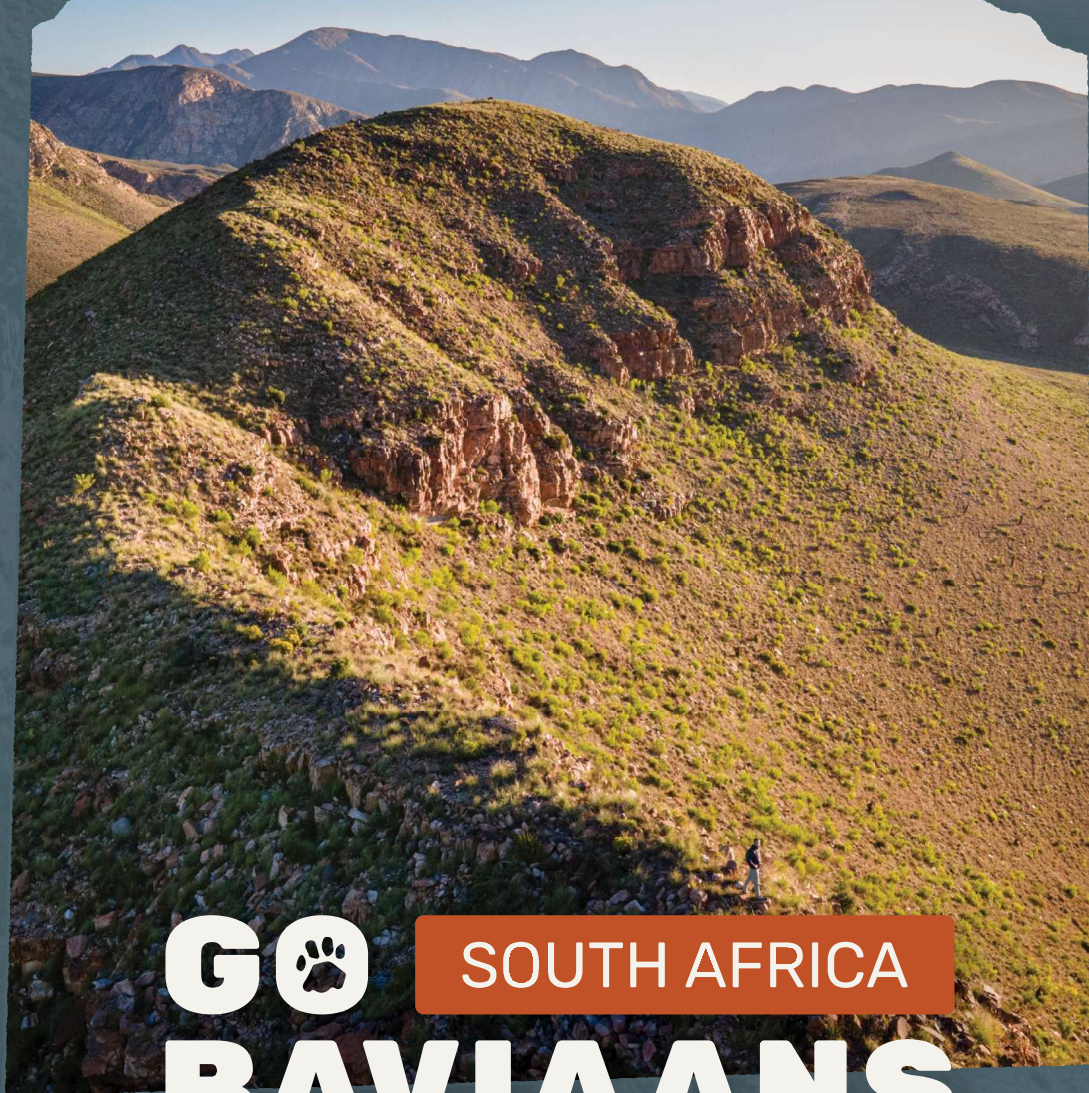


Baviaanskloof

English

Everything you need to know about the Baviaanskloof



SOUTH AFRICA

BAVIAANS

Only have 1min to learn about the Baviaans- kloof?

**QUICK
FACTS:**

HERE ARE **FIVE** THINGS YOU
REALLY NEED TO KNOW...



01

One of South Africa's Natural Giants

The Baviaanskloof is the third largest protected area in the country – a vast, rugged wilderness where nature still rules.

02

A Global Hotspot for Plant Life

Nowhere else on Earth packs so much plant diversity into so small a space. The variety of habitats and ecosystems here is unmatched.

03

Mountains older than Africa itself

The rocks forming the Baviaanskloof and Kouga mountains are 300 to 600 million years old – they've been here longer than the African continent as we know it.

04

Home to Humans for over 100,000 Years

Modern humans have lived in this landscape for more than 120,000 years. Their stories, footprints, and spirit still echo through the valleys.

05

A World Heritage Treasure

The Baviaanskloof is part of the Cape Floral Kingdom, a global biodiversity hotspot and UNESCO World Heritage Site that protects the rich and rare Fynbos biome.

World Heritage Site

WELCOME TO THE FYNBOS –
A WORLD HERITAGE WONDER

Even though the Cape Floral Region covers less than **0.4% of Africa's land**, it holds nearly **20% of the continent's plant species** – including **five plant families** found nowhere else.

In just 90,000 km², you'll find:

- **8,996** plant species
- **988** different genera
- **32%** of these species are found nowhere else on the planet



A floral Wonder of the World.

