## The Van Stadens Wildflower Reserve

The Van Stadens Wildflower Reserve, about 40 km west of Port Elizabeth, conserves a number of endemic, rare and threatened plants in the Albany Centre of Endemism and serves as an important environmental education centre to local communities in the Nelson Mandela Metropole and outlying regions.

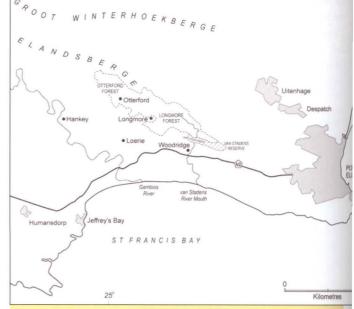
by Wesley Berrington, Nelson Mandela Metropole Municipality, Port Elizabeth and Tony Dold, Selmar Schonland Herbarium, Rhodes University, Grahamstown

In the 1700s the rather sinister name Galgenbosch (Dutch for 'Gallow's Wood') referred to the greater Thornhill area of the Eastern Cape, including the Galgenbosch Hoogte that is now the Van Stadens Berg. Army ensign August Beutler camped at Galgenbosch in 1752, so named because some travellers had cut their names on a tree and someone else had added a gallows above them. Although it remains unclear who Van Staden was, the grassy flats and steep mountains of that name were much admired by early travellers from as early as 1773 when the Swedish botanist Carl Peter Thunberg wrote, 'In the environs of Van Stade's river, were the finest woods I had seen in the whole country.' Many other famous early explorers like Sparrman in 1775, Lichtenstein in 1804, La Trobe in 1816, Moodie in 1820, Backhouse in 1838 and Krauss in 1839 mention Van Stadens River and the Van Stadens Berg in their writings. In 1838 Sir Charles Bunbury, who collected plants at the Cape of Good Hope in 1838 and 1839, noted 'The deep and narrow valley...is quite a gem ... and really puts one in mind of some of the smaller valleys of Switzerland. It is beautifully verdant, partly cultivated, partly pasture...hemmed in by mountains, not indeed of great height...but excessively steep and richly clothed with thick evergreen woods.'

In 1882 botanical artist Marianne North spent time at Cadle's Hotel (now the site of Woodridge Preparatory School) overlooking the Van Stadens gorge and together with Russell Hallack (of *Satyrium hallackii* and *Disa hallackii*) admired the nearby Van Stadens Berg on horseback, an experience she describes enthusiastically in her book, written in 1893.

The Van Stadens Wildflower Reserve, formerly Van Stadens River Outspan, was proclaimed in 1951 and remains, as





TOP: The summit of the Van Stadens Berg looking southwards towards Jeffrey's Bay. The rush lily, *Bobartia macrocarpa* in the foreground. Photo: Tony Dold.

MAP: The greater Van Stadens area west of Port Elizabeth.

noted by Helen Vanderplank (a botanical artist from Port Elizabeth who passed away last year), 'a natural gem'. Many of Helen Vanderplank's paintings in *Wildflowers of the Port Elizabeth area* (1999) are from plants collected in the reserve. The reserve belongs to the Nelson Mandela Metropolitan Municipality (NMMM) and consists of a low-lying area of about 600 ha between the mountain and the coast. The Van Stadens Berg comprises three entities under different conservation custodianship. The Van Stadens Berg is a proclaimed Natural Heritage Site (1 500 ha) that belongs to Mountains to Oceans (formerly SAFCOL). Ladies Slipper Nature Reserve (365 ha), so named because a prominent rock outcrop resembles a lady's shoe, belongs to NMMM. Witteklip Private Nature Reserve (28 ha) belongs to the Mountain Club of South Africa. According to Prof. Selmar Schonland, director of the Albany Museum and lecturer in botany at Rhodes University in the late nineteenth century, who undertook a botanical survey of the Uitenhage – Port Elizabeth area (now the NMMM) in 1919, the Van Stadens Berg has the highest rainfall records in the Port Elizabeth – Uitenhage region and therefore has a unique flora for the region.

## Rare and threatened plants in the Van Stadens area

The Van Stadens area boasts a high number of endemic plants. Some of these are rare and threatened and are listed in the Red Data List of plants. The greatest threats to the natural environment in the NMMM are urban sprawl, industrial development, commercial afforestation and alien plant invasion. Road reserves in the Van Stadens area appear to play an important conservation role as a refuge for at least three threatened species (see Veld & Flora 90(4), p. 137 for discussion on road reserves). While threatened species such as Aspalathus lanceicarpa, Cyclopia filiformis, Lotononis monophylla, Othonna membranifolia and Senecio serrurioides remain elusive, we have found and photographed many of the red-listed plants for the Custodian's of Rare and Endangered Wildflowers (CREW) programme (see page 186) who will use the information to re-assess the conservation status of these species.

Aster laevigatus is listed as

Vulnerable and is endemic to the Van Stadens Berg. Until recently it was only known from only two herbarium specimens, both collected in the late nineteenth century. Now, one hundred years later, after a recent mountain fire, we have found that this beautiful daisy is in fact much more common than previously thought to be, but still very localized on the mountain.

