

The spectacular *Brunsvigias*

Brunsvigias thrive in almost every climatic condition in South Africa but the plant's habitat is threatened by farmland and grazing animals and some of the genus are finding it hard to survive.

Brunsvigia – *Candelabra flowers* *Kandelaarblom* (Afrikaans)

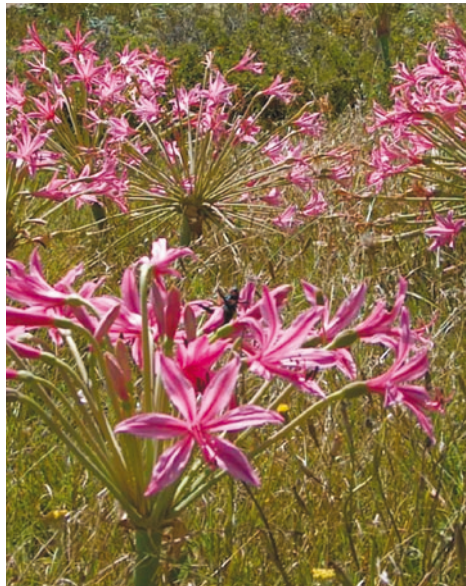
Most people are amazed by the sight of the large candelabra flowers in various shades of red and pink which emerge in mid to late summer and autumn. They seem to come from nowhere and appear as spherical flower heads with multiple trumpet-shaped flowers. These are the *Brunsvigias*, a genus belonging to the Amaryllidaceae family. The name was established in 1755 by an early German botanist, Heister, when describing a bulb of *Brunsvigia orientalis* sent to Germany in 1748 by the Cape Governor, Ryk Tulbagh. The genus was named in honour of a patron of the arts and sciences, Karl Ferdinand, Duke of Brunswick.

Pollinated by birds or insects

Brunsvigias are deciduous, bulbous plants with leaves that are either sub erect or pressed flat on the ground. After flowering, seed capsules develop at the terminal ends of the flower spikes. When the seed is mature the fruiting head dries off, detaches from the bulb and by tumbling and rolling across the ground scatters seeds, ensuring a wide dispersal. This feature has given rise to another common name, "*Perdespook*", referring to the fact that horses tend to shy if one of these dry heads tumbles across their path. Fences catch the tumbling heads and sometimes result in a concentration of plants along fence lines.

A wide habitat

Brunsvigias are endemic to Southern Africa and are widespread from the dry winter rainfall regions of Namaqualand and the



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- The *brunsvigia* is also called "*Perdespook*" because the rolling seed heads tumble in the wind frightening horses.
- *Brunsvigias* are deciduous, bulbous plants with leaves that are either sub erect or pressed flat on the ground
- Their habitat is disappearing.

1. *Brunsvigia radulosa*, flower detail. These flowers are insect-pollinated, usually by butterflies

2. A group of *Brunsvigia grandiflora* flowering at the end of February on a road verge near Thomas River in the Eastern Cape. Because of their upright leaf growth, they have largely disappeared from adjacent camps where they have been grazed.

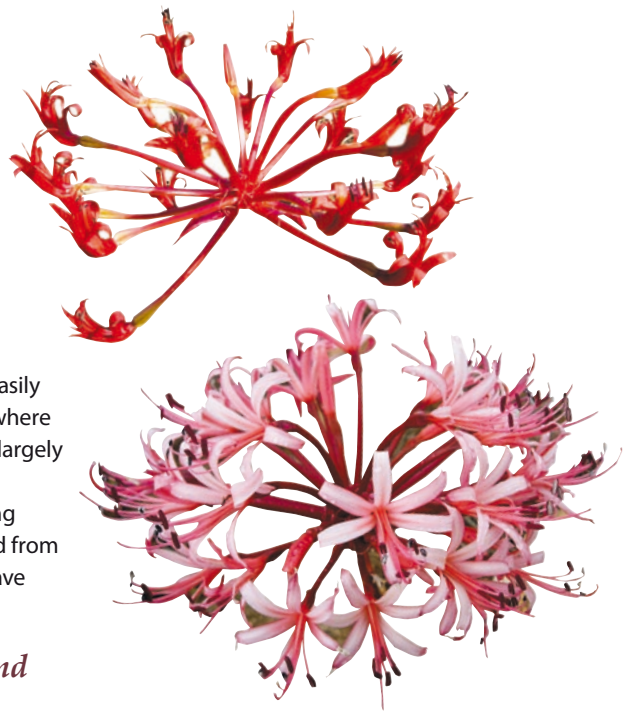
3. *Brunsvigia radulosa* near Cathcart.