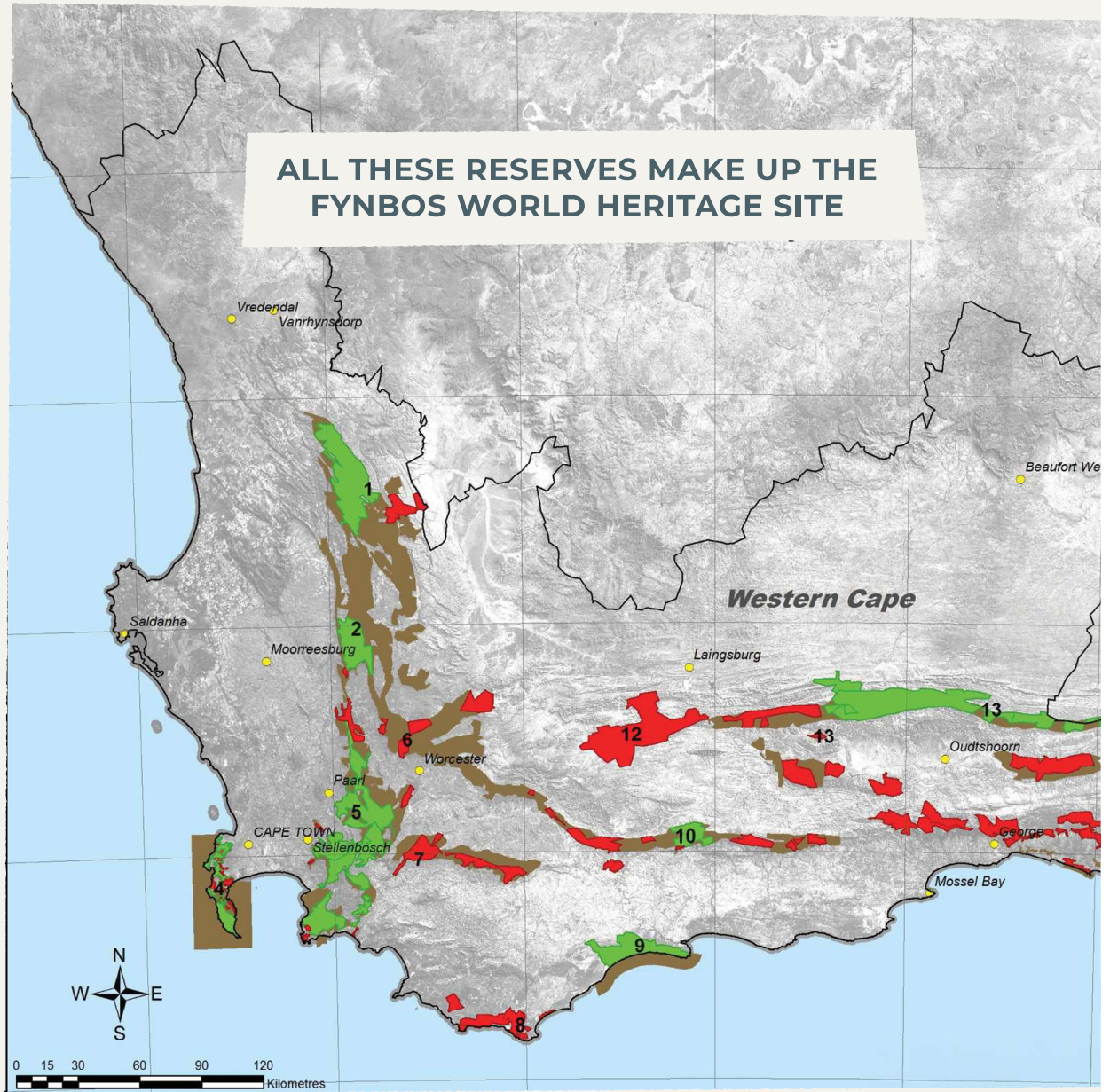
The plant life here is so rich and unique, it's earned this region a place as one of just six floral kingdoms on Earth.

The World Heritage Site was created to protect this incredible biodiversity. It's made up of a patchwork of parks and reserves across the Western and Eastern Cape, covering every type of soil, climate, and landscape the fynbos calls home.

