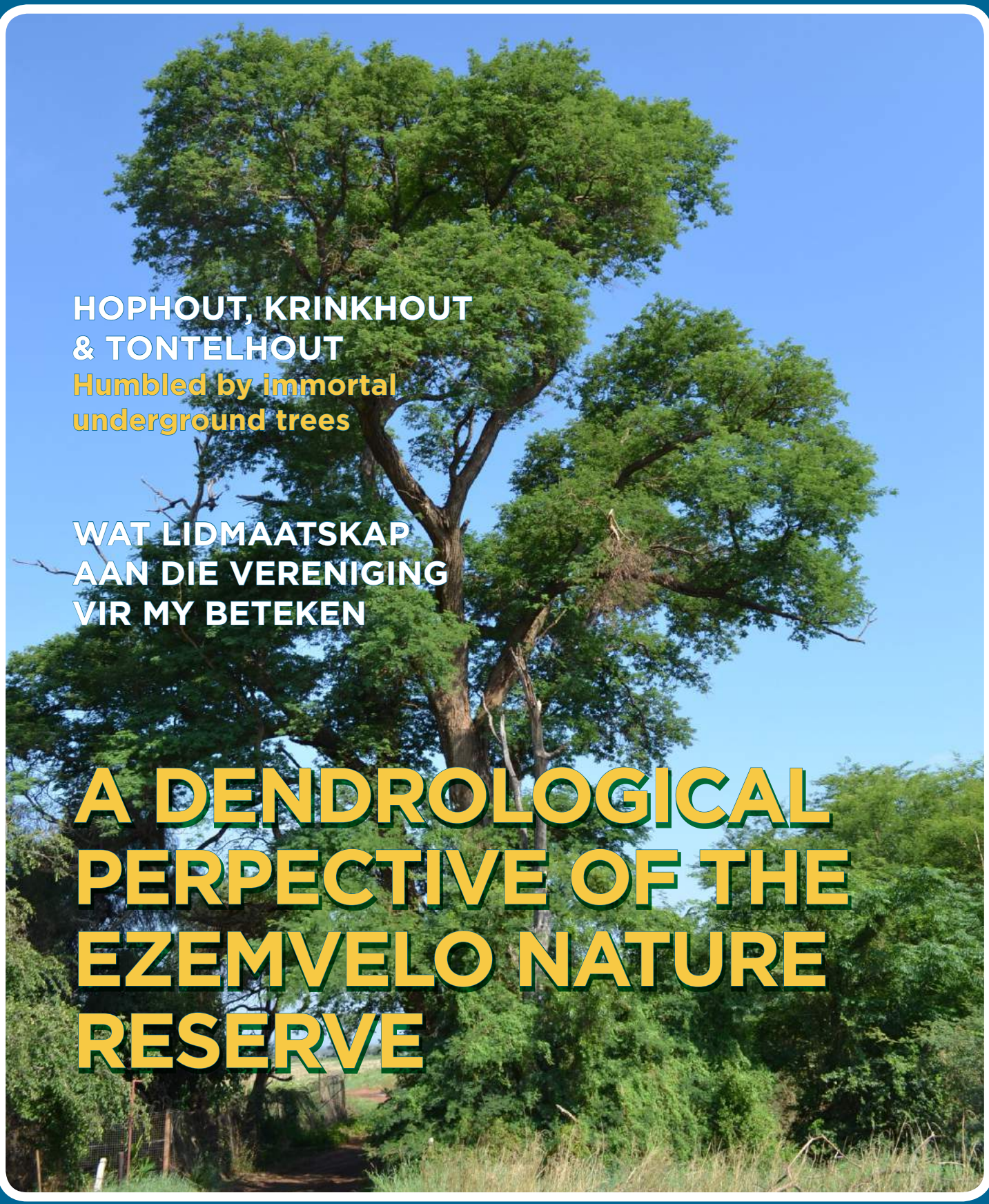
Dendron

Tydskrif van die Dendrologiese Vereniging, die Boomkunde en Bewaringsvereniging van Suid-Afrika
Magazine of the Dendrological Society, the Tree Science and Conservation Society of South Africa

No/Nr: 49 Desember 2017



HOPHOUT, KRINKHOUT & TONTELHOUT
Humbled by immortal underground trees

WAT LIDMAATSKAP AAN DIE VERENIGING VIR MY BETEKEN

A DENDROLOGICAL PERPECTIVE OF THE EZEMVELO NATURE RESERVE

Burned remains of *Ozoroa paniculosa* var. *paniculosa* – broad-leaved resintree | Photo: Jaap Kroon

"When you enter a grove peopled with ancient trees, higher than the ordinary, and shutting out the sky with their thickly inter-twined branches, do not the stately shadows of the wood, the stillness of the place, and the awful gloom of this doomed cavern then strike you with the presence of a deity?"

~ Seneca

Lucius Annaeus Seneca (often known simply as Seneca) (ca. 4 BCE – 65 BCE) was a Roman Stoic philosopher, statesman, dramatist, and in one work humorist, of the Silver Age of Latin literature. He was tutor and later advisor to emperor Nero. While he was later forced to commit suicide for alleged complicity in the Pisonian conspiracy to assassinate Nero, the last of the Julio-Claudian emperors, he may have been innocent.

Preface

The French novelist and philosophy teacher, Muriel Barbery asks all the big questions in her radical poetic novel *L'Élégance du hérisson*: what's the meaning of life; why the electrician didn't pitch; is analysis worthwhile; how to say, on your first date, that you need to use the toilet; what purpose has art or intelligence; …and much more. In exploring what makes life bearable and meaningful she writes:

There's so much humanity in a love of trees, so much nostalgia for our first sense of wonder, so much power in just feeling our own insignificance when we are surrounded by nature...yes, that's it: just thinking about trees and their indifferent splendour and our love for them teaches us how ridiculous we are - vile parasites squirming on the surface of the earth - and at the same time how deserving of life we can be, when we can honour this beauty that owes us nothing[1].

As trees are non-emotional things, apparently unthinking, they are not going to argue or celebrate their own story or existence. But as the ultimate survivalists there are few things more impressive than trees. Trees live longer, generally in harmony with their own surroundings, and grow to be larger than anything around them while supporting many other species. Good reasons exist aplenty for our respect for trees to grow, but it is our emotional connection that will really make the difference.

Modern man's culture has become one of picturesque parks and gardens surrounded and suffocated by kilometres of tarmac, concrete jungle and high fences. In an attempt to hold on to the beauty of nature we are stripping it bare down a path of destruction from which the earth might never recover. The rapid industrialization, urbanization, pollution and population growth have contributed to the current situation. In a weird way we have done great loss to ourselves.
Trees are an integral part of our planet. They are our neighbours and friends, in true sense our life-long companions, important to the biosphere, maintaining a crucial ecological balance and they play an important role in survival of life in many ways. Not only do trees provide essential elements for survival and progress, they also add to the natural beauty.

In the vastness of the Kalahari the Bushmen lives in small family groups. One family of Bushmen might meet up with another only once in a few years. But for the most part,

1. Barbery, M. L'Élégance du hérisson. 2006. (Translated by Alison Anderson The Elegance of the Hedgehog 2009). Gallimard.

they live in complete isolation unaware that there are other people in the world. The Kalahari Bushmen talk about the two hungers. There is the Great Hunger and then there is the Little Hunger. The Little Hunger wants food for the belly, but the Great Hunger, the greatest Hunger of all is the hunger for meaning…

Sir Laurence van der Post (1906 – 1996) said it best when he contemplated the essence of meaning in our lives: *This hunger for meaning transfigures all; and once what you are living and what you are doing has for you meaning, it is irrelevant whether you are happy or unhappy. You are content. You're not alone in your spirit. You belong*[2].

So, let us all embrace this hunger for meaning for the purpose and protection of the environment and of the species that live in it. Only then will it be possible to succeed in changing or modifying the attitude of people and society towards their environment. Often those attitudes have their origin in the lack of awareness of, or ignorance towards the environment, as well as in the existing disparity between conservation and our obsession with progress and comfort at the expense of nature. Trees have a very deep and crucial meaning for human beings. The trees we love create special places – places to be in and places and memories to pass through. Trees are central to these shared and structured symbols in our existence that invoke a sense of pride and belonging which attract separate attention of the natural environment.

I therefore do believe there is this crying need by ordinary people like you and me to plant more and more trees. It is our way to engage with the natural environment, it gives us a sense of belonging and meaning in understanding more about the benefits that trees and woodlands bring to our society. We should promote afforestation. The planting of trees will enable people and have an immediate tangible and positive effect on the environment, bringing people together for meaningful purpose that can build bridges and promote the understandings of our collective responsibility towards this loveliness of nature that owes us nothing.

2 Sir Laurens van der Post from Hasten Slowly, a film by Mickey Lemle.

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Skuinsdrift *Vachellia galpinii* - apiesdoring / monkey thorn
Foto: Naas Grové

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LANGUAGE EDITING /
TAAL REDIGERING:
Naas Grové

LAYOUT / UITLEG:
www.roomfordesign.co.za

COVER PHOTO:
Naas Grové

PUBLISHER/UITGEWER:
Dendrological Society of South Africa
Dendrologiese Vereniging van Suid-Afrika

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ISSN : 1991-1539

"Prehistoric tree mystery"

The research is reported in the journal Proceedings of the National Academy of Sciences. (Ed).

Palaeontologists have discovered tree trunks of a well preserved fossilized tree which is believed to lived 393 – 372 million year ago (MJA). These sturdy trees who grew up to 12m tall, vaguely resembles modern day palm trees with erect branches. One palaeontologist, Christopher Berry was amazed by the sheer size and the complex growth strategy of these ancient trees.

Most modern trees have a single cylindrical trunk made up of woody strands called xylem that transports water and nutrients from the roots to the leaves. New xylem grows in rings at the periphery of the trunk, just under the bark and the new layers of xylem in most trees produce familiar growth rings in their trunks and branches as the tree gets taller.

The newly discovered fossilized trees known as *Cladoxylopsida* were towering, woody trees with an empty space where their heartwood should be. Contrary to modern trees, their water conducting system is in a ring of hundreds of individual strands of xylem (water conducting cells) interconnected in many places like a finely tuned network of water pipes. The earliest trees had their xylem therefore confined to the outer 5cm of the trunk while the middle was completely hollow. Rather than the tree laying down a growth rings under its bark each year, each xylem strand generated its own growth ring. In effect the xylem strands behaved like individual mini-trees. As the strands expanded, connections between them split apart and the diameter of the tree trunk widened.

According to Christopher Berry, the trees are particularly important, because they dominated Earth during the Devonian period from 419 - 358 MJA. They formed the first forests and played a key role in absorbing carbon dioxide from the atmosphere. They also added oxygen to the atmosphere, affecting the climate and influencing conditions that fostered the emergence of other life forms by reducing carbon dioxide levels. This study helps us to better understand how the key inhabitants of the first trees on the planet managed to survive. Despite their early critical role in the evolution of life on Earth, the *Cladoxylopsids* do not have any modern descendants.

