

veld & flora



BOTANICAL SOCIETY
OF SOUTH AFRICA

**Why thickets
are botanical
museums**

**Jachtvlakte:
small, beautiful,
threatened**

**Dissecting
button
daisies**

**Solving a
camelthorn
question**

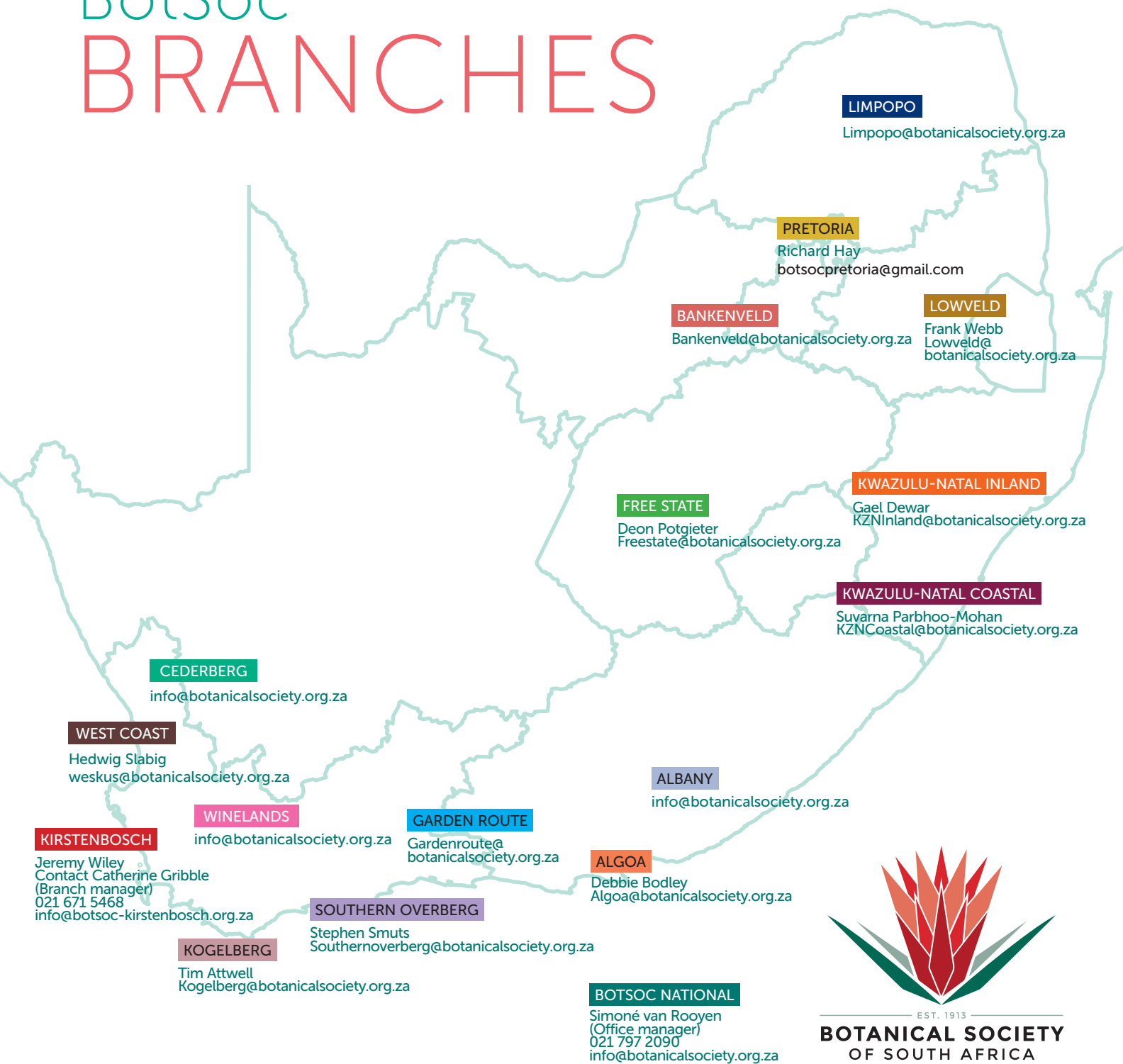


EST. 1913
BOTANICAL SOCIETY
OF SOUTH AFRICA

**Celebrating BotSoc's
110 years!**



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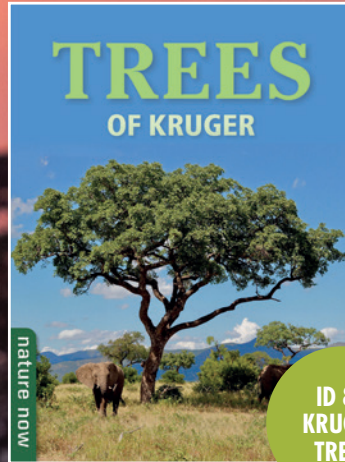
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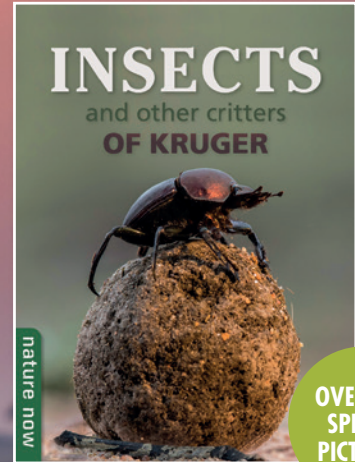
nature now



FEATURES
OVER 80
SPECIES



ID 80
KRUGER
TREES

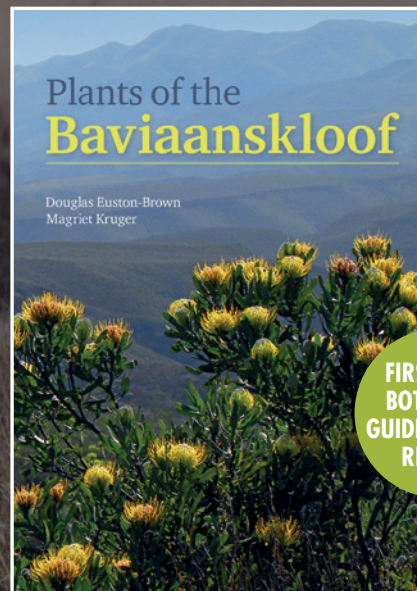


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110 years of protecting SA's indigenous flora



Two decades of plant partnership



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Save our succulents



It starts with the land



Green careers for SA's youth



New beginnings



Going dotty about cycads



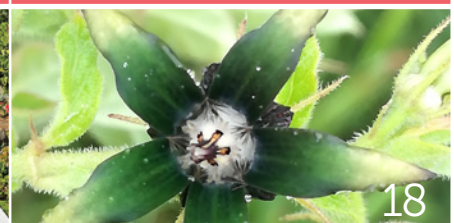
Medicine's future harvest



Franschhoek's blooming heart



Cape pride at Leeuwenhof



Grow our Heritage Circle

COVER: *Tritonia dubia* is one of the wild treasures of Jachtsvlakte in Nelson Mandela Bay.
PHOTOGRAPH: LUC STRYDOM

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BOTSOC

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BotSoc's mission is to win the hearts, minds and material support of individuals and organisations, wherever they may be, for the conservation, cultivation, study, enjoyment and wise use of the indigenous flora and vegetation of southern Africa.

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Plant delight at Jachtlvakte, includes: (from top left) *Delosperma ecklonis*, named after early Danish botanical collector and apothecary, Christian Ecklon, who visited in the 1820s; *Malephora uitenhagensis*, also a member of the ice-plant family; partridge pipe or *Gladiolus permeabilis*; the rarely recorded *Syringodea flanagani*; the diminutive *Aloe bowiea*; and the endangered Eierpol or *Euphorbia globosa*.

