

Farm restoration in Northern Cape in the spotlight

NIEUWOUDTVILLE: The scars run chest-deep in the grainy tillite clay on the renosterveld slopes of the Bokkeveld plateau, outside Nieuwoudtville in the Northern Cape. Their walls are hard as cement, baked solid by the sun since their topsoil has long since been carved away through the scouring action of rain water.

Some of these fissures are over a century old, slashed into the hillside by water erosion following overgrazing, the plough shear and failed contour lines where previous generations of farmers tried to stop tilled soils from washing away.

But now, just three years after erosion control measures were started by the Environmental Monitoring Group (EMG) at a demonstration site on the farm Avontuur, and the land is showing signs of recovery.

Tiny shrubs, succulents and flowering plants have started to bristle out of the sediment that's been trapped by small 'check dams' made of poles, rocks and geotextile, a biodegradable hessian-like fabric.

'Slow down, spread out'

Noel Oettle, EMG rural projects manager based at the non-governmental organisation's Nieuwoudtville office, explains how this technique aims to slow and spread rain water running through the erosion gully which would otherwise only cut the channel deeper. Thick wedges of silt that have built up behind the check dams, whose geotextile is slowly beginning to rot, shows how effective the measures have been in trapping soil and seeds that are washed down by rain.

Once the plants have established, natural processes will take over the role of diffusing the energy of the rushing water, further helping the gullies to recover.

This is part of a broader restoration initiative on Avontuur, in a bid to reverse the damage of previous farming methods that have left parts of the farm heavily degraded. Oettle says recent research shows an estimated 3km³ of top soil has been lost here in recent decades.

Once a commercial farm, Avontuur was bought by WWF (the Worldwide Fund for Nature) in 2008 because of its conservation potential as the largest remaining stand of Bokkeveld sandstone fynbos, and its rare but heavily farmed Nieuwoudtville shale renosterveld and Nieuwoudtville-Roggeveld dolerite renosterveld.

EMG is managing the restoration and conservation of the farm, as well as a project which seeks to integrate conservation into sustainable farming practices.

For more information on the Avontuur Sustainable Agriculture, visit <http://avontuur.org.za> or contact EMG at 027 218 1117.