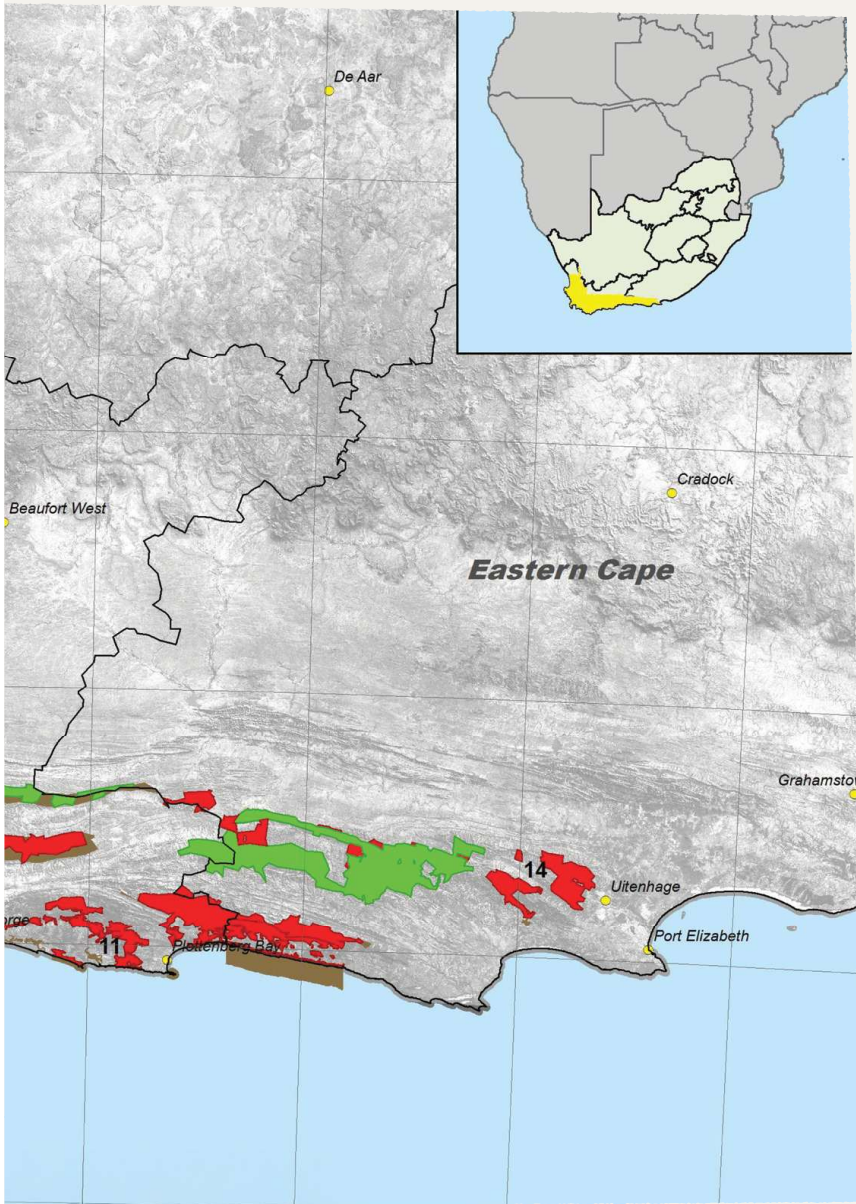
From the rugged Cederberg to the tip of the Cape of Good Hope, through the Boland Mountains, De Hoop, and the Swartberg – and all the way east to the Baviaanskloof.

The Baviaanskloof marks the eastern edge of the fynbos, where it blends into other biomes. That makes it not just beautiful, but biologically priceless.

ALL THESE RESERVES MAKE UP THE FYNBOS WORLD HERITAGE SITE



- | | | | |
|----------|------------------------------|----------|--------------------------------|
| 1 | Cederberg Complex | 5 | Boland Mountain Complex |
| 2 | Groot Winterhoek Complex | 6 | Hexrivier Complex |
| 4 | Table Mountain National Park | 7 | Riviersonderend Nature Reserve |