4. The *Brunsvigia litoralis* flowering near Jeffrey's Bay. This species also has upright leaves and is sunbird-pollinated.

Western Cape, across the southern coastal belt, to the moist grasslands of the eastern summer rainfall region. According to the "Encyclopedia of Cape Bulbs" by Manning, Goldblatt and Snijman published by Timber Press in 2002, there are 22 species of *Brunsvigia* of which six are found in Namaqualand, nine in the Cape and the balance in the Eastern region. The Western Cape and Namaqualand species flower in March, a good strategy, since the seeds ripen in April and May and are dispersed just before the onset of the winter rains. In good years spectacular flowering of *Brunsvigia bosmaniae* can occur in places

also with prostrate leaves, *Brunsvigia gregaria* (gregarious because it is often found in large populations). It flowers much later, in March and April.

In contrast, the beautiful, lighter pink but much larger *Brunsvigia grandiflora*, endemic to the Eastern Cape, has upright leaves which are easily grazed in the heavily stocked areas where they occur. Consequently they have largely disappeared and persist today only on road verges and areas surrounding cultivated fields, which are protected from grazing animals. Farmers who still have



TOP: *Brunsvigia striata*, a small Western Cape species photographed near Cape Infanta. These flowers are designed for insect pollination.

MIDDLE: *Brunsvigia orientalis* photographed near Napier, Western Cape. It has flowers that are adapted to be pollinated by sunbirds.

BELOW: Two contrasting *Brunsvigia*: the prostrate leaves of *Brunsvigia radulosa* and (bottom) the upright leaves of *Brunsvigia grandiflora*.

'They have largely disappeared from stock farming areas and persist today only on road verges.'

around Van Rhyndorp and Nieuwoudtville. The autumn-flowering *Brunsvigias* and other Amaryllids such as *Haemanthus* in those areas are attracting an increasing number of tourists at that time of the year. *Brunsvigia orientalis* is the most widespread in the Western Cape, occurring from Namaqualand to the West Coast and through the Overberg to Knysna. It prefers sandy flats but is also found in clay soils.

Under threat from grazing and aliens

Much of the habitat of the *Brunsvigia orientalis* is now infested by alien vegetation. Near Napier where I live, there are thousand of plants in an area thickly infested with alien acacias, which severely inhibit flowering. If the area was cleared this population could be a major tourist attraction in the flowering season.

In general the summer rainfall species flower earlier, some as early as mid-December, when conditions are favourable for seed germination and the establishment of young plants. The most widespread species is the red and deep pink *Brunsvigia radulosa* which occurs throughout the Free State and in the Eastern Cape as far south as Cathcart, Tarkastad and Graaff Reinet. It has leaves that are prostrate and so it is generally better protected from animal grazing, although the buds are often cropped. South of the escarpment, from Seymour and Peddie to as far west as Jeffrey's Bay, *Brunsvigia radulosa* is replaced by a smaller but similar species,

populations of *Brunsvigia grandiflora* on their land, for instance around Thomas River and Hogsback, in the Cathcart district, parts of the Maclear district and in the Bosberg above Somerset East, are urged to make provision for the protection of these plants.

Saved by quick action

Because of its limited distribution and the threat to its habitat, *Brunsvigia litoralis* is possibly the most vulnerable *Brunsvigia* in the Eastern Cape. It is one of the few *Brunsvigias* with upright leaves and it occurs from Cape St Francis to Port Elizabeth, in areas that are being overtaken by urban sprawl and cultivation. When it became clear that a sizable population near Jeffrey's Bay was doomed because of property development, the local Fourcade Botanical Group, a branch of CREW (Custodians of Rare and Endangered Wild Flowers) stepped in. With permission from the Koega Municipality, bulbs were relocated to a suitable safe haven on a nearby farm, where isolated scattered plants still occurred. The project got under way in 2006 with Ilse and Johan Prozesky, assisted by a Department of Environmental Affairs and Tourism team, removing more than 70 bulbs of various sizes. Twenty seven of the transplanted bulbs flowered in March 2007. This is an example of how important it is to survey land destined for development or cultivation, to determine if there are special plants that need to be preserved. – Cameron McMaster (cameron@haznet.co.za). |fw