Keen-eyed botanists have been finding hidden treasures in an unassuming patch of grey-green shrubs in the heart of Nelson Mandela Bay for at least 250 years

REPORT: LUC STRYDOM



(Clockwise from top) Little is known about the distribution of *Lampranthus zeyheri* and it is classified as data deficient; doll's powderpuff or *Cyanotis speciosa* can withstand harsh conditions; *Tritonia dubia* has lost more than 50% of its habitat in the past 150 years to urban expansion and crop cultivation.

LARGE BRACKISH PANS and pockets of thicket dot low undulating plains cloaked in hardy Karoo scrubland in Nelson Mandela Bay.

With urbanisation expanding from both Gqeberha and Kariega, Jachtlakke ('Jagvlakte') is a threatened biodiversity hotspot lying between the Swartkops, Chatty and Brak rivers.

Among Jachtlakke's asbos (*Pteronia incana*) and other grey-green shrubs, more than 300 indigenous plant species and 27 species of conservation concern have been recorded. This precious 2 500-hectare space is also a refuge for small mammals.

Human history at Jachtlakke stretches far back into the past and the hills and flats are scattered with tools from the early to late stone age. Scientific interest began 250 years ago in 1773 when Swedish naturalist Carl Thunberg (1743-1828) gazed in fascination across this plain. Later notable plant hunters who made a point of visiting include: John Barrow (1797), Christian Ecklon (1829), Isaac and Johan Drège (1829), Carl Zeyher (1832), Ferdinand Krauss (1839), Florence Paterson (1908), Josef Brunthaler (1909) and Frank Stayner (1930).

Jachtlakke's arid climate provides less than 500 millimetres of rain per year. Together with the deeper clays of the lowland hills, this provides a habitat well suited to succulents, geophytes and caudex-forming species capable of storing sufficient water to survive the harsh dry periods.

To this day, Jachtlakke is richly diverse in ice plants (Aizoaceae), euphorbia, crassulas, dogbanes (Apocynaceae) and a feast of hyacinth species including squills (*Drimia*), albuca and star of Bethlehem (*Ornithogalum*).

PLAINS TREASURE

It is also a refuge for locally endemic species which have been lost elsewhere and in some cases were thought extinct after habitat loss nearby during the development of Kariega and Despatch.

Recently a small population of a member of the iceplant family (Aizoaceae), *Trichodiadema stayneri*, was confirmed within the Jachtlakke area. This critically endangered species had not been recorded for more than 60 years. Similarly, the leather-leaved African hyacinth (*Ledebouria coriacea*) and the succulent

Jachtlakke plant species of conservation concern recorded from January 2017

FAMILY	SPECIES	STATUS
Acanthus (Acanthaceae)	<i>Justicia orchioides</i> subsp. <i>orchioides</i>	Vulnerable
Ice plants (Aizoaceae)	<i>Bergeranthus addoensis</i>	Near threatened
	<i>Bergeranthus multiceps</i>	Data deficient
	<i>Corpuscularia lehmannii</i>	Critically endangered
	<i>Delosperma hollandii</i>	Critically endangered (possibly extinct)
	<i>Delosperma parviflorum</i>	Data deficient – insufficient information
	<i>Drosanthemum autumnale</i>	Data deficient – insufficient information
	<i>Trichodiadema orientale</i>	Data deficient – taxonomically problematic
	<i>Trichodiadema rupicola</i>	Data deficient – taxonomically problematic
	<i>Trichodiadema stayneri</i>	Critically endangered (possibly extinct)
Amaryllis (Amaryllidaceae)	<i>Cyrtanthus spiralis</i>	Endangered
Dogbanes (Apocynaceae)	<i>Pachypodium bispinosum</i>	Near threatened
	<i>Pachypodium succulentum</i>	Near threatened
Asparagus (Asparagaceae)	<i>Albuca annulata</i>	Vulnerable
	<i>Eriospermum dregei</i>	Near threatened
	<i>Eriospermum paradoxum</i>	Near threatened
Asphodels (Asphodelaceae)	<i>Aloe bowiea</i>	Endangered
	<i>Haworthia cooperi</i> var. <i>pilifera</i>	Data deficient – taxonomically problematic
Daisies (Asteraceae)	<i>Gnaphalium declinatum</i>	Near threatened
	<i>Osteospermum spathulatum</i>	Data deficient – insufficient information
Spurges (Euphorbiaceae)	<i>Euphorbia globosa</i>	Endangered
	<i>Euphorbia meloformis</i>	Near threatened
Cranesbills (Geraniaceae)	<i>Pelargonium campestre</i>	Data deficient – insufficient information
	<i>Pelargonium reniforme</i>	Near threatened
Hyacinths (Hyacinthaceae)	<i>Ledebouria coriacea</i>	Critically endangered
Iris (Iridaceae)	<i>Syringodea flanaganii</i>	Vulnerable
	<i>Tritonia dubia</i>	Near threatened
Mints (Lamiaceae)	<i>Salvia obtusata</i>	Vulnerable
Lobelia (Lobeliaceae)	<i>Lobelia filicaulis</i>	Critically endangered
Water clovers (Marsileaceae)	<i>Marsilea schelpeana</i>	Vulnerable
Plumbagos (Plumbaginaceae)	<i>Limonium linifolium</i>	Near threatened
Figworts (Scrophulariaceae)	<i>Selago zeyheri</i>	Vulnerable