Naas Grové

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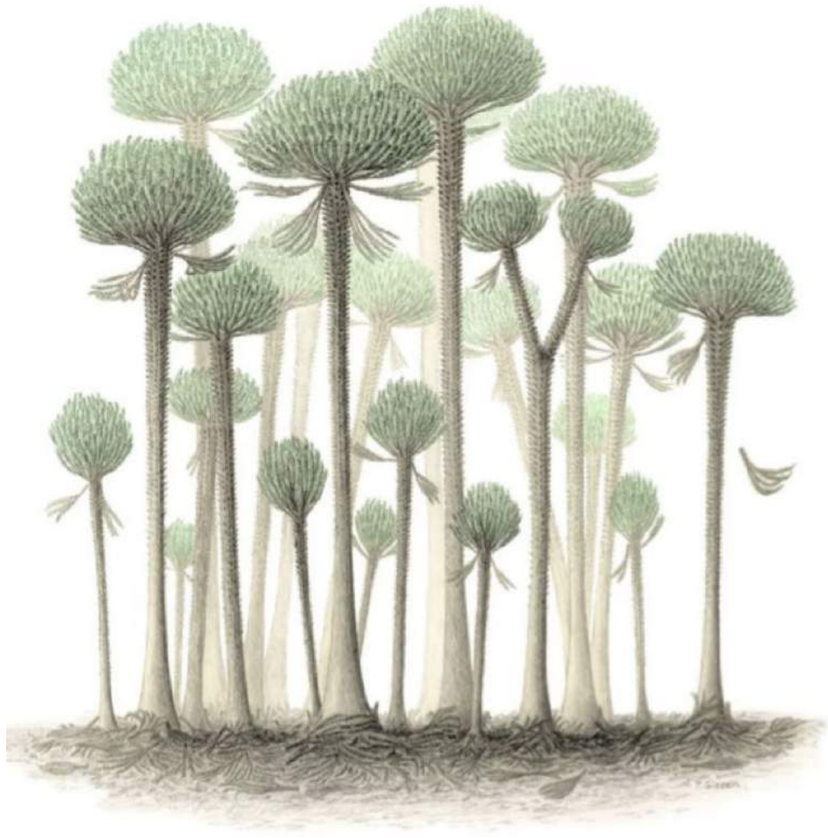

How the Cladoxylopsid trees would have looked (Picture: Cardiff University)

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Humbled by immortal underground trees

Naas Grové

Biomes are very large and complex ecological communities characterized by distinctive plant and animal species maintained under climatic conditions of a region. Biomes can be recognized by its general distinctive appearance given by the shapes of plants and the landscape. For example, grasslands, have mostly grass, deserts more sand and forests are mostly dominated by tall trees and other plants growing beneath the canopy at ground level. Each biome is unique and boundaries between biomes are not always clearly defined. They move as climate changes. Grasslands can be transformed into deserts, forests can be converted into grasslands and more recently, human activities have drastically altered these communities.

Biomes are made up of abiotic (nonliving) and biotic (living) components. Abiotic components include water, air, soil, temperature, and solar energy. Plants, animals, and microbes make up the biotic component of a biome.

Each biome is unique and that explains why certain animals and plants have made special adaptations to thrive in one area yet would not be able to exist in another. One of the most dramatic climate shifts in the world happened 6 000 – 5 000 years ago, with the transformation of the lakes and grasslands in North Africa to the present-day Sahara Desert, the world's largest desert.

A biome is different from an ecosystem which is a natural system consisting of all plants, animals and microorganisms (biotic factors) in an area interacting together with all the non-living physical (abiotic) factors of the environment. A biome can be made up of many ecosystems. Within a biome, you will find many vegetation types, which is not so easily recognized as a biome. The different vegetation types are defined in terms of dominant as well as rare species and differences in the topography, geology, rockiness, drainage, soil texture and depth, slope, etc. all contributing to the difference in vegetation types. Each vegetation type has its own set of habitat conditions and species composition.

The Savanna Biome is found in Africa, South America, India and Australia. It is the largest biome in southern Africa, locally known as the bushveld. The Savanna Biome is well developed over the Lowveld, northern parts of the Limpopo Province, the Kalahari region and it is also the dominant vegetation in Botswana, Namibia and Zimbabwe. It covers 46% of the total land area in southern Africa and almost one third the area of South Africa. The Savanna Biome is characterized by a grassy layer and distinctive woody plants. Most of the plant species are adapted to survive severe seasonal veld fires and even when damaged can re-sprout the following season from

the burned bases. This shrub-tree layer can reach a height of between 1 – 20 meters, but it typically varies between 3 – 7 meters. Moderate rainfall is concentrated in 6 – 8 months in a year and not enough to cause major floods although occasional flooding does occur. The soil is porous and thin layered and does not hold water well. The rainy season is followed by a long period of drought and drying winds during which time seasonal fires occur which play a vital role in the biodiversity of the savanna.

It is in these conditions that some of the immortal underground trees of Africa can be found. Some scientists believe that these trees appeared before the savannahs spread 8 million years ago, which suggests their fire-avoiding origins are closely tied with the savannas' birth. There are however other evolutionary drivers of the underground tree habitat in Africa and research also showed that these trees did not evolve just once, which can be seen in the at least 200 known different types of underground trees with at least 30 different independent adopted strategies for survival.

Survival strategy:
Some trees have evolved strategies to cope with the constant threat of fire.

According to Joseph Burtt Davy the combined factors of the cold dry winters, periodic drought, hot sun and dry winds on the Highveld and Bushveld are conditions affecting the survival of seedlings such as trees which take a long time to establish. It is under these severe unfavourable conditions for the growth of trees that several plant species represented on the Highveld and Bushveld have developed as pyrogenic (fire stimulated) *geoxylic suffrutices*, (singular: *geoxylic suffrutex* or "*geosuffs*") partly *hypogenic* (growing on or remaining below surface), partly epigeous (growing and spreading above the surface) which suggests that they form an intermediate stage in the morphological plant evolution. These plants are better adapted to survive under the conditions imposed by the environment. Burtt Davy therefore presents that the *geoxylic suffruticose* habitat is not a temporary adaptation to the environment, but has become a fixed habitat which persists under these severe conditions. This peculiar woody plant growth form can be compared to underground trees with a massive woody structure tucked away underground. The annual branch tips die back every year and is unlikely to be noticed by the casual passerby. Nothing can kill these trees. They are drought resistant and constantly exposed to regular veld fires and severe winter frost in some places. Fire and frost destroys the above surface growth of the tree but does not kill the tree outright. Because underground trees are almost entirely buried they can live for more than 10,000 years in the savannas of southern Africa and South America.

Erythrina zeyheri – plough-breaker | Photo: Naas Grové

These plant's response to annual fires, frost or grazing by herbivores is clearly adaptive. The extensive underground parts survive the extreme conditions and the perennial canopy emerges in early spring, right after the long winter drought, before competition with grasses and therefore sunlight becomes a serious factor. These plants are highly unpalatable (*Parinari capensis* subsp. *capensis* – sand apple / bosappel) or extremely toxic (*Dichapelatum cymosum* – poison leaf / gifblaar) to avoid excessive herbivory. Flowering takes place some weeks or months before the arrival of summer rain, for a very short time so that pollination can happen without the competition of grasses and other plants. The grass will eventually conceal the suffructices. Most savanna trees have developed features such as thick bark and fire resistant shoots and it seems the geoxyles have also adapted to the fire-maintained savannas by developing a woody underground component to escape the fire pressure imposed by seasonal fires.

It is however not only fire and winter frost attributing to the geoxyle habitat. Frank White pointed this out in his paper on underground trees published in 1976, and mentioned that most of these plants are found on sandy infertile soils on very gently sloping or almost flat surfaces. The lower surfaces are seasonally waterlogged and seasonally dry which causes a fluctuation in the water table. Under these conditions

Ziziphus zeyheriana – dwarf buffalo thorn | Photo: Naas Grové

at the sandy edges of shallow floodplains and wetlands woody plants are completely eliminated and the trees are replaced by these suffrutices, referred to as *dambos*. The total biomass of the underground trees exceeds that of the grasses in this environment. The correlation between the mosaic of different edaphic conditions (relating to the physical or chemical composition of the soil found in an area) in these areas therefore disqualify fire and frost as the main contributors to this geoxyle habitat.

Hidden beneath the surface of the Savanna are unseen forests, the only visible signs of their presence are clumps of erect leaves at ground level. Some trees are entirely buried with their wooden stems growing horizontally, extending for meters in all directions under the surface. These underground trees are a very peculiar growth form associated with the South African savanna, not found anywhere else in the world except for a limited degree on the Aglaia in Papua New Guinea, Bolivian cerrado plants and Andean bromeliads. More than two hundred known species have been identified across a variety of plant families.

It seems that each suffrutex species is related to a tree like species from which it may have evolved. For example, the leaves, flowers and fruit of the underground *Parinari capensis* subsp. *capensis*, *Ziziphus zeyheriana* (dwarf buffalo thorn), *Lannea edulis* (wild grape), *Elephantorrizhia elephantina* (eland's bean) and *Erythrina zeyheri* (plough-breaker / ploegbreker) are almost identical to *Parinari curatellifolia*, the mobula plum, *Ziziphus mucronata* (buffalo thorn), *Lannea discolor* (live-long), *Elephantorrizhia burkei*

Elephantorrizhia elephantina – elephantroot | Photo: Naas Grové

Lannea edulis - wild grape | Photo: Naas Grové

Parinari capensis subsp. *capensis* | Photo: Naas Grové

(elephantroot) and *Erythrina* spp. (coral trees).
Parinari capensis subsp. *capensis* is a perennial plant with an extensively rhizomatous root system. These plants typically are found on the edges of dambos, on infertile sands, especially seasonally waterlogged soils and on Kalahari sands, where trees are absent. They form large patches in secondary grassland following destruction of woodland by fire, cultivation, grazing, etc. The erect, woody dwarf shrub with aerial stems are not more than 20 cm high with few single erect leathery leaves. The upper surface of the leaves is hairless with white felted hairs underneath. Flowers are much branched and arranged in loosely clustered erect branches. The glabrous single seeded fruit is ovoid, large (~ 1.8 cm long), hard brown and fleshy, with lenticels. The sweet outer flesh is eaten and the raw stamped kernels eaten as a relish to meat. Fresh fruit are pounded and the liquid could be drunk immediately or boiled and fermented for making beer. It can also be dried and eaten as a soft cake.

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Bome met stories

Naas Grové

Mense het bome nodig. Ons het nodig om by die venster uit te kyk en die ritseling van blare te sien. Ons wil in die koelte van 'n boom vertoef. Bome het die vermoë om mense agter die betonmure van hul skuilings uit te lok en so word gelukkige gemeenskappe gevorm. Deur die geskiedenis is daar talle bewyse van hoe bome as tradisionele ontmoetingsplekke vir spesiale byeenkomste of historiese gebeure gedien het. Baie van dié bome is gekies op grond van hul unieke voorkoms of posisie binne 'n gemeenskap. Hierdie bome het later gedien as 'n landmerk in die gemeenskap en dit het bygedra tot 'n burgerlike trots.

Die historiese Indaba-boom by Pretoriuskop-ruskamp in die Kruger Nasionale Park is 'n tipiese voorbeeld van so 'n boom. Talle tradisionele dorpies in Afrika het ook indaba-bome waar gemeeskappe bymekaarkom om belangrike sake te bespreek. Indaba beteken 'vergadering' of 'vergaderplek' of 'samekoms'.