Major
Towns

Declared
2004

Declared
2015

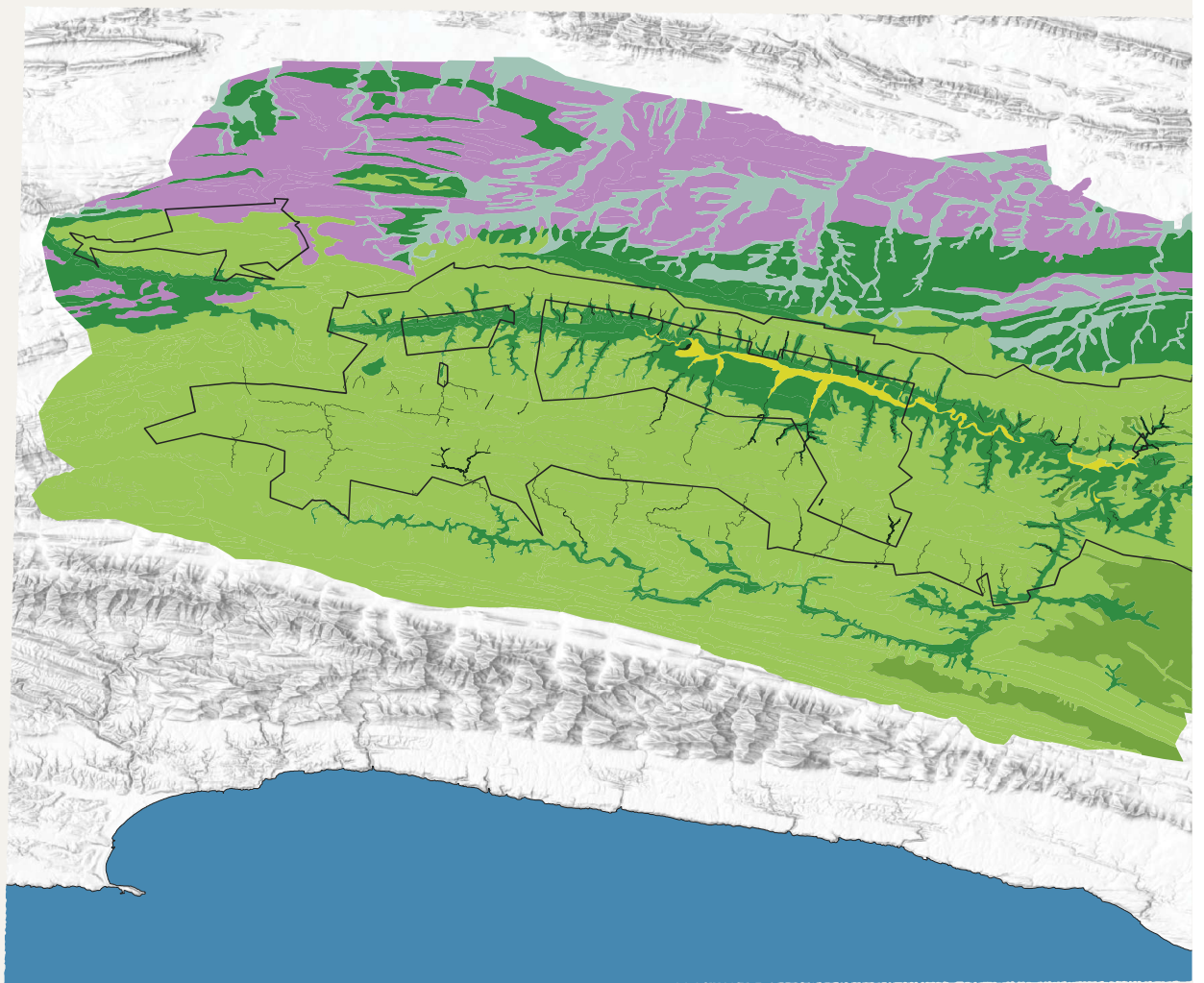
Buffer Zone

- 8 Agulhas Complex
- 9 De Hoop Nature Reserve
- 10 Langeberg Complex

- 11 Garden Route Complex
- 12 Anysberg Nature Reserve
- 13 Swartberg Complex
- 14 Baviaanskloof Complex

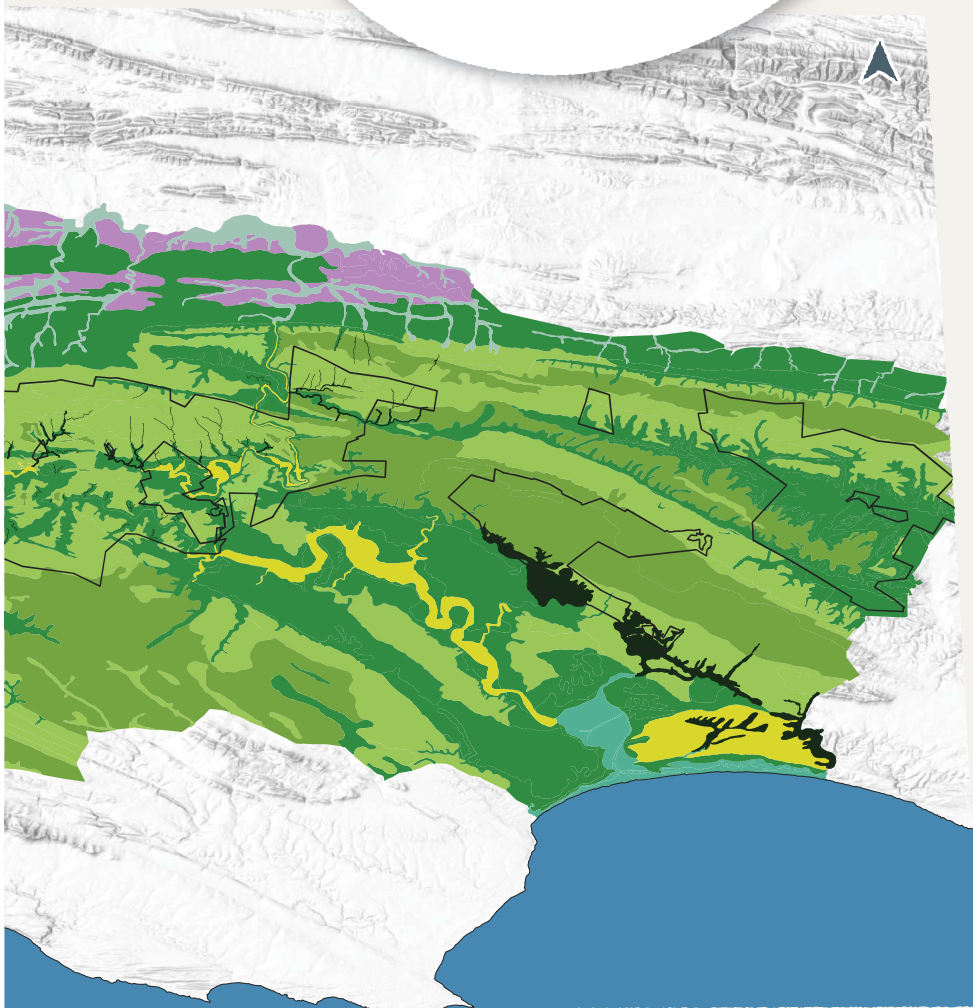
Baviaanskloof

A BIODIVERSITY HOTSPOT LIKE NO OTHER!



Where Plant Worlds Collide

Welcome to a place where seven of South Africa's eight major biomes meet in and around one spectacular valley. From lush forests to arid succulent thickets, this is a land of contrasts – and of life!



Fynbos

Thicket

Nama-Karoo

Succulent
Karoo

Grassland

Savanna

Forest

10 20km

ANOTHER SOUTH AFRICAN WORLD CUP WINNER

If there was a world cup for plant diversity, the Baviaanskloof would be champion! Plant diversity at the habitat and ecosystem level is extraordinarily high and probably without parallel in the world.

NOT 1, OR 2, BUT 3 GLOBAL HOTSPOTS!

The Baviaanskloof is very important from a global conservation perspective. The region includes three internationally recognised 'hotspots' of biological diversity – the Cape Floral Region, the Succulent Karoo and the Maputaland-Pondoland-Albany region.

