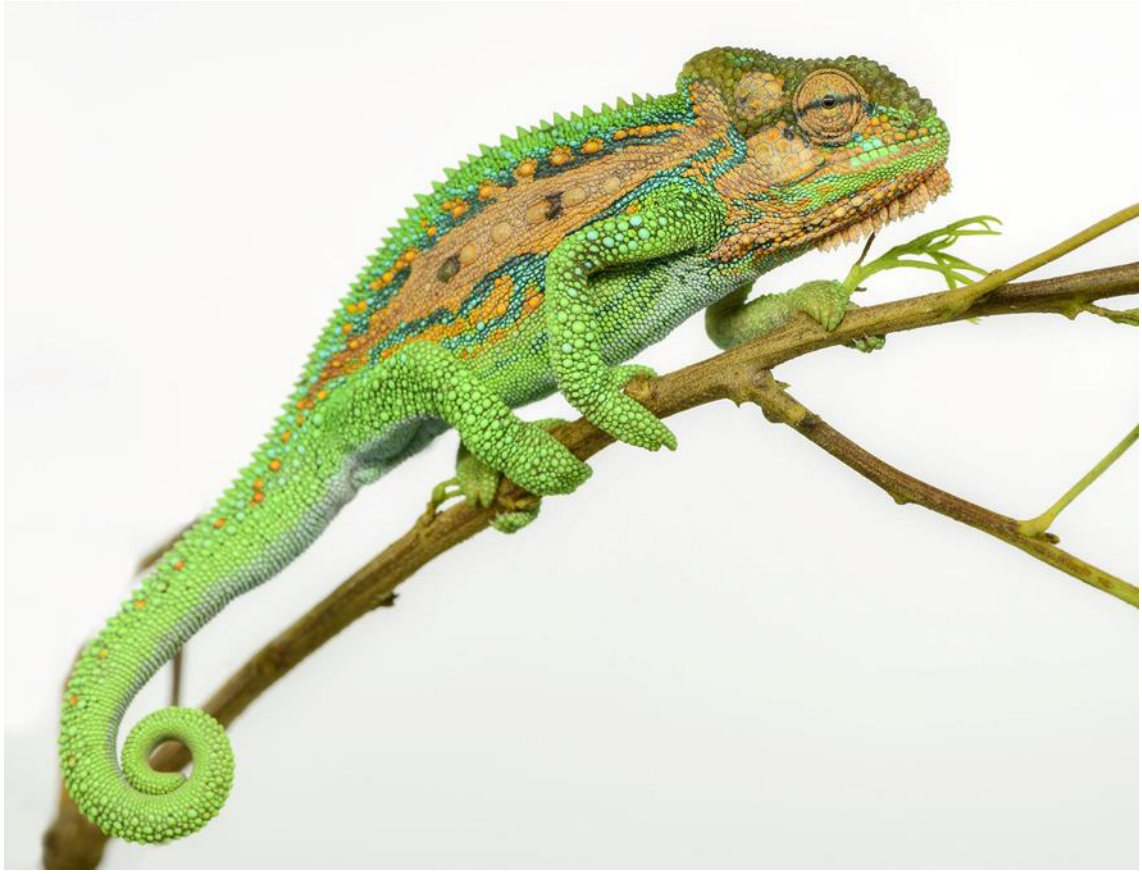
LITTLE SLOW-FOOT

It was a traumatic experience that galvanised Whale Coast Conservation into starting its Chameleon Conservation Project. An eco-adventure to look for chameleons on open plots in Vermont led to the discovery of more than a hundred animals right there among the houses. What excitement! Who would have known - except the chameleon enthusiast who led the adventure.

But within a few days disaster struck when the chameleon colony was bulldozed for infrastructure. It was clear that something needed to be done to minimise the loss of more chameleons. Bur why are chameleons so important to us?



These little dragons can swivel their eyes independently to scan nearly 360°. Their tongues are twice the length of their bodies and can be used like ballistic missiles to catch prey. They have prehensile tails and sets of fused toes with sharp nails to grip their perch. They can change colour in response to their environment, their mood and the ambient temperature. They are the embodiment of any child's fascination with dragons and dinosaurs.

Most people who grew up in the Western Cape will remember often finding them in suburban gardens and going 'hunting' with a chameleon perched on a finger. These days we see them much less often. Does that mean their numbers have declined or are we not looking? What do we know about Cape Dwarf Chameleons and their conservation status?

