

Southern African Institute of Forestry



Delivering a professional service to forestry

Southern African Institute of Forestry, Postnet Suite 329, Private Bag X4, Menlopark, 0102
www.saif.org.za, saif@mweb.co.za

Contents:

1. From the President's desk "Eucalyptus Essential Oils" by Wayne Jones (p.1)
2. The World's Largest Tree (p.3)
3. Vintage Photos Of Lumberjacks In The Early 20th Century (p. 3)
4. The Rob Thompson Column : "Impressionist forestry" (p.4)
5. World Environment Day: 5 June 21: Celebrating Sappi's role in restoring ecosystems (p.5)
6. World Bee Day: Bolivia honey producers work to meet demand due to COVID-19 (p.6)
7. Announcing: ISTF-SAF Symposium (p.7)
8. Women in Forestry : Izette Greyling (p.8)
9. Latest on re-commissioning of Forestry on former State Forest Land in the W- Cape (p.8)
10. World Forestry Congress (p.9)
11. SAIF Contacts / June Birthdays (p.10)



Photographer: Jos Louw | Branch: Southern Cape | Description: Diversity after the fire, Jonkersberg Plantation, in former afforested areas

**SAIF Calendar June 2021 : Photographer : Jos Louw :
Watsonias in full bloom at Jonkersberg after the Fire**

From the President's desk **Eucalyptus Essential Oils**

Eucalyptus is a genus of over seven hundred species of flowering trees, shrubs or mallees in the myrtle family, Myrtaceae. Along with several other genera in the tribe Eucalypteae including *Corymbia*, they are commonly known as eucalypts. Plants in the genus *Eucalyptus* have bark that is either smooth, fibrous, hard or stringy; leaves with oil glands and sepals and petals that are fused to form a "cap" or operculum over the stamens creating a woody capsule.

For many years essential oils have been extracted from eucalypts through steam distillation processes of fresh or partially dried leaves and young twigs. Depending on the species the oil yield ranges from 1.0% to 2.4% (fresh weight). Oils are extracted for widespread applications in pharmaceutical formulations such as inhalers, hygiene and cleansing products, which include soaps, detergents, and mouthwashes. Other applications include room sprays, insect repellents, flavouring in foods and perfumery. Through aromatherapy the essential oils can be used for skin care and full body care, which includes respiration, immunity, nervous system, and treatments for the musco-skeletal system.

In the summer rainfall regions of South Africa, *Eucalyptus smithii* has been the main species deployed and managed for essential oil production. In recent times other species such as *E. dives* and *E. radiata* have gained some interest, adding to the potential growth in this sector. The main essential oil-producing species of eucalypt from Australia include *Eucalyptus*



globulus, the southern blue gum, which has a restricted distribution on the coast of Victoria and coastal eastern and south eastern parts of Tasmania.

Eucalyptus dives also known as the broad-leaved peppermint gum occurs in central and southern tablelands of New South Wales and central to eastern Victoria. *Eucalyptus radiata* known as narrow-leaved peppermint gum occurs both in New South Wales and Victoria. It is split into two subspecies, *radiata* and *robertsonii*, due to the bluish grey leaves in all stages of growth in the subspecies *robertsonii*. *Eucalyptus smithii*, the gully gum, occurs on the eastern side of the southern tablelands of New South Wales and into eastern Victoria. *Eucalyptus polybractea*, the blue leaf mallee, has a restricted distribution near Wyalong in New South Wales and Bendigo in Victoria. *Corymbia citriodora*, known as the lemon-scented gum, grows in undulating country in open forest and woodland in several disjunct areas in Queensland and as far south as Coffs Harbour in New South Wales.

Within each species there are both subspecies, provenances and chemotypes. This illustrates a very complex situation in determining best seed sources to establish essential oil-producing plantings. In addition, not all species are suited to the summer rainfall regions and site-matching, particularly latitude and altitude within the source environment are key in ensuring project success in the exotic environment. Typically, *Eucalyptus globulus* is not suited to the summer rainfall regions due to its susceptibility to leaf diseases. Eucalyptus oil has a clear, sharp, pungent and cooling taste, and a fresh and very distinctive smell (camphoraceous odour). It is a pale-yellow liquid and is watery in viscosity. It is insoluble in water, miscible in alcohol and in oil, fats, paraffins, ether, chloroform, and glacial acetic acid.

