

Vergelegen celebrates an abundance of water

This World Water Day on 22 March, farm management, staff and visitors of Vergelegen Wine Estate will be raising a glass to the abundant water permeating land once densely packed with invasive alien vegetation.



Newly rehabilitated wetland showing growth

In what is believed to be the largest private conservation undertaking in South Africa, 2,000 hectares (of a planned total of 22,00 hectares on the farm) have been cleared and rehabilitated to indigenous vegetation. In the process, the programme has unleashed water resources and generated over 230 jobs for previously unemployed and untrained people, in areas such as bush cutting and hand-picking alien seedlings.

Anglo American acquired the farm in 1987, and the investment in this clearing programme, and other interventions, have made it a leader in the Biodiversity and Wine Initiative. The estate, which is open to the public, is considered a national treasure and has been nominated as a World Heritage Site.

Clearing alien vegetation boosted water flow

“Before the implementation of the clearing project, activities such as the planting of pine plantations, acacia and eucalyptus woodlots and agricultural development opened pathways for alien plant invasion, said Vergelegen environmental project manager Jacques van Rensburg. “More than 80% of the farm’s natural veld was invaded by pine on the higher slopes, with acacia and eucalyptus species in the low-land area.”

As alien vegetation uses up to 60% more water than fynbos, its clearing has boosted water flow. The farm's environmental treasures now include 80 hectares of rehabilitated wetlands, fed by the Hottentots Holland mountain range catchment area. These offer a thriving habitat for numerous species of birds, amphibians, invertebrates and wetland-associated mammals such as otters, mongooses and small buck.

While the slightly acidic nature of the farm's wetlands limits the number of plants, numbered among them are floral jewels such as *Wachendorfia*, *Watsonia* and *Aristea*. There are also varieties of *Ericas* and endemic *Leucodendrons*, many of which are on the International Union for Conservation of Nature's Red Data List. The farm's wetland areas also contain a pristine palmiet bed that helps remove excess nutrients from the water and improves its quality.

Lourens River

The return of indigenous vegetation (which acts as a natural filter) and other conservation initiatives have also contributed to mopping up pollution and encouraging diversity in the Lourens River. This is the only South African river that is a Protected Natural Environment, and the 10 kilometres running through the estate (of a total 20 km) are managed by Vergelegen, the Lourens River Conservation Society, the City of Cape Town and CapeNature.

The river has indigenous fish such as *Sandelia capensis* and *Galaxia* spp. Shy Cape clawless otters can be seen at night, while water mongoose, large grey mongoose and small grey mongoose live off the fish. Large-spotted genets also thrive, while resident bird life includes malachite and giant kingfishers.

On the entire farm, the number of bird species has soared from 80 to at least 142 since the alien vegetation clearing began. The animal population now includes numerous antelope species, leopard, caracal, honey badgers, snake weasels, silver foxes, Cape hares and spotted genet. There are at least 500 different plant species in total.



Vergelegen middle dam

Local and international scientific research at the farm is coordinated by Vergelegen's Centre of Learning Excellence. For example, Hamburg University of Technology scientists researched the Lourens River water quality, while a Stellenbosch University group undertook research at the estate's vast Rooiland dam, which stores 2.72 million m³ of water. The dam was used as a negative control in an investigation of the impact of small-scale aquaculture on the water quality of irrigation dams in the Western Cape.

"Improving the quantity and quality of water at Vergelegen has been one of the many successful outcomes of the alien vegetation clearing programme," said Vergelegen MD Don Tooth. "Our achievements have been a team effort and we are happy to share our conservation research and learnings with other interested parties

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