



WILDFLOWERS OF THE DARLING RENOSTERVELD

Can they be maintained for future generations?

By Barry Heydenrych, Conservation Officer,
Flora Conservation Committee

Why do people who want to look at spring wildflowers drive straight past Darling on their way to Namaqualand? Members of the Darling Wildflower Society asked me this question recently and I had to admit that I have also been guilty of rushing past the town of Darling, 70 km north of Cape Town.

During the spring of 1994, the Flora Conservation Committee conducted a preliminary study of the region. We surveyed the hills of Darling, which comprise renosterveld vegetation, the most reduced and threatened vegetation type in

southern Africa.

There is some debate as to exactly what renosterveld is and how it should be managed. Renosterveld is a dynamic vegetation which fluctuates between a grass-dominated and a shrub-dominated state, depending on the use of fire and bush cutting techniques. Until recently I thought of renosterveld as a boring vegetation type consisting of the renosterbos (*Elytropappus rhinocerotis*) and not much else. This is probably because this is the view one gets of the small patches of renosterveld that remain between the wheatfields of the western Cape as one drives past at

120 km/hr! Pixie Littlewort, who probably knows the flora of the Darling region better than anyone else, introduced me to the local vegetation. I was astounded by the diversity of flowering plants that we encountered on the first visit to one of Darling's renosterveld koppies. During a preliminary survey of seven hills in the Darling region, over 420 species of flowering plants were recorded, a number much higher than I would have expected. There was not sufficient time to sample the wetlands and seeps of the area, but it is known that these habitats contain additional species of plants, including many rare and threatened varieties. Of the plant species recorded almost a third were monocots, largely comprising petaloid species, with the Iridaceae being the family with the largest number of representatives. Many of these bulbous species feature regularly at the Darling Wildflower Show and important genera include *Babiana*, *Geissorhiza*, *Ixia* and *Moraea*.

The natural habitats in which



Above. Typical scenery near Darling showing renosterveld-clad hills surrounded by agricultural land.

Photo: P. Ivey.

Left. A cultivated stand of Darling's yellow chasmanthe (*Chasmanthe floribunda* var. *duckittii*), a popular horticultural colour form, which in nature is restricted to a single seep on a single farm in Darling.

Photo: National Botanical Institute.

THE SEARCH AND RESCUE PROJECT

by Lee Jones, Co-ordinator, Search and Rescue Project

Almost without exception, those hearing for the first time of the Search and Rescue Project presume it to be an organization of mountaineers - dedicated souls, who, against all odds and hampered by severe conditions, locate the missing species (usually *Homo sapiens*) then return home tired yet triumphant.

Wrong, but not entirely off the mark. The project (funded by WWF, SA) is dedicated to the conservation of threatened habitats and species. The flora of southern Africa is incredibly diverse, consisting of some 24 000 indigenous flowering plant species. Unfortunately, for many reasons (the reduction of habitat due to agricultural, housing, and industrial development and indiscriminate and unsustainable harvesting of plants for medicinal and other purposes) many species such as *Erica jasminiflora*, *Protea odorata*, *Gladiolus alatus* and *Widdringtonia cedarbergensis* have been brought to the brink of extinction. Others, for example *Erica verticillata* and *Mimetes stokoei*, are now extinct in the wild.

The Project is directed by the Botanical Society's Flora Conservation Committee and based at their Head Office at Kirstenbosch. Other non-governmental organizations, conservation and local authorities, landowners, and the general public are called upon to help. Search and Rescue brings these various departments and individuals together, and it is only through exhaustive debate and negotiation that areas requiring conservation are finally proclaimed as reserves or Natural Heritage Sites. Sadly, at times all attempts fail and one is left with the 'if only...' feeling and a devastated tract of land.

Botanical Society members are invaluable as the 'cell phone' of the fynbos since many threatened areas have been identified by members who have then made the information available to us. Volunteers aid search operations, help with the replanting of threatened species, and donate precious time (and money) to the project. Horticulturists at Kirstenbosch, amongst other experts, propagate and care for 'rescued' plants until these are ready for return to their natural or foster homes.