The major components of essential oils would be a combination of citronellal, cineole, camphene, fenchene, limonene, phellandrene and pinene.

At a species level there are clear differences in the proportions of these components within the extracted essential oils. Other factors that will impact on component levels include species provenance origin, genetic variation of trees within provenance, establishment site and management practices.

Various studies indicate that *E. globulus*, *E. smithii*, *E. radiata* and *E. polybractea* show high levels of 1,8-cineole, ranging between (57-92%). Conversely *E. dives* and *Corymbia citriodora* have low levels of 1,8-cineole, ranging between (0.45-2%). This is replaced by higher levels of piperitone (40-50%) and citronellal (56%), respectively, within these two species. *Eucalyptus dives* also shows the highest levels of phellandrene across all species, between (20-30%). *Eucalyptus radiata* and *E. globulus* have significant levels of α -pinene of between (11-21%). *Corymbia citriodora* is unique, with modest levels of citronellol (8%) and citronellyl acetate (11.5%). Except for *C. citriodora*, various levels of limonene, globulol and pinene can be found across most eucalypt species commonly used to extract essential oils.

Cineole-based eucalypt oil is used as a flavouring at low levels (0.002%) in various products, including baked goods, confectionery, meat products and beverages because of its pleasant, spicy aroma and taste. Piperitone is used as the principal raw material to produce synthetic menthol and thymol. Citronellal has insect repellent properties and research shows high repellent effectiveness against mosquitoes. It also has strong antifungal properties. Phellandrenes are used in fragrances because of their pleasing aromas.

The odour has been described as peppery-minty and slightly citrusy. For many years, Eucalyptus oil has been used to relieve coughing. Today, some over-the-counter cough medications have Eucalyptus oil as one of their active ingredients. Vicks VapoRub, for example, contains about 1.2% Eucalyptus oil along with other cough suppressant ingredients.

Extraction of essential oils is a great example of the multiple products that can be produced within the forestry industry. It relies on a sustained supply of raw materials, the most productive species, unique forestry practices and efficient processing facilities. and products for local consumption.



Manufacturers continue to deliver pharmaceutical grade eucalypt essential oils to the rest of the world.

Sources:

<https://www.sciencedirect.com/topics/pharmacology-toxicology-and-pharmaceutical-science/eucalyptus>

<https://en.wikipedia.org/wiki/Citronella>

<https://en.wikipedia.org/wiki/Phellandrene>

<https://www.healthline.com/health/9-ways-eucalyptus-oil-can-help>

<https://www.routledgehandbooks.com/doi/10.1201/9781315153131-3>

Did you ever wonder what and where is the largest tree in the World ?

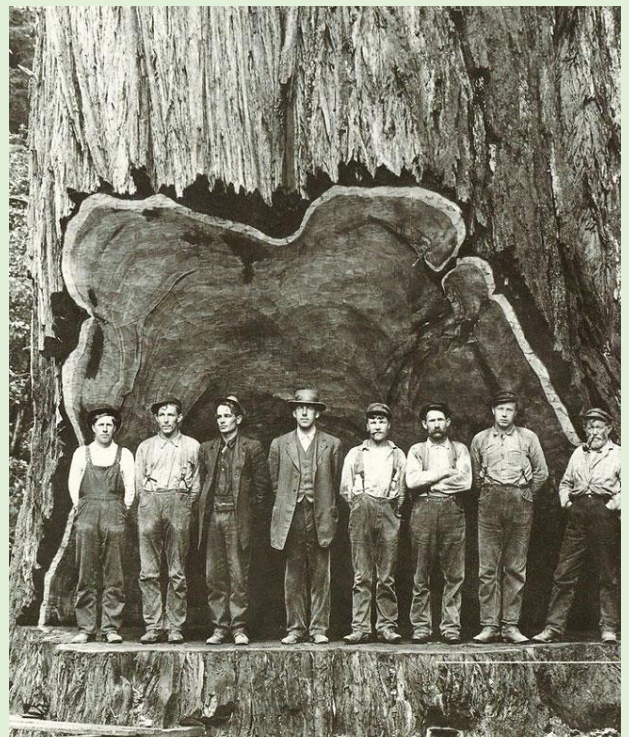


General Sherman Tree in Sequoia National Park, USA

Vintage Photos Of Lumberjacks Who Felled Big Trees Using Only Hand Tools In The Early 20th Century



Lumberjacks, many of whom came from farms before heading to the woods to make money logging, took pride in the trees they cut and posed for pictures on massive stumps using the growing technology of photography. While the work was dangerous, the woodworkers also developed sports such as logrolling that are still practiced by outdoorsmen in competitions today.



