty-one workshops were conducted virtually, using the same consultation approach, to capture feedback from academics, conservation and welfare NGO's, species specialists (including veterinarians)¹, wildlife industry - game and cattle farmers, reserve managers, hunters, tourism operators², national entities and provinces³, and intergovernmental structures⁴. Overall, the workshops were attended by 1,980 participants in total. However, given that many of these participants serve as representatives of their respective stakeholder groups, the reach and influence of the consultations extended beyond the number of individuals who directly attended, resulting in a significantly larger audience being engaged.

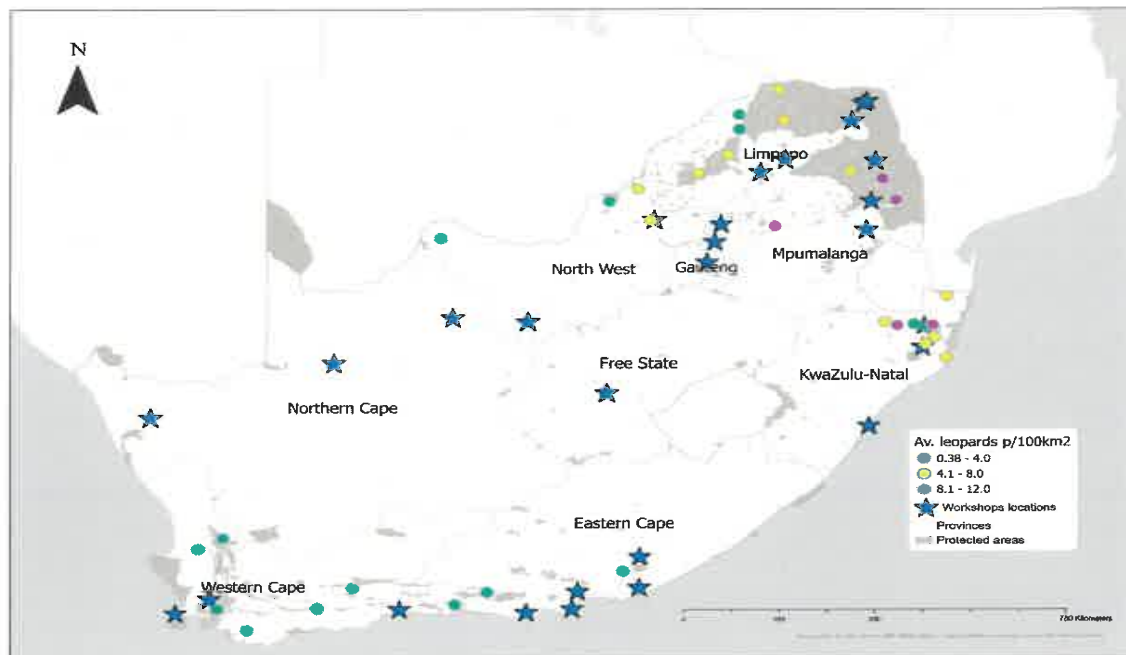


Figure 2. Locations of the 28 in-person stakeholder workshops held across all provinces of South Africa in relation to surveys of key leopard populations.

The workshop feedback was collated by the core strategy review team and the contents processed to inform the development of the Vision, Goals, and Strategic Actions for the Strategy (Table 3). The workshops also helped to identify enabling factors required to achieve the main goals of the Strategy. Analysis of the feedback on the three main workshop questions was facilitated using Word Cloud software to identify the most prevalent words/terms featured in workshop feedback. The three main workshop questions were:

1. What is the species value/cost to you?
2. What are the constraints to you realising those values or minimising costs?
3. What can be done to remove those constraints?

All workshop feedback reports were captured in a stakeholder engagement report which included a summary of the key points that came out in the answers to the three workshop questions on species value, cost/constraints, and solutions. The stakeholder engagement report contains all material used during the workshops, the word clouds that were generated to identify most-used words during feedback, and figures showing workshop attendance by province and a breakdown of the most prominent answers to the workshop questions per target group e.g. communities, NGO's etc. The below table illustrates the key values, costs, constraints and associated themes that were captured during the workshops, which have formed the basis for the development of the key strategic activities in this document.

5.1 Multiple values and costs, constraints and responses

The aspirations expressed by the stakeholders during the consultation process can fit under three key themes - 1. Ecological role of leopards, 2. Social and cultural values, and 3. Livelihood impact of leopards. The national stakeholder consultation workshops were conducted with the intention of developing this Strategy from the bottom-up, thus, this Strategy reflects the country's vision for conserving leopards and their national heritage in South Africa.

Stakeholders expressed a range of critical insights (Table 3), which highlighted the complex and often competing values associated with leopards in South Africa, reflecting a wide spectrum of cultural, economic, ecological, and social perspectives. At one end of the spectrum, are deeply rooted cultural and spiritual values, where leopards are seen as totemic animals integral to heritage, identity, and traditional governance systems. On the other end, lies a conservation science and regulatory view, emphasising biodiversity protection, legal compliance, and ecological integrity. Amid these extremes lies a diversity of perspectives, including those focused on economic livelihoods, education, human safety, and equitable access.

A clear dichotomy emerges between those advocating for consumptive use driven by traditional leaders and traditional health practitioners, and trophy hunting stakeholders, and those advocating for strict preservation and protection, often aligned with ecological and non-consumptive tourism initiatives. Recognising this multiplicity of values and the systemic costs carried by different groups is essential. Effective leopard conservation depends on acknowledging and navigating these competing pressures, not only between use and preservation, but between inclusion and exclusion, identity and legality, cultural survival and ecological protection. The challenge lies in designing a governance system that is as adaptive and pluralistic as the values it seeks to protect.

5.2 Strategic Trade Offs

This Strategy explicitly recognises that it is not possible to simultaneously accommodate all the needs and desires of all stakeholders. During the stakeholder engagement exercise, it became apparent that there is a high demand for the consumptive use of leopards by many stakeholders, including traditional leaders, traditional health practitioners, cultural and religious groups, and trophy hunters. Stakeholders within the agricultural sector highlighted the ongoing challenges associated with leopard-human interactions and emphasised the need for improved management tools that both support livelihoods and address the needs of leopards. A system needs to accommodate and balance these needs in a fair, equitable and transparent fashion, while also accommodating the needs of non-consumptive users. These include the tourism industry, and members of the public who attach intrinsic value to the presence of wild leopards in their natural environment. Preserving leopards as a key element of South Africa's biodiversity heritage, and an important element of functioning ecosystems is an equally important consideration. This Strategy thus seeks to identify the trade-offs.

A Strategy that focusses exclusively on the preservation of leopards and does not allow for any consumptive use is not acceptable to a large proportion of stakeholders and may thus prove ineffective and ultimately detrimental to a range of stakeholders and the long-term conservation of leopards. Conversely, a policy of allowing unfettered consumptive use of leopards may result in the rapid extirpation of leopards from most of their range in South Africa. This Strategy aims to balance these competing objectives to ensure the preservation of all the values including cultural and natural heritage associated with leopards.

Table 3. Summary table of the key points captured during feedback on values, costs, and constraints from the 31 national stakeholder workshops conducted in all provinces in South Africa from August to December 2024.