Foto: www.tourismkwadukuza.co.za

Pretoriuskop is die oudste ruskamp in die Kruger Nasionale Park. Die Park se eerste wildbewaarder, Harry Wolhuter, het sy daaglikse personeelvergaderings onder 'n *Trichillia emetica* subsp. *emetica* – bosveldrooiessenhout gehou. Wolhuter was 'n kleurvolle karakter in eie reg. Soms het hy rondgeloop in die vel van 'n leeu wat hy self gejag het. Dit het aan hom sy Swazi naam '*Lindana*', wat lendedoek beteken besorg. Die Pretoriuskop-ruskamp was oorspronklik deel van die tuin rondom Wolhuter se hut. Dit is dan ook die enigste plek in die Park waar jy uitheemse flambojante en pers bougainvillas aantref wat deur Wolhuter geplant is en nou deel vorm van die nostalgiese geskiedenis van die Park.

In 1837 word die Ndebele verslaan tydens gevegte by Mosega en Dwarsberg deur die Griekwas en die Zoeloes. Die Ndebele verdeel hierna in twee groepe: een onder leiding van Induna Gundwane Ndiweni, wat bestaan het uit vroue en kinders. Hulle trek na die huidige Zimbabwe in 1838 en die ander groep, onder leiding van Mzilikazi en sy vegtende krygers, trek noordwes na Botswana en die Zambezi.
Na Mzilikazi se dood breek bloedige gevegte tussen strydende partye uit en uiteindelik seëvier Lobengula en word hy die nuwe leier. Hy noem sy hoofstad koBulawayo, afgelei van 'bulawa' wat 'om dood te maak' beteken. By die huidige Staatshuis in Bulawayo, het Lobengula onder 'n *Pappea capensis* hofsittings en indabas tussen 1870 -1880 gehou. Vandag is dit 'n historiese terrein.

Die doppruim het in duie gestort tydens 'n reënstorm in Februarie 1984 toe dit meer as 200 jaar oud was. 'n Nuwe generasie van jong boompies het opgeskiet uit die wortels van die ou boom en dit word beskerm deur die Natuurlike Museums en Monumente Wet van Zimbabwe.

Behalwe vir die talle bome wat as vergaderplekke vir indabas en tradisionele byeenkomste gedien het, staan bome ook sentraal tot baie legendes en mites. Die ou Engelse eikeboom wat in George voor die ou biblioteek staan, is in 1811 Landros Van Kervel geplant. Dit staan bekend as die Ou Slaweboom, as gevolg van 'n geroeste ketting en slot wat in die stam vasgegroei het. Die slot dateer uit 1890 en is gebruik om die roller van die tennisbane te beveilig en nie om slawe vas te ketting soos waana die naam van die boom verwys nie! Die boom is vandag 'n Nasionale Monument.
In die beginjare van die Boererepublieke van die Transvaal en die Oranje-Vrystaat was dit nie net die Griekwas, Korannas en Swart volkere wat onder mekaar gestry het nie. Die Britse Ryk het nie die twee nuwe Boererepublike herken het nie en dit was deels verantwoordelik vir die ondelinge broedertwis en onmin in Afikaner geledere wat hooggety gevier het. Die meningsverskille het gegaan oor konfrontasie met die

The plaque reads: Lobengula's first Bulawayo was on this site 1870 – 1888
Foto: www.zimfieldguide.com


Foto: http://local-info.co.za/sites/

Britse Ryk - verder noordwarts trek of onderhandeling, kerklike skeurings, vereniging van die twee Boererepublieke en persoonlike familie gerskille. Die strydende partye was verteenwoordig deur Hendrik Potgieter aan die een kant en Andries Pretorius aan die ander kant. Na hulle dood is die stryd deur Stephanus Schoeman, Jan Viljoen en Marthinus Wessel Pretorius voortgesit. Paul Kruger het later ook tot die stryd toegetree.

Vanuit die Vrystaat het MW Pretorius probeer om die twee Republieke te verenig, te midde van 'n verkiesing wat in die Transvaal gehou is waartydens Willem van Rensburg as President verkies is. Hy verteenwoordig die sogenaamde Staatsleger-faksie wat hoofsaaklik uit ledemate van die Gereformeerde Kerk bestaan het. Baie van die Boere het egter buite stemming gebly en Viljoen en Schoeman was nie met die uitslag gediend nie. Hulle het die Volksleger-faksie, hoofsaaklik bestaande uit ledemate van die Hervormde Kerk verteenwoordig. Oppad na Pretoria om te regeer is die nuutverkose President en sy Staatslegers deur Schoeman en Viljoen by Kommandonek se Volkslegers, net suid van Brits ingewag. Van Rensburg het hiervan te hore gekom en het oor die Krokodilrivier oor Silkaatsnek weggeswenk om die konflik te vermy. Schoeman en Viljoen het hulle agtervolg en kort nadat hulle deur die rivier is, het hulle die Staatslegers ingehaal wat op 'n koppie stelling ingeneem het. Een man van die Schoemankommando is dood geskiet en gelukkig het dit nie in 'n volskaalse oorlog ontaard nie. Intussen het MW Pretorius hom vanaf die Vrystaat na die gevegsterrein gehaas en onderhandeling tussen die leiers het plaasgevind waarin hulle besluit het om 'n nuwe verkiesing te hou. Die onderhandelings het vir ses dae onder drie verskillende kareebome plaasgevind. Die boom waaronder die finale onderhandelings gehou is, is die Vredesboom genoem. Hierdie boom het egter intussen doodgegaan.

Naby hierdie boom teenaan die pad by Silkaatsnek het 'n ander groot kareeboom gestaan. Omdat dit 'n lekker groot koelteboom was, het dit in die omgewing uitgestaan en in later jare was dit dikwels as verwysing vir 'n afspreekplek gebruik om gaste wat van Pretoria af gekom het in te wag. Dit het die naam ''Wagboom'' gekry. In 1961 is by hierdie boom 'n klein momument ter herdenking aan die 1864 Burgeroorlog opgerig. Alhoewel dit nie dié boom is waaronder die vrede gesluit is nie, het dit tog 'n belangrike rol in die vrede en daarna gespeel.

Die Afrikaanse digter Jo'e-Lo, gebore Johanna Gustavus Rossouw, skryf in haar gedig Halfmens: *Kon ek maar 'n donker ets teen die verre horison wees dan sou ek wuiwend in die spieëlblink newels buig.*
Kon ek maar met een stekel-arm omhoog bly staan en vir stofmoeë reisigers die duinende doringpad baan.

Endemies aan 'n klein deel van die Gariep-streek in die Noord-Kaap en die Ai-Ais Richtersveld in suid-wes Namibië, in die rotsagtige woestyn aan beide kante van die Oranjerivier, word die halfmens teen die steil suidwestelike berghange aangetref. Die plante word blootgestel aan uiterste somertoestande van baie min reën, hitte en koue winde in die winter.

Foto: https://i.pinimg.com/originals/

Die maan aanbiddende Khoikhoi of Khoekhoe, wat 'mense mense' of 'regte mense' beteken, behoort aan die Khoisan etniese groep wat in suidelike Afrika vir ongeveer 30 000 jaar geleef het. Hulle was eens aan die Europeërs bekend as 'Hottentotte', 'n term wat tans as neerhalend en kwetsend beskou word. Die naam Hottentot is afgelei van die Nederlandse woord 'stotteraar' en dit is 'n beskrywing van die klikgeluide van die Khoisan-tale. As gevolg van voortgesette skermutselings met ander stamme in suidelike Afrika, is die Khoisan geleidelik uit hulle land verdryf en dit het die tradisionele Khoikhoi lewe effektief beëindig. In die legendes van die Khoekhoe word die halfmens vergelyk met die siel van die mens. Volgens hierdie legende is die halfmens eintlik die gees van 'n Nama wat oor die Gariep (Oranjerivier) vlug. Tydens die vlug het hy omgekyk en 'n simpatieke god het hom in 'n versteende plant laat verander, wat vir ewig noordwaarts kyk om die Nama te herinner aan hierdie warm, waterlose vaderland waaruit hy verdryf is. Hierdie pre-historiese plante se 'koppe' wys almal na die noorde en volgens die legende versimboliseer dit die Khoisan se verlange na sy geliefde land wat hulle agtergelaat het. Halfmens bome is ikoniese oorlewendes wat kenmerkend is van die harde, onvoorspelbare klimaat van die dorre Sukkulente Karoo.

Die dorings van die blinkblaar-wag-'n-bietjie verskyn in pare by die verdikking in die takkies: die een groep na onder gekrom en die ander reguit en effens vorentoe. Hierdie verskynsel is dikwels afwesig by ouer bome. Volgens die Nguni-legende vertel die dorings ons iets oor onsself – die reguit dorings versimboliseer ons vooruit kyk na die toekoms en die teruggekromde dorings moet ons nooit laat vergeet waar ons vandaan kom nie.

Tydens die Algemene Jaarvergadering in April vanjaar het die Vereniging sy vyftiende verjaardag gevier. Baie mag dalk wonder waarom net vyftien jaar, wetende dat die Vereniging reeds in 1980 gestig is. Vyftien jaar gelede het wyse manne en vroue besluit om vorentoe te kyk en die verbintenis met die Dendrologiese Stigting te beëindig en onafhanklik as die Dendrologiese Vereniging te funksioneer. In erkenning van die Nguni-legende kan ons vandag terugkyk op die gebeure van die verlede en weet

Ziziphus mucronata | Photo: Naas Grové

waar ons vandaan kom. Ingelyks kyk ons vorentoe en streef ons na uitnemendheid in alles wat ons aanpak.

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Stinkwood

Naas Grové

Stinkwood (*Occotea bullata*) has for many years been the hallmark of Cape furniture. The earliest inventories referring to stinkwood is that of Engela van Breda and Michiel Leij between 1714 – 1719 referring to '*1 stinkhout tafel met chitze sprei'* (one stinkwood table with tablecloth) and '*1 stinkhout ledekant met blou behangsels en beddegoed'* (1 stinkwood four-poster bed with blue curtains and bedding). The early Settlers in the Cape Colony experienced a shortage of good timber wood, as most of the indigenous trees have been harvested for ship and house building by the Dutch settlers. George Rex, an entrepreneur and timber merchant founded the town of Knysna and later played a significant role in developing the area. He immediately recognised the opportunity to supply and transport timber by sea instead of using the existing ox wagon trails to the Cape Colony. Soon he started to cut, transport and export indigenous wood from a port near Knysna to the Cape Colony on his own vessel made of stinkwood between 1830 – 1842. Indigenous wood was in such great demand that the Knysna forests became seriously depleted of accessible indigenous wood species by 1912. This was one of the reasons why the cutting of indigenous wood was was banned in state forests between 1939 –1967.

Today these types of indigenous wood are generally unaffordable, and in the case of stinkwood, mostly commercially unobtainable. Stinkwood (or black stinkwood, Cape laurel, stinkhout, swartstinkhout, laurelhout (Afr), umnukani (isiZulu), umhlungulu (isiXhosa) is one of the most expensive and highly prized timbers in the world. This medium sized fast growing evergreen tree can be found in the mist belt Afromontane forests of the eastern Drakensberg escarpment, the mountain forests of the Soutpansberg and in evergreen moist forests along the south coast of KwaZulu-Natal and the Knysna forests in the southern Cape.