The Rob Thompson Column Impressionist forestry

A lesser known fact is that I have dabbled regularly with oil and acrylic painting over the years. Whilst a Michelangelo I am not, I find the hobby to be both challenging and rewarding. Sadly, not as yet rewarding enough to afford an early retirement, but certainly pleasurable and exciting.

As a permanently enrolled student with the University of YouTube, I have picked up many hints and tips over the years that I have splattered paint onto canvass, from those distinctly more talented than myself. Every now and again, and I guess no matter what the topic or discipline being researched, one encounters, within the hallowed halls of YouTube, a tutor with a really insightful piece of information that qualifies distinctly as a 'game-changer'.

In my case, it was when watching acrylic artist, Robert Burrige, explain that one should actually do away with any focus on detail. He advocates tossing out fine brushes, cease fixation on every minute detail and rather concentrate on using a broad brush and very loose strokes. I have been amazed over months of watching this fellow, just how expressive his paintings are, despite the lack of fine detail. A broad line here, another there, a few in-between and what starts off as an apparent incongruous mess, suddenly emerges from the canvass, as a defined and detailed image, providing pleasure and value to the viewer.

Impressionist artists (think Vincent van Gogh) have through the ages, recognized and practiced the art of creating inherent detail, by means of a few broad bold brush strokes, without resorting to expending energy by "sweating the small stuff".

Coinciding with these views on painting, I was listening, with half an ear, to a recent talk given by Dave Pepler, the well-known biologist with a forestry background, when I suddenly zoomed in on his reference to a 'broad-brush approach'

"Is he also a dabbler in art" I wondered? Closer attention to his talk revealed that there is a particular species of frog, endemic to Table Mountain in the Cape, which biologists are trying to conserve via a captive breeding.

programme and other direct detail-based interventions Dave's contention is that the better approach would be to rather look 'broadly' after the mountain and the rest, or the finer detail, will automatically look after itself. Proper and diligent care for the mountain will result in the natural preservation and rendering of the appropriate downstream ecological services, upon which the various components of the mountains' eco-system rely.

The broad-brush analogy therefore does appear to hold some credibility as a potential 'real approach' to some real challenges. Often a broad-brush approach is inherent and not necessarily a conscious decision, but some thought about the analogy is certainly interesting to say the least.

This was illustrated when spending last weekend in a cottage on one of our plantation estates. This visit presented the opportunity to inspect the field operations through different (and more relaxed) eyes. It's amazing what a glass of good red can contribute towards a field audit. The broad strokes become far more visible and interpretation thereof far easier! It was shortly after the second red that the analogy of a plantation canvass began to take shape in my mind.

One of the first major broad-strokes that foresters ought to employ is a well-developed and maintained road network. This inherently provides an undercoat of enhanced access, fire protection efficiencies, reduced vehicle maintenance, improved security, efficient runoff, ease of extraction, and an overall enhancement of the plantations' well-being and cost efficiencies. Staff pride of place is also encouraged via a well presented and managed road network, that inevitably spills over positively to the manner in which the stands are managed and nurtured. An established foundation is thus created that will radiate through successional strokes and layers.

Sustained maintenance of open areas and valleys is the next brush-stroke for the impressionist forester. Targeted weed control and grassland management places an important sheen onto the plantation canvass.



As these brush strokes are applied, the details of clean migratory routes and bio-diversity health are enhanced and brought more to the foreground. Interesting texture become tangible when certification is achieved, adding value to the overall marketability of the plantation image being created.

Our impressionist plantation clearly requires application of a broad brush outline of regular, quality communication, with staff at all levels. Each heartfelt communication brush-stroke, adds a veneer to the overall picture, which is core to the integrity of the staff output, and the level of ownership they perceive and embrace.