VALUES	COSTS	CONSTRAINTS
Cultural and Spiritual Significance - Leopards, lions, and cheetahs are regarded as totemic animals and symbols of ancestry, heritage, leadership, strength, and spirituality. - Use of animal skins and parts in traditional attire, healing, ceremonial roles, and ancestral connection was widespread. - Many groups expressed that these animals are part of identity and cultural continuity.	Barriers to Cultural Practice Inaccessibility to skins and animal parts disrupts traditional healing, ceremonies, and regalia making. Cultural loss: When people cannot practice their customs linked to species, they perceive it as a diminishing of identity and heritage. Erosion of cultural identity: Restrictions on traditional attire and ceremonies involving leopard, lion, and cheetah parts limit cultural expression. Loss of spiritual connection: Communities lose access to spiritually significant species and landscapes, weakening traditional beliefs and rituals. Criminalisation of practices: The use of animal skins or parts in rituals may be criminalised, creating tension between cultural rights and national laws. Exclusion from decision-making: Traditional authorities and practitioners often lack a formal voice in conservation governance, leading to marginalisation. Breakdown of intergenerational knowledge transfer: Younger generations may lose interest or ability to engage in traditional practices due to legal or logistical barriers. Undermining of traditional governance systems: State-led conservation approaches sometimes override customary rules and spiritual stewardship, weakening indigenous leadership. Spiritual distress and loss of meaning: Inability to perform ancestral rituals or access sacred sites causes emotional and spiritual harm to practitioners.	Loss of traditional knowledge: Elders and knowledge holders are not always involved in conservation discussions, leading to erosion of indigenous practices. Lack of formal recognition: Cultural and spiritual practices involving leopards, lions, and cheetahs are often not acknowledged in formal conservation frameworks. Restricted access to natural areas: Community members may be prevented from accessing areas that are spiritually significant or used for traditional practices due to conservation restrictions. Conflict with modern legal frameworks: Traditional use of animal parts (e.g., skins for attire or rituals) often conflicts with national and international wildlife protection laws. Stigmatisation of beliefs: Cultural and spiritual beliefs related to predators may be misunderstood or stigmatised by authorities and broader society. Limited participation in decision-making: Traditional leaders and spiritual practitioners may not be adequately included in conservation planning and policy development. Economic pressures: Poverty and land competition may shift focus away from cultural and spiritual values to survival needs, reducing the practice of traditions linked to large carnivores. Inadequate policy integration: There is a gap between conservation policies and the integration of customary law and beliefs. Reduced and declining leopard populations: Fewer leopards mean reduced availability of derivatives.
Economic and Livelihood Value Species were framed as community assets, critical for poverty alleviation and economic inclusion. Ecotourism income: Big cats are central to wildlife tourism and generate significant revenue through photographic safaris and wildlife experiences. Trophy hunting revenue: Legal hunting of lions and leopards (less so cheetahs) and derivative sales can provide economic returns to landowners and communities.	Economic and Livelihood Costs Cost of livestock replacement and inadequate or absent compensation schemes. Economic strain on farmers and rural households due to predation. Fence maintenance and management: Expensive for both state and private landowners, particularly in lion-occupied areas. Opportunity costs: Inability to legally benefit from species derivatives pushes people to black markets or denies cultural practices. Loss of tourism revenue: In areas affected by poaching or species decline.	Economic Hardship Poverty drives illegal hunting and human-wildlife conflict: Illegal hunting for subsistence or sale and increased HWC due to its threat to livelihoods. No or delayed compensation for livestock losses or human injury. Inconsistent benefit-sharing: Limited flow of tourism or hunting revenue to rural or traditional communities hosting predators. Lack of access to predator-related economic opportunities: Barriers to entry in tourism, conservation, or wildlife ranching sectors.

VALUES	COSTS	CONSTRAINTS
• Job creation: Employment in tourism, conservation, guiding, and park operations linked to predator presence. • Livestock guarding and related services: Emerging income-generating practices related to non-lethal predator management (e.g., guard dogs, fencing).	Human-Wildlife Conflict • Loss of livestock: A dominant concern across all provinces, especially in areas adjacent to protected areas. • Risk to human safety: Attacks on people, especially when animals escape reserves. • Emotional distress and trauma: Fear, disrupted schooling (especially for children in affected areas), and reduced quality of life.	• Uncompensated losses: Inadequate or absent compensation schemes create resentment and discourage coexistence with predators Infrastructure and Safety Gaps • Broken or inadequate fencing, allowing species to escape or livestock to wander into reserves. • Lack of rapid response mechanisms for managing escapes or reporting danger. • Weak support systems: Insufficient veterinary, extension, or financial services for managing livestock losses or implementing mitigation. • Limited law enforcement presence to prevent poaching or support community safety. • Policy and land-use conflicts: Misalignment between conservation areas and local development or grazing priorities.
Biodiversity and Ecological Integrity • Stakeholders consistently linked these species to ecosystem balance and biodiversity health. • They are seen as keystone and indicator species and important for food chain regulation and environmental health. • Ecological tourism value: Their ecological presence underpins the appeal of protected areas and wildlife tourism.	Ecological and Population Management Costs • Risk of species extinction • Genetic bottlenecks: Fragmentation and small population sizes threaten ecological resilience and long-term species viability. • Human-wildlife conflict impact: Escalating conflict can result in reactive removals, disrupting ecological roles. • Over management or mismanagement: Poorly designed reintroductions, artificial management, or lack of scientific guidance can compromise ecological integrity.	Ecological and Species Management Challenges • Species perceived as unmanageable • Habitat loss, prey depletion, and drought may worsen conflict or reduce species value. • Habitat fragmentation: Expanding human land use reduces viable habitat and ecological connectivity. • Limited ecological data: Insufficient monitoring and ecological studies impede adaptive management. • Uncoordinated conservation efforts: Fragmented governance between provinces and sectors undermines coherent ecological planning. • Illegal or poorly regulated off-takes: Unsanctioned killings disrupt predator-prey dynamics and population stability • Ineffective predator control or relocation programs fail to address root causes of conflict.
Education and Intergenerational Value • Cultural knowledge transmission: These species are integral to stories, customs, and oral traditions passed between generations. • Learning through co-existence: Longstanding practices of living alongside predators foster unique traditional ecological knowledge.	• Erosion of traditional knowledge: Loss of species and conflict-driven attitudes reduce opportunities for passing on ecological wisdom. • Disconnection from nature: Youth in modernised or urban communities are increasingly alienated from natural and cultural ties to predators. • Misinformation and fear: Lack of balanced education fosters fear and antagonism toward predators, especially where conflict is high.	Insufficient Education and Awareness • Lack of conservation education in schools and communities leads to misunderstandings or fear of species. • No public information about species behaviour, ecosystem roles, or how to access legal support. • Limited public campaigns or materials in local languages or formats suited to community needs.