Numerous sites and species are dealt with concurrently. Milnerton Race Course (one of the last significant outposts of sand plain fynbos on the Cape Flats), Shaw's Pass Outspan (near Caledon), the Brackenfell Rocky Outcrop and Joostenbergkloof (site of the largest surviving population of *Leucadendron verticillatum*) are but a handful of the sites presently under investigation. A Nature Conservation student, Richard Schubert, is currently doing a vegetation survey of the Brackenfell Rocky Outcrop for Search and Rescue. A preliminary peek in July revealed a high diversity of species in this small natural remnant in the heart of urban sprawl. (All in the next issue of *Veld & Flora*!)

Trying to explain the significance of a piece of vegetation to a developer the other day, and having to look at his wrinkled brow of incredulity presented full face for just a minute too many, I finally resorted to dirty tactics. I asked whether it would bother him if he was responsible for the extinction of lions in southern Africa - given the choice of shooting the last lion in the country. You see, there are many of us who feel as strongly about floral habitats - and the butterflies and other creatures who rely on plants, directly or indirectly, for their existence - as we do about the majestic lions. Yes, it bothered him. ☹

If you know of any natural vegetation which is under threat, make your voice heard in the press or simply contact Lee Jones, Co-ordinator of the Search and Rescue Project, Botanical Society, Kirstenbosch, Claremont, 7735.

Tel (021) 797 2090, fax (021) 797 2376.

these species occur have been reduced to a large extent in the past and certain Darling endemics (such as *Geissorhiza darlingensis* and *Geissorhiza mathewsii*) have been given Red Data status. Some plants have extremely limited distributions. A local variety which is very popular as a horticultural subject is the yellow chasmanthe (*Chasmanthe floribunda* var. *duckittii*). This natural colour form of an otherwise common species, is restricted to a single seep area near Darling. The careful management of wetland areas is therefore of critical importance in protecting certain plant species, as well as maintaining habitats for insects and other fauna.

Overgrazing, grazing at the wrong time of year, and the fragmentation of natural veld for cultivation will eventually lead to the decline of the natural flora. But how can farmers who are set on maximizing production afford not to utilize wetlands or to graze the natural vegetation on their properties to the maximum extent?

One possible way of bringing in additional revenue to an area in an environmentally-friendly way is ecotourism. But the question is, how realistic is this option? Tourism today is the world's largest industry and is rapidly growing in South Africa, currently ranking as the fourth highest earner of foreign exchange after manufactured goods, gold and mining. Tourism not only brings in revenue but is also important in the government's Reconstruction and Development Programme as it creates jobs. In South Africa, tourism provides approximately 430 000 jobs (1 in every 25 workers) and it has been estimated that for every 30 tourists, one direct and two indirect jobs are created.

The Darling Wildflower Show attracts tourists to the region in spring and certain farmers open their fields to the public so that flowers can be seen in their natural state. 'Spin-offs' from tourism benefit the local economy as a whole, and I believe there is still room for expansion in the form of bed and breakfast accommodation on farms, linked with trails for hiking, mountain-biking and horse-riding. The landscape of the area certainly lends itself to these kinds of activities. With a combination of careful agricultural practices and environmentally-friendly land-use practices such as ecotourism, it is possible that the unique flora of the Darling region can be maintained for the generations to come. ☘

This year's Darling Wildflower Show will take place from 14-17 September. For more information please phone (02241) 2422 or (02241) 3361.

Further Reading

Heydenrych, B.J. & P. Littlewort. (1995). Darling Flora Survey.

A preliminary investigation into the conservation of the renosterveld remnants in the Darling area. *Flora Conservation Committee Report*, Botanical Society of South Africa, Kirstenbosch.

Low, A.B. & F. E. Jones. (1995). Renosterveld use and management symposium proceedings. *Flora Conservation Committee Report*, Botanical Society of South Africa, Kirstenbosch.

Wood, J. (1994). The Tygerberg Area. A natural heritage for all. *Veld & Flora*, 80(4), 126-128.