



**SAVE
OUR
TORTOISES!**



**SHOW
YOUR
SUPPORT!**
Display your
Bumper Sticker.

**LEAVE ME.
PROTECT ME.
SAVE ME.**



CapeNature

www.capenature.co.za

Your Field Guide to tortoise awareness

SHOW YOUR SUPPORT

Display your bumper sticker.



Your bumper sticker

Date: _____ Species: _____
 Location: _____
 Comments: _____

Date: _____ Species: _____
 Location: _____
 Comments: _____

Date: _____ Species: _____
 Location: _____
 Comments: _____

Date: _____ Species: _____
 Location: _____
 Comments: _____

Date: _____ Species: _____
 Location: _____
 Comments: _____

Date: _____ Species: _____
 Location: _____
 Comments: _____

Date: _____ Species: _____
 Location: _____
 Comments: _____

Date: _____ Species: _____
 Location: _____
 Comments: _____

THANK YOU!



TORTOISES OF THE WESTERN CAPE



A TREASURE-TROVE OF TORTOISES

The tortoise is a terrestrial (land-dwelling) reptile and the world is home to a total of about 43 species, with adults ranging in size from about 10 centimetres to one metre. South Africa has 13 species of tortoise and 8 are found in the Western Cape alone. This makes the Western Cape an international tortoise hotspot, because on less than 1% of the earth's surface, we find almost a quarter of all known species, and there is even an endemic (a species found nowhere else on earth) named the geometric tortoise. Among the tortoises of the Cape we find the world's smallest (the speckled padloper), Africa's second largest (the leopard tortoise) and arguably one of the world's rarest (the geometric tortoise).

TORTOISE TALLY

43 or more species of land tortoise occur worldwide

8 species are found here in the Western Cape

13 species are found in South Africa

1 species is only found in the Western Cape and nowhere else in the world

SAFE IN ITS SHELL

Tortoises left in the wild not only reach a very old age, but have been doing so successfully for a very long time. In the millions of years that these reptiles have been around, their bodies have not changed much. The bony shell is covered by shields made of a protein called keratin, which is similar to human fingernails. It consists of two main parts, the carapace above and the plastron below. A tortoise will withdraw its head, legs and tail into its shell whenever a predator gets too close or if it feels threatened, but it's more than just a mobile shelter. The spine of this vertebrate (an animal with a backbone) is fused with the shell and cannot be separated.



DID YOU KNOW:

The Western Cape can promote itself as the world's tortoise mecca, because here, **on less than 1% of the earth's surface**, you will find **nearly one out of every four known tortoise species**.

TORTOISES OF THE WESTERN CAPE

TORTOISES OF THE WESTERN CAPE

GETTING SOME AIR

Most of us don't give a second's thought to taking a breath, but imagine being in a suit of armour that prevented your lungs from expanding. The way a tortoise breathes is unique because of the hard shell that cannot expand to inhale. So it contracts its muscles to create space inside the shell and the vacuum allows air to be drawn in. To exhale, it needs to pull in its legs, which pushes its other organs against the lungs and generates pressure which forces the air out again.



SOLAR HEATING

Like all other reptiles, tortoises do not actually have cold blood, but they cannot regulate their body temperature in the same way that birds and mammals can. The tortoise relies on heat from the sun and in this sense its shell is like a natural solar panel. Where birds and mammals need a large amount of food for energy to regulate their body temperature, reptiles move regularly between sun and shade to maintain theirs. If a tortoise is removed from its environment and exposed to extreme changes in temperature, it will not be able to move around or digest its food, and will ultimately die as a result.

DID YOU KNOW:

If a tortoise ends up upside down it may not be able to turn itself upright again and can die when it is exposed to the sun and overheats.



FUSSY FEEDER

Tortoises have no teeth. They feed by using a hard, sharp-edged beak to tear and chew vegetation. Tortoises are largely herbivores (animals that eat plants). However, tortoises will occasionally nibble on bones, carcasses, faeces and insects in order to get supplementary nutrition. All tortoises drink water, but in arid regions like Namaqualand or the Karoo, they obtain much of their water from feeding on succulent plants. They also play an important role in the ecosystem, because they distribute the seeds of the plants they eat in their droppings.



THE NEXT GENERATION

Generally in the Western Cape tortoises mate during spring when the weather begins to warm up. When she's ready, the female will excavate a hole in the soil with her hind legs and lay between 1 and 18 eggs, depending on the species. The eggs of some species may only take 4 months to hatch, but the leopard tortoises may take up to 15 months or more. The hatchlings will dig their way to the surface and immediately have to fend for themselves. With predators like crows and mongooses, it is a hostile world for young tortoises and many do not survive long enough to reproduce.