VALUES	COSTS	CONSTRAINTS
• Inspiration for stewardship: Big cats symbolise strength and wisdom, motivating conservation values in younger generations. • Symbolic education tools: Used in traditional teachings and modern environmental education to promote biodiversity awareness.	• Marginalisation of Indigenous perspectives: Formal education systems often neglect or exclude traditional and cultural narratives related to these species.	• Limited access to education: Remote or rural communities may lack resources to support conservation or cultural education. • Generational shifts: Younger generations may prioritise economic survival over conservation traditions due to poverty or modern influences. • Language and content barriers: Conservation messaging may not be delivered in accessible or culturally relevant ways. • Lack of inclusion in formal systems: Traditional knowledge holders are rarely integrated into official environmental education curricula.
Equity, Access, and Transformation • Repeated emphasis on fair access to: ○ National parks ○ Permits for derivatives ○ Decision-making spaces • There was strong demand for inclusivity, co-management, and recognition of traditional knowledge. • Call for transformation in legislation, permitting, and benefit sharing. • Emphasis on redefining conservation to include cultural, spiritual, and economic values of wildlife for previously marginalised communities. • Call for Restorative justice—addressing past exclusion and exploitation of indigenous and local communities in protected area management and species use.	Social and Institutional Costs • Lack of trust and communication: Between communities and protected area managers or government. • Absence of co-management or meaningful inclusion: Stakeholders feel marginalised in decision-making and from conservation benefits. • Over-reliance on external NGOs or donors: May skew local priorities or reduce agency. • Disconnection from cultural ties to wildlife.	Limited Access • Restricted physical access to protected areas (high entry fees, distance, lack of transport). • Inaccessible animal parts and carcasses, even from natural deaths or euthanasia. • Legal and policy frameworks sometimes restrict access to body parts/derivatives (such as skins for traditional use), which limits equitable cultural practices. • Exclusion from wildlife-based economies, including tourism, hunting, or game farming. Marginalisation and Exclusion from Decision-Making • Communities, traditional leaders, and healers feel excluded from policy formation and management planning. • Lack of meaningful engagement by conservation authorities, leading to poor buy-in and resentment. • Top-down governance fails to account for local realities and traditional ecological knowledge.
Justice and Redress • Stakeholders stressed the need to address: ○ Land dispossession ○ Policy exclusion ○ Unequal benefit distribution • Values were strongly aligned with restorative justice, empowerment, and dignity.	Legal and Regulatory Barriers • Restrictive legislation: Difficult/complex permitting processes limit access to skins, bones, or carcasses. • Lack of transparency and clarity in rules leads to accidental non-compliance. • Inaccessible policies: Communities feel excluded from shaping and benefiting from wildlife policies.	Regulatory and Policy Barriers • Complicated, inconsistent permitting processes across provinces. • Strict laws not adapted to traditional practices, limiting access to species for healing, ceremonial, or cultural use. • Lack of legal clarity and transparency, particularly around ownership of derivatives, protected status, and redress mechanisms.

6 National Vision and Impact Statement

VISION:

Leopards thrive in living landscapes, support cultural traditions and local livelihoods through inclusive community driven conservation.

Impact Statement: Transformed and equitable leopard conservation that promotes sustainable development.

The vision is based on the values expressed by the stakeholders during the consultation process, which encompasses three core themes: environmental outcomes and the role that leopards play in these; social outcomes that embody the values that stakeholders associated with leopards; and livelihood outcomes and how leopards can contribute to or impact on these. Living landscapes refer to interconnected, multi-use areas where leopards, people, and livelihoods coexist, supported by ecological connectivity and sustainable land-use practices. These landscapes form the foundation for participatory and inclusive conservation, enabling local communities, landowners, and other stakeholders to collaboratively manage habitats and reduce conflict while safeguarding leopard populations across both protected and non-protected areas. The vision embraces leopards as integral to cultural identity, spiritual symbolism, and as economic assets for stakeholders, while also recognizing costs they carry. It is aspirational and transformative, rooted in the real experiences and expressed needs of people and leopards, and oriented toward solutions that restore dignity, equity, and sustainability in leopard conservation, with a duty of care where both people and nature can thrive.

7 Strategic Framework

The stakeholder consultations highlighted the importance of recognising key trade-offs specific to leopards alongside acknowledging the diverse aspirations of stakeholders. Navigating these trade-offs through equitable and transparent engagement with stakeholders will ensure that trade-offs consider the values, needs, and aspirations of all South Africans.

As the first National Strategy and Action Plan for leopards, the Strategy is structured to give effect to the White Paper on Conservation and Sustainable Use of South Africa's Biodiversity (White Paper) and the Policy Position on the Conservation and Sustainable Use of Elephant, Lion, Leopard and Rhinoceros, with specific reference to leopards. By prioritising conservation and sustainable use that benefits both leopards and communities, as well as livelihoods, traditions, and the wellbeing of people living with leopards, the Strategy supports the policy's vision of responsible stewardship and improved conservation outcomes.

7.1 Ecological Role of Leopards

GOAL 1. *Conserve leopards and their landscapes by strengthening ecological resilience, connecting habitats, and reducing threats.*

Leopards play an important role in maintaining healthy ecosystems, fulfilling critical ecological functions through their role as apex predators. Their presence contributes substantially to maintaining complex food webs, regulating prey populations, and thereby promoting biodiversity and ecosystem stability and resilience. Leopards, therefore, carry an existence value of their own. They can act as a keystone species for broader ecosystem restoration and biodiversity management.

As habitat generalists, leopards enhance landscape connectivity, with natural ranges covering large areas. In South Africa, leopard populations are fragmented, and their natural movement is restricted, disrupting gene flow, their natural ecology and ecological influence, and increasing their vulnerability to local extinction. Interventions focusing on restoring leopard populations in historical ranges and increasing connectivity across areas where leopards occur are important for securing a future for leopards and leopard landscapes in South Africa.

However, conserving leopards must balance ecological needs with human needs and aspirations. Human-leopard conflict poses one of the largest barriers to striking this balance in South Africa. Leopard conflict with livestock and game farmers requires innovative solutions that protect both wildlife, people and their livelihoods. Solutions that lie within local partnerships show promise in being able to achieve safe, fair, and effective outcomes that improve coexistence and provide benefits for stakeholders with diverse interests. Supporting biodiversity stewardship initiatives and creating mechanisms for cooperative landscapes will contribute toward building an inclusive and participatory, landscape-scale approach to leopard conservation that uplifts natural systems and enhances human lives.

7.2 Social and Cultural Values

GOAL 2. *Preserve cultural heritage, promote sustainable practices, and ensure safe and inclusive access to leopards and protected areas.*

Leopards hold profound social and cultural significance in South Africa, serving as symbols of power, spirituality, and ancestral connection for many communities. Traditional leaders and Traditional Health Practitioners have historically used leopard derivatives, such as skins and bones, in ceremonies and regalia, embedding the species in cultural identity and practices. However, the current complex legislative process has created tensions, often effectively impeding expression of these traditions through criminalising acquisition or possession of leopard derivatives without providing legal alternatives. Recognising these cultural values is essential to fostering inclusive conservation that respects both biodiversity and heritage, while addressing historical inequities in resource access.

The sustainable use of leopard resources must balance cultural needs with ecological protection. Communities seek regulated access to derivatives from naturally deceased or euthanised animals to express their heritage, traditions, and religious and cultural practices. Integrating traditional knowledge into conservation policies, such as declaring leopards as "royal animals" or incorporating community-led monitoring, can bridge cultural practices and modern management. This approach aligns with calls for policy reform, including simplified permitting processes and the inclusion of traditional leaders in decision-making.