The tree belongs to the LAURACEAE-family (Stinkwoods). Plants commercially grown such as cinnamon, bay leaves, camphor for insect repellent and medicinal purposes as well as avocado are all members of this family. The genus *Ocotea* refers to the native name for the genus in Guiana and the Latin *bullata* refers to the two or more raised hollow pockets in the axil of the veins. The common name stinkwood refers to the unpleasant smell of freshly cut wood. Young trees have a smooth grey bark and fresh cut bark has a pleasant smell (not the wood). The young green fruits look like miniature acorns and turn purple when ripe. The seeds are eaten by insects, birds and primates so it can be hard to find. The seeds are recalcitrant (unorthodox seeds that do not survive drying and freezing because they can lose their viability) and cannot be stored before planting. Freshly planted seeds will germinate within six weeks. The plant can also be grown from stem cuttings to be prepared in August and dipped into rooting hormone which will take after approximately ten weeks.
Stinkwood is under the top ten traditional medicinal plants in KwaZulu-Natal and the destructive harvesting methods and high demand has caused the species to be close

Ocotea bullata | Photo: Naas Grové

to extinction in this area. The bark is harvested and used to cure headaches, urinary disorders, to treat stomach problems and as an emetic for emotional and nervous disorders. Because of the anti-inflammatory properties in this plant grounded bark is snuffed or smoke is inhaled to relieve headaches, emotional and nervous disorders.

The larvae of *Trioza bullatae* sp. n. induce conspicuous globular galls on the leaves of the stinkwood which causes the leaves to curl. (*Burckhardt, et al.*). The stinkwood is a protected plant in South Africa.

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Bushveld red-balloon

Naas Grové

The *Erythrophysa transvaalensis* (bushveld red-balloon, bosveldrooiklapperbos (Afrikaans) mofalatsane (Setswana) is a very rare species and in terms of legislation, a protected tree in South Africa. The plant belongs to the SAPINDACEAE, Litchi-family. Until recently it was suspected that the species is endemic only to a small area of distribution in South Africa. It is now known that the plant has been noted at least west of Gauteng, on the slopes of the norietkoppies at Bospoortdam near Rustenburg, in the Pilanesberg, to the west of Thabazimbi, in the Strydpoort mountains in Limpopo as well as in the Waterberg. The engineer in charge of building the Bospoortdam sent the first leaf samples of the plant in 1933 to the Botanical Research Institute for identification. The plants are also found in three places west of Bulawayo, one being the ancient Khami Ruins founded by the Torwa Dynasty, the first rulers of the Kingdom of Butua, and also in southern Botswana.

The genus name is derived from *Erythrophysa* (Greek *erythros* = red + *physos* = bladder or windsock) and it refers to the red inflated fruit. The species name *transvaalensis* / *-e* refers to the old Transvaal province's geographic location north of the Vaal River.

It is a small deciduous shrub tree that can grow up to 5m with a sparse crown. It usually occurs on rocky outcrops on the warmer northern slopes. Swollen underground tuberous roots make that the plant can survive veld fires and because of the constant exposure to this the plant is often multi-stemmed.

Leaves are imparipinnately compound

The bark is reddish-brown, smooth, shiny and crisp. The spear-like leaves are crowded at the end of the branches and occurs only on new growth. The compound leaves are imparipinnate with 7 – 10 pairs of single pinnae. The pinnae are opposite with a terminal leaflet and a petiolule is absent. The petiole is about 2.5cm long. The leaf base is asymmetrical, and the rachis is winged. Often, fern-like foliage can be observed at the base of the leaf, which is an outstanding feature. The leaf margin is smooth.

Attractive large flowers appear from September to October, before or with the new leaves. The flowers are green suffused with red and the petals are often completely red. The fruit is a beautiful bladder-like red triangular capsule that looks like an inflated windsock. Each of the three lobes hold a blue-black seed that is almost round and slightly flattened. The plant grows easily from seed and is only suitable for frost-free gardens.

Flowers | Photo: Naas Grové

Very distinctive red triangular inflated capsule | Photo: Naas Grové

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Hophout, krinkhout, tontelhout

Prof. André de Villiers, Voorsitter van Magaliestak

Klink die opskrif na die trappe van vergelyking van hout? Of dalk na enkele eienaardige volksname wat destyds om een of ander eienskap aan hierdie bome gegee is? Hoekom elke keer die hout gedeelte van die naam? Almal kan mos sien dis bome en dat hulle houtagtig is.

Die skrywer het om 'n verskeidenheid van redes besluit om iets oor hierdie bome te skryf.

Eerstens was Naas Grové, president van die Dendrologiese Vereniging, se onlangse boek: Vratjievrugbliksembos[1] 'n besonder interessante titel vir enige boek. Dit wakker mens se belangstelling in bome van die Magaliesberg aan en lewer tegelyk 'n ernstige pleidooi vir die bewaring van hierdie verklaarde en bedreigde biosfeergebied.
Watse snaakse boom of struik kan die naam vratjievrugbliksembos gegee word en waarom? Al drie die houte hierbo word volledig in Vratjievrugbliksembos beskryf en kom in volgorde op bladsye 24, 148 en 350 voor.

Tweedens, nes die vratjievrugbliksembos, is die gekose drie bome relatief skaars. Hulle kom meesal in die Bosveld voor en die skrywer het slegs enkele van hulle op die plaas Marulani net buite Bela Bela (voorheen Warmbad), opgemerk. Trouens hy kan enigeen wat belang sou stel na elke betrokke eksemplaar neem.
Derdens die wetenskaplike name en die families waaruit hulle kom is ook heel interessant.

1. Grové, N. 2016. Vratjievrugbliksembos en ander Magaliesbergbome, Briza Publikasies

Vratjievrugbliksembos | Photo: Naas Grové

Maar, kom ons kyk gou eers na die vratjievrugbliksembos voor ons hierdie drie snaakse houte verken. Volgens Grové: 40 is die wetenskaplike naam *Clutia pulchella* en dit behoort aan die naboomfamilie of *Euphorbiaceae*, hoewel dit op die oog af glad nie daarna lyk nie. Dis 'n klein bladwisselende struik of boom wat tot 6 meter hoog word. Die genusnaam van die boom verwys na *Clutius* of *Cluyt*, wie in die sestiende eeu 'n bekende inspekteur van die Leydense Botaniese tuin was. *Pulchella* beteken klein en aantreklik. In Engels is dit 'n *warty-fruited lightning bush* en dié benaming verwys na die tradisionele geloof dat besit van dele van die plant mens teen weerlig beskerm. Die vrug is 'n drielobbige vratagtige kapsule wat oopbars en die sade versprei. Die plant het 'n simbiotiese verwantskap met 'n vlinder asook 'n skaars mierspesie. Dis hoogs bedreig en slegs enkele plante kom nog in die Magaliesberg voor.

Die hophout of *Trema orientalis* het slegs een inheemse spesie. Dit behoort aan die *Celtidaceae* of witstinkhoutfamilie. Die pit van die vrug het heelwat gaatjies of holtes en die *Trema* verwys daarna. Die orientalis beteken dit is veral in die Ooste bekend. Die Engelse naam is *pigeonwood* en duiwe is geneig om daarin nes te maak. Die boom het 'n lang reguit liggrys stam en dit word tot twaalf meter hoog. Dit is oortrek met lentiselle. Die hout is ligpienk en het geen kommersiële waarde. Bykans al die dele van die plant word in tradisionele medisyne gebruik en dit is 'n gasheer vir heelwat skoenlapperspesies.

Hophout is 'n pionierspesie wat eerste vestig op versteurde grond. Dit is goed vir die bekamping van erosie en kom veral in natter dele voor. Daar is relatief min van hierdie bome in die Magaliesberg en die Boaveld en hulle kom meesal op die rante van bosagtige dele voor.

Hophout | Photo: Naas Grové

Krinhoutbome, *Securidaca longepedunculata*, of in Engels *violet tree*, is ‘n middelmatige groot boom met ‘n snaakse groen-geel stam wat teen skemer eintlik spookagtig tussen ander bome uitstaan. Die Engelse naam is meer beskrywend as die Afrikaanse naam want die blommetjies is tipies perskleurig en lyk soos ertjieblommetjies. Die naam krinkhout kan dalk verkeerdelik verwys na krankhout vanweë die medisinale gebruike.
Die genusnaam verwys na die sade wat soos ‘n strydbyl, in Latyn *securia*, gevorm is. Met die veselagtige vlerk herinner dit baie aan die uitheemse tipuana wat volop in tuine in Pretoria aangeplant is. Die spesienaam verwys na die lang bloeiwyse. Die bome is al te pragtig wanneer hulle in Oktober blom en bye hulle bestuif. Dit behoort aan die familie *Polygalaceae* wat die bloukappie insluit. Dit is ‘n beskermde boom.

Vanweë vele medisinale gebruike is hierdie boomspesies vandag erg bedreig en word hulle as beskermde bome geklassifiseer. Volgens die Staatskoerant[2] is daar 47 spesies bome wat as beskermd verklaar is. Dit sluit in geelhout, hardekool, kameeldoring, kremetart, maroela, melkhout, silwerboom, stinkhout en selfs die witgat. Verder is daar die bome met medisinale waarde soos die boesmanstee (*Cathu edulis*), die peperbas (*Warburgia salutaris*) en die Pondo-gifertjie (*Tephrosia pondoensis*). Dit beteken dat geen persoon enige van hierdie spesies mag afkap, beskadig of daarin handel mag dryf nie. Permitte word slegs onder uitsonderlike omstandighede uitgereik.
Die wortels van die krinkhout bevat metielsalisilaat, beter bekend as *wintergreen*. Saammet gekneusde blare word ‘n mengsel gebruik om slange weg te hou en dit kan selfs visse verlam. ‘n Tinktuur van gekapte bas is glo effektief as seksstimulant; mens kan dit glo as tradisionele Viagra gebruik. Omdat dit ‘n toksiese alkoloïed bevat, is die moontlikheid van fatale vergiftiging hoog en die beskermde status van die boom is dalk ook ter beskerming van die publiek.

2 Notice 1161 of 2015, List of endangered tree species under the National Forests Act, Act 84 of 1998

Krinkhout | Photo: Naas Grové

Tontelhout, in Engels *tinderwood*, se botaniese naam is *Clerodendron glabrum*. Die spesienaam verwys na die haarloosheid van die blare. Ander Afrikaanse name is harpuisblaar, bitterblaar, stinkboom en truitjie-roer-my-nie. Dit behoort aan die *Lamiaceae* of *Labiatae*, ook bekend as die saliefamilie en is ‘n matige groot boom met blare wat stink ruik. Die gekneusde blare is ‘n nuttige insekafweerder en wanneer gekook, word die aftreksel teen griep en maagpyn gebruik.

Min mense sal vandag weet wat ‘n tonteldoos is. Voor die koms van vuurhoutjies is ‘n tonteldoos gemaak deur ‘n klein silindriese metaalhouer vol vlambare materiaal soos katoen of fyn skaafsels hout te stop. ‘n Vonkie van ‘n vuursteen is gebruik om dit te laat brand. Daarna kon ‘n roker sy pyp of ‘n braaivleisvuur aan die brand gesteek het. Vermoedelik was droeë tontelhoutskaafsels ook heel geskik, vandaar die naam.

Tonteldoos is ‘n dorpie naby Dullstroom op die Hoëveld van Mpumalanga teenaan die grens met Limpopo. Dit is bekende wegbreekplek vir stadsmense oor naweke waar forelvisvang en ‘n lekker kuierkroeg deel van die vermaak bied. In Dullstroom was daar ‘n restaurant met die naam Tonteldoos waar toeriste heerlike gevulde pannekoeke vir middagete kon geniet. Die toilette vir mans was gemerk Tontel en dié vir dames kan seker geraai word.

