

*SOIL SCIENCE
SOCIETY OF
SOUTH AFRICA*



NEWSLETTER

No. 112

November 2021

SSSSA COUNCIL: 2021-23

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Vice-President	Prof J.J. van Tol (UFS, Bloemfontein)
Past President	Mr M. du Plessis (NWK, Lichtenburg)
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The SSSSA does not necessarily agree with opinions expressed in this newsletter.

MESSAGE FROM THE PRESIDENT

Since being elected to office in January 2021, the 2021-23 Council has had two meetings, in May and September 2021, to deliberate on matters of interest to the society for the benefit of the members. This report will touch on some of those issues.



Combined Congress 2022

The date for the Combined Congress 2022, to be held on a virtual platform from 24 to 26 January 2022, is fast approaching and preparations are in top gear. The theme of the congress is “*What is the new normal for agriculture to ensure sustainable livelihood in Africa?*” The second announcement was sent out on 19 July 2021, and the deadline for submission of abstracts has been extended to 5 November 2021. The rate of submission of abstracts has been very slow and therefore I would like to encourage members to take advantage of the extended deadline to submit their abstracts. As mentioned in my last report, the societies have invited respected experts in their respective fields of specialization as keynote speakers and this should be an opportunity not to be missed.

SSSSA Webinar

The SSSSA inaugural webinar was held on 28 October 2021 and was well attended by members and well as external professionals working within the area of soil science. Council has decided to organize regular webinars to allow sharing of information among researchers, academics and professionals working within the area of soil science as well as to showcase their latest research activities. This is just the beginning and we are looking forward to having more interesting presentations in the near future. I would therefore like to encourage members of the society to support the webinars by registering and attending whenever they are announced. Members who would like to present their work are also encouraged to contact Dr Rozanov, the council member in charge of the webinar portfolio.

Journal

All paid-up members of the SSSSA have free access to the SA Journal of Plant and Soil. The Journal is hosted by Taylor & Francis, and all previous issues are available electronically on the Taylor & Francis website www.tandfonline.com. To help improve the impact factor of our journal, please cite articles in our Journal, download articles from our Journal and publish in our own Journal.

SSSSA Bursary

The SSSSA will henceforth award one or more bursaries annually to deserving final year undergraduate and/or postgraduate South African students who study full-time for a degree in the broad area of Soil Science (Soil chemistry; Soil physics; Soil biology; Soil fertility; Soil genesis, classification & mapping; Soil mineralogy; Soil technology) at a South African university. This is a great step towards supporting our young upcoming soil scientists.

Photo Competition

The Beauty of African Soils Photo Competition 2021 is on and once again, **AGT Cover Crops and Forages** is our proud sponsor. This competition has proven to be very popular amongst members and I would like to encourage as many members as possible to participate in the competition by submitting beautiful photos of our soils.

SACNASP

The SSSSA encourages its members to register with SACNASP as Natural Scientists in the field of Soil Science. According to law, it is compulsory for practicing soil scientists to register with SACNASP. Points for Continuous Professional Development (CPD) must be earned, namely 25 points per cycle of five years. By attending the congress, you earn three of the annual five points. By being a paid-up member of the SSSSA, you earn yet another point annually, and by performing your job as a scientist, you may earn another two points each year.

SSSSA Web Page

The setup of the new SSSSA web page is now complete and most of the important information and links are available on the web page, although some more information is still being added and others updated. Members are encouraged to visit the web page regularly for the latest information posted.

Membership

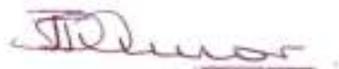
New members continue to join the society and it is encouraging to see many young members joining the society. Registered members should encourage their colleagues who are not registered to do so and senior soil scientists must please encourage junior soil scientists to join.

International Union of Soil Sciences (IUSS)

The SSSSA is affiliated to the IUSS. Every paid-up member of the SSSSA is entitled to the privileges of the IUSS. A regular newsletter from IUSS is also circulated online to all registered members of the SSSSA.

Just a reminder that Covid-19 is still with us and let us all take the necessary precautions to stay safe and healthy.