Ensuring safe and inclusive access to leopards and their habitats also hinges on addressing livelihood concerns. Human-wildlife conflict, particularly livestock predation, undermines coexistence and perpetuates negative perceptions. Solutions like support for improved livestock husbandry and community-based enterprises can mitigate conflicts while creating economic benefits. By effectively merging social equity, cultural preservation, and ecological sustainability, South Africa can model a conservation framework that honours both people and wildlife.

7.3 Livelihood Impacts of Leopards

GOAL 3. *Increase fair opportunities for people to benefit from leopards while reducing the challenges they pose to livelihoods.*

Leopards, while ecologically vital, pose significant challenges to rural livelihoods in South Africa, particularly through livestock and game animal predation and by posing a threat to human safety. Livestock depredation often leads to economic losses for farmers and subsequent retaliatory killings of leopards, undermining conservation efforts. Addressing this tension requires solutions that both mitigate the risks leopards pose and create tangible benefits for communities. Strategies such as increased capacity and tools for communities to avoid and manage conflict and the introduction of payments for ecosystem services schemes for example, have proven effective in reducing conflicts while fostering coexistence. These measures allow communities to protect their livelihoods while contributing to leopard conservation, but can be challenging to implement at scale and require significant investment, as well as community buy-in.

Beyond conflict mitigation, leopards present unique opportunities for economic empowerment through sustainable wildlife-based enterprises. Community-led ecotourism initiatives, such as cultural heritage experiences and photographic safaris can generate income and jobs, directly linking conservation to local beneficiation. Additionally, responsible hunting, regulated access to leopard derivatives (e.g., skins or bones from naturally deceased animals) for traditional use or legal trade could provide further economic incentives. Ensuring that these benefits are equitably distributed among stakeholders, including marginalised groups, is critical to building long-term support for conservation.

To maximise these opportunities, systemic barriers must be addressed. Inadequate policies, lack of funding, and limited access to markets often hinder community participation in wildlife economies. Key actions include streamlining permitting processes, allocating tourism revenue to local development, and providing training for communities to undertake conservation-related roles. Public-private partnerships and donor support can also play a pivotal role in scaling up these initiatives. By aligning ecological goals with livelihood needs, leopards can play a role as ecological assets and can act as catalysts for sustainable development.

8 Enabling Conditions

Three enabling conditions **1) Sustainable Finance, 2) Participation, Communication, Education and Awareness, 3) Legislation & Policy Reform**, are essential for achieving the three core Strategy goals of ecological resilience, cultural and social values, and livelihood improvement. With multiple enablers cutting across all three goals, they provide the foundation for, and facilitate, the implementation of and successful outcomes for the strategic activities. Participation, communication, education and awareness increases public understanding and pride in leopard conservation in a relatable manner, while legislative and policy reform establishes the legal clarity and cultural recognition required for equitable implementation. Sustainable and diversified funding mechanisms provide the resources needed to support conservation activities and community benefits. Without these enabling principles, the three main goals risk being unsupported, misaligned with local contexts, or unsustainable in the long term. Their integration guarantees that conservation efforts are locally relevant, socially accepted, and ecologically effective.

1) Sustainable Finance

Objective: Secure and sustain diverse funding mechanisms to support inclusive and equitable leopard conservation, and long-term human-wildlife coexistence.

This enabler focuses on establishing a resilient and diversified conservation finance system that provides long-term support for leopard conservation across all land-use sectors. Strategic actions will strengthen the enabling environment for sustained investment, incentivise stewardship and conservation-compatible land management, and expand partnerships that mobilise public, private, and philanthropic resources. Together, these strategic actions will create a stable and adaptive funding framework that supports leopard conservation, strengthens stewardship across landscapes, and promotes shared benefits for people and ecosystems.

2) Participation, Communication, Education and Awareness

Objective: Foster a deeper understanding and appreciation of leopards by promoting culturally relevant, inclusive education that integrates indigenous knowledge, supports intergenerational learning, and reshapes public perceptions.

This enabler focuses on building a shared conservation ethic that recognises the ecological, cultural, and social significance of leopards. Strategic actions will promote inclusive communication, knowledge exchange, and learning opportunities that reflect South Africa's diverse cultural perspectives and experiences. Particular emphasis will be placed on recognising indigenous and local knowledge systems, strengthening intergenerational learning, and fostering meaningful participation in conservation decision-making. Together, these strategic actions will strengthen public appreciation of leopards, build trust and shared ownership of conservation outcomes, and support a more inclusive and socially relevant approach to leopard conservation that benefits present and future generations.

3) Legislation & Policy Reform

Objective: Establish a coherent and inclusive legal framework that aligns regulations, respects cultural practices, and strengthens enforcement to support both leopard conservation and equitable community access.

This enabler focuses on creating a clear, consistent, and effective regulatory environment that supports sustainable leopard conservation while recognising South Africa's diverse cultural, social, and economic contexts. Strategic actions will strengthen policy alignment across jurisdictions, improve governance and accountability, enhance monitoring and reporting systems, and promote coordinated compliance and enforcement approaches. Together, these strategic actions will provide a clear, inclusive, and enforceable legal framework that reduces uncertainty, strengthens cooperation among stakeholders, supports sustainable conservation outcomes, and promotes equitable participation in and benefits from leopard conservation.

9 Strategic Framework Table

ECOLOGICAL ROLE OF LEOPARDS		
GOAL 1: Conserve leopards and their landscapes by strengthening ecological resilience, connecting habitats, and reducing threats.		
IMPACT STATEMENT: Leopards live in ecologically healthy, connected landscapes with natural habitat.		
Strategic Priority	Strategic Action	Outcomes
Connected, resilient landscapes: Leopard populations move across both protected and unprotected landscapes, highlighting the importance of landscape-level conservation approaches. Stakeholders consistently recognised the ecological role of leopards in maintaining ecosystem functioning and supporting biodiversity health. Expanding ecological corridors and conservation areas is important for maintaining gene flow, improving landscape connectivity, and enhancing resilience to climate change.	Activity 1.1 Protect, restore, and connect critical leopard habitats to ensure resilience and gene flow, and adaptive capacity to climate change.	- Improved protection and connectivity of leopard habitats through expanded reserves, corridors, and stewardship areas. - Increased ecological resilience to the impacts of climate change. - Enhanced opportunities for natural leopard dispersal and gene flow. - Cross-sector partnerships established to support habitat protection.
Ecological management, threat reduction, secure communities: Leopards are widely regarded as keystone and indicator species that play an important role in regulating food webs and maintaining ecosystem health. Reducing anthropogenic threats within protected areas is essential to maintaining functional ecosystems that support natural leopard behaviour and stable populations, while also minimising risks to neighbouring communities.	Activity 1.2 Reduce anthropogenic threats to ensure persistent, dynamic leopard populations.	- Stabilised leopard populations supported by reduction of anthropogenic threats in protected areas. - Strengthened on the ground presence and infrastructure in key leopard areas. - Greater collaboration between public, private, and community reserves. - Increased protection of broader biodiversity through cross-cutting threat mitigation.

