

Critically endangered *Renosterveld*

Fertile soil makes Renosterveld attractive to crop and livestock farmers, and this is why it was some of the first land to be exploited by farmers. Today only 10% of the original area still exists, writes **Cameron McMaster**.

RENOSTERVELD OCCURS ON THE fertile shale and granite-based clay soils in the lowland areas of the Western Cape, extending to some extent into the extreme western part of the Eastern Cape. While Renosterveld is part of the Fynbos biome it's very distinct from Fynbos, which is found mainly on the acidic, sandy soils of low nutritional value on sand plains and mountains. In plant life Renosterveld lacks the three distinct Fynbos elements of proteas, ericas (heather) and restios (reeds).

As nearly 90% of the original extent of the Renosterveld has been transformed by agriculture, it's now a critically endangered veld type unique to South Africa. The little that remains occurs primarily on private ground. The unpalatable renosterbos,

Elytropappus rhinocerotis, is the dominant shrub and although a key species, it does tend to dominate in the absence of periodic fire and in situations of overgrazing.

How did Renosterveld get its name? About 300 years ago black rhino and other large mammals occurred in the region.

'It's one of the richest ecosystems in the world.'

Some assume that's why, while others contend it's because the dull, grey colour of the renosterbos looks like the skin of a rhino.

Why is it so special? It's one of the richest ecosystems in the world. However, the Renosterveld we see today is very different from what it was 300 years ago.

Before the advent of large-scale commercial agriculture the Renosterveld supported large numbers of big game including black rhino, eland and the now-extinct bluebuck. It had a larger grass component and diversity of shrubs and bulbs. Sadly the replacement of large animals with small, selective stock like sheep, combined with years of overgrazing and too-seldom or too-frequent burning has caused this special veld to become severely degraded.

Today it's represented by small fragments in road reserves and in between fields, in places either too steep or too rocky to plough. Areas that are well managed retain the characteristics of real Renosterveld and it's clear the habitat supports a diversity of botanical gems, incomparable to any other system in the world.

Moraea insolens is an example of the Renosterveld's rare endemics. It occurs in one small reserve near the entrance to the Roodebloem Experimental Farm in the Caledon District. The farm is named for this beautiful flower (*Roodebloem* means red flower). The reserve remains only a few hectares in extent. Land owners need to take the initiative preserving this rare veld type.

PHOTO: ROD SAUNDERS





ABOVE: Researchers Odette Curtis and Eugene Carinus on a survey of the Overberg Renosterveld as part of the management Project.

ABOVE LEFT: Pristine Renosterveld on Michael Swart's farm Swartrivier near Caledon. It was established as a reserve a decade ago.

BELOW LEFT: The ruins of Renosterveld near Napier. Only relict fragments too steep or stony to plough remain, the conservation of which is critical to preserve what is left of the rich biodiversity of this endangered veld type.

The very high number of bulbous species found in this veld type is unequalled and many are endemic. Because of habitat loss, many of the plants are rare or highly vulnerable.

Even within Renosterveld the veld varies, depending on the soil type and rainfall pattern, supporting different groups of plants.

Detailed information about the extent and distribution of the different types of Renosterveld can be found in the most comprehensive and useful recent publication of the SA National Biodiversity Institute *The Vegetation of South Africa, Lesotho and Swaziland* edited by Mucina and Rutherford.

Of the endemics some species are so specialised they are only found in very

unique and localised micro-habitats in a handful of localities such as the silcrete *koppies* in certain regions. Many of these species are now on the Red Data list.

As farmers and landowners we are often responsible for fragile systems that need to be carefully managed and protected if future generations are to enjoy their hidden treasures.

Preserving Renosterveld

Researchers and farmers are doing surveys to determine where the rare species still occur and the best ways to manage these relict fragments.

The more we learn the better we will be able to understand the conservation dynamics and the better the chances are the little that remains will be managed.

By creating reserves and implementing environmentally-friendly farming practices you would preserve that which you love – and you can only love that which you know. To be informed is the key to the conservation as knowledge creates a better understanding of the ecology of your veld and the interdependence of all species.

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What is the Renosterveld Management Project?

The Renosterveld Management Project focuses on Overberg Renosterveld and aims to determine how remnants should be managed to maintain Renosterveld's long-term viability as a functioning ecosystem.

The project is being managed by University of Cape Town-based researchers Odette Curtis and Clement Cupido.

Vegetation on the remaining fragments of Renosterveld are being surveyed and landowners interviewed. The data will be used to produce management strategies for landowners. In addition long-term burning trials were set up on 11 farms, where the veld is being monitored after burning in the Autumn of 2008.

This new knowledge will enable landowners to make better decisions about managing their Renosterveld for better grazing value, erosion control, water management and the conservation of biodiversity.

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- Renosterveld is one of the world's most diverse ecosystems.
- Ironically its fertility makes it attractive to crop farmers, putting it in danger.
- Landowners need to get involved to preserve Renosterveld.