A PLACE WHERE FAMILIES THRIVE

The Baviaanskloof is top of the class when it comes to number of plant genera and families. While other areas in the western distribution of the Fynbos region have higher number of species (for example, the Cederberg is estimated to have 1.6 times more plant species) – the Baviaans has an amazing 147 more genera and 38 more plant families, more than any other Fynbos protected area.

THE BAVIAANSKLOOF'S REMARKABLE BIOME DIVERSITY

The Baviaanskloof is one of South Africa's most ecologically diverse regions – a rare place where seven of the country's eight biomes meet in a dramatic and beautiful landscape. This incredible variety makes it a natural treasure of global significance.

WHAT IS A BIOME?

A biome is a large ecological area with distinct climate, vegetation, and wildlife. Different biomes support different types of plants and animals.

BIOMES FOUND IN THE BAVIAANSKLOOF:

Fynbos: Part of the Cape Floral Kingdom, known for its extraordinary plant diversity and colourful shrubs.

Thicket: Dense, spiny vegetation that supports animals like kudu and bushbuck.

Nama-Karoo: A semi-arid shrubland, home to hardy plants and small mammals.

Succulent Karoo: Characterised by low-growing succulent plants adapted to dry conditions.

Grassland: Open landscapes dominated by grasses, typically found on gradual slopes with summer rainfall.

Savanna: Mixed grassland and trees, more common in summer rainfall regions.

Forest: Found in deep, shady kloofs with year-round moisture and tall tree cover.

WHY IT MATTERS

This overlapping of biomes creates:

- Exceptional plant and animal richness
- Unique ecological transitions
- Living examples of species adapting and evolving
- Vital habitat corridors for biodiversity

01. Fynbos

FUN FACT:

**Part of the Cape
Floral Kingdom** –
one of the world's
richest plant regions
with thousands of
species found
nowhere else

WHERE:


Mountain slopes
and rocky ridges

CLIMATE:

Cool, wet winters &
hot, dry summers

PLANTS:

Proteas, ericas
(heathers), restios



The **fynbos biome** is characterised by a climate where most of the rainfall (ranging from 300 to 3,000 mm per year, depending on the site) falls in the winter months, by predominantly infertile soils and the universal presence of three main plant types: shrubs with small, evergreen leaves, or *ericoids* (heaths or Erica); shrubs with large, leathery leaves, or *proteoids* (proteas, pincushions and cone-bushes); and wiry, sedge-like plants or *restioids* (of the family *Restionaceae*).

Furthermore, fynbos burns at regular intervals of between five and 50 years and fire is an essential force for the proper functioning of fynbos ecosystems.

The fynbos biome also includes renosterveld, a fire-prone shrubland dominated by the small-leaved renosterbos *Elytropappus rhinocerotis*. Renosterveld differs from fynbos in that it grows on relatively fertile soils, lacks *proteoids*, and has a low cover of *restioids* (these are largely replaced by grasses). Its hallmark is a high number of bulbs, less a feature of the study area than the winter-rainfall renosterveld to the west. Within the Baviaanskloof, the fynbos biome is mainly confined to the mountains and lower slopes comprising the sandstone substrata of the Table Mountain Group rocks.

Two principal forms occur: **Mountain Fynbos** grows on the wetter, upper slopes (this form is a 'pure' fynbos type since it lacks summer-growing grasses; it is also only accessible to those who are willing to explore these upper slopes on foot); and **Grassy Fynbos** – the most widespread form – grows on the lower slopes and plateaus of the African surface.

Typically, Grassy fynbos has a high abundance of summer-growing grasses and shows floristic links to the upland grasslands of the summer-rainfall eastern Cape. Renosterveld is not abundantly found in the Baviaanskloof: although bands of renosterveld occur on the lower, northern slopes of the Baviaanskloof Mountains while extensive areas occur to the west of Nuwekloof, on Bokkeveld shale, much of this area falls outside of the Mega-reserve.



02. Thicket



FUN FACT:

Key biome for **ecological restoration** and carbon storage projects

WHERE:


Lower slopes and valleys

CLIMATE:

Hot, dry, with irregular rainfall

PLANTS:

Dense spiny shrubs, succulents, small trees



The **thicket biome** is found mainly where the annual rainfall of between 200 and 800 mm falls in both winter and summer (although spring and autumn peaks occur), where soils are mostly deep and relatively fertile, and in sites that are protected from fire. The typical plant types are shrubs (often spiny) with shiny, mostly large, evergreen leaves; succulents of all shapes and sizes; and vines or climbers. Grasses are poorly represented within the thicket clumps, but may be common in the spaces between them.

Thicket burns only under extreme circumstances; browsing by large mammals constitutes the disturbance process that has shaped the biology and functioning of thicket plants and ecosystems, respectively. The thicket biome is centred in the south-eastern part of South Africa (mainly in the Eastern Cape) where it is most extensive in the major river valleys (such as the Gouritz, Baviaanskloof-Gamtoos, Sundays, Great Fish and Kei).

All three major types of thicket occur in the Baviaanskloof: **Mesic Thicket** (with much river euphorbia *Euphorbia triangularis*) in the Gamtoos Valley; **Valley Thicket** (with spekboom *Portulacaria afra* and valley bush euphorbia *Euphorbia grandidens*) on the lower slopes from Cambria to Coleskysplaas; and **Arid Thicket** (with spekboom *Portulacaria afra* and wildepruim or jacket plum *Pappea capensis* on screes and lower slopes of Bokkeveld shale and Enon deposits from Sandvlakte to Nuwekloof). Thicket also forms a staggering diversity of mixtures or mosaics with vegetation of other biomes; in the Baviaanskloof, thicket clumps are interspersed with fynbos, renosterveld, grassland and karoo.