Sovêr is tesame minder as twintig hophoute, krinkhoute en tontelhoute op Marulani, ‘n duisend hektaar plaas, naby die paaie uitgeken. Daar is slegs vier maroelabome uitgeken, dus wonder mens waarom die plaas die naam Marulani dra.

Bronne:

1. Grové, N. 2016. Vratjievrugbliksembos en ander Magaliesbergbome, Briza Publikasies
2. Notice 1161 of 2015, List of endangered tree species under the National Forests Act, Act 84 of 1998

Tontelhout | Photo: Naas Grové

fokus
focus

South Africa Arbor City Awards 2017

Izak van der Merwe

Every year the Department of Agriculture, Forestry and Fisheries offers the Arbor City Awards in partnership with TOTAL South Africa and the Institute for Environment and Recreation Management. The whole idea behind this competition is to encourage local municipalities to green their areas of jurisdiction and promote environmental conservation and development, thereby securing a healthy living environment for residents in all settlement areas. It provides incentives and rewards to municipalities who are doing their best in terms of greening and landscape management, especially in the townships and new settlement areas. The competition further encourages the municipalities to create awareness on the importance of green landscapes and provides a platform for identifying challenges facing municipalities in the area of greening their environment.

The competition provides for three categories i.e. Metropolitan municipalities, category B local municipalities and a category for rural municipalities. The metropolitan category only has a first prize winner. The category B local municipality has a first

Rural Category: Umzimvubu Local Municipality

Local Category: Runner up Polokwane Local Municipality

Local Category: Stellenbosch Municipality

Metro Category: Tshwane Municipality

and second prize winners, and the rural municipality has fi¬rst prize winner only. The latter category was introduced in the year 2016 to encourage small and rural based municipalities to enter the competition and engage in environmental and greening matters. These municipalities are required to demonstrate real potential in order to qualify for the competition.

Municipalities submit portfolios of evidence to a panel of adjudicators who evaluate their tree management and greening programmes according to strict criteria. The panel then visit the short listed municipalities, who are each allowed to give a presentation of approximately 45 minutes. Selected projects within each selected municipality are visited. Thereafter the judges discuss the projects and complete scoring sheets. An average score is calculated to determine the winner for each category.

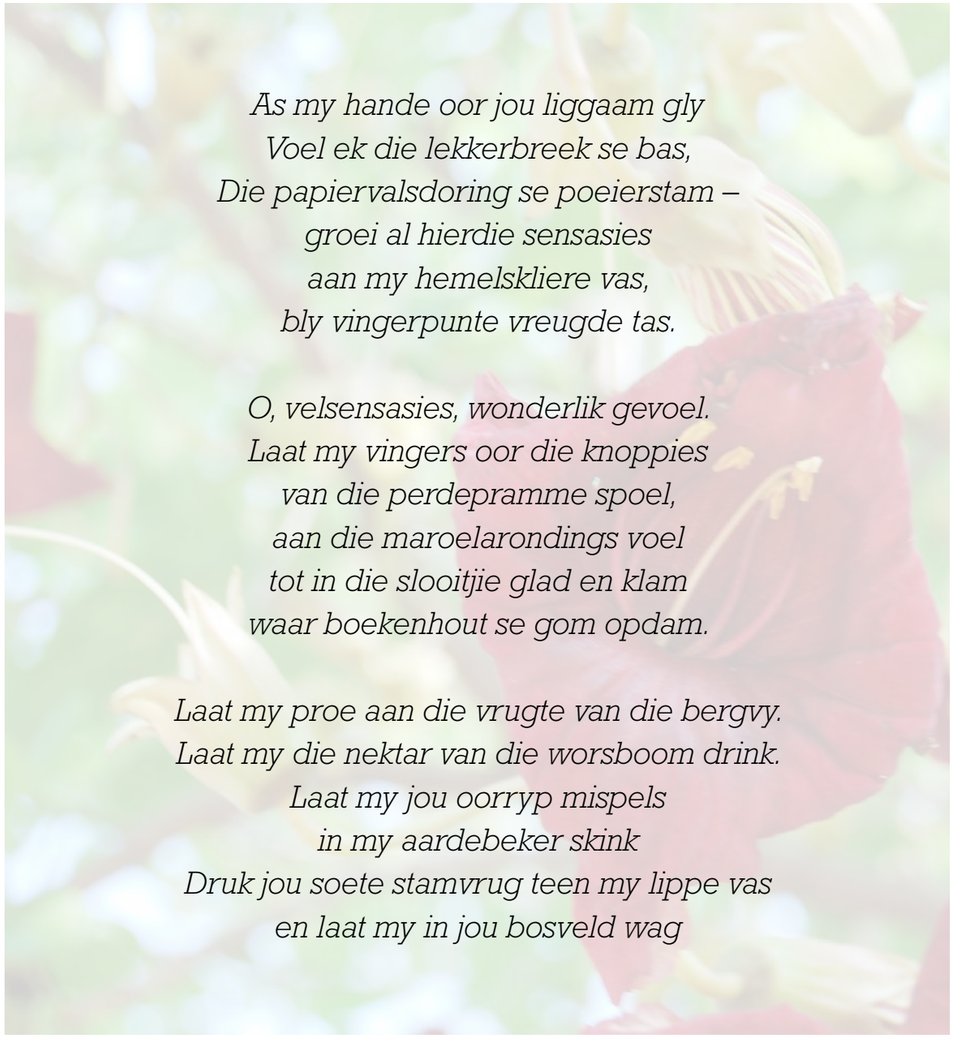
The 1017 Abor City Awards were announced at a function held in Matatiele, Kwa Zulu-Natal. The winners announced are:

Metropolitan: Tshwane Municipality
Local Municipality: Stellenboch Municipality
Second prize: Polokwane Municipality
Rural Municipality: Umvimvubu Local Municipality

Competition entry forms are available on the departmental website, wwww.daff.gov.za.

For further information regarding the competition, please contact Mr Michael Modise:
Tel.: **012 309 5787** • Fax: **012 309 5839** • E-mail: MichaelMod@daff.gov.za.

Gevoel



Dr. Carel Pretorius was een van die stigterslede van die Waterbergtak meer as 30 jaar gelede. Hy was ook n geruime tyd die voorsitter van die tak en is steeds aktief betrokke by die tak as ‘n boommeester. Dr Carel was ook vir ‘n aantal jare die president van die Dendrologiese Vereniging van Suid-Afrika.

Dr. Carel was vir meer as 40 jaar Modimolle (Nylstroom) se plaaslike dokter en tans locum hy steeds.

Dr. Carel is reeds 53 jaar getroud met Jean, sy skoolliefde, en woon tans in Bosveldsig in Modimolle.

A Dendrological Perspective Of The Ezemvelo Nature Reserve

Theunis Morgenthal

Introduction

The Magalies Branch held its 2017 year end meeting at the Ezemvelo Nature Reserve just outside Bronkhorstspruit during the weekend of the 18-19 November. The year has been a busy one for the Magalies Branch with the launch of a new book co-authored by Izak van der Merwe titled "*The Remarkable Trees of South Africa*" (*Esterhuyse et al.:* 2016) and a new partnership was initiated with the Brooklyn Theatre to promote the love of trees through poetry and art as part of the Gaufestival. Outings were held to the Wonderboom Nature Reserve, the Moreletakloof Nature Reserve in Pretoria and Shelter Rock in the Magaliesberg. We celebrated Arbour Week by planting a *Ziziphus mucronata* (buffalo thorn) at the Faerie Glen Nature Reserve in Pretoria and took a stroll with the *Friends of Faerie Glen Nature Reserve* through the reserve.

The Ezemvelo Nature Reserve is an 1800ha conservation area on the banks of the Grootspruit (Figure 1). The vegetation is typical Bankenveld with grassland and wooded ridges. Grassy plains are classified by Mucina and Rutherfort (2006) as Rand Highveld Grassland, while the woody ridges and hills are associated with Loskop Mountain Bushveld.

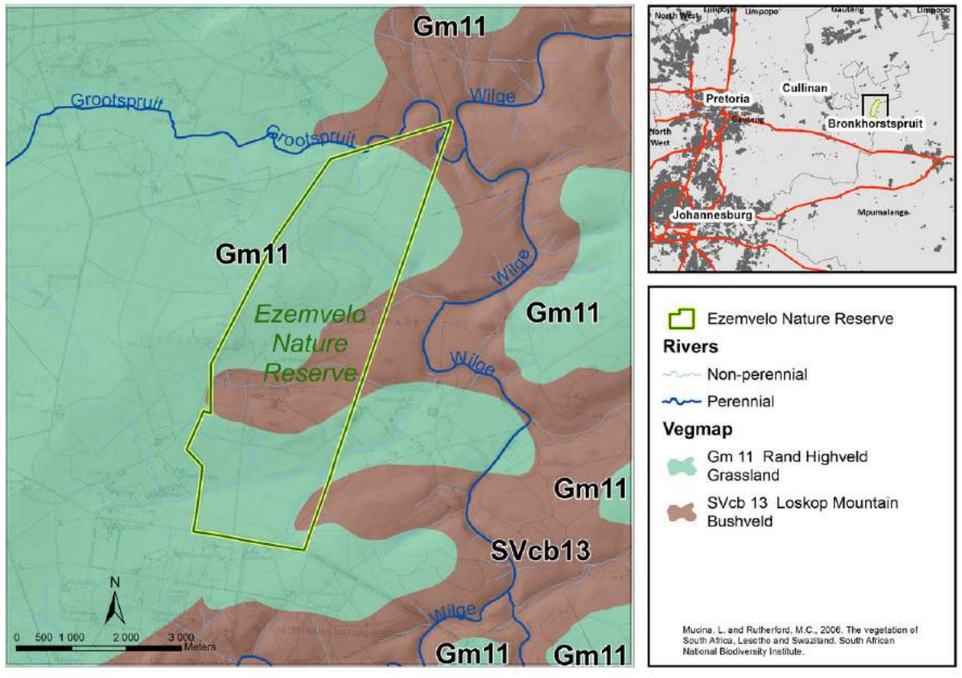


Figure 1. Locality Map of the Ezemvelo Nature Reserve. Black square in insert locality map presents map extent of larger vegetation map.

Trees and shrubs of Ezemvelo

The expectation was to find trees and shrub species typical of Bankenveld, especially along the ridges and river gorges transecting the reserve. The privately owned nature reserve has three hiking trails varying in difficulty, of which two are good options for some "tree hugging". The Ochna Trail path include two ridges around the southern part of the reserve near the chalets and camping area, while the Burkea Trail includes the rocky north facing slopes of the Grootspruit Gorge.

A total of 62 trees and large shrubs with tree status were recorded during the two days (Table 1: List of trees). Along the southern ridges (near the chalet and camp site) 47 trees were recorded and 38 trees along the Grootspruit Gorge. At the foot of the southern ridges are dominated by groves of *Burkea africana* (wild seringa) and *Senegalia caffra* (common hook-thorn) while the vegetation on the ridge was dominated by *Croton gratissimus* subsp. *gratissimus* (lavender fever berry), *Englerophytum magalismontanum* (stamvrug), *Euclea crispa* subsp. *crispa* (blue guarri), *Ochna* subsp.