Reflected off of the broad communication strokes, are enhanced monitoring and accuracy of detail management. Timber harvested is constantly monitored, measured and accounted for robustly, thereby preventing shrinkage and revenue losses. Staff at all levels are noticeably interested in their tasks and feel empowered to execute these. Cost efficiencies, enhanced product quality, expanded market share, increased organizational profits, health and safety sustention, and untold other focus points emerge from the strokes previously cast, contributing irrevocably towards the attractiveness of the overall plantation image.

Well intended target-directed brush-strokes towards neighbouring communities add further value to the image compilation, and arguably contribute towards its ultimate long term preservation, and acceptability to a wide audience of stakeholders.

As I surveyed the view of the estate, with a third red in hand (which tasted exceptional I might add), the extent of the intricacies at landscape, social and oversight levels, all requiring attention, became very apparent. It is nigh on impossible for any one person to know of and to understand all of them, which makes the broader management strokes that we execute daily, all that more critical and important. Our task is to place the strokes assigned to us, in such a pattern, that they enhance others, and collectively realign into underlying detail, sustaining the environment, and our business, on the canvass that we call "Forestry".

For those readers who may be somewhat concerned, I did leave the estate, and my impressionist ramblings, with both ears still intact!

.World Environment Day: 5 June 2021: Celebrating Sappi's role in restoring ecosystems

"**#Generation Restoration.**" That's the theme for this year's World Environment Day which also marks the launch of the United Nations Decade for Ecosystem Restoration.

It's a theme that has particular resonance for Sappi, given that our strong belief that responsible forestry plays a key role in building a bio-based future as we restore, conserve and/or maintain biodiversity and natural forest areas.

The key here is 'responsible'. While the deforestation of endangered tropical forests is a significant source of greenhouse gas emission and thereby cause for concern, we can confidently say that our sourcing practices cause zero deforestation. What's more, forests and forestry play an important role in mitigating climate change and reducing deforestation and forest degradation lowers greenhouse emissions. In addition, sustainable forest management can maintain or enhance forest carbon stocks and sinks, while wood products can store carbon over the long term and can substitute for emissions-intensive materials. All of these are important, because to maintain healthy ecosystems – estimated to hold the key to one third of the climate solution – we need to stay below a 2°C global temperature rise.

As our primary input, woodfibre is a natural resource, we depend on ecosystem services such as healthy soils, clean water, pollination and a stable climate. Against this backdrop, working to increase our positive contribution to maintaining and restoring healthy ecosystems is not only the right thing to do, it makes sound business sense. Accordingly, our sustainable forestry practices promote clean air and water and protect biodiversity, among many other critical benefits.

These practices and those of our suppliers are validated by independent forest certification audits which take place in the well-managed forests and plantations from which we source woodfibre.



We strive to continually increase the share of certified woodfibre supplied to our mills.

In South Africa, where we are one of the country's major landowners, we have a particular responsibility to manage biodiversity in accordance with best practice principles. Of our 394,000 hectares of owned and leased land, approximately one third is managed for biodiversity conservation. We have approximately 160 Important Conservation Areas (ICAs) on our land and seven declared nature reserves. In addition, we have established a biodiversity target in terms of which we have established a 2025 target to enhance biodiversity in our conservation areas by 10% per annum.

While we do not own land in the other regions in which we operate, we also work to restore ecosystems. At Kirkniemi Mill in Finland, for example, we are involved in a project to build fish passages in order to restore salmon stocks and freshwater pearl mussel populations in the Mustionjoki River. In North America, Sappi is a member of the Sustainable Forestry Initiative® (SFI®). The Maine SFI® Implementation Committee is deploying trail cameras to survey carnivore species in areas across the state of Maine to assess the variation in occupancy probabilities between different forest stand types and ages, harvest histories, landscape configuration, latitudes, and other anthropogenic influences to investigate how timber harvesting may influence carnivore distributions of conservation interest. Our shared commitment to SFI's Principles of Sustainability is demonstrated in our procurement operations, sourcing policies, rigorous due diligence system, supplier engagement, investment in research and community outreach, staff training, and countless other activities. For example, Sappi's support for the Ruffed Grouse Society helps create healthy forest habitat for the benefit of ruffed grouse, American Woodcock and other forest-dependent wildlife. We also support the University of Minnesota Sustainable Forests Education Cooperative that offers continuing education opportunities to forestry and natural resource professionals in a broad range of fields.