03.

Nama-Karoo



**FUN
FACT:**

**Adapted to
drought** – many
plants conserve
water with small,
waxy leaves

WHERE:


Drier interior and
north-facing slopes

CLIMATE:

Semi-arid, low
unpredictable rain

PLANTS:

Small grey shrubs,
hardy grasses



In the **Nama-karoo biome**, rain – varying from 100 to 400 mm per year – falls in the warmer months, especially in early autumn when the conditions that produce summer rain penetrate westwards, deep into the interior of South Africa.

However, unlike the succulent karoo, rainfall in this biome is highly variable from year to year.

Much of the Nama-karoo, especially on the high plateau above the Great Escarpment, experiences biting temperatures and hard frosts during winter. The soils are mostly clayey and relatively fertile.

The typical plant form is the karoo bossie, a dwarf to low shrub, with soft and often aromatic leaves, that are shed in times of drought. Ephemeral or weakly perennial grasses that grow in the warmer months of the year, are also characteristic.

The ecosystem drivers are periodic droughts when the amount of rain falls way below the average, and – in the past – grazing impacts of the large concentrations of nomadic springbok and wildebeest that used to roam across this biome in search of grazing, nurtured by the scattered and sporadic rains.

In the Baviaanskloof, Nama-karoo is found in the drier western reaches, where it forms mosaics with Arid Thicket, and on the Steytlerville flats, north of the Baviaanskloof Mountains.

04.

Succulent Karoo



**FUN
FACT:**

One of
the most
succulent-rich
areas on Earth –
with vibrant
spring flowers
after rain

WHERE:

Dry western edges

CLIMATE:

Low rainfall, often in winter

PLANTS:

Low-growing succulents,
bulbous species



The **succulent karoo biome** is a semi-arid ecosystem where the meagre rainfall of between 100 and 300 mm falls mainly in the winter months.

Unlike all other deserts, however, this rainfall is unusually reliable and this phenomenon explains much about the appearance of succulent karoo, especially the predominance of small-bodied succulents and the annual displays of colourful flowers.

Succulent karoo grows on a wide range of soils, but they are invariably more fertile than those soils supporting the adjacent fynbos. The plant types that characterise succulent karoo are small (often tiny) shrubs with succulent leaves, most being members of the vygie or mesemb subfamily (*Ruschioideae*) of the *Aizoaceae*, although crassulas and stem succulents (*stapeliads* and *euphorbias*) are also common.

Succulent karoo ecosystems appear to be driven by occasional droughts – normally at ten-year intervals – that cause the death of many of the shallow rooted and drought-intolerant succulents. Grazing by indigenous animals (springbok, gemsbok) may also have played a role, although animal density was probably never high.

In the Baviaanskloof, succulent karoo is largely restricted to small patches throughout the region, where it invariably forms mosaics with Arid Thicket.



05.

Grassland



**FUN
FACT:**

Important
for **grazing
animals**
during wet
seasons

WHERE:

Isolated patches on
plateaus or cooler areas

CLIMATE:

Warm summers
with seasonal rain

PLANTS:

Dominated by grasses like red
grass (*Themeda triandra*)



South Africa is home to magnificent grasslands, very rich in plant species.

Grasslands are distributed mainly in the eastern, summer-rainfall parts of the country where annual totals range from 400 mm (in the drier west) to above 2,000 mm (along the eastern escarpment).

The grassland biome is found on a wide range of soil types: infertile soils, especially under high rainfall, support sourveld – a form of grassland that is palatable only during the growing season; more fertile soils and lower rainfall conditions support sweetveld, where the component grasses retain their nutrition, and are palatable to livestock throughout the year.

The obvious, plant-related characteristic of the grassland biome is the predominance of grasses. In the South African situation, these grasses are all summer-growing species of tropical affinity.

In grasslands, disturbance is associated with regular fire – sometimes on an annual basis in the wetter, more productive forms – and the grazing impacts of the large number of indigenous animals that used to occupy this biome.

Baviaanskloof grasslands are almost entirely associated with African surface plateaus and comprise a mixture of sweet and sour species. However, sour grasslands are found on shale bands in the De Doorns, below the Groot Winterhoek Mountains.



06. Savanna



FUN FACT:

Common in Tropical Africa, but rare this far south –
Baviaanskloof's savanna shows a northern influence

WHERE:

Broad valley bottoms

CLIMATE:

Hot summers, moderate rainfall

PLANTS:

Grasses mixed with trees like acacias

South African savannas are a relatively species-poor extension of the vast **savanna biome** that covers most of south-central Africa.

Savanna is essentially a subtropical formation, experiencing summer rainfall of between 250 mm (in the Kalahari) and in excess of 1,000 mm per year.

It is characterised by the presence of two plant types: **winter-deciduous trees** and **summer-growing grasses**. In this sense, it is sometimes envisaged as a wooded grassland, the latter component being sweet or sour, depending on rainfall and soil fertility.

The savannas of the Baviaanskloof, which are entirely confined to the alluvial bottomlands of the major river valleys – are dominated by a single tree species – Soetdoring *Acacia karoo* – while the ground layer comprises a mixture of sweet and nutritious grasses, especially Guinea grass *Panicum maximum*.