**Crinum lineare** (listed as Vulnerable) is occasionally seen in small clumps in coastal grassland between Port Elizabeth and the coast near Hamburg. Our photo is from the Van Stadens Wildflower Reserve, which is possibly the type locality for the species.

Bergtee **Cyclopia longifolia** (listed as Vulnerable) was, until recently, only known from four herbarium specimens, all collected on the Van Stadens Berg (Longmore forest station and Helsekloof). We have recently found a fifth population comprising a few isolated plants below the 'Lady's Slipper' on Van Stadens Berg.

Cyclopia pubescens (Vulnerable) is endemic to the NMMM where we know it from five severely fragmented and threatened populations in western suburbs of Port Elizabeth. Some of these remnant populations may no longer be viable. A population within the road reserve of the N2 near Van Stadens Wildflower Reserve featured on the environmental television programme '5050' about ten years ago and more recently in the local press. A proposed service station and interchange would have destroyed this population along with a population of the endangered Brunsvigia litoralis had it not been



TOP: Aster laevigatus at the summit of the Van Stadens Berg – re-discovered after 100 years.

ABOVE: *Crinum lineare* in the Van Stadens Wildflower Reserve, a low-lying area of about 600 ha between the mountains and the coast.

BELOW LEFT: *Cyclopia pubescens*, one of five fragmented populations, growing here within the road reserve of the N2 between Van Stadens and Port Elizabeth. This population will be protected as an educational eco-attraction when a proposed service station is built on the site in the near future.

BELOW RIGHT: *Euryops ursinoides* overlooking the Van Stadens gorge. Photos: Tony Dold.





for public intervention resulting in a novel development/management plan to ensure that no damage is done to the population during construction.

**Cyrtanthus staadensis** (Vulnerable) was only known from the Van Stadens Reserve when it was reported on in *Veld & Flora* volume 89(2), p 66 in June 2003. We have subsequently found two new populations in the Van Stadens Berg.

**Euryops ursinoides** (Vulnerable) is known only from the Van Stadens Berg and the nearby Otterford Reserve. We have found it overlooking the infamous Van Stadens Bridge.

*Leucadendron orientale*, the Van Staden's conebush (Vulnerable), was until recently only known from Loerie, Otterford, Longmore Forest Station and Van Stadens Berg, where it was first collected by William Burchell in 1814. The Protea Atlas Project reports a population from the Baviaanskloof – a range



TOP: Paranomus reflexus on the hot, dry, north-facing slopes of the Van Stadens Berg.

ABOVE: Sterculia alexandri in the Van Stadens River gorge. Photos: Tony Dold.

extension of about 80 km.

**Paranomus reflexus**, the Van Staden's sceptre (listed as Vulnerable), has been collected at Doornkraal near Humansdorp, Otterford, Loerie, Blouberg, Longmore and Van Stadens Berg. It is the easternmost distribution of 18 species and is threatened by commercial afforestation. The Protea Atlas Project recently posted an unconfirmed report on their website of a population in the Baviaansberge, 35 km north-east of Otterford.

## Conservation and Environmental Education

The Van Stadens Wildflower Reserve is situated about 40 km west of Port Elizabeth, on the old Cape Road (R102). Take the N2 out of the city towards Cape Town. After 40 km turn left off the N2 to Van Stadens Pass. The entrance to the reserve is on the right hand side, less than a kilometre from the N2. The gates open at 07h30 and close at 18h00 in summer and 17h00 in winter (1 May-31 August). There is no entry fee.

There is a well maintained customdesigned 'flower house' with correctly named flowering plant specimens at the reception office to test your knowledge. Two walking trails are available. The River Walk is a 4 km trail that follows the contour of the north-facing slope of a small tributary to the Van Stadens River. The steep slopes are home to Encephalartos longifolius and Cyrtanthus staadensis. The Forest Walk is a 6 km walk through the Van Stadens River gorge where local endemics Atalaya capensis and Sterculia alexandri can also be seen. A visit to the traditional Xhosa umzi (homestead) with household utensils, kraal and farming implements is worth a visit. For further information contact the Reserve Manager on 041 956 0155.

Other important nature reserves in the NMMM are Aloes Reserve, Cape Recife Nature Reserve, Groendal Wilderness area (Uitenhage), Island Nature Reserve, Maitland Nature Reserve, Sardinia Bay Nature Reserve, St Croix Island Reserve and Swartkops Nature Reserve.

## **BotSoc link**

To find out more about the magnificent flora of the Eastern Cape, get the BotSoc's South African Wild Flower Guide 11, *Eastern Cape* by John Manning, or contact the Algoa Branch of the BotSoc (Steve MacKenzie at 041 372 1162 or stevemack@absamail.co.za) if you are interested in participating in some of their activities in the area.

If you have an interest in monitoring rare and endangered plants of the Eastern Cape, please contact the Custodian's of Rare and Endangered Wildflowers (CREW) programme manager Domitilla Raimondo on 012 843 5314, or fax 012 843 5205, or email raimondo@sanbi.org. (See also page 186 of this issue).