As we celebrate World Environment Day, we can be proud of our commitment to maintaining and restoring ecosystems and we can look forward to intensifying this commitment in the next decade – and beyond.

World Bee Day: Bolivia honey producers work to meet demand due to COVID-19



FAO/Boris Fernandez 20 May 2021, La Paz, Bolivia

Beekeepers in Bolivia have been working hard to meet an increased demand for honey during the COVID-19 pandemic, according to reports from producer organizations in the country.

Honey has been used for food but also for its medicinal properties in Bolivia since ancient times. "People know formulas using honey mixed with herbs and roots to prepare medicines for helping with colds and flu," said Osvaldo Soruco, legal representative of the Association of Beekeepers of the Department of Santa Cruz (ADAPICRUZ).

According to Soruco, demand for honey and propolis, a bee-hive sealant also used in traditional medicine, has surged in 2020 and 2021 due to COVID-19.

Maria Luisa Añez, Coordinator of the Association of Beekeepers of San Ignacio de Velasco (APROVE), has also noticed an increase in demand.

"We continue to put into practice ancestral knowledge about honey and its health benefits," Añez said.

Marena Rosario Romanazzi, President of APROVE, said they had taken steps to meet the new demand. "Special permits were negotiated with the authorities of our municipality in order to be able to harvest honey in the 18 communities where our beekeeping partners are located," Romanazzi said.



Honey for indigenous livelihoods

The Forest and Farm Facility has supported both ADAPICRUZ and APROVE to meet demand for honey and propolis sustainably.

ADAPICRUZ works with indigenous communities of Chiquitanía to develop their organizational and production capacities to profit from native Melipon bees, including knowledge training on best practices to improve production, and partnering with carpenters to use discarded wood to make beehives.

“A group of 20 indigenous women supported by APROVE have developed a spirit of entrepreneurship – from working only in the home to becoming part of the local economy,” said Marena Rosario Romanazzi. “There are women working as carpenters to construct the beehives, as well as making syrups, soaps, and other honey products.”

APROVE meanwhile set up a bagging machine that allowed the group to supply honey for school breakfasts across their municipalities of San Ignacio de Velasco. APROVE has also established an apiary school to strengthen producers’ knowledge and capacity.

Healthy bees, healthy forests

Increasing the production of honey from Melipon bees requires dedication and sophisticated technical knowledge from beekeepers. Not only must more boxes and hives be built, but chemical repellents and disinfection must be avoided, and apiaries must have at least 3km of forest around them.

“The forest relies on bees to pollinate different plant species,” said Soruco, underlining the reciprocal relationship between forests and bees. “In turn, the bees are attracted to the flowers of the forest to carry out that pollination and transform nectar into honey.”

Article taken from FAO June 2021 Newsletter: (Shortened)



Announcing: ISTF-SAF Symposium 1 July



International Trade in Wood Products: Today’s Markets

The International Society of Tropical Foresters (ISTF) and the International Forestry Working Group of the Society of American Foresters (SAF) are pleased to announce a symposium on International Trade in Wood Products: Today’s Markets.

July 1, noon to 2 p.m. Eastern Time (New York City).

Overview: This symposium is for people who are knowledgeable about forestry but not necessarily about the details of international trade. The first two speakers will cover trade rather broadly to provide a background of the structure and promise of international trade in forest products today and in the near future. The program also includes speakers who will cover current critical topics, forest certification, and the investor’s view. There will be time at the end of the program for questions.