The offspring's gender is determined by a combination of genetic and environmental factors. Temperature and humidity play a big role in determining if the hatchlings will be male or female. If the eggs are incubated at a lower temperature, the chances will be higher of the hatchlings being male, and the opposite applies to females. Females generally grow larger than males, but that is not always the case. To tell the difference, conservationists often look at the plastron (the underside), because those of the male are usually concave (curved inward) to be able to mount the female, while the female's plastron is flat. The male's tail is also usually longer than that of the female.



TORTOISES OF THE WESTERN CAPE

Leopard tortoise

Stigmochelys pardalis



Description: Southern Africa's largest tortoise can weigh over 20kg and live for 75 years or longer. The name is derived from the black-and-yellow spotted shell's resemblance to a leopard's coat, but the pattern gradually fades to a uniform brown over time.

Angulate tortoise

Chersina angulata



Description: Endemic to the southern tip of Africa, this tortoise inhabits the coastal regions between Port Elizabeth and Namibia. They are of medium size, rarely longer than 22cm in length, and have an elongated shell with slightly raised scutes that have black centres and edges. The plastron is characteristically red, hence the Afrikaans name, rooipens. Males often fight over territory and females, using enlarged neckshields to overturn their opponents. They do not like to be handled and as a defence mechanism, they release valuable fluids stored in their bowels for times of drought.

Geometric tortoise

Psammobates geometricus



Description: These sensitive and critically endangered reptiles are endemic to the Renosterveld of the southwestern Cape. The head, neck and limbs are yellow, while the scutes on the carapace are raised and characterised by a yellow star pattern on a dark brown background. They have highly specialised diets and thus cannot adapt to changes in environment. Over 90% of their habitat has been altered by farming activities, alien vegetation and frequent fires. A number of nature reserves have been proclaimed specifically for this species. The survival of the species depends to a large extent on the support of farmers and land owners in the region.

DID YOU KNOW:

It is sometimes called the "mountain tortoise", probably because of its size.



TENT TORTOISES



Tent tortoise

Psammobates tentorius tentorius



Description: This tortoise has sharply raised scutes on the carapace with dull yellow stripes radiating prominently against a black background. It has a hooked beak, five claws on each forelimb and brown markings on the plastron. It is very similar to the geometric tortoise in appearance, but found further inland towards the northeast.

Namaqualand tent tortoise

Psammobates tentorius trimeni



Description: The smallest and most attractive of the tented tortoises, this species has small projections on the carapace with orange-yellow stripes on a black background radiating from each scute. They are found along the northwestern coastal strip between the Olifants River and the Orange River.

Bushmanland tent tortoise

Psammobates tentorius verroxii



Description: This species has dull orange stripes set against a brownish background and the carapace is comparatively smooth with scutes only faintly raised. It is found in the northwestern interior of the Western Cape.

DID YOU KNOW:

The three subspecies of the tent tortoise are distinguished by the yellow and black geometric patterns on their shields and markings on the under side of their shell. These attractive tortoise are found in a variety of shapes and colours.



Common padloper

Homopus areolatus



Description: The common padloper inhabits the southwestern coastal region of the province and is usually found at altitudes below 600m. They are excellent climbers, very small (no more than 10cm in length), and have a pronounced hooked beak, hence the colloquial name, parrot-beaked tortoise. It has four claws on the forelimbs, which are covered in scales. Its carapace is olive in colour with reddish-brown centres on the scutes.



Karoo padloper

Homopus boulengeri



Description: This species has a flattened carapace with an obvious bridge and varies in colour from dark red to olive yellow. It is found in the interior Karoo regions of the southwestern Cape. It is known to be active when thunderstorms approach, hence its Afrikaans name, donderweerskilpad.



Greater padloper

Homopus femoralis



Description: The largest of the padloper genus, this tortoise rarely exceeds a weight of 300g and is characterised by an olive-brown carapace with nostrils set below the level of the eyes. It has a brownish-yellow skin and four claws on each of the forelimbs, and is found mostly on the Roggeveld escarpment in the Great Karoo.



