

## X. APPENDICES – FAUNA and FLORA

### Appendix Xb6. Renosterveld vegetation – from the Internet

#### What is Lowland Renosterveld?



Lowland Renosterveld is the relatively fertile clay-based veld type that occurs in the low-lying areas of the Western Cape, South Africa. Renosterveld is part of the Fynbos Biome, although it is very distinct from Fynbos. The main difference is that it generally lacks, with some exceptions, the three distinct Fynbos elements, i.e. the Proteas, Ericas (heather) and Restios (reeds). Renosterveld is one of the richest ecosystems in the world, mostly due to its **extraordinary bulb diversity**. However, the Renosterveld we see today is very different from what it was 300 years ago, before the advent of large-scale commercial agriculture in the Western Cape.

**Before European farmers settled** in the region, Renosterveld **supported large numbers of big game**, including Black Rhino, Eland and the now extinct Bluebuck and Quagga. It was also possibly a far **more grassy system**, with some areas even having a very high Rooigras (*Themeda triandra*) component, with a much higher plant diversity. The combination of grazing and browsing game animals of varying sizes maintained the diversity and structure of this system. Sadly, the replacement of large game animals with small selective feeders, such as cattle and sheep, combined with years of poorly-informed management (i.e. over-grazing and too little or too much burning) has allowed extensive areas of this special veld to become severely degraded and dominated by ‘unwanted’ shrubs, such as Renosterbos (*Elytropappus rhinocerotis*).

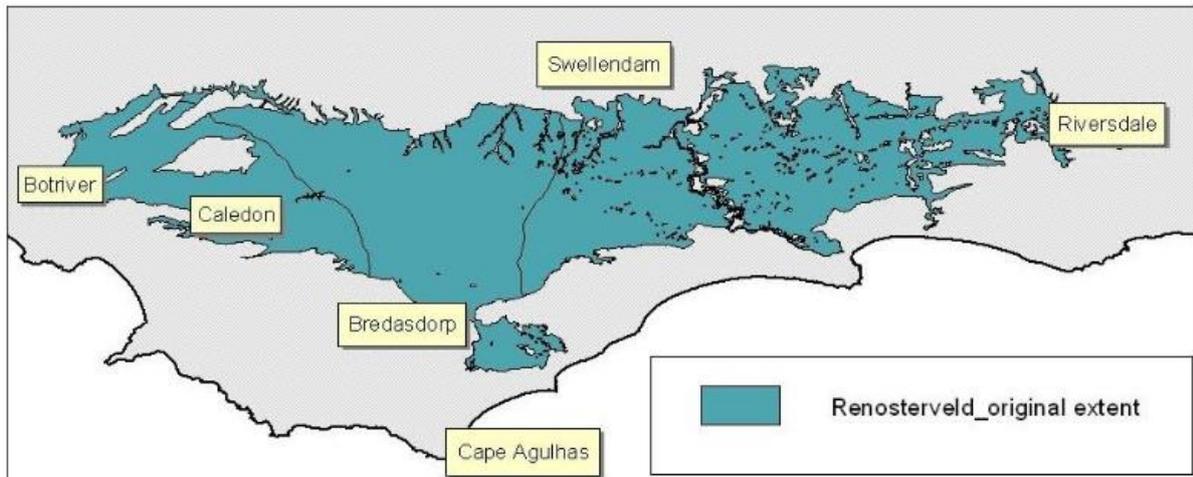
The grey, ‘drab’ veld that we see today is probably largely a result of the legacy of **historic overgrazing** and is NOT representative of true Renosterveld. Today, those areas that *are* well-managed retain the characteristics of Renosterveld and it is clear that this habitat supports a diversity of botanical gems, incomparable with any other system in the world. See our [Renosterveld library](#) for more articles on the history of Renosterveld and the ongoing debates around what Renosterveld actually *is*.