Speakers:

Jean-Christophe Claudon, International Timber Trade Organization

Kathleen McGinley, USDA Forest Service

Gabriel Thoumi, Planet Tracker

Kent Wheeler, Center for International Trade in Forest Products, The University of Washington

To register and for more information, go to: <https://tropicalforesters.org/symposium-july-2021/>



Forestry South Africa : Women in Forestry

Izette Greyling



Mondi Forest Health Specialist

Qualifications

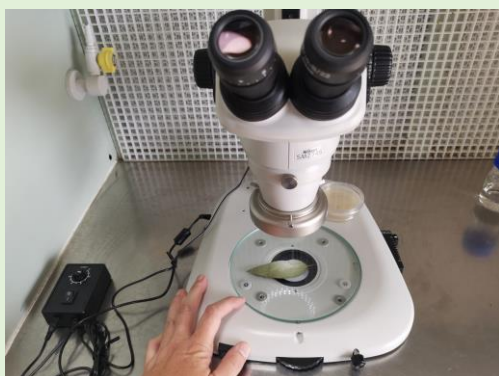
- Masters in Microbiology :

Thesis Title: *Pantoea* spp. associated with leaf and stem diseases of *Eucalyptus*

Supervisor: Prof. T. A. Coutinho

Research

Insects, fungi and bacteria can all attack and kill trees. My job is to find out why trees are getting sick and to produce the research needed to prevent this happening in the future. This requires both field-based research and lab-work, with the ultimate objective being to keep trees healthy so they can continue to be used in all the different wood-based products we rely upon.



Latest on re-commissioning of Forestry on former State Forest Land in the W- Cape

A decision was taken by government in 2001 namely that $\pm 45,000$ ha of State-owned Plantation in the Western Cape Province should be phased out over a period of 20 years. This 20 year program also known as the Exit Project was concluded in October 2020 when MTO Forestry(Pty) Ltd handed back the final $\pm 3,000$ ha of harvested commercial plantation removed in terms of the Exit Lease Agreement with DFFE (formerly DWAF & DAFF).

This finally brought down the curtain on the phasing out of plantation which existed for between 100 and 130 years. This culminated in the closure of more than one primary processing facility eg. Stellenbosch Sawmill over the past 20 years and the closing of several businesses closely related with forestry and has been estimated to lead to the loss of $\pm 5,000$ jobs in the sector over that period. The Southern Cape where the Forest- and Forest Products Industry has been a prominent and integral part of the landscape and economy, has been hard hit by the reduction in forestry activity and reduction in availability of raw material. This should also be seen in the context of the 2017 and 2018 fires which jointly resulted in damage to $> 10,000$ ha of commercial plantation.

Despite the confirmation by the IDC/ DAFF Study done by the late Louis Heyl in 2014, of the former VECON study recommending that 22,000 ha should be retained for forestry, very little has happened to date regarding the signing of new lease agreements. Fortunately for a short period (2 years) DAFF had a Management Agreement with MTO which also included the re-establishment of some of the so-called VECON Forestry Areas. During that period a considerable area have been replanted.

The devastating fires of 2017 and in particular 2018 unfortunately burnt down some of these areas . Only a small area of the so-called Exit Area and more specifically the area earmarked for re-establishment remains . One such area, is at Bergplaas which can be seen on the photo. There are also small patches at Buffelsnek and Jonkersberg and other areas currently unplanted but which are ready to be replanted.





Compartment at Bergplaas replanted in 2018 . Signs of Oct. 2018 fire are visible in the background.



Vecon Forestry area at Farleigh ready for replanting

Current Status

The Forestry Support Program (FSP) initiated by the Department of Forestry, Fisheries & the Environment (DFFE) in January 2020, currently manages the former MTO Exit Plantations located at Kluitjieskraal, Grabouw, Jonkersberg, Bergplaas, Homtini and Buffelsnek. Approximately 250 persons trained by the Working on Fire Program(WOF) and employed on contract by them, are currently doing primarily fire protection work mainly consisting of making fire breaks and doing selective fuel load reduction.

The Way Forward

DFFE has repeated their commitment to re-commissioning of commercial forestry operations on the 22,000 ha earmarked for forestry during recent stakeholder meetings in the Southern Cape held in April and May 2021. This is in line with the recommendations by the IDC (Louis Heyl) report and the Forestry Master Plan of 2020. New lease agreements for the 5 packages must still be negotiated. These will make provision for community beneficiation. Unfortunately no specific time-lines can be provided. The SAIF plays an active role in the process. (Editor)



XV WORLD FORESTRY CONGRESS

Building a Green, Healthy and Resilient Future with Forests
2-6 May 2022 | Coex, Seoul, Republic of Korea
Vol. 5 / June 2021

Reminder: Call for abstracts for papers and posters ends on 30 June 2021 and 3 September for videos. The submission platform for side event proposals is open, and the deadline for submission is 30 July 2021.