Evidence-led conservation: The presence of leopard contributes significantly to the attractiveness of protected areas and supports wildlife-based tourism. Long-term monitoring provides critical information on leopard population trends, distribution, and ecological roles, informing adaptive management and targeted threat mitigation.	Activity 1.3 Strengthen and expand the national population monitoring and research system to inform adaptive management.	• Enhanced understanding of leopard ecology and ecosystem roles through integrated scientific and community-based monitoring. • Comprehensive, long-term data on leopard populations, distribution, and trends. • Expanded understanding of the ecological, cultural, and economic roles of leopards to guide inclusive conservation planning. • Research outputs translated into adaptive management recommendations.
Adaptive, inclusive management: Scientific data and traditional ecological knowledge together inform flexible management. Community participation helps shape decisions as conditions change.	Activity 1.4 Implement evidence-based, adaptive population and landscape management.	• Science-based, adaptive landscape and population management plans guiding effective conservation action. • Inclusive management and decision making facilitates local level participation in conservation. • Integrated adaptive management framework institutionalised to ensure long-term, evidence-based conservation success. • Leopard conservation strategies regularly revised and improved based on up-to-date ecological, social, and conflict data. • Key stakeholders sign data-sharing agreements to improve collaboration. • National reporting and biodiversity assessments are strengthened by robust, coordinated data inputs.

SOCIAL AND CULTURAL VALUES

GOAL 2: Preserve cultural heritage, promote sustainable practices, and ensure safe and inclusive access to leopards and protected areas. IMPACT STATEMENT: Leopards are sustainably integrated into cultural life, valuing their role in traditions and (cultural) identity, with communities able to access, celebrate and protect their heritage in inclusive, respectful ways.		
Strategic Priority	Strategic Action	Outcomes
Living cultural heritage: Leopards remain totemic animals. Skins and parts are legally accessible for traditional attire, healing, and ceremonies. Identity and cultural continuity are preserved.	Activity 2.1 Ensure preservation of traditional and cultural use of leopard derivatives and products.	- Increased community access to and use of protected areas, especially for cultural, educational, and spiritual practices. - Increased emotional and cultural connection to conservation spaces. - Strengthened partnerships between conservation authorities and traditional/community institutions. - Enhanced community participation in biodiversity education linked to visits. - Feasibility assessed and appropriate mechanisms established for improved regulation of traditional access to leopard parts.
Intergenerational knowledge transfer: Leopard stories, customs, and coexistence knowledge are transferred across generations to youth. Traditional ecological knowledge is valued equally with scientific data.	Activity 2.2 Strengthen intergenerational knowledge transfer and cultural connection to leopards.	- Enhanced intergenerational transmission of indigenous knowledge and cultural heritage related to leopards. - Higher levels of local engagement, pride, and cultural connection in leopard (and general) conservation initiatives. - Cultural significance of leopards is reaffirmed and strengthened.

LIVELIHOOD IMPACTS OF LEOPARDS		
GOAL 3: Increase fair opportunities for people to benefit from leopards while reducing the challenges they pose to livelihoods.		
IMPACT STATEMENT: Improve the livelihoods of people living alongside leopards while keeping conflict low.		
Strategic Priority	Strategic Action	Outcomes
Leopards as economic assets: Ecotourism, hunting revenue, and conservation jobs reach local communities. Livestock guarding services generate income. Poverty is alleviated through leopard-related enterprises.	Activity 3.1 Catalyse inclusive, predator-based economic opportunities and skills development.	- Expanded wildlife-linked job opportunities in tourism, game farming, monitoring, and conservation. - Greater youth participation in conservation and tourism careers through targeted skills development and training support. - Reduced economic reliance on harmful or extractive land uses.
Improved conflict management and human safety: Livestock losses are compensated quickly and fairly. Rapid response teams prevent escalation. Farmers no longer need retaliatory killing to protect their livelihoods and communities feel safer.	Activity 3.2 Implement a standardised national framework for human-leopard conflict mitigation and response.	- Improved community safety, leopard conflict response, and fair mitigation mechanisms in place that enhance tolerance and reduce economic losses from human-wildlife conflict. - Reduction in poisoning, snaring, and illegal lethal responses. - More community capacity and economic resilience in priority conflict areas.

10. Strategic Action Plan

ECOLOGICAL ROLE OF LEOPARDS

GOAL 1: Conserve leopards and their landscapes by strengthening ecological resilience, connecting habitats, and reducing threats.

Strategic Actions (Broad)	Key Activities (Detailed)	Key Performance Indicator (KPI)	Lead & Key Partners	Timeline (Phase)	Priority
1.1 Protect, restore, and connect critical leopard habitats to ensure resilience and gene flow, and adaptive capacity to climate change.	1.1.1 Map priority corridors	Priority corridors identified	Lead: DFFE Partners: SANBI; Management Authorities	Y1-Y2	High
	1.1.2 Establish corridor partnerships across different land uses	Number of partnerships established	Leads & Partners: Management Authorities; NGOs; SANBI; Landowners.	Ongoing	High
	1.1.3 Expand conservation estate (protected and conservation areas) to include key leopard habitat.	Number of hectares added into the conservation estate that includes leopard habitat	Lead: Management Authorities Partners: NGOs; SANBI (species index); Landowners	Ongoing	High
	1.1.4 Incorporate leopard corridor spatial data into SANBI BGIS as the foundation for conservation planning purposes	SANBI BGIS contains leopard corridor spatial data.	Lead: SANBI Partners: Management Authorities; NGOs; Research Institutions	Y1-Y5	Med

Strategic Actions (Broad)	Key Activities (Detailed)	Key Performance Indicator (KPI)	Lead & Key Partners	Timeline (Phase)	Priority
	1.1.5 Develop a climate change resilience and response mechanism for PAs and leopard corridors.	Number of action plans developed	Lead: DFFE Partners: SANBI; Management Authorities	Y6-Y10	Med
	1.1.6 Allocate resources for implementation of climate change resilience and response mechanism.	Number of resources identified and allocated	Lead: Management Authorities & all relevant partners	Y6-Y10	Med
1.2 Reduce anthropogenic threats to ensure persistent, dynamic leopard populations.	1.2.1 Interventions implemented in and around PAs to reduce anthropogenic threats.	Number of associated interventions implemented in and around PAs	Lead: Management Authorities of PAs Partners: Private/Community Reserve Associations, NGOs, other relevant parties	Ongoing	High
	1.2.2 Interventions implemented outside of PAs in high-conflict areas to reduce anthropogenic threats.	Number of interventions implemented by traditional authorities Number of interventions implemented by landowners, wildlife industry, NGOs, traditional health practitioners	Lead: Management Authorities & all relevant partners	Ongoing	High
1.3 Strengthen and expand the national population monitoring and research system to inform adaptive management.	1.3.1 Maintain and expand long-term, standardised population monitoring sites for leopards.	Number of additional monitoring sites Number of existing monitoring sites maintained	Lead: SANBI Partners: Provinces, Private Reserves, Wildlife Industry, NGOs, Research Institutions	Ongoing	High

Strategic Actions (Broad)	Key Activities (Detailed)	Key Performance Indicator (KPI)	Lead & Key Partners	Timeline (Phase)	Priority
	1.3.2 Secure resources for long-term population monitoring.	Relevant resources secured (funding, equipment, human capacity)	Lead: SANBI Partners: Provinces, Private Reserves, Wildlife Industry, NGOs, Research Institutions	Ongoing	High
	1.3.3 Explore modalities for creation of a database to collate leopard population data.	Report on findings/conclusions	Lead: DFFE Partners: SANBI, Provinces, Private Reserves, Wildlife Industry, NGOs, Research Institutions	Y3-Y6	Med
1.4 Implement evidence-based, adaptive population and landscape management.	1.4.1 Revision of NDF for leopard.	Publications of revisions of NDF for leopard	Lead: SANBI Partners: Provinces, Private Reserves, Wildlife Industry, NGOs, Research Institutions,	As and when required	High
	1.4.2 Integrate legal leopard DCA offtake data into the national monitoring framework for leopard.	National monitoring framework for leopard revised to include legal DCA offtake data.	Lead: SANBI Partners: DFFE; Management Authorities: Science NGOs, Private Reserves	Y2-Y5	High

SOCIAL AND CULTURAL VALUES

GOAL 2: Preserve cultural heritage, promote sustainable practices, and ensure safe and inclusive access to leopards and protected areas.