Not only has Renosterveld been altered by management, it has also been **severely fragmented for agricultural development**. The result is that **over 95%** has been **irreversibly converted to croplands**, rendering what remains of this vegetation type in urgent need of conservation attention. Despite these incredibly high levels of threat, Renosterveld has retained an extraordinary diversity and the ORCT was instrumental in **discovering six new species** in 2012 (see photos below – from left to right *Otholobium curtisiae*, *Polhillia curtisiae*, *Ficinia overbergensis*, *Aspalathus quartzicola*, *Hesperantha kiaratayloriae*, and *Aspalathus microlithica*). These discoveries, along with the countless records of rare, endemic and threatened species are testament to the importance and biodiversity value of this overlooked and **under-valued habitat**.

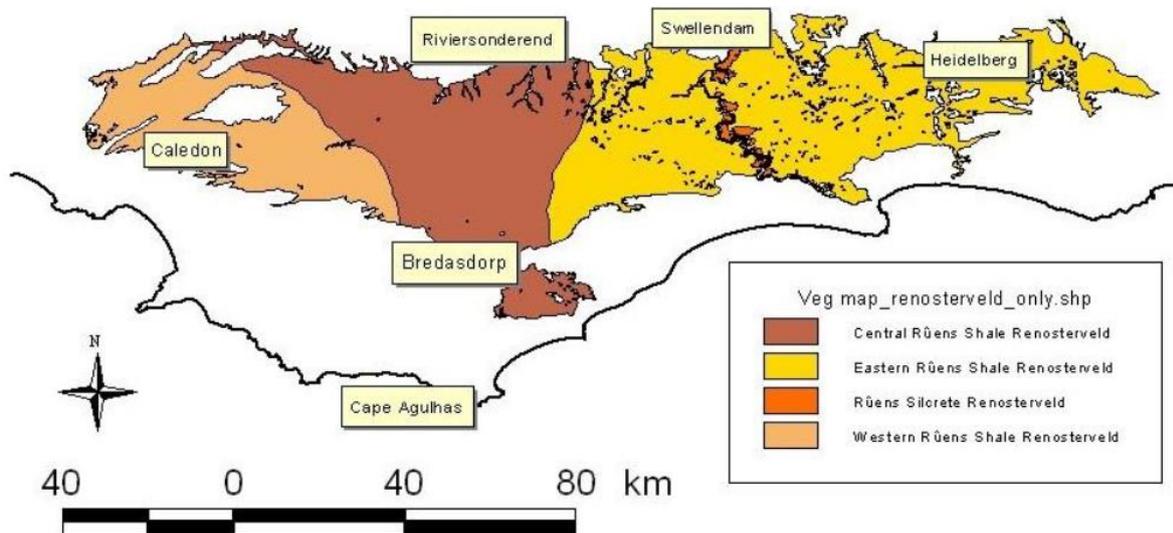
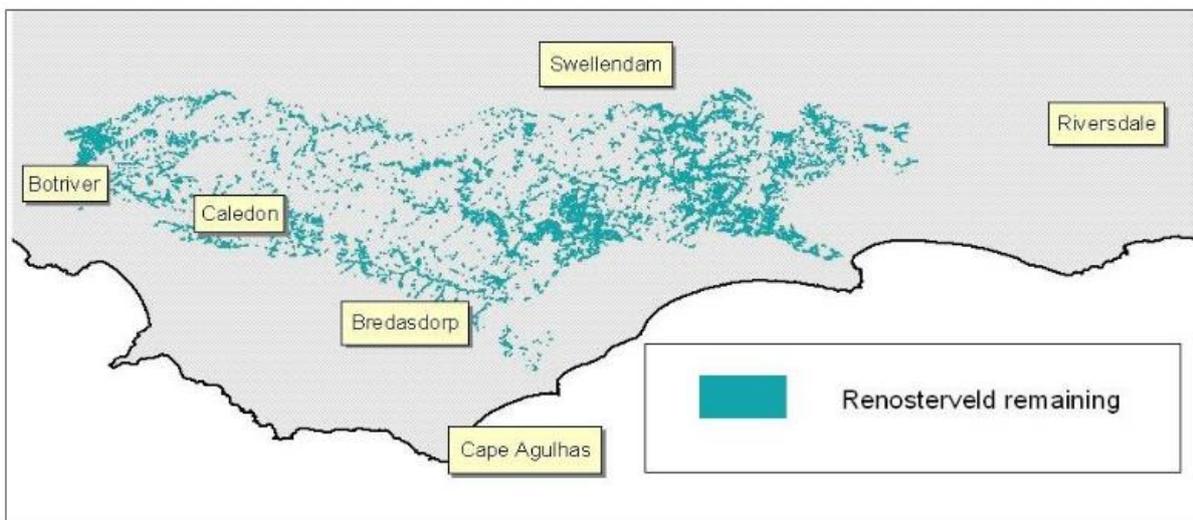