For more information : Visit the website

<https://wfc2021korea.org/>

International Day of Biological Diversity **22 May 2021: Conserving biodiversity in a patchwork landscape**



“Few people realise that within forestry landholdings there are over 305 000 hectares of grassland, fynbos, indigenous forest and water bodies. As a result, the forestry landscape provides an array of habitats and ecological services that can benefit biodiversity.” – Dr Ronald Heath, FSA Director: Research and Protection.

Forestry South Africa: FSA Magazine:

<https://www.forestrysouthafrica.co.za/fsa-magazine/>

During these stressful times – “Be like a tree” – DETERMINED TO SURVIVE

A Place Of Enchantment



SAIF Contact Details

Position	Name	Email	Phone
President	Wayne Jones	president@saif.org.za	033 330 2455
Vice-president	Braam du Preez	southern-cape@saif.org.za	044 874 0682
Past-president	Dr Hannél Ham	past-president@saif.org.za	076 452 5567
National secretary	Ms Corine Viljoen	admin@saif.org.za saif@mweb.co.za/	082 523 8733
SF Journal Editor	Dr Hannél Ham	journal@saif.org.za	076 452 5567
KwaZulu-Natal	Mmoledi Mphahlele	kzn@saif.org.za	033 329 5415
Gauteng	Prof. Brett Hurley	gauteng@saif.org.za	082 909 3211
Mpumalanga	Vacant	admin@saif.org.za	082 523 8733
Southern Cape	Braam du Preez	southern-cape@saif.org.za	082 887 2592
Western Cape	Dr Philip Crafford	western-cape@saif.org.za	021 808 3303
DAFF representative	Tendani Mariba	tendanim@daff.gov.za	012 309 5753



MEYER W.K.	Jun-01	HENDERSON C.S.	Jun-15
GERMISHUIZEN I.	Jun-01	KOTZE H.	Jun-15
WILLIAMS L.A.	Jun-03	BUCHLER M.	Jun-16
BOAKE J.B.	Jun-04	SILBERBAUER L.C.	Jun-17
MITCHELL R.G.	Jun-04	RAMANTSWANA M.	Jun-17
POOL J.G.	Jun-05	BOTHMA J.G.	Jun-17
FEELY J.E.	Jun-06	THOMPSON R.	Jun-19
LUBALA D.	Jun-06	SIVPARSAD B.J.	Jun-21
MORRIS A.R.	Jun-08	HARRISON I.	Jun-23
CRAWFORD-BRUNT R.J.	Jun-08	GARDINER P.J.B.	Jun-25
MEINCKEN M.	Jun-10	DEMBURE T.P.	Jun-26
LAWRIE D.G.	Jun-11	KANYEMBA I.	Jun-30
GEVERS W.K.E.	Jun-14	JANSEN J.F.	Jun-30



The Southern African Institute of Forestry

Handbook order form

The Southern African Institute of Forestry publishes three industry specific handbooks.

I would like to order:

South African Forestry Handbook

Price: SAIF members: R400

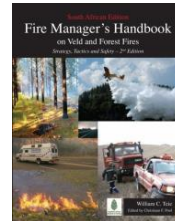
Non members: R500



Fire Manager's Handbook on Veld and Forest Fires

Price: SAIF members: R300

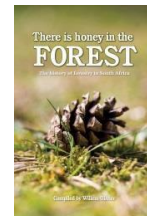
Non members: R400



There's Honey in the Forest

Price: SAIF members: R100

Non members: R150



International orders must contact the Secretariat for a quote due to currency and postage fluctuations.

A bulk discount of 10% applies on orders of 10 or more copies.

Price includes VAT and postage **(within SA)**

I am a member non-member of the SAIF.

Name	
Company	
Postal address	
Contact number	
Email address	

Bank details: Nedbank Retail Park Branch code: 169745 Account: 1697009913 Account name: SAIF

Fax order and proof of payment to: SAIF Secretariat fax 086 689 6430 or email saif@mweb.co.za.