Strategic Actions (Broad)	Key Activities (Detailed)	Key Performance Indicator (KPI)	Lead & Key Partners	Timeline (Phase)	Priority
2.1 Ensure preservation of traditional and cultural use of leopard derivatives and products	2.1.1 Develop fit for purpose mechanisms to create opportunities for equitable and fair sharing of leopard products and derivatives for cultural and spiritual use.	Mechanism for distribution for leopard derivatives and products from protected areas¹ Mechanism for distribution of leopard products and derivatives from the Wildlife industry² Upscaling and developing additional mechanisms for providing leopard skins for religious & cultural purposes³	Lead: DFFE in partnership with relevant key stakeholders ¹ DFFE & Management Authorities ² Management Authorities & Wildlife Industry ³ Traditional Leaders, National House of Traditional and Khoi-San Leaders, Traditional Health Practitioners, Religious Groups.	Y2-Y8	High
2.2 Strengthen intergenerational knowledge transfer and cultural connection to leopards.	2.2.1 Support programmes for knowledge transfer between elders, youth, and conservationists on leopard cultural heritage.	Number of intergenerational knowledge-sharing events held annually Development of cultural heritage resources (e.g., booklets, recordings)	Lead: Cultural Institutions / NGOs Partners: Traditional Councils, Schools, Museums (Iziko)	Ongoing	Med
	2.2.2 Incorporate Indigenous Knowledge Systems (IKS) into leopard conservation planning and monitoring.	IKS indicators and knowledge integrated into ≥ 2 provincial leopard management plans	Lead: SANBI (IKS Centre) Partners: DFFE, Universities, Traditional Knowledge Holders	Ongoing	Med

LIVELIHOOD IMPACTS OF LEOPARDS

GOAL 3: Increase fair opportunities for people to benefit from leopards while reducing the challenges they pose to livelihoods.

Strategic Actions (Broad)	Key Activities (Detailed)	Key Performance Indicator (KPI)	Lead & Key Partners	Timeline (Phase)	Priority
3.1 Catalyse inclusive, predator-based economic opportunities and skills development.	3.1.1 Develop and implement programmes to expand inclusive access to leopard-related jobs in tourism, monitoring, and conservation.	Number of inclusive leopard-related programs	Lead: DFFE (Biodiversity Economy) Partners: CATHSSETA, Tourism Business Council, Private Reserves, NGOs	Ongoing	High
	3.1.2 Incorporate leopard-related economic opportunities into the broader biodiversity program, encouraging integration with the Biodiversity Economy by leveraging NBES programmes (ecotourism) for leopard landscapes.	Number of NBES-aligned biodiversity economy programs that include leopard.	Lead: DFFE (Biodiversity Economy) Partners: CATHSSETA, Tourism Business Council, Private Reserves, NGOs	Ongoing	Med
3.2 Implement a standardised national framework for human-leopard conflict mitigation and response.	3.2.1 Contribute and provide input into the National GEF project (Reducing HWC through an evidence-based and integrated approach in Southern Africa).	HWC objectives of GEF project are met	Lead: DFFE (Biodiversity & Conservation) Partners: DALRRD, Provincial Disaster Management, NGOs	Y1-Y5	High

Enabler 1. Sustainable Financing

Strategic Actions	Key Activities (Detailed)	Key Performance Indicator (KPI)	Lead & Key Partners	Timeline (Phase)	Priority
E1.1 Secure sustainable funding mechanisms that support multi-level leopard conservation initiatives.	E1.1.1 Explore and implement dynamic, effective, and sustainable funding mechanisms that support multi-level leopard conservation initiatives.	New funding streams identified and implemented	Lead: DFFE, Partners: Provincial Authorities, NGOs, Private Sector	Ongoing	High
	E1.1.2 Develop and implement the Biodiversity Management Agreements (BMA) for tax incentives for safeguarding leopards.	Number of signed BMAs	Lead: DFFE (Biodiversity Management) Partners: National Treasury	Y2-Y10	High
	E1.1.3 Secure long-term funding through public-private partnerships (PPPs), donor support, and conservation levies.	Number of active funding agreements (levies/contracts/pledges)	Lead: DFFE Partners: Provincial Authorities, NGOs, Private Sector	Ongoing	High

Enabler 2. Participation, Communication, Education, and Awareness

Strategic Objective (Broad)	Specific Objective / Activity (Detailed)	Key Performance Indicator (KPI) / Result	Lead & Key Partners	Timeline (Phase)	Priority
E.2.1 Co-learn and promote widespread cultural awareness and education to foster pride, understanding, and support for leopard conservation.	E.2.2.1 Develop and implement a leopard communications strategy, integrating existing relevant communications initiatives (e.g. endangered species/predator-focussed).	Approved strategy and annual reports	Lead: DFFE (Communications) & SANBI Partners: Provincial Authorities, Department of Basic Education, Media Houses	Ongoing	High
	E.2.2.2 Leopard-related education integrated into stewardship/ranger roles, incorporating co-learning from communities living with leopards.	Number of communities receiving and participating in integrative learning	Lead: DFFE (Communications) & Provincial Authorities Partners: Department of Basic Education, Media Houses	Ongoing	High
E.2.2. Institutionalise inclusive, participatory sustainable use and governance.	2.3.1 Mandate seats for traditional leaders & health practitioners on the National Leopard Steering Committee and LICC.	Number of permanent seats Quarterly meetings with documented input.	Lead: DFFE (Biodiversity Management) Partners: CONTRALESA, National Khoi-San Council, Healer Associations	Y1-Y4	High