07. Forest

FUN FACT:

**Acts as a
refuge** for
ancient plant
lineages and
forest-loving
birds

WHERE:

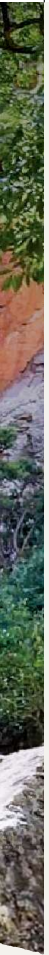
Deep, shady kloofs and ravines
with permanent water

CLIMATE:

Cool, humid microclimates

PLANTS:

Tall trees like Yellowwood,
Wild Olive and Cape Fig



The **forest biome** occupies only a small part of South Africa and most of this is found in the Tsitsikamma-Outeniqua region to the south of the Baviaanskloof. Forest typically require copious moisture – upwards of 800 mm per year or access to water from perennial streams – and sites that are protected from fire. Forest plants grow in deep and relatively fertile soils although like thicket, they can become established on poorer soils – provided these areas are fire free – and enrich the earth by producing large amounts of organic and nutrient-rich litter.

The typical forest plant type is the tree, usually evergreen, but sometimes deciduous for a short time of the year. Other characteristic plant types are ferns (in wetter forms) and vines (in drier ones).

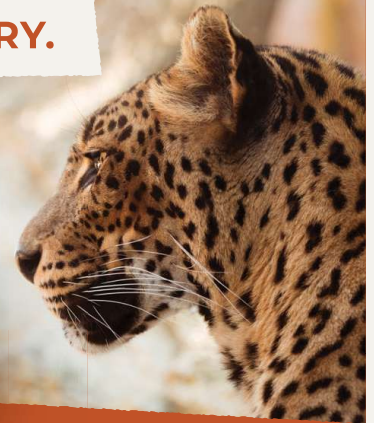
Disturbance in forest is caused by tree falls – induced by plant death or unusually strong wind – and the light gaps these create. (In the shorter, subtropical types, such as the Alexandria forests east of Port Elizabeth, elephant browsing would have undoubtedly played a role in creating gaps in the forest canopy.)

In the Baviaanskloof, forests are entirely restricted to deep, shaded kloofs where there is perennial water. As mentioned above, these forest patches comprise a mixture of both temperate and subtropical species.

The Elusive King of the Baviaanskloof

YOU MAY NEVER SEE ONE – BUT THE BAVIAANSKLOOF IS LEOPARD COUNTRY.

These silent, powerful cats are the last surviving large predator in this landscape, and they play a vital role in keeping the ecosystem healthy and balanced.



WHY LEOPARDS MATTER HERE

- **Top of the Food Chain** – They're the apex predator in the Cape Fold Mountains.
- **Globally Important** – Listed as Vulnerable on the IUCN Red List.
- **Source Population** – Baviaanskloof leopards roam far and wide, helping keep populations alive across the region.
- **Wild and Free** – They are a living symbol of wilderness and resilience.

TRACKING THE INVISIBLE

Leopards are shy, mostly nocturnal, and blend perfectly into the landscape. So how do we study them? We use camera traps – hidden motion-sensitive cameras placed along trails and ridgelines. Each leopard has a unique spot pattern, like a fingerprint. These photos help researchers identify and track individual cats.

HOW MANY LEOPARDS ARE HERE?

Research suggests that between **50 and 80 leopards** live in the greater Baviaans area.

LIVING WITH LEOPARDS

Even in a protected area, leopards face threats:

- **Conflict with Farmers** – especially where they prey on livestock outside the reserve.
- **Habitat Loss and Fences** – roads, development, and farmland break up their roaming space.

PROTECTING THE FUTURE

Leopard conservation depends on:

- Strong partnerships with local communities
- Ongoing monitoring through science and fieldwork
- Growing public awareness and support

The Willowmore Cedar

(*Widdringtonia schwarzii*)

A RARE TREE, FOUND NOWHERE ELSE ON EARTH

The Willowmore Cedar only grows here – in the **Baviaanskloof** and a few nearby mountains. It prefers **deep, cool kloofs and steep rocky slopes**, where it grows slowly into tall, twisted giants – usually **10–20 metres**, and sometimes up to **40 metres** in sheltered spots.

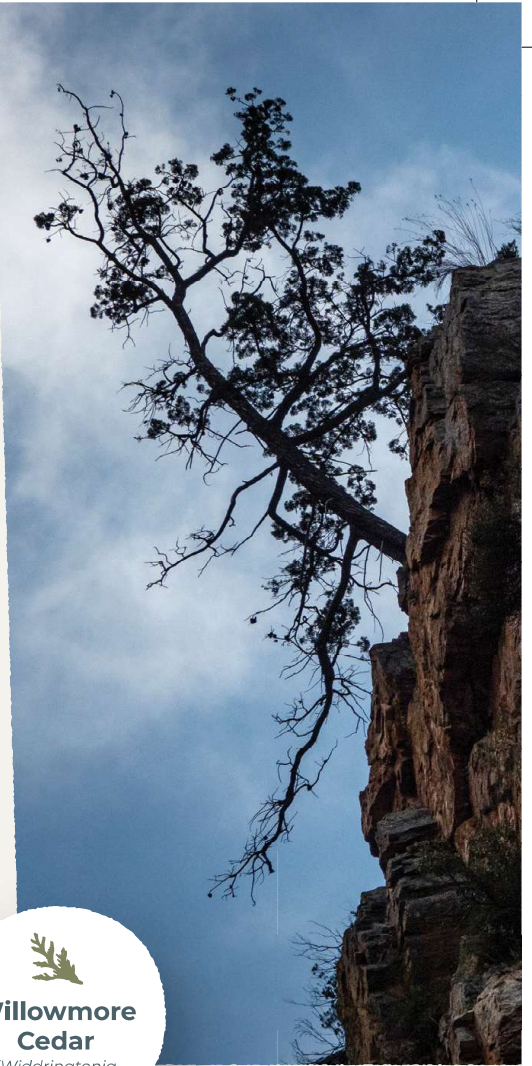
NOT YET ENDANGERED, BUT CLOSE...