Figure 2. *Rhoicissus tridentata* subsp. *cuneifolia* growing as a small scrambling shrub among rocks at the Ezemvelo Nature Reserve

pulchra (peeling plane), *Protea caffra* (common sugar bush) and *Searsia leptodictya* (mountain karee).

On first glance the ridges seems poor in tree diversity, but for a tree lover who is prepared to scratch around surprises await. Large *Olea capensis* subsp. *enervis* (bushveld ironwood), *Heteropixis natalensis* (lavender tree), *Dovyalis zeyheri* (wild apricot) and *Maytenus undata* (kokotree) stands out over the surrounding canopy. On the southern side of the ridge, sizeable examples of *Heteropixis natalensis* (lavender tree) were growing in the grassland with typical white flaky bark. One medium sized *Dombeya rotundifolia* var. *rotundifolia* (wild pear) grows on the lower, leafy, southern slopes, together with *Cussonia paniculata* subsp. *sinuata* (Highveld cabbage-tree) and *Combretum molle* (velvet bushwillow).

Rhoicissus tridentata subsp. *cuneifolia* (northern Bushman's grape) growth form at Ezemvelo is more like an untidy shrub than the usual liana (Figure 2), with leaflets which are small and hairy. A large exemplar of *Olea capensis* subsp. *enervis* was found at the edge of the second ridge, sheltered among two large boulders (Figure 3). Other trees observed were *Afrocanthium gilfillanii* (velvet rock alder), *Mundulea sericea* (cork bush), *Ozoroa paniculosa* var. *paniculosa* (resintree) and *Strychnos pungens* (spine-leaved monkey-orange). Woody species with tree status growing as shrubs were

Figure 3. Large *Olea capensis* **subsp.** *enervis* **(bushveld ironwood)**

Acokanthera oppositifolia (Bushman's poisontree), *Myrsine africana* (Cape-myrtle), *Ochna pretoriensis* (Magalies plane), *Pavetta zeyheri* (small-leaved bride's bush) and *Tetradenia brevispicata* (small gingerbush).

On Sunday the 18th, the Burkea Trail was explored. The trail is, however, described as tough and not suitable for the physically challenged. The group walked the Burkea Trail from the hikers hut to the family huts. The trail includes some steep climbs and descents along the slopes of the Grootspruit Gorge and a walk through riverine shrub, which leads to a forest clump where the path ends against a cliff face. The last section of the trail was a back track on the existing trail and a steep scramble up the slope to the family huts. Although very similar to the species found along the southern ridges, greater habitat diversity made this a very rewarding tree walk. At the hikers hut beautiful examples of *Faurea saligna* (boekenhout) grows on the edge of the stream. Along the stream *Searsia gerrardii* (water crowberry) occurs as untidy large shrubs flanking the streambed. The tri-foliated leaflets of *Searsia gerrardii* are narrowly elliptic with a few large scattered teeth along the margin. A good characteristic to look out for is the yellowish venation of the leaves and the reddish young branchlets.

The small forest clump at the edge of the cliff against the river edge comprises mainly of a few large *Apodytes dimidiata* subsp. *dimidiata* (whitepear) trees. Within the small clump a large *Pittisporum viridiflorum* (cheesewood) grow with a strait bole as high as the cliff's edge. The light grey bark with prominent black lenticels scattered on the trunk was a clear give-away. This small forest clump of large trees is a definite must for tree lovers and a nice place for a pit stop. Other surprises on the route were *Diospyros whyteana* (bladdernut), *Diplorhynchus condylocarpum* (hornpod), *Ficus ingens* (red-leaved fig), *Morella serrata* (lanced-leaved waxberry) and *Searsia zeyheri* (blue crowberry). Another small shrub unknown to the group was *Rotheca myricoides* (rough-leaved cat's whiskers), also previously known as *Clerodendrum myricoidesis*, an aromatic (foul smelling) shrub with leaves in whorls of three. The fruit, a berry segmented into two or three lobes and purplish in colour when ripe, looks superficially like Grewia.

Three tree species noteworthy to mention in more detail are *Vepris reflexa* (bushveld white-ironwood), *Combretum moggi* (rock bushwillow) and *Strychnos cocculoides* (corky monkey-orange). *Vepris reflexa* for most of the group was a rare find and Ezemvelo has one of the most typical examples in a small ravine close to the chalets. *Combretum moggi* only grows on the Mpumalanga Highveld and Limpopo and it was the group's first time recording this species. Although *Strychnos cocculoides* sporadically occurs on the Magalies Mountains e.g. the Wonderboom Nature Reserve, the Ezemvelo Nature Reserve has some of the best specimens of *Strychnos cocculoides*.

Vepris reflexa - bushveld white-ironwood

Vepris reflexa is a small tree growing on rocky outcrops or on the margin of forests (Schmidt et al, 2002). In Ezemvelo Nature Reserve it is a rare tree and only a few

plants were seen during the two day walk. The best example stands in a ravine not far from the chalets (Figure 4).

A. Leaves

B. Tree trunk

C. Tree habit

Figure 4. *Vepris reflexa* **growing in a small ravine near the chalets in the Ezemvelo Nature Reserve. Photo A illustrate the reflexed leaflets that are slightly folded upwards, Photo B is a close-up of the bark and Photo C depicts the habit of the tree.**

The foliage is dark green and the trunk pale white and smooth. Leaves are trifoliate and since it belongs to the Citrus family the leaflets are lemon-scented when crushed. The scientific name *reflexa* refers to the trifoliate leaves that are bent downward - reflexed (Schmidt et al, 2002). Leaflets are slightly folded upward and leaf margin entire.

***Combretum moggi* - rock bushwillow**

Combretum moggi was a new find for most of the group. The small tree is endemic to Highveld and higher lying areas of Mpumalanga and Limpopo Provinces (Figure 5). Within Ezemvelo Nature Reserve, it was found along the protected ravine's southern ridges and on top of the Grootspruit Gorge. At first glance, the tree can be confused with *Combretum molle* (velvet bushwillow), also occurring within the same habitat. The leaves (Figure 5A) are narrower than *Combretum molle*, but also velvety/woolly (lesser so than *Combretum molle*). The fruits are larger than *Combretum molle* and are grey green with a light reddish tinge on the margins.

A. Leaves and fruits

B. Habit and growth form

Figure 5. Combretum moggi (Rock Bushwillow) photographed near the family hut along the Burkea Trail. Photo A depicts the leaves and fruit of the tree. Photo B illustrates the habit of the tree where it grows among rocks on top of the Grootspruit Gorge.

***Strychnos cocculoides* - corky monkey-orange**

In comparison to *Strychnos pungens*, a common small tree on ridges, *Strychnos cocculoides* (corky monkey-orange) is a less common tree. In Ezemvelo Nature Reserve it occurs within grassland in close proximity to ridges, either in small groups or as single trees (Figure 6). *Strychnos cocculoides* in the Ezemvelo Nature Reserve has an erect habit with an untidy crown. As the common name indicates, the bark of the main trunk is characteristically corky with deep longitudinal fissures. Its corky bark is perfectly adapted for regular fire occurrence that is common within these grassy plant communities. The branches are thick and armed with curved opposite spines.

Branches frequently also terminate into a spine tip. Leaves are small with venation distinctly 3 or 5 veined from the base (typical of *Strychnos* species in South Africa). The largest specimen within the *Strychnos cocculoides* clump, near the camp site, was measured for possible consideration to be included in the big tree list (28.938666 E / -25.702673 S). The multi-stemmed tree has stem circumferences of 0.53m; 0,54m; 0.48m; 0.55m; 0.53m and a crown diameter of 4.48m by 5.3m. The height is estimated to be 5m. This is the first exemplar of this species measured due to its relatively large comparable size for the species. Schmidt et al.: (2002) and Palgrave: 2002 suggest that the tree can reach heights of at least 8m under ideal conditions. The specific species is potentially an important fruit tree in southern and central Africa where it grows mainly as part of Miombo Woodland and has the potential to be domesticated as a food source (Chirwa and Akinnifesi: 2008).

Figure 6. A cluster of *Strychnos cocculoides* near the camp site at the Ezemvelo Nature Reserve. The four-stemmed specimen in the foreground was measured for inclusion into the big tree list.

Salacia rehmannii | Photo: GNU Free Documentation License

Some final thoughts on the vegetation of Ezemvelo

The Ezemvelo Nature Reserve has a rich diversity of flora and fauna. The tree list for the southern ridges is a very good reflection of the woody composition. The species list for the woodlands along rocky slopes and riverine areas of the Grootspruit Gorge is in all likelihood incomplete. Considerable more tree species could have been listed if Wilge River was included in the walk. The list of trees drafted during 17 – 18 November includes planted indigenous species and exotic trees (Table 1). The tree communities composition along the ridges resemble those of the Gold Reef Mountain Bushveld along the Magalies and Bronberg Mountain Ranges, but with the addition of a few unique species not common in the Gold Reef Mountain Bushveld e.g. Heteropyxis natalensis, *Combretum moggi, Strychnos cocculoides, Olea capensis* subsp. *enervis* and *Vepris reflexa*. A phytosociological study of the reserve was undertaken by Swanepoel (2007) which includes a list of all species recorded during the survey.

The Ezemvelo Nature Reserve furthermore has an interesting composition of *pyrogenic geoxylic suffrutices* also called "underground trees". The most notorious of these are *Dichapetalum cymosum* (gifblaar), which is responsible for livestock losses. This species occurs together with other *geoxylic suffrutices* species such as *Parinari capensis* subsp. *capensis* (sand-apple / dwarf mobolaplum / sandappel, grysappel)

and *Pygmaeothamnus zeyheri* (sand-apple, goorappel gousiektebossie). Other woody suffrutices species from woody underground rootstocks found in this area are *Searsia magalismontana* subsp. *magalismontana* (Magalies rock currant), *Lannea edulis* (wild grape), *Elephantorrhiza elephantina* (elephant's root, eland's bean, elandsboontjie, olifantswortel, leerlooibossie) and *Salacia rehmannii* (wildelemoentjie). (The roots of *Salacia* species are important Zulu aphrodisiacs, known as *bangalala*. *Ed*).

Back: Theunis Morgenthal, Owen Brett, Ann and André de Villiers, Izak van der Merwe, Daniël van der Merwe. Front: Johan and Marlene Oberholzer, Tessa Joubert, Louise Kritzinger, Herman Jacobs (Not present in the picture: Gert & Marta Middelberg and Johan Rosemann).

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Acknowledgements
The following tree enthusiasts enjoyed the weekend walks and contributed making this paper possible.