Renosterveld originally covered the entire clay-/shale-based lowlands of the Overberg (see map below on left). These comprise the most fertile soils of the region and so were first identified as being most suitable for agriculture by early European settlers. It is uncertain what exactly these habitats looked like in the past, as they were radically transformed (through livestock grazing and subsequent ploughing) relatively soon after European settlement. Adjacent to these habitats are the mountainous and strandveld-type habitats, which are generally based on poor and acid soils and are less transformed than their Renosterveld counterparts. The map below on the right shows that there is around 5% of the original Renosterveld left within the Overberg.





Figures above and below demonstrate the amount of renosterveld that has been lost in the Overberg over the last ±300 years. Figure 1a denotes the original extent of renosterveld in the Overberg, while Figure 1b shows the fragments remaining to date (adapted from SANBI maps).



The distribution of renosterveld types across the Overberg.

## Rescuing Renosterveld in the Overberg

Written by Andrea Weiss, 10 December 2018

In spring, the Overberg is a quilt of green wheat fields and bright yellow canola fields, but from a conservation perspective, the dark, grey-green patches of natural vegetation in between are what matter most.



**A typical Overberg scene where agricultural activities dominate and only remnants of Renosterveld remain.** Image courtesy of Flickr Creative Commons/Steve Crane

These fragments of Renosterveld – only 5% of the original remains – represent the most endangered vegetation type on earth. I recently tagged along on a media trip with the **WWF Nedbank Green Trust** to spend time with Dr Odette Curtis-Scott and her team from the Overberg Renosterveld Conservation Trust (ORCT) to find out more about their work in the area.



**Haarwegskloof is owned by WWF and has a research centre for scientists and guest accommodation.**

To the background of welcome rain thrumming on the tin roof of the research centre at **Haarwegskloof**, ORCT ecologist Keir Lynch told us more about their work. Hard to believe but these 500 ha at Haarwegskloof is the largest single piece of Overberg Renosterveld remaining which makes it pretty special. It lies only 10km from CapeNature's De Hoop Nature Reserve on the coast, and the dream is to one day secure a corridor of **land** that connects with De Hoop. An old dairy next to the research centre has been converted into beautiful **guest accommodation**. Visitors can also explore the reserve on foot, cycle on farm roads or drive to nearby attractions like the pontoon at Malgas – all the while knowing that their support is helping conservation efforts here.



© Overberg Renosterveld Conservation Trust

Water courses provide corridors and safe havens for wildlife, like these secretive aardwolves which were photographed with a camera trap. They are insectivorous and eat mostly termites.

Easing the pressure

Keir is the manager of the **Watercourse Restoration Project**, another vital component of the ORCT's work. Not only do these water courses provide pathways and refuge for animals, plants and pollinators, but they also help to prevent further damage or degradation to the veld which helps the farmers. By mapping water courses, the project is able to prioritise the removal of alien invasive vegetation and erosion control. One of the unexpected surprises of this exercise has been the discovery of a population of critically endangered Heuningnes redfins, a freshwater fish which is now the subject of further study.



The *Pelargonium lobatum* (or vine-leaved pelargonium) which flowers in spring in lowland areas puts off a strong, clove-like scent at night.

### Rewilding Renosterveld

Sometimes ecologists also have to let their imaginations run wild. Along with the Renosterveld that disappeared so did many other species such as the quagga (extinct) and the bloubok (a kind of antelope that was endemic to Renosterveld and is also extinct). But there is one elegant creature that could be brought back if Haarwegskloof increased in size. This is the serval or *tierboskat* – a slender, long-legged, medium-sized cat that once occurred here. Just imagine that!



**If Haarwegskloof doubled in size to over 1000 ha it might be possible to reintroduce serval which once occurred here.**

Image courtesy of Flickr Creative Commons/Markus Jaschke.