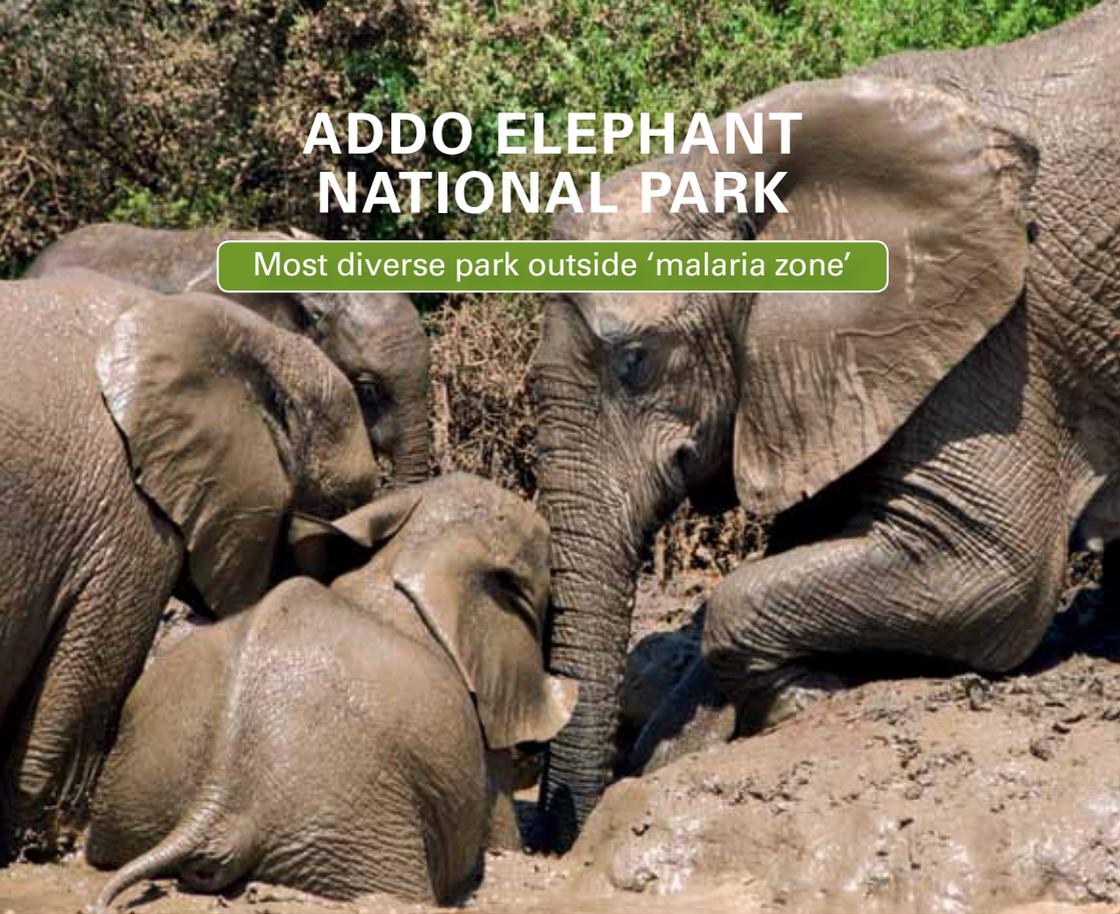


ADDO ELEPHANT NATIONAL PARK

Most diverse park outside 'malaria zone'



LOCATION



Lie of the land

Addo stretches over 200 km from Kenton-on-Sea in the east, to the banks of the Darlington Dam and to Waterford in the Karoo in the north-west. The park centres on the Zuurberg Mountains (part of the Winterhoek mountain range) that separate the dry, flat plains of the Karoo in the north from the southward-sloping land and hill country that runs to the Indian Ocean seaboard. Altitudes range from sea level to almost 1 000 m, including several Zuurberg peaks above 800 m. From Darlington Dam in the north-west, the Sundays River runs inside the south-western border of the park, emptying its waters into Algoa Bay at the western edge of the largest coastal dune system in the southern hemisphere. Addo covers approximately 164 000 ha but will ultimately encompass 686 000 ha, including a 120 000 ha marine reserve.