Enabler 3. Legislative and Policy Reform

Strategic Objective (Broad)	Specific Objective / Activity (Detailed)	Key Performance Indicator (KPI) / Result	Lead & Key Partners	Timeline (Phase)	Priority
E.3.1 Enhance policy, legal, and enforcement frameworks that support inclusive, participatory leopard conservation.	E.3.1.1 Strengthen the national monitoring and reporting framework by increasing provincial and community capacity.	Number of provinces with dedicated monitoring officers/funds. Completeness and timeliness of provincial data submissions to national database.	Lead: DFFE (Biodiversity Monitoring) Partners: Provincial Authorities, NGOs	Y2-Y5	High
	E.3.1.2 Consolidate Provincial Guidelines to align permitting and enforcement with new national norms.	Schedule for alignment completed and published. Number of provinces that have amended their procedures.	Lead: DFFE (Biodiversity Management) Partners: Provincial Authorities	Y3-Y8	High
	E.3.1.3 Increase Enforcement Capacity via training for Environmental Management Inspectors (EMIs) and fostering SAPS collaboration.	Number of EMIs and SAPS members trained in wildlife crime investigation. Number of joint investigations initiated.	Lead: DFFE (Compliance & Enforcement) Partners: SAPS, NGO Wildlife Crime Units	Ongoing	High

11. Implementation, Revision, Monitoring, and Evaluation

Progress, Review, and Adaptation Process

This Strategy serves as the national species recovery plan for leopards and provides direct inputs into provincial and national species recovery programmes. It is important that implementation is co-owned by all stakeholders, and initiatives by different stakeholders to lead processes will be supported and encouraged. A key element is establishing transparent reporting mechanisms with responsibility and accountability to all relevant stakeholders, including communities living with leopards.

A **Leopard Implementation Coordination Committee (LICC)** will be established within three months of the Strategy's publication, with formal Terms of Reference developed and approved by DFFE. The LICC serves as the primary implementation agent responsible for overseeing, coordinating, and reporting on Strategy implementation. The existing **Leopard Advisory Forum (LAF)** will serve as a reference group to the LICC, providing technical and stakeholder advice as needed.

The Strategy operates on a 5-year cycle, with an **Implementation Plan created and reviewed annually** (by the LICC) and actions revised when and if necessary based on implementation progress, new evidence, or changing circumstances. A formal **annual report** is submitted to the Minister of Forestry, Fisheries and the Environment each year, summarising progress, challenges, and any adaptations made to the Action Plan. The overall **Vision and Goals** are reviewed after 10 years, allowing sufficient time for meaningful ecological and social outcomes to manifest while maintaining long-term strategic direction.

The Way Forward

Moving forward, the focus must be on building institutional and social contexts to support implementation, including sustained funding, provincial capacity, legislative alignment, and collaborative approaches that reflect the aspirations of all stakeholders, especially those historically excluded from decision-making. The Strategic Action Plan provides the operational roadmap, structured around three core goals and containing over thirty activities, assigned priority levels and a phased five-year timeline, with clear lead institutions and accountability. This Plan achieves its vision by securing ecological connectivity, supporting cultural traditions through Indigenous knowledge integration and regulated access, advancing local livelihoods via predator-based economies and direct incentive mechanisms, and operationalising transformation through equitable governance, fair benefit-sharing, and sustainable development linked to the objectives of the Biodiversity Economy. Ultimately, sustained implementation, transparent reporting, and shared commitment from government, communities, civil society, and the private sector will determine success, redefining leopard conservation as a tool for national transformation that builds trust, delivers equitable benefits, and secures South Africa's natural and cultural heritage for future generations.

12. References & Further Reading

References

Amin, R., Wilkinson, A., Williams, K., Martins, Q., & Hayward, J. (2022). Assessing the status of leopard in the Cape Fold Mountains using a Bayesian spatial capture–recapture model in Just Another Gibbs Sampler. *African Journal of Ecology*. <https://doi.org/10.1111/aje.12944>

Bothma, J. D. P. (1998). A review of the ecology of the southern kalahari leopard. *Transactions of the Royal Society of South Africa*, 53(2). doi: 10.1080/00359199809520392.

Devens, C., Hayward, M., Tshabalala, T., Dickman, A., McManus, J., Smuts, B., & Somers, M. (2019). Estimating leopard density across the highly modified human-dominated landscape of the Western Cape, South Africa. *Oryx*, 55, 34 – 45. <https://doi.org/10.1017/s0030605318001473>

Falayi, M., Gambiza, J., & Schoon, M. (2021). Thematic Section: Conservation Implications of Social-ecological Change in Southern Africa A scoping review of environmental governance challenges in southern Africa from 2010 to 2020. *Environmental Conservation*. <https://doi.org/10.1017/s0376892921000333>

Garbett, Rebecca, Gareth Mann, Ross Pitman, Jessie Berndt, Sean Morar, Shannon Dubay, Valentine Tawira, Lauren Foden, Annie Basson, and Guy Balme, 2023. South African Leopard Monitoring Project Report on 2022 Leopard Monitoring activities for the South African National Biodiversity Institute. Panthera, Cape Town.

Greyling, E., Comley, J., Cherry, M., Leslie, A., & Müller, L. (2023). Facilitation of a free-roaming apex predator in working lands: evaluating factors that influence leopard spatial dynamics and prey availability in a South African biodiversity hotspot. *PeerJ*, 11. <https://doi.org/10.7717/peerj.14575>

Hinde, K., Wilkinson, A., Tokota, S., Amin, R., O’Riain, M., & Williams, K. (2023). Leopard density and the ecological and anthropogenic factors influencing density in a mixed-use landscape in the Western Cape, South Africa. *PLOS ONE*, 18. <https://doi.org/10.1371/journal.pone.0293445>

Jacobson, A. P. *et al.* (2016). Leopard (*Panthera pardus*) status, distribution, and the research efforts across its range. *PeerJ*, 2016(5), pp. 1–28. doi: 10.7717/peerj.1974.

JET, McKaughan, Stephens PA, Lucas C, Guichard-Kruger N, and Hill RA., 2024. Leopard density and determinants of space use in a farming landscape in South Africa. *Scientific Reports* 14, no. 1 10562.. <https://doi.org/10.1038/s41598-024-61013-6>

Mann GKH, Williams KS & da Silva JM. 2025. A conservation assessment of *Panthera pardus*. In Patel T, Smith C, Roxburgh L, da Silva JM & Raimondo D, editors. The Red List of Mammals of South Africa, Eswatini and Lesotho. South African National Biodiversity Institute and Endangered Wildlife Trust, South Africa.

Mann, G., O’Riain, M., & Parker, D. (2020). A leopard's favourite spots: Habitat preference and population density of leopards in a semi-arid biodiversity hotspot. *Journal of Arid Environments*, 181, 104218. <https://doi.org/10.1016/j.jaridenv.2020.104218>

Mann, G., Pitman, R., Whittington-Jones, G., Thomas, L., Broadfield, J., Taylor, J., Rogan, M., and Balme, G., 2017. South African Leopard Monitoring Project. Annual report on monitoring activities in 2017. Report to the Scientific Authority of South Africa, November 2017.

McManus, J., Schurch, M., Goets, S., Faraut, L., Couldridge, V., & Smuts, B. (2022). Delineating Functional Corridors Linking Leopard Habitat in the Eastern and Western Cape, South Africa. *Conservation*.

<https://doi.org/10.3390/conservation2010009>

Mercugliano, E., Boshoff, M., Dissegna, A., Cerizza, A., Laner, L., Indovina, A., Biasetti, P., Da Re, R., Mascarello, G., & De Mori, B. (2025). Wildlife management and conservation in South Africa: informing legislative reform through expert consultation using the Policy Delphi methodology. *Frontiers in Veterinary Science*, 12.