Overgrazing and illegal dumping threaten Jachtvlakte's plant life, including (top left) the little-known *Pelargonium campestre* and (bottom left) the sea lavender, *Limonium linifolium*, found near salt pans.

subshrub *Delosperma hollandii* have recently been recorded at Jachtvlakte.

Several endemic herbaceous species are also found, mainly along the fringes of thicket clumps, on sparse rocky hillsides or around the edges of the pans. Notable species include the near-threatened daisy *Gnaphalium declinatum* and the vulnerable figwort *Selago zeyheri*. The panel on page 39 lists several more.

TOMORROW'S REFUGE?

In the Eastern Cape's 2019 biodiversity conservation plan, portions of Jachtvlakte were declared critical biodiversity areas – but they have not been formally protected. Sections of the area are heavily impacted by illegal



dumping (often accompanied by new populations of invasive species), off-road recreational motor sports, medicinal harvesting, ever-encroaching urban and industrial expansion and overgrazing by domestic goats and cattle.

The ecological importance of this threatened habitat and unique landscape is very high and protecting at least some of it is critical. This unique landscape preserves some south-eastern Cape lowland thicket habitat and provides a vital refuge for numerous endemic species.

Its importance grows further when you look at it in context. Directly adjacent to Jachtvlakte's critically endangered Motherwell karroid thicket lie Van der Kemp's Kloof municipal nature reserve and Hopewell Private Game Reserve's Bethelsdorp bontveld



The angulate tortoise (above) and common cannibal snail (below) find refuge in Jachtsvlakte.



habitat. In Hopewell and Van der Kemp's Kloof the critically endangered, possibly extinct, groundsel *Senecio hirtifolius* was recently recorded.

Look south from Jachtsvlakte and you see the historically valued Swartkops and Missionvale salt pans, which are part of an intricate system of seasonal wetland clusters flanking the Swartkops river and extending from Kariega towards the Swartkops estuary. In 2018, directly south-east of Jachtsvlakte, the critically endangered *Lobelia filicaulis* was recorded in a seasonal pan.

Today Jachtsvlakte and these other sites are jewels in a broken necklace of precious remnants. Recognised protection would save them for tomorrow and for generations to come. 🌿

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Wildlife refuge

As well as indigenous flora, Jachtsvlakte is a refuge for animal species, including scrub hares and common duiker. You are likely to encounter at least one angulate tortoise (*Chersina angulata*) and maybe even a parrot-beaked tortoise (*Homopus areolatus*). Cross-marked grass snake (*Psammophis crucifer*) and the elusive spotted skaapsteker (*Psammophylax rhombeatus*) may appear. On rain-misted mornings, you might see the indigenous common cannibal snail (*Natalia cafra*) slowly gliding across the smooth red clay towards a new bush clump in search of meaty prey.