Speckled padloper

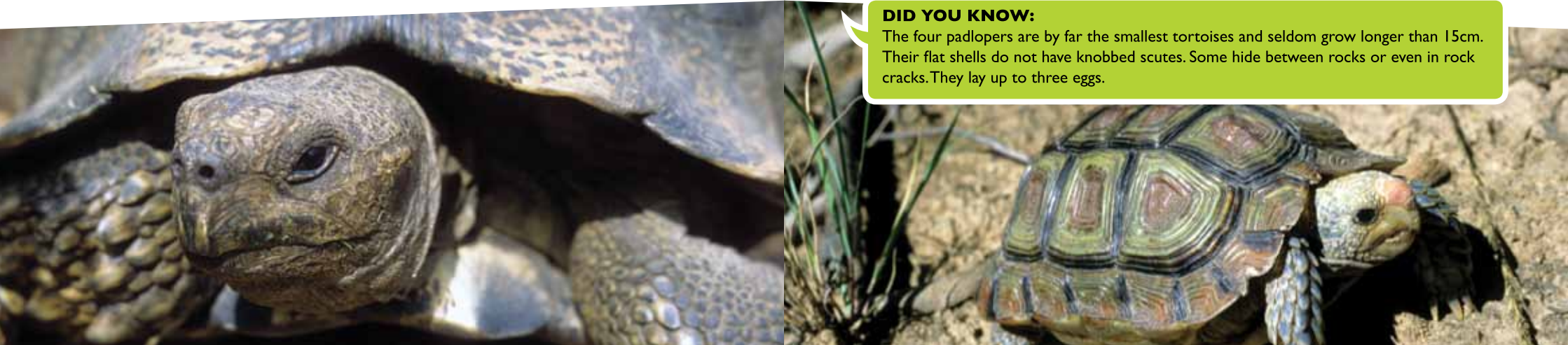
Homopus signatus



Description: Occurs in rocky outcrops extending from the Piketberg area northward to the Orange river. In the Western Cape part of its range, this tortoise has a very light brown to orange-red carapace with black spots or flecks, while the forelimbs are covered in proportionately large overlapping scales. They like sheltering among and under rocks and rock slabs, hence they are known in Afrikaans as the klipskilpad.

DID YOU KNOW:

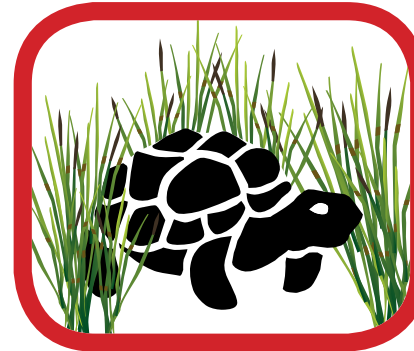
The four padlopers are by far the smallest tortoises and seldom grow longer than 15cm. Their flat shells do not have knobbed scutes. Some hide between rocks or even in rock cracks. They lay up to three eggs.





3 Ways You Can Make A Difference

PROTECT ME



Tortoises are in danger everywhere, not just in the Cape.

The establishment and expansion of towns and farms are major threats to the habitat of tortoises.

What remains of their habitat is further fragmented by roads criss-crossing the country and they often get run over by cars.

Invasive alien plants and animals further threaten their natural habitat and survival.

Fires are an important part of many ecosystems in the region but frequent fires that are caused by careless people can have a devastating impact on tortoise populations.

The slow tortoise simply cannot move out of the way fast enough.

SAVE ME



There are so many different types of tortoise in the Cape because of the different natural environments.

Each tortoise is specifically adapted to its ecosystem and will struggle to survive when removed from it.

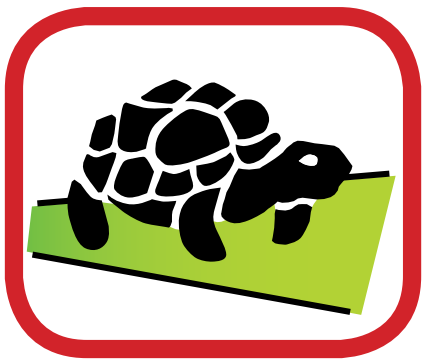
By moving tortoises between different regions, people not only threaten the survival of the individual tortoise, but of the whole species.

It causes the genepool to deteriorate and often introduces new diseases to populations that have not built up a resistance over many generations.

Never release a captive tortoise into the wild, rather donate it to a zoo, wildlife refuge centre or contact your nearest conservation office to find an authorised tortoise keeper.

Remember it is illegal to collect, keep, sell, buy, trade, import, export, or transport a tortoise in South Africa unless you have the proper permits.

LEAVE ME



Tortoises are solitary and those found alone are not "lost".

Roads often cross the specific routes they follow to find food or mates.

If found on the road, pick the tortoise up and place it safely in the direction it was moving.

Tortoises cannot easily get back on their feet if they are overturned and can die of exposure.

If found on its back, turn the tortoise over onto its feet and allow it to walk away.

Tortoises are wild animals and generally do not make good pets.

By leaving tortoises in the wild, you help to conserve healthy populations and contribute to their ultimate survival.

SHOW YOUR SUPPORT

Display your bumper sticker.

(sticker inside)

Awareness is critical to the success of conservation programmes. Show your support by displaying the **SAVE OUR TORTOISES bumper sticker** and spreading the message of conservation.



Find CapeNature on Facebook.
www.facebook.com/CapeNature1



For advice or to report illegal tortoise trade and other environmental crimes, contact the regional offices of CapeNature or visit the website.

Call: 0861 227 362 8873 or 021 483 0190



CapeNature

Conserve. Explore. Experience.

www.capenature.co.za

CAPENATURE CONSERVATION AROUND THE WESTERN CAPE

Head Office (021) 483-0000 | Porterville (022) 931-2900 | Oudtshoorn (044) 203-6301
George (044) 802-5310 | Onrus (028) 316-3338 | Cape Town Metro (021) 955-5940 | Stellenbosch (021) 866-1560