<https://doi.org/10.3389/fvets.2025.1549222>

Morris, D., McWhorter, T., Boardman, W., Simpson, G., Wentzel, J., Coetzee, J., Du Plessis, F., & Moodley, Y. (2022). Gene flow connects key leopard (*Panthera pardus*) populations despite habitat fragmentation and persecution. *Biodiversity and Conservation*, 32, 945-963. <https://doi.org/10.1007/s10531-022-02531-5>

Müller, L., Briers-Louw, W., Seele, B., Lochner, C., & Amin, R. (2021). Population size, density, and ranging behaviour in a key leopard population in the Western Cape, South Africa. *PLoS ONE*, 17.

<https://doi.org/10.1371/journal.pone.0254507>

Naude, V., Balme, G., O'Riain, J., Hunter, L., Fattebert, J., Dickerson, T., & Bishop, J. (2020). Unsustainable anthropogenic mortality disrupts natal dispersal and promotes inbreeding in leopards. *Ecology and Evolution*, 10, 3605 - 3619. <https://doi.org/10.1002/ece3.6089>

Naude, V., Balme, G., Rogan, M., Needham, M., Whittington-Jones, G., Dickerson, T., Mabaso, X., Natrass, N., Bishop, J., Hunter, L., & O'Riain, M. (2020). Longitudinal assessment of illegal leopard skin use in ceremonial regalia and acceptance of faux alternatives among followers of the Shembe Church, South Africa. *Conservation Science and Practice*, 2. <https://doi.org/10.1111/csp2.289>

Patel, T., Smith, C., Roxburgh, L., da Silva, J. & Raimondo, D. 2025. *The Red List of Mammals of South Africa, Eswatini and Lesotho*. EWT and SANBI.

Rodriguez-Recio, M., Burgos, T., Krofel, M., Lozano, J., Moleón, M., & Virgós, E. (2022). Estimating global determinants of leopard home range size. *Animal Conservation*, 25(6), pp. 748–758.

Searle, C., Bauer, D., Kesch, M., Hunt, J., Mandisodza-Chikerema, R., Flyman, M., Macdonald, D., Dickman, A., & Loveridge, A. (2020). Drivers of leopard (*Panthera pardus*) habitat use and relative abundance in Africa's largest transfrontier conservation area. *Biological Conservation*. <https://doi.org/10.1016/j.biocon.2020.108649>

Swanepoel, LH 2008, Ecology and conservation of leopards, *Panthera pardus*, on selected game ranches in the Waterberg region, Limpopo, South Africa, MSc dissertation, University of Pretoria, Pretoria.

Tensen, L., Power, J., Camacho, G., Godinho, R., Van Vuuren, J., & Fischer, K. (2022). Molecular tracking and prevalence of the red colour morph restricted to a harvested leopard population in South Africa. *Evolutionary Applications*, 15, 1028 - 1041. <https://doi.org/10.1111/eva.13423>

Viollaz, J., Thompson, S., & Petrossian, G. (2021). When Human–Wildlife Conflict Turns Deadly: Comparing the Situational Factors That Drive Retaliatory Leopard Killings in South Africa. *Animals: An Open Access Journal from MDPI*, 11. <https://doi.org/10.3390/ani11113281>

Woodgate, Z., Garbett, R., Mann, G., Dubay, S., Foden, L., Honiball, TL., Basson, A., Theron, D., Maciejewski, K., & Balme, G., 2024. South African Leopard Monitoring Project Report on 2024 Leopard Monitoring activities for the South African National Biodiversity Institute. Panthera, Cape Town.

Woodgate, Z., Garbett, R., Mann, G., Dubay, S., Foden, L., Honiball, TL., Basson, A., Theron, D., Maciejewski, K., & Balme, G., 2025. South African Leopard Monitoring Project Report on 2025 Leopard Monitoring activities for the South African National Biodiversity Institute. Panthera, Cape Town.

Further Reading

Balme, G. A., Slotow, R., & Hunter, L. T. B. (2009). Impact of conservation interventions on the dynamics and persistence of a persecuted leopard (*Panthera pardus*) population. *Biological Conservation*, 142(11), 2681–2690.

Balme, G. A., Slotow, R., & Hunter, L. T. B. (2010). Edge effects and the impact of non-protected areas in carnivore conservation: Leopards in the Phinda–Mkhuze Complex, South Africa. *Animal Conservation*, 13(3), 315–323.

Bouderka, S., Perry, T. W., Parker, D. M., Beukes, M., & Mqatsa, N. (2022). Count me in: Leopard population density in an area of mixed land-use, Eastern Cape, South Africa. *African Journal of Ecology*.
<https://doi.org/10.1111/aje.13078>

Comley, J., van Tonder, J., Greyling, E., Wilkinson, A., Williams, K. S., Annecke, W. J., & Leslie, A. J. (2025). Unveiling threat patterns for leopards and mesopredators in agricultural landscapes of South Africa. *People and Nature*.

Constant, N. L. (2024). *A socio-ecological approach towards understanding conflict between leopards (Panthera pardus) and humans in South Africa: Implications for leopard conservation and farming livelihoods* [Doctoral thesis].

Devens, C. H., Tshabalala, T., McManus, J., & Smuts, B. (2018). Counting the spots: The use of a spatially explicit capture–recapture technique and GPS data to estimate leopard (*Panthera pardus*) density in the Eastern and Western Cape, South Africa. *African Journal of Ecology*, 56(4), 972–985.

Jacobson, A. P., Gemgross, P., Lemeris, J. R., Jr., Schoonover, R. F., Anco, C., Breitenmoser-Würsten, C., Dollar, L. (2016). Leopard (*Panthera pardus*) status, distribution, and the research efforts across its range. *PeerJ*, 4, e1974.

Martins, Q., & Martins, N. (2006). Leopards of the Cape: Conservation and conservation concerns. *International Journal of Environmental Studies*, 63(5), 579–585.

McManus, J., Faraut, L., Couldridge, V., van Deventer, J. V., Samuels, I., Cilliers, D., Smuts, B. (2022). Assessment of leopard translocations in South Africa. *Frontiers in Conservation Science*, 3, 943078.

Pitman, R. T. (2024). The conservation biology and ecology of the African leopard *Panthera pardus pardus*. *The Plymouth Student Scientist*, 17(1), 1–35.

Rogan, M. S., Distiller, G., Balme, G. A., Pitman, R. T., Mann, G. K. H., Dubay, S. M., O’Riain, M. J. (2022). Troubled spots: Human impacts constrain the density of an apex predator inside protected areas. *Ecological Applications*, 32(2), e02498.

Swanepoel, L. H., Lindsey, P. A., Somers, M. J., van Hoven, W., & Dalerum, F. (2013). Extent and fragmentation of suitable leopard habitat in South Africa. *Animal Conservation*, 16(1), 41–50.

Williams, S. T., Williams, K. S., Lewis, B. P., & Hill, R. A. (2017). Population dynamics and threats to an apex predator outside protected areas: Implications for carnivore management. *Royal Society Open Science*, 4(11), 161090.

Wilkinson, A., Fabricius, M., Brink, E., Garbett, R., Hahndiek, E., & Williams, K. S. (2024). Leopard dispersal across a fragmented landscape in the Western Cape, South Africa. *African Journal of Ecology*.