STEENBOK NEWS

BRUNSVIGIA ORIENTALIS

(Linnaeus) Aiton ex Ecklon
Candelabra flower, Koningskandelaar, Perdespookbossie
Amaryllidaceae

Late summer in Steenbok Park sees the emergence of the spectacular crimson Candelabra flower or *Brunsvigia orientalis* which grows in scattered colonies in coastal sand. The bud of this large bulb pushes up through the sand on its sturdy stem before a leaf can be seen, and produces up to 40 flowers in a head shaped like a rounded candelabra.

As the flowers fade the ovaries enlarge and become papery and eventually the flower stem breaks away and the flower head is blown about, tumbling over the ground and scattering its seeds. These 'balls' blowing in the wind no doubt give rise to the Afrikaans name *Perdespookbossie*.

The plant was initially called *Amaryllis orientalis*, but in 1753 Lorenz Heister (1683-1758), a botanist and professor of medicine at the University of Helmstädt, renamed it Brunsvigia in honour of his patron the Duke of Brunswick. Karl Wilhelm Ferdinand (1735-1806) was a cultured and benevolent despot, who promoted the study of plants. The bulb had been sent to Germany in 1748 by Cape Governor, Ryk Tulbagh, who was very interested in the flora and fauna of the Cape and regularly sent plants and stuffed animals to Europe.

Brunsvigias are deciduous and have adapted to the dry period of the year by resting underground. The large flower heads appear shortly before the rainy season. Sunbirds searching for nectar in the tubular flowers are their chief pollinators. Once the seeds have been scattered they germinate very quickly, giving the seedling a full rainy season to develop sufficiently to withstand its first dry season underground.

The leaves usually appear from about May, after the flower head has dried and broken off. There are usually about six large tongue-shaped leaves spread flat on the ground. They start to die down from

October, thus helping the bulb to retain moisture through the long dry summer.

Brunsvigia orientalis grows on coastal forelands in sand, and is very seldom found in clay. The area of distribution is from southern Namaqualand to Worcester, Cape Peninsula to Knysna. The colony on Steenbok Nature Reserve has the highest concentration of plants in the Knysna area — a scattering of plants can be found at the Knysna Elephant Park and Westford Bridge Private Nature Reserve.

In 2000 interested Island residents counted 880 of these bulbs in Steenbok Nature Reserve, but by 2008 the count had dropped to 220. Most Brunsvigias are erratic in their flowering behaviour and do not like their bulbs or roots being disturbed. Moles cannot be blamed for the drop in numbers as toxins in the bulbs ensure that moles do not eat them. It has been suggested that attacks by the Lily borer or Amaryllis worms (*Brithys crini pancratii*) and the invasive Cogon grass (*Imperatus cylindrical*) may be factors contributing to this decline.

In 2009 large numbers of the Lily borer worms were noticed feeding on the Brunsvigia leaves. Experts were consulted and advised that moths called the Lily Leaf Miner (*Brithys crini pancratii*) that lay the eggs on the leaves, are enjoying a population explosion at present, possibly because of the abnormally dry climatic conditions.

As they overexploit their food resource, their population will inevitably crash again. Artificial control of the moth larvae has adverse ecological consequences and therefore has not been undertaken in Steenbok Nature Reserve.

The experts felt that damaged bulbs would re-grow in time and new seedlings would increase the numbers once more given adequate rainfall. Keen gardeners may feel differently about their own gardens as the worm also eats crinum, amaryllis, clivia, cyrtanthys, haemanthus and nerine.

For further botanical information on the Brunsvigia orientalis, click here