South Africa is home to 19 species of chameleons, of which 17 are Dwarf Chameleons of the genus *Bradypodion*, meaning 'slow foot'. All the Dwarf

Chameleons are endemic to South Africa, i.e. they occur nowhere else. Many of the species are extremely rare and endangered. The good news is that there may be more species to add to the list. They are in the process of being described by the experts – notably Prof Krystal Tolley from the SA National Biodiversity Institute. The bad news is that about a quarter of the dwarf species occur in small patches outside protected areas and are on the ICUN endangered list.

The species we see in Hermanus (and most of the coastal belt from Cape Town to Agulhas), is *Bradypodion pumilum*, the Cape Dwarf Chameleon. Although they occur over quite a large area, their habitat is increasingly diminished by urban development, agriculture, pesticides (which affect both the chameleons and their prey), and alien species. Our little dragons are thus considered to be near-threatened.

Chameleon rescue

This is where Whale Coast Conservation's Chameleon Project is trying to make a difference. Amazingly, there are still chameleons in the Hermanus-Hawston urban areas. Urbanisation has increasingly squeezed their available habitat, so that the few remaining ones have taken up residence in gardens and on undeveloped plots. Their greatest enemies in gardens are domestic cats and pesticides. On as yet undeveloped plots they are threatened by neighbourhood cats, incoming bird species such as crows - and bulldozers.

In February 2018 permission was obtained from CapeNature to relocate 120 vulnerable chameleons to safer habitat. Each animal was photographed for the record. Yes, the pattern on a chameleon's flank is unique for that animal – like a fingerprint. At least once or twice a month for a year a team of volunteers searched out the released chameleons and re-photographed them to keep track of each animal. The results are presently being statistically analysed to assess the success of such a relocation. The (unproven) impression we have is that the survival rate is encouraging and the birth of many babies testifies to a potentially viable community.

Yes, dwarf chameleons give birth to live young. They are ovoviviparous which means that the females retain the eggs inside the body while the babies develop. They are born as very tiny versions of the adults.

The WCC chameleon project continues with moving chameleons from dangerous situations to suitable habitats. For example, chameleons are regularly discovered in garden waste dumped at the Hermanus transfer station. Project leader Sheraine van Wyk has permission from the municipality and CapeNature to collect them regularly and move them to selected habitats. No other person may do so.

Monitoring of open and 'green' spaces in urban areas also continues, with the aim of motivating the preservation of ecological corridors for chameleons to move between gardens.

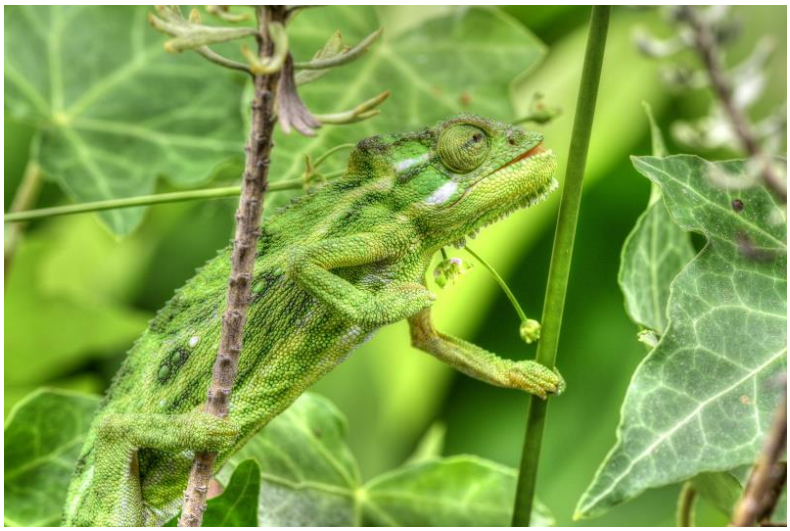
Going forward

How can we make our urban gardens attractive to chameleons? We need to have enough natural vegetation, free of pesticides – and cats. They are very particular

about the vegetation because their little feet can only grip branches that are thin enough and near the ground. Their favourite perches are restios, especially the thatching reed that is proliferating everywhere. During the day they hunt near the ground where birds are unlikely to spot them. At night they climb up the restios to sleep near the top where they are safe from nocturnal predators on the ground. This is when they are most easily spotted by chameleon enthusiasts. With a powerful torch in hand, look near the tips of branches of low-hanging trees, bitou, blombos and, of course, restios. The chameleons will reflect the light, shining almost white in the dark.

Our Cape Dwarf Chameleons are indeed a shining light for conservation. And Whale Coast Conservation needs your financial support to continue the project.

Anina Lee



Chameleon rescued from cut vegetation at municipal dump sit