The Willowmore Cedar is officially listed as **NEAR THREATENED** – it's holding on, but only just. Thankfully, it's now a **Protected Tree by law**, and ongoing **conservation efforts** are making a difference:

- Fire management in key areas
- Discoveries of new trees in remote valleys
- Seed banks and garden plantings (including at Kirstenbosch)

A TREE WITH A STORY

- In the past, cedar wood was in high demand: **it's durable, easy to work with, smells great, and resists insects.**
- Early settlers used it for almost everything – **fences, houses, furniture, and even telegraph poles.**
- Most of the accessible trees were cut down, while those tucked deep in kloofs were left standing.



**Willowmore
Cedar**
*(Widdringtonia
schwarzii)*

WHAT'S THREATENING THESE TREES?

- **FIRE RISK:** Cedars burn easily and rarely survive wildfires.
- **LOSING THEIR SPACE:** Farming and repeated fires over the last 200 years have reduced the quiet canyons they need to thrive.
- **SMALL, SCATTERED POPULATIONS:** The trees survive in just a few small groups, making them more vulnerable to any local disaster.

Freshwater Fish in the Baviaanskloof

SMALL FISH. BIG STORIES.

The Baviaanskloof is a special place for freshwater fish. It's home to **15 indigenous species** – an impressively high number for South Africa – and some are found nowhere else on Earth.

Three of these species live only in the **Cape Floristic Region**, making this a key area for their survival.



**Redfin
Minnow**

*(Pseudobarbus
afer / P. asper)*

SPOTLIGHT ON THE REDFIN MINNOW

(Pseudobarbus afer & Pseudobarbus asper)

Two species of **Redfin Minnow** live in the Baviaanskloof. Both are under threat, and protecting them here is crucial.

- They love clear, rocky pools.
- Juveniles hang out in large shoals; adults form smaller groups.
- They're bottom-feeders and spawn several times each summer.

Redfins are often found **at the very top of streams** – the kind that dry up further downstream. That means Redfins in one stream rarely mix with those in another.

Over time, this has led to **unique local variations** in each stream – like tiny fish evolving on their own islands.

A Human History of the Baviaanskloof

OVER 1 MILLION YEARS AGO

Early humans lived here

The oldest evidence of human activity in the Baviaanskloof comes from large stone tools – hand axes and cleavers – made on river cobbles. These date back between 1 million and 250,000 years ago. Found near rivers, springs, and wetlands, these tools belong to the Earlier Stone Age, made by early hominids who lived across this landscape.



AROUND 120,000 YEARS AGO

The first modern humans emerged

The world's oldest remains of modern people (first *Homo Sapiens Sapiens* – people anatomically similar to us) were found at the Klasies River Caves along the Tsitsikamma coast on the fringes of this region, and date between 110,000 and 120,000 years old. These remains are believed to belong to the early ancestors of the KhoiSan people of southern Africa.

THE LAST 20,000 YEARS

San hunter-gatherers in the Baviaanskloof

The San were the first known inhabitants of the Baviaanskloof. They lived in small family groups, hunting wild animals and gathering plants. They sheltered in rock overhangs and caves, many of which still hold beautiful rock paintings showing animals, hunters, and spiritual scenes.

The Baviaanskloof's freshwater springs, sheltering cliffs, and rich biodiversity made it an ideal long-term environment for San hunter-gatherers. San people likely followed game migration paths and seasonal plant cycles through the kloof, returning to known shelters year after year. Even after other groups arrived, the San remained in the kloof for centuries – leaving behind an extraordinary cultural legacy carved into stone.

2,000 YEARS AGO

The arrival of the Khoikhoi Herders

About two thousand years ago, the Eastern Cape witnessed the arrival of a new people with a new way of life. These were the Khoikhoi, pastoralists who brought domesticated sheep and cattle into the region.

The Khoikhoi were originally related to the San, but had adopted herding. This shift to animal herding was revolutionary: instead of surviving only by hunting and gathering, the Khoikhoi raised livestock for milk and meat. They became the first native herders in southern Africa, and they proudly distinguished themselves from the purely foraging San.

1,500 YEARS AGO

The Xhosa brought agriculture & metalworking

From around 1,500 years ago, Bantu-speaking communities began moving south into the region. These early Xhosa ancestors practiced agriculture, raised cattle, and worked with iron. Their lifestyle supported larger communities and permanent settlements. As they encountered the Khoikhoi and San, they absorbed elements of their culture – including some of the Khoisan language clicks and survival knowledge. Archaeological evidence in the kloof is limited, but oral histories and nearby finds suggest it was used seasonally for herding, refuge, and travel, rather than for major settlements.

THE EARLY 1800'S

The first White Settlers arrive

These were mostly Afrikaner farmers looking for grazing land and freedom from colonial authorities. They brought their wagons, livestock, and families, and set up farms in the kloof's fertile valleys. Life was tough – remote and rugged – but the kloof offered clean water, wild game, and grazing. These settlers became part of the larger story of the eastern Cape frontier, where land and power were contested.

Their arrival also marked a shift: fences, guns, and livestock began to change the landscape, pushing out the San and closing a chapter of thousands of years of indigenous life in the kloof.

TODAY

The region carries the complex legacy of these centuries of contact, conflict, and cultural exchange.



THIS BOOKLET IS AVAILABLE IN AFRIKAANS & ENGLISH

GO  SOUTH AFRICA
BAVIAANS

www.gobaviaans.co.za