Table 1. List of trees observed during 17 – 18 November by the Magalies Branch at Ezemvelo Nature Reserve

Nr	Scientific	English Names	Afrikaanse Naam
639	*Acokanthera oppositifolia*	Bushman's poisontree	boesmansgif
706	*Afrocanthium gilfillanii*	rock-alder	klipels
422	*Apodytes dimidiata*	whitepear	witpeer
730	*Brachylaena rotundata*	mountainsSilver oak	bergvaalbos
636	*Buddleja saligna*	olive sagewood	witolienhout
637	*Buddleja salviifolia*	sagewood	saliehout
197	*Burkea africana*	wild seringa	wildesering
39	*Celtis africana*	white stinkwood	witstinkhout
536	*Combretum erythrophyllum*	river bushwillow	riviervaderlandswilg
542	*Combretum moggii*	rock bushwillow	rotsboswilg
537	*Combretum molle*	velvet bush-willow	fluweelboswilg
328	*Croton gratissimus* var. *gratissimus*	lavender fever-berry	laventelkoorsbessie
563	*Cussonia paniculata* subsp. *sinuata*	highveld cabbage-tree	hoëveldkiepersol
1	*Cyathea dregei*	grassland treefern	grassveldboomvaring
605.2	*Diospyros lycioides* subsp. *guerkei*	bushveld bluebush	bosveldbloubos
611	*Diospyros whyteana*	bladder-nut	swartbas
643	*Diplorhynchus condylocarpon*	hornpod	horingpeultjieboom
471	*Dombeya rotundifolia*	wild Pear	blompeer
507	*Dovyalis caffra* #	Kei-apple	keiappel
511	*Dovyalis zeyheri*	wild-apricot	wildeappelkoos
581	*Englerophytum magalismontanum*	stem-fruit	stamvrug
594	*Euclea crispa* subsp. *crispa*	blue Guarri	bloughwarrie
159	*Faidherbia albida* #	anatree	anaboom
75	*Faurea saligna*	boekenhout	boekenhout
55	*Ficus ingens*	red-leaved fig	rooiblaarvy
399	*Gymnosporia buxifolia*	spike-thorn	pendoring
455	*Heteropyxis natalensis*	lavender tree	laventelboom
362	*Lannea discolor*	live-long	dikbas
403	*Maytenus undata*	kokotree	kokoboom
38	*Morella serrata*	lance-leaved waxberry	smalblaarwasbessie
226	*Mundulea sericea*	cork bush	kurkbos
577.1	*Myrsine africana*	Cape myrtle	mirting
633	*Nuxia congesta*	wild-elder	wildevlier
480.2	*Ochna pretoriensis*	Magalies Plane	magaliesrooihout
483	*Ochna pulchra*	peeling plane	lekkerbreek
618.1	*Olea capensis* subsp. *enervis*	bushveld Ironwood	bosveldysterhout
617	*Olea europaea* subsp. *africana*	wild olive	olienhout
375	*Ozoroa paniculosa* subsp. *paniculosa*	resintree	harpuisboom
433	*Pappea capensis*	jacket-plum	doppruim

Nr	Scientific	English Names	Afrikaanse Naam
722	*Pavetta zeyheri*	small-leaved bride's bush	fynblaarbruidsbos
139	*Pittosporum viridiflorum*	cheesewood	kasuur
87	*Protea caffra* subsp. *caffra*	common sugarbush	gewone suikerbos
456.7	*Rhoicissus tridentata* subsp. *cuneifolia*	northern Bushman's grape	noordelike boesmans-druif
667.1	*Rotheca myricoides*	rough-leaved cat's whiskers	growweblaarkatsnorbos
378	*Searsia gerrardii*	water crowberry	watertaaibos
386	*Searsia lancea*	karee	karee
387	*Searsia leptodictya*	mountain karee	bergkaree
392	*Searsia pyroides* var. *pyroides*	firethorn crowberry	taaibos
396.1	*Searsia zeyheri*	blue crowberry	bloutaaibos
162	*Senegalia caffra*	common hook thorn	wag-n-bietjiedoring
166	*Senegalia galpinii*	monkey thorn	apiesdoring
623	*Strychnos cocculoides*	corky-barked monkey-orange	kurkbasklapper
628	*Strychnos pungens*	spine-leaved monkey-orange	stekelblaarklapper
668.1	*Tetradenia brevispicata*	small-leaved ginger-bush	kleinblaargemmerbos
172	*Vachellia karroo*	sweet thorn	soetdoring
188	*Vachellia tortilis* subsp. *heterocantha*	umbrella thorn	haak-en-Steek
702	*Vangueria infausta*	wild medlar	wildemispel
703	*Vangueria parvifolia*	mountain wild medlar	bergwildemispel
260	*Vepris reflexa*	bushveld white-ironwood	bosveldwitysterhout
103	*Ximenia caffra*	sourplum	suurpruim
253	*Zanthoxylum capense*	small knobwood	kleinknophout
447	*Ziziphus mucronata*	buffalo thorn	blinkblaar-wag-`n-bietjie
Exotic Trees			
	*Acacia mearnsii**	black wattle	swartwattel
	*Acacia melanoxylon**	blackwood	swarthout
	*Celtis sinensis**	Chinese nettle tree	chinese netelboom
	Eucalyptus spp*	gum tree	bloekom
	*Jacaranda mimosifolia**	jacaranda	jakaranda
	*Lantana camara**	lantana	lantana
	*Ligustrum lucidum**	Chinese privet	blinkblaarliguster
	*Melia azedarach**	seringa	maksering
	*Populus deltoides**	cottonwood	vuurhoutjiepopulier
	*Populus x canescens**	grey poplar	vaalpopulier

*Exotic invader species; # Planted indigenous trees

The Champion Tree Project Expands

Izak van der Merwe

The year 2017 was an eventful year for the Champion Tree Project. Three Champion Trees made the newspapers for different reasons. On 13 April 2017 the famous Sunland baobab (*Adansonia digitata*) near Modjadjiskloof collapsed, several months after losing a big branch late in 2016. This tree was well known for a bar installed on the inside. Professor Yolanda Roux of the Forestry and Agricultural Biotechnology Institute investigated the tree in 2016, but at the time did not find concrete evidence of disease that could be linked to the first collapse.

Four new Champion trees were added to the list of Champion trees. One of these is a massive common wild fig (*Ficus burkei*) on a guest house property in Albertinia, Western Cape. The trunk circumference of this tree measured a massive 14.6 metres. A function was held at this tree in August 2017 to publicize its declaration as a Champion tree, attended by the mayor of the Hessequa municipality, and various other functionaries.

Another tree that hit the headlines is a huge karri gum tree (*Eucalyptus diversicolor*) that was discovered in June 2017. It was discovered by Mr Leon Visser, a professional tree climber and arborist assisting forestry officials and SANParks with advice on the rehabilitation of the Tokai Arboretum, which was damaged in a fire two years

Anneke van der Merwe and guest house owner Marietjie Coetzee at the Whisper Tree: Izak van der Merwe

Tree climber scaling the karri gum tree at Tokai Arboretum: Izak van der Merwe

ago. He measured the height at 55.7 metres. The trunk circumference at breast height measured at 7.2 metres. An overall size index of 441 makes this the fourth largest tree in South Africa.

The company Aurecon initiated the Adopt a Champion Tree project to assist the Department of Agriculture, Forestry and Fisheries with Champion Trees that need management interventions. The first action was the upgrading of the picnic and tree viewing area at the Isidenge Big Tree. This is the tallest pine tree in the Eastern Cape, located in the Isidenge State Forest near Stutterheim. A launch function was held at this huge Monterey pine tree (Pinus radiata), which was then also visited by the Champion Tree Evaluation Panel members in May 2017. This project also paid for the treatment of mold on the Champion oak tree (*Quercus robur*) at Kirchmonth Heights in Gauteng.

To date eighty-six Champion trees have been declared as protected under the National Forests Act of 1998. Four trees on the list have died or collapsed over the past few years.

Champion tree evaluation panel members and forestry staff at the Isidenge Big Tree

From left to right standing: Ms Lindiwe Jakavula, Mr Sakhiwo Ntwanambi, Mr Khaya Masholopu and Mr Mxolisis Malgas (all DAFF Forestry staff); Ms Shumani Dzivhani, Mr Steve Kotze, Dr Coert Geldenhuys, Mr Leon Visser (all Champion Tree Evaluation Panel members) Sitting: Prof Brian Bredenkamp, Mr Johan Bester, Mr Vukosi Baloi and Mr Theo Stehle (all Champion Tree Evaluation Panel members)

The Gaufestival *Trees are Life* Competition

Izak van der Merwe

In the first week of October each year, the Gaufestival is held in Pretoria to promote various forms of arts and entertainment. The Brooklyn theatre leads this initiative, in partnership with various organizations, including the Tshwane municipality, various government departments, as well as SAPPI and Aurecon. In 2017 a tree competition was added to the itinerary of the Gaufestival. The Dendrological Society of South Africa was a main partner in this initiative, which included a sponsorship, participation in planning meetings and the assessment of competition entries. Schools could submit entries on art, prose and poetry on the theme Trees are Life. Schools could also nominate big trees on their school grounds as School Champion Trees.

On 1 October 2017 a prize giving function was held at the Brooklyn theatre, in the Greenlyn Village Centre, Menlo Park. Those present were treated to a Marimba Concert, after which the winners in the various categories were announced. Prof Andre de Villiers delivered a talk and participated in the ceremony on behalf of the Society. Mr Alex Thiel, CEO of SAPPI, announced the winners in the art category. Both participated afterwards in a tree planting ceremony at the theatre, where rare pepperbark trees (*Warburgia salutaris*) were planted.

The Dendrological Society, Briza Publications and Aurecon sponsored book prizes worth R20 000, handed to the winners of the various categories of the Trees are Life competition. The winners of these categories were:

Essays:
Winner: Helena Coetzee For "Dood In Die Woud": Grade 10 – Afrikaans Girls High School Pretoria

Second Prize: Daniël Van Der Merwe For "The Thorn Tree": Grade 3 – Centurion Christian Primary School

Art:
Winner: Lané Cornelius: Grade 11 - Menlopark High School
Second Prize: Vandré Swart & Liezl Roos: Ermelo High School
Third Prize: Embeth Du Toit For "Die Eggo": Grade 11 - Menlopark High School

Poetry:
Winner: Britney Seegers For "Sycamore" : Grade 11 – Centurion High School
Second Prize: Andrea Blignaut For "And So, She Grows": Grade 11 – Woodhill College

The winning school champion tree is a river red gum tree (*Eucalyptus camaldulensis*) at the Zwartkops High School in Centurion, and the second prize went to Uitsig High School in Centurion for a large fever tree (*Vachellia xanthophloea*).

The Pepperbark Tree Project

Izak van der Merwe

The pepperbark tree (*Warburgia salutaris*) is one of the rarest and most threatened trees in South Africa. Its natural distribution is mostly limited to natural forests of the Kwa Zulu Natal, Mpumalanga and Limpopo provinces. The species occurs in sparse and fragmented populations, but has disappeared over much of its distribution range. It is a tree highly valued for various medicinal uses, and the bark, leaves as well as roots are used in medicinal compounds to treat headaches, colds, influenza, bronchitis and fungal infections, among others. Harvested bark is sought after, and fetches high prices in the muti markets of Durban and Johannesburg. This demand is the driving force behind the demise of the species. Excessive bark harvesting often kill the trees.

The genus Warburgia belongs to the cinnamon family, and is named after the German natural scientist Dr. Otto Warburg. *Salutaris* in Latin means healthy. The tree has been listed as endangered, and is a protected tree under the National Forests Act No 84 of 1998.

In 2008 the forestry company SAPPI and the South African National Parks (SANParks) initiated a conservation programme to save the pepperbark tree from extinction. This programme has various dimensions. In the Kruger National Park small populations of the species is protected by armed rangers to halt bark harvesting that already killed many of the trees.