Savanna elephants frequently wallow in mud and water, especially on hot summer days.

Brief history

Several sites in the Addo area carry evidence of humankind from at least the Middle Stone Age. Some of the most significant artefacts lie within the Alexander dune field and show three distinct periods of usage. It is believed that the earliest

group, about 5 000 BP, came to the coast to forage only at certain times of the year. From about 4 000 BP people were living here permanently, as evidenced by the type of stones from which they made their tools. The bones of domestic livestock in the 'kitchen' middens indicate that Khoekhoen peoples had settled in the dunes by 2 000 BP. From around 1 500 BP there were at least three Khoekhoen clans in the area, the Iqua, Gonaqua and Damasqua, but they were largely wiped out by smallpox in the early 1700s.

Nomadic Xhosa tribes were also pushing into the area by this time, including the Gqunukhwebe who settled around the mouth of the Sundays River, and the Dange who established themselves along the Wit River. The Khoekhoen survivors, the Hoengeiqua, rallied under their leader Ruiters and successfully campaigned against the migrating Xhosa.

The first Boers penetrated this area in the 1740s in search of ivory and trade, but within a decade they had begun to settle and farm. Initially the Boers' chief conflicts were with the San hunter-gatherers, but by 1780 at least five Xhosa clans had settled in the area and there were more battles, chiefly with the Gqunukhwebe. These conflicts peaked in 1789 and the tribesmen retreated into the Zuurberg. Guerilla warfare ensued as about 700 Khoe and mixed-breeds allied with the Xhosa warriors to harass the Boers. In 1811 a colonial force of about 1 000 regular soldiers and settler militias drove the 'enemy' beyond the Great Fish River. In this so-called 'cleansing of the Suurveld', some 20 000 Xhosa and Khoekhoen were displaced. During the 2nd Anglo-Boer War, several skirmishes took place between Boer commandos and British troops near Darlington Dam in the north of the park.

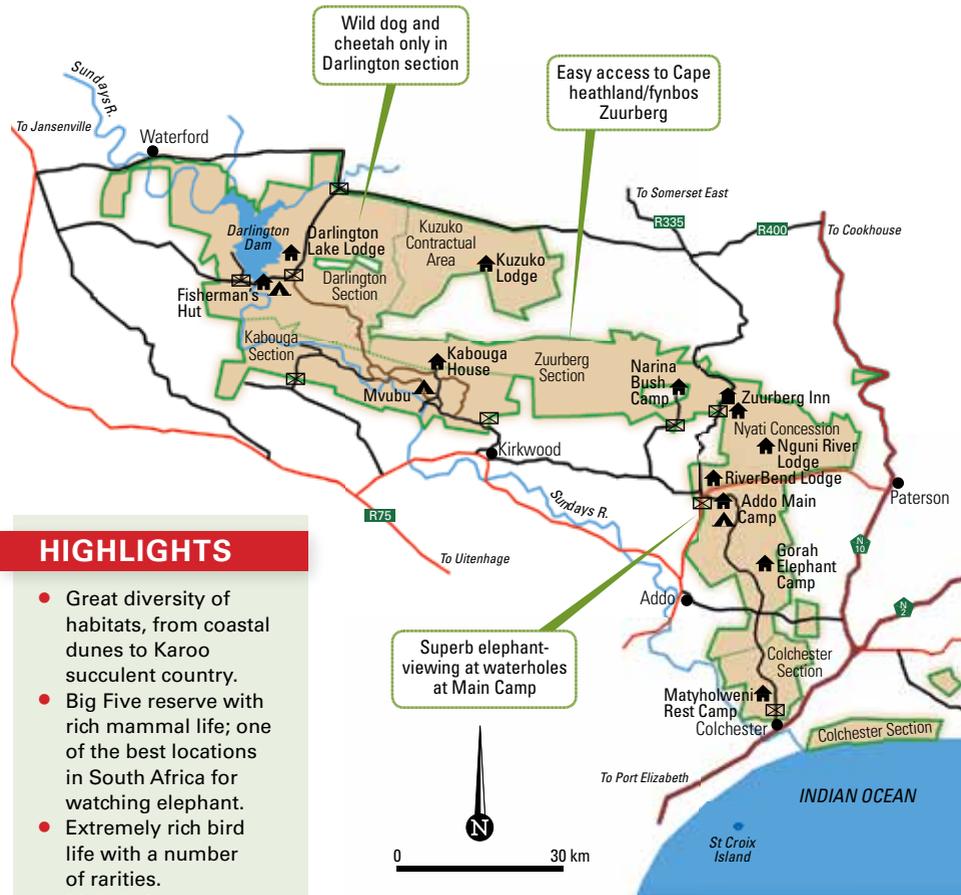
By the early 1900s only small, isolated populations of elephant remained in the Eastern Cape. In 1919 Major P.J. Pretorius, appointed to exterminate the Addo elephant because of conflicts with agriculture, shot 114 animals in just over 12 months. When the park