Armed ranger guarding pepperbark trees | Photo: Michelle Hofmeyr

Pepperbark trees provided to rural communities | Photo: Michelle Hofmeyr

A project was started to propagate the species. More than 18 000 seedlings were propagated at Skukuza nursery. Most of these seedlings are provided to rural communities living close to the Kruger National Park. These trees are planted at homesteads, and should begin to provide in much of the medicinal needs of the communities within a decade, and thus reduce pressure on natural tree populations. The plan is to expand the provision of the trees to other areas where the tree products are in demand.

Tim Neary coordinates the Pepperbark project for SAPPI. He is also known as a broadcast journalist on environmental issues, mostly for Radio 702 and Cape Talk. Tim also serves on the Conservation Live expert panel.

A Brief Update On Enforcement And Monitoring Of Protected Trees And Illegal Deforestation

Izak van der Merwe

The number of cases of illegal deforestation and cutting of protected trees dealt with by the Department of Agriculture, Forestry and Fisheries (DAFF), have risen sharply over the past few years. There are currently more than twenty significant court cases involving the felling of numerous protected trees, or sizeable natural forest areas, and numerous smaller cases which sometimes involve spot fines. The National Forests Act No 84 determines that trees in a natural forest, as well as trees declared as protected under the Act, may not be cut or damaged without a license.

Several interdicts have been obtained where deforestation continued after charges have been laid. In one case an interdict was obtained against headmen of the Chaguba community that illegally sold plots in a natural forest near Port St Johns in the Eastern Cape. The informal houses already built were removed. In another case, a farmer was ordered by the High Court to stop clearing forest for the planting of commercial plantations, pending a court case for land already cleared.

In August 2016 DAFF cooperated with Afriforum in laying several charges for the illegal cutting of matumi trees (*Breonadia salicina*) in the Tzaneen area, and confiscating a truck load of matumi timber. A syndicate appeared to be involved in some of the crimes. matumi timber is a highly prized timber, usually cut into slabs for heavy furniture such as bar counters.

Many tree species are targeted for the lucrative braaiwood industry, including protected trees such as camel thorn (*Vachellia erioloba*) and leadwood (*Combretum imberbe*) which together make up some 20% of the total braaiwood sold. Some of this is harvested and sold without a license. More than 30 000 tons of braaiwood are sold

Armed ranger guarding matumi trees | Photo: Izak van der Merwe

Confiscated matumi timber | Photo: Izak van der Merwe

each year. About 70% of this wood is indigenous Bushveld species, and the rest is made up of alien invasive species like rooikrantz (*Acacia cyclops*). Several charges were brought against people and businesses for selling braaiwood of protected species without a license, also involving the confiscation of wood. Increased volumes of camel thorn wood and leadwood is now imported from neighbouring countries like Namibia and Mozambique, partly because of local enforcement.

Timber crossing the inland borders and seaports of South Africa must be inspected to ensure that any species listed under the Convention of International Trade in Endangered Species are licensed. A Timber Working Group has been set up by the Department of Environmental Affairs, involving DAFF and Environmental Management Inspectorates. The main aim of this working group is to monitor timber moving across the border. DAFF assists the World Wildlife Fund with timber identification training to enforcement agencies at their annual workshops aimed at the trade in protected species.

The Southern African branch of the organization TRAFFIC, monitoring the trade in protected species, reported on significant illegal logging incidents in neighbouring countries this year. Mozambique has now resorted to a 90 day ban on logging, which has recently been lengthened. In a recent media interview Environment Minister Celso Correia admitted that Mozambique must sharpen its enforcement or face a losing battle against illegal logging. This year Zambia also announced a ban on trade in certain local timber species.

Most countries of the Southern African Development Community (SADC) acknowledge that the enforcement of legislation pertaining to protected trees and forests is an uphill battle. Cases brought before court are but a small percentage of the illegal activity out there. Were it not for those cases, however, the illegal deforestation would have been far worse.

Events

Byeenkomste

Praktiese boomkenniseksamens

Naas Grové

Daar was die afgelope jaar hernude belangstelling by lede in die aflê van die praktiese boomkenniseksamens van die Vereniging. Die eksamens vir Graad 1, 2 en 3 Dendroloog behels 'n teoretiese komponent wat die kandidaat op sy eie tyd binne 'n tydsraamwerk moet voltooi, opgevolg deur 'n praktiese boomidentifiserings sessie van 'n aantal boomspesies soos bepaal deur die onderskeie vereistes vir die verskillende grade.

Dr. Carel Pretorius (Eksaminator), Andries van Niekerk, Henry Francis (Graad 3 Dendroloog), Jaap Kroon, Naas Grové (Eksaminatore), Joy Gonall, Anne-Marie Boshoff en Gertie Oosthuizen (Graad 1 Dendroloog)

Henry Francis van die Pilanesbergtak het in Mei 2017 die Graad 3 Teorie eksamen met lof geslaag. Die praktiese veldwerk komponent wat die identifisering van 80 boomspesies behels waarvan 'n maksimum aantal van 15 spesies uitheems kan wees, is afgelê langs die Taaibosrivier net buite Vaalwater in die Limpopo provinsie. Henry het met die geleentheid 83 inheemse boomspesies positief geïdentifiseer en tydens 'n takbyeenkoms van die Pilanesbergtak op 21 Junie 2017 het hy sy Dendroloog Graad 3 balkie in ontvangs geneem. Lede van die Waterbergtak het nie op hulle laat wag nie, en die Voorsitter, Andries van Niekerk het eweeens die uitdaging met vlieënde vaandels geslaag deur die Graad 3 teorie eksamen met lof te slaag. Tydens die praktiese veldwerk het hy net kort van 90 boomspesies geïdentifieer. Saam met hom het die dames van die Waterbergtak, naamlik Gertie Oosthuizen, Anne-Marie Boshoff en Joy Gonall almal die Graad 1 teorie en prakties met lof geslaag. Lede van die Waterbergtak se praktiese eksamens is afgelê op die plaas Kroonwild, naby Melkrivier in die Limpopo provinsie.

Namens die Uitvoerende Komitee, baie geluk aan al die lede wat die uitdaging met welslae aangedurf het, wat hopelik meer lede sal motiveer om dieselfde te doen.

Wat Lidmaatskap Van Die Dendrologiese Vereniging Vir My Beteken (Het)

Francois van Wyk

Vanjaar is dit tien jaar wat ek en my vrou Ouneke lid is van die Dendrologiese Vereniging. Omdat ons in Rustenburg woonagtig is, is ons ingedeel by die Pilanesberg tak van die Vereniging.

Ek onthou nog die wintersdag in Mei 2007 toe ons twee die moed bymekaar geskraap het om die eerste keer 'n uitstappie van die Pilanesberg tak mee te maak. Dit was na Utopia buite Rustenburg. Die uitstappieleier was Naas Grové, tans ons Nasionale President en destyds voorsitter van die tak.

Ek het toe al lank die frustrasie gehad dat ek verskillende boomspesies omtrent glad nie van mekaar kon onderskei en kon herken nie. Dit was hierdie frustrasie en hierdie behoefte om meer te weet wat uiteindelik die deurslag gegee het om die uitstappie mee te maak en by die Vereniging aan te sluit.

Ek onthou soos gister dat, toe al die uitstappiegangers by Utopia se hoofgebou bymekaar gekom het, iemand vir Naas gevra het "Naas, watse boom is hierdie?". Naas het die boom een kyk gegee, vinnig aan 'n blaar gevoel en onmiddellik geantwoord:

Pilanesberglede rus tydens 'n uitstappie by Lindleyspoortdam. Ouneke en Francois van Wyk sit 2de en 3de van links | Foto: Naas Grové

''Australiese boskersie; *Syzygium paniculatum*''. My mond het oopgehang, en dit het my in 'n sekere sin nog meer geïntimideerd laat voel as wat ek toe reeds was. Hoe gaan ek ooit my onkunde kan oorkom?

Dit was natuurlik 'n voorreg om by Naas te kon te leer. Aanvanklik baie vreemde en intimiderende begrippe soos wat 'n blaar is, wat dubbelveervormigheid is, wat ewe geveerde blare is, wat gaafrandigheid is, wat 'n petiool is, en baie ander dinge, het geleidelik sin begin maak en begin insink. Byna soos 'n baba wat eers begin kruip en wat later met wankelende tree begin loop, het ek my voete begin vind en meer vertroue begin kry.

Die gogga het gebyt en dit het wonderlik bevredigend geraak om vanself bome te kon herken en te leer om bome te identifiseer.

Nog later het die besef by my ingesink dat bome maar een van die baie speke in die natuur se wawiel is: Sekere bome verkies sekere grondtipes, sekere voëls verkies sekere bome, ensovoorts. Dit het daartoe aanleiding gegee dat ek en Ouneke in 2009 'n jaar lange ekologiekursus gevolg het wat deur Unisa geakkrediteer is. Die kursus is oor verskeie modules versprei en oor naweke aangebied. Daar was teoretiese lesings en ook praktiese veldwerk, en met elke nuwe module is eksamen geskryf oor die vorige module.

Hierdie kursus was een van die mees bevredigende dinge wat ek nog in my lewe gedoen het, en het alles omtrent bome, diere, insekte, reptiele, grasse, basiese ekologiese beginsels en baie ander dinge saamgetrek en in perspektief gestel.

Bome bly egter my eerste liefde, en elke hoop en verwagting wat ek gehad het omtrent my aansluiting by die Vereniging is in die afgelope tien jaar vervul. Natuurlik het ek nog ongelooflik baie om te leer, maar ek voel dat ek in 'n sekere sin wat bome betref geletterd geraak het. Dit is ongelooflik bevredigend om die aanvanklike onkunde te kon verplaas met die mate van kennis wat ek nou het.
Daarvoor sê ek vir die Vereniging, en vir al die lede van die Vereniging met wie ek oor die afgelope tien jaar kon skouer skuur, baie dankie.

Nuus uit die Waterberge

Gertie Oosthuizen

Die Waterbergtak het meer as 40 lede wat aan die Dendrologiese Vereniging behoort en is 'n baie aktiewe tak.

Ons het elke maand 'n boomuitstappie en gedurende die jaar is daar ook boomidentifikasie-projekte om vir oorde en wildplase hul bome te identifiseer en naamplaatjies aan te bring.

Vier van ons lede het in November 2017 hul boomeksamen suksesvol afgelê. Die voorsitter, Andries van Niekerk, het ook sy graad 3 eksamen geslaag.
'n Paar hoogtepunte van 2017.

Besoek aan Makapansgrotte naby Potgietersrus: Daar was 'n paar besonderse bome byvoorbeeld knoppiesboontjie en 'n paar soorte inheemse vye. Mens betaal by Mokopane Zoo en neem die gids saam na die grotte 12 km buite die dorp. Vir besprekings skakel mens 015 491 4911.

Besoek aan die Soutpan- / Tswaingkrater naby Pretoria: Dit was ‘n besondere belewenis. Op die suid-oostelike hoek van die park is daar ‘n reuse hardekool wat waarskynlik die grootste in Gauteng is.

Bestuurslede het vir twee dae die Mangweni-lodge besoek en 185 bome geïdentifieseer en van naamplaatjies voorsien. Interessante bome was: blouheuningklokkies, gifblaarbruidsbos en dopperkiaat.

In a forest of a hundred thousand trees, no two leaves are alike. And no two journeys along the same path are alike

~ Paulo Coelho, Aleph

***Strychnos usambariensis* – blue bitterberry / bloubitterbessie | Foto: Naas Grové**

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