CLIMATE

The area is classified as a tension zone where summer, winter and all-year rainfall regimes meet. The main game area, and the area near the park headquarters, receives year-round rain averaging 450 mm, with most in February/March and October/November. Summer and all-year rainfall regimes meet at the coast, where the Sundays River mouth area averages just 390 mm, while the Alexandria Forest on the eastern edge of the dune field gets 900 mm. The dune fields themselves lie in a 'rain shadow' and receive lower rainfall than their surroundings. Up to 720 mm per year falls in the Zuurberg, but as little as 250 mm falls in the summer-rainfall Karoo area around Darlington Dam. At the park headquarters temperature ranges are 15°C to 45°C in January and 5°C to 18°C in July. Temperatures vary greatly; the Darlington Dam area may reach 48°C in summer and freezing temperatures in winter.

Cape fur seals breed on islands in Algoa Bay that fall within the Marine Protected Area adjacent to the national park.



HIGHLIGHTS

- Great diversity of habitats, from coastal dunes to Karoo succulent country.
- Big Five reserve with rich mammal life; one of the best locations in South Africa for watching elephant.
- Extremely rich bird life with a number of rarities.
- Malaria-free.

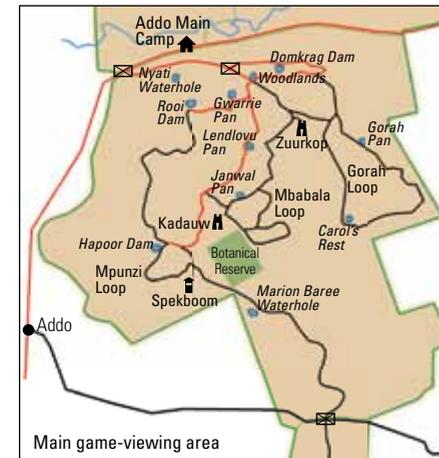


The Karoo boer-bean flowers in spring, from August to October.

was proclaimed in 1931, only 11 elephant remained, and animals continued to be lost because of inadequate enclosure. In 1954, with just 22 elephant, the park manager Graham Armstrong developed an effective elephant-proof fence that stands to this day. Only one elephant ever breached the fence, the famed bull Hapoor whose mounted head can now be seen in the information centre. Today there are over 450 elephant and the population continues to grow.

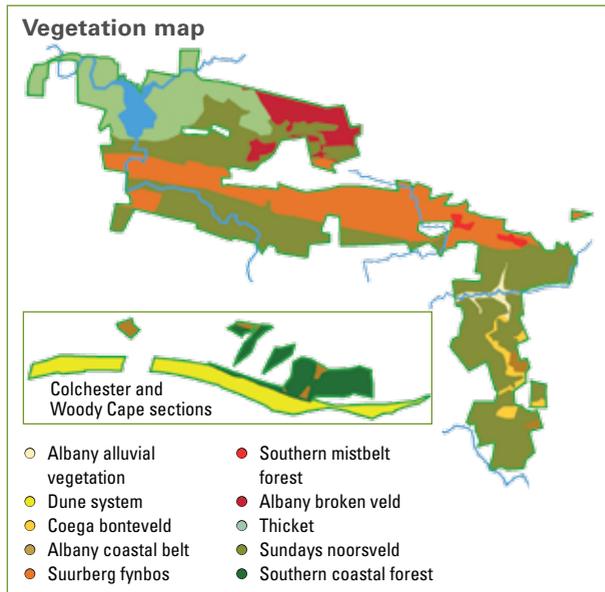
Geology and landscape

The Zuurberg range can be seen from all over the park. It is an eastern outlier of the Cape Folded Belt, consisting of quartzite and sandstone sediments of the Witteberg Group, laid down about 400 million years BP. However, the islands in Algoa Bay are built of the oldest exposed rock in the park, a quartzitic sandstone formed some 500 million years BP. At the southern base of the Zuurberg range is a mix of



There are two species of hare in the park, with the scrub hare being most widespread and favouring a mix of open and bushed country (top). Black-backed jackal occur throughout the park and are commonly seen and heard (above).

conglomerates, glacial tillites, mudstones and sandstones. Further south lies a series of ancient, undulating wave-cut platforms between 30 m and 100 m above sea level. At the northern edge of the range are rocks of the Dwyka Group, derived from glacial deposits and extending to the southern shores of Darlington Dam. In the Karoo section most of the rocks are mudstones and sandstones belonging to the Beaufort and Ecca groups, and date from 250 to 300 million years BP. The Sundays River Formation of reddish and greyish mudstones underlies much of the area south of the mountains. South-eastwards towards the coast there are extensive areas of whitish limestone of the Alexandria Formation, laid down when oceans covered the area. This white rock is quite obvious on the upper reaches of some hills within the main game area. The Alexandria coastal dune field, at 15 800 ha the largest in the southern hemisphere, dates from 6.5 million years BP and is annually augmented by about 350 000 m³ of seaborne sand.



The Karoo shepherd's tree flowers from August to November.

Vegetation

Of South Africa's seven biomes, five can be found in the park, more than in any other African conservation area. These are Nama-Karoo, Cape heathland (fynbos), grassland, forest, and subtropical thicket; the latter covers large areas of the park, including the main game area. Within this complex of biomes botanists have identified no fewer than 43 vegetation units, each with its own unique mix of species. The subtropical thicket includes such abundant species as **porkbush**, or **spekboom**, (*Portulacaria afra*), a favourite food of many browsing animals such as greater kudu and elephant, **white milkwood** (*Sideroxylon inerme*), the **blue-flowered plumbago** (*Plumbago*

The Alexandria coastal dunefield is the most extensive of its type in the southern hemisphere.



Main Camp offers a variety of accommodation units.

auriculata), **common gwarrie** (*Euclea undulata*), **Karoo boer-bean** (*Schotia afra*) and a local agave, **Bushman's hemp** or **mother-in-law's tongue** (*Sansevieria thyrsiflora*). This thicket is very dense, rarely more than 4 m tall but with the occasional aloe or euphorbia sticking above the 'crowd', and able to withstand temperature extremes and erratic rainfall. The exotic **prickly pear cactus** (*Opuntia ficus-indica*), a noxious weed in areas with no elephants, is absent from the main game area. This is because elephant favour this plant and eat both the cladates ('leaves') and the fruit – natural pest control at work. Large swathes of grassland clothe the south-facing slopes of the Zuurberg: the most important grazing grasses are **red grass** (*Themeda triandra*) and **guinea grass** (*Panicum maximum*). Standing above the grass are the **Zuurberg cycad** (*Encephalartos longifolius*) about 3 m tall with palm-like leaves, and the gnarled, large-leaved **Zuurberg cushion bush** (*Oldenburgia grandis*). The cushion bush grows on outcrops and produces purplish-cream flower heads up to 13 cm across, throughout the year. The richest biome is the Cape heathland, or fynbos, on the Zuurberg. It can be classified into two types: mountain fynbos exhibits the greater species diversity and is found on the wet southern slopes and here and there at lower levels, while grassland fynbos covers a much greater area, and is found along the ridges and gentle slopes in the high-lying regions. Mountain fynbos includes the rush-like members of the Restionaceae, with scattered stands of **real sugarbush** (*Protea repens*) and **giant protea** (*Protea cynaroides*) with flower heads as much as 30 cm across. The slopes harbour three species of cycad, while other species occur elsewhere in the park. Pockets of Afromontane forest are found on south-facing slopes and consist of evergreen trees with a canopy height of between 10 m and 14 m. The Alexandria coastal forest has low-growing trees with a fairly dense, dark canopy and a lower population of undergrowth plants. Interesting trees among the rich diversity include **white stinkwood** (*Celtis africana*), **white milkwood** (*Sideroxylon inerme*), **coastal red milkwood** (*Mimusops caffra*), **common wild elder** (*Nuxia congesta*) and **Cape teak**

FACILITIES AND ACTIVITIES

- Main and Matyholweni camps have 61 and 12 accommodation units respectively, comprising cottages, rondavels, and safari tents; Main has a campground.
- Bush camp (Narina) in the Zuurberg section and several concession lodges, including Gorah, Intsomi, Nguni, Darlington Lake, Kuzuko and RiverBend – more are planned. Most lodges are in refurbished farmhouses and offer a range of services. Basic huts and campground in Darlington section.
- Restaurant, shop and fuel at Addo Main Camp; Port Elizabeth lies 72 km south.
- A 45-km 4x4 trail.
- Hiking trail in Woody Cape section with overnight huts, and in Zuurberg section.
- Accompanied horse-riding trails at Woody Cape, main Addo game-viewing area and eastern Zuurberg.
- Sunset cruises on Darlington Dam.
- Accompanied game drives in open vehicles.
- Game-viewing road network of 64 km from Addo Main Camp, and a further 16 km route in the Colchester section. More routes being developed.

WILDLIFE FACTS

- 95 mammal species, including savanna elephant, savanna buffalo, lion, hook-lipped rhinoceros, hippopotamus and spotted hyaena, and marine species.
- Some 417 bird species including a number of rare vagrants; many oceanic and coastal species.
- Some five tortoise, 26 snake (including five different adders) and 23 lizard species.
- About 20 species of frog and toad.
- Approximately 26 species of freshwater and estuarine fish in the Sundays River system. More than 300 marine species recorded in Algoa Bay.
- One of the last strongholds of the large flightless dung beetle.



It is not only big game animals that are protected here but also flightless dung beetles.



Watch for yellow mongoose in open areas.

(*Strychnos decussata*). The remaining major biome is the Nama-Karoo, a dry area to the north-west of the Zuurberg, and this also has some characteristic plants. These include two subspecies of the succulent **noors** (*Euphorbia coerulescens*), whose rows of thorns are not enough to put off browsers such as greater kudu and hook-lipped rhinoceros. Another prominent succulent is the **coral aloe** (*Aloe striata*), which produces its large, showy flower heads from July to October. Easily identified trees are the **sweet thorn** (*Acacia karroo*) with its distinctive long white thorns, and the pale-barked and small-leaved **shepherd's tree** (*Boscia albitrunca*).

Wildlife Mammals

Addo will be forever associated with its **elephants**. Although most of the elephants can be seen in the main game area, it is planned to move a few into the northern Colchester section, and possibly other areas over time. The Addo elephant descend from the herds that once ranged freely across the eastern and southern Cape. In 2003 adult bulls were translocated from Kruger to introduce new genetic material. There are more than 40 **hook-lipped rhinoceros**, both in the main game area and in the thickets around Darlington Dam. It is believed that the park can carry as many as 300 of these animals. A small number of **hippopotamus** live in the Sundays River in the north-western Kabouga section. **Savanna buffalo** also survived early hunting and a herd of about 30 that remained in the dense bush found sanctuary. Today there are several hundred disease-free animals, particularly valuable for translocation to other conservation areas. Within the main game area **plains zebra** have been introduced, and **Cape mountain zebra** are found in the Zuurberg and the Darlington section. Antelope are well represented with 13 species, including **southern oryx (gemsbok)**, **common eland**, **greater kudu**, **red hartebeest**, **bushbuck**, **common duiker**, **steenbok** and **Cape grysbok**. **Oribi** have been reintroduced to the Langevlakte contractual area of the park. The most commonly seen ungulate, particularly in the main game area, is the **common warthog**. The 22 terrestrial carnivores include limited numbers of

lion and **spotted hyaena** in the main game area, **cheetah** and **wild dog** in the Darlington section and **brown hyaena** in the coastal dunes and possibly elsewhere. Many carnivores are rarely seen but troops of **suricate** often forage in open areas, as does the **yellow mongoose**, which is active in the day. **Black-backed jackal** are common, and frequently heard calling in the early evening and morning. Mammal species restricted to the Alexandria Forest are the dainty 4 kg **blue duiker** and the **tree hyrax**; this is the latter's western distribution limit. You are unlikely to see this night-active creature but its blood-curdling call is a give-away.

There are very few African conservation areas that can claim to host both elephant and those marine giants, the whales. No fewer than nine species of whale and dolphin have been observed in the inshore waters, including **Bryde's**, **humpback** and **southern right whales**. Most frequently seen are the **Indian Ocean bottlenosed** and **long-beaked common dolphins**. Algoa Bay is of particular importance for the **humpback dolphin**, harbouring perhaps as much as 10% of South Africa's population.

Birds

No fewer than 417 bird species profit from Addo's rich diversity of habitats. Even without the vagrants and sporadic oceanic species, birds are well represented. Large breeding populations of **African penguin** and **Cape gannet** occur on islands in Algoa Bay, and approximately 68 000 pairs of gannet breed on Bird Island. The beaches are the most easterly breeding location for the **African (black) oystercatcher**. Winter months tend to be more productive for spotting oceanic species such as the albatrosses, petrels and shearwaters. No fewer than 12 species of tern have been recorded on the coastline here and the rare **Damara tern** breeds in the dune system. The trail through the Alexandria Forest area is well worthwhile with a good chance of hearing and sighting **trumpeter** and **crowned hornbills**, **Knysna turaco**, **brown scrub robin**, **dark-backed weaver**, **black-bellied starling** and **white-starred robin**, among others. In the thicket country birding is also excellent but can be rather frustrating given the dense nature of the bush. It is often worthwhile to pull the vehicle off the road, wind down the windows and just spend a peaceful hour or so, letting the birds show themselves. Especially along roadsides around thickets watch for **red-necked spurfowl**. As usual



The bird hide is located at a waterhole within Main Camp.



A newborn red hartebeest is still unsteady on its legs. The red hartebeest is one of 13 antelope species occurring in Addo.



The plumage of the Cape Batis is rich in colour.



Top: South Africa's largest land chelonian, the leopard or mountain tortoise, is easy to spot in the park.

Above: The giant stick insect is one of many invertebrates in Addo. Even so, surprisingly little is known of the park's insects.



Buffalo droppings are eagerly sought out by flightless dung beetles.

you will find some of the most productive birding in the camp, but there is also a bird hide at a pool and a short walking trail that can be very rewarding. In the Zuurberg area, among the mountain fynbos, watch for **Cape sugarbird**, **southern** and **greater double-collared sunbirds** and **malachite sunbird**. The Darlington section has resident **African fish eagle** around the dam and Sundays River, whilst **Verreaux's eagle** is seen over the rocky hills that team with its main prey, the rock hyrax or dassie. The man-made lake, originally called Lake Menz, offers great opportunities for observing waterfowl, herons and kingfishers.

Reptiles and amphibians

The park's diverse habitats host a wide range of reptile and amphibian species. There are four species of land tortoise, of which the most commonly seen is the large **leopard tortoise**. The **marsh terrapin** also occurs here. There are no fewer than 26 different snakes, among them five species of adder including the very localized **Albany adder**, which is seriously endangered outside the park. Of the 23 lizard species, you are most likely to see South Africa's largest, the **rock** and **water monitor**

lizards. There are at least two dwarf chameleon species, the **Eastern Cape** and **Elandsberg dwarf chameleons**. The casual visitor will probably see none of the 20 frog and toad species, but during the rains calling males will certainly be heard.

Fish

Some 26 fish species are known to occur in the Sundays River, its tributaries and the estuary but only the **Eastern Cape redbfin** is at risk because of its limited range. Algoa Bay and the marine sanctuary have at least 300 species of fish, including residents, migrants and occasional visitors. The bay is an important sanctuary for the globally threatened **great white shark**.

Invertebrates

The area is rich in invertebrate species, including two rarities, the **Woody Cape dune grasshopper**, which is endemic to this dune-system, and the **flightless dung beetle**. Addo is the last major stronghold of this dung beetle, which harvests mainly elephant, rhino and buffalo dung both for food and as brood balls for its larvae. Do not drive over dung on the road as these beetles are often casualties.

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- Behave sensibly when encountering dangerous big game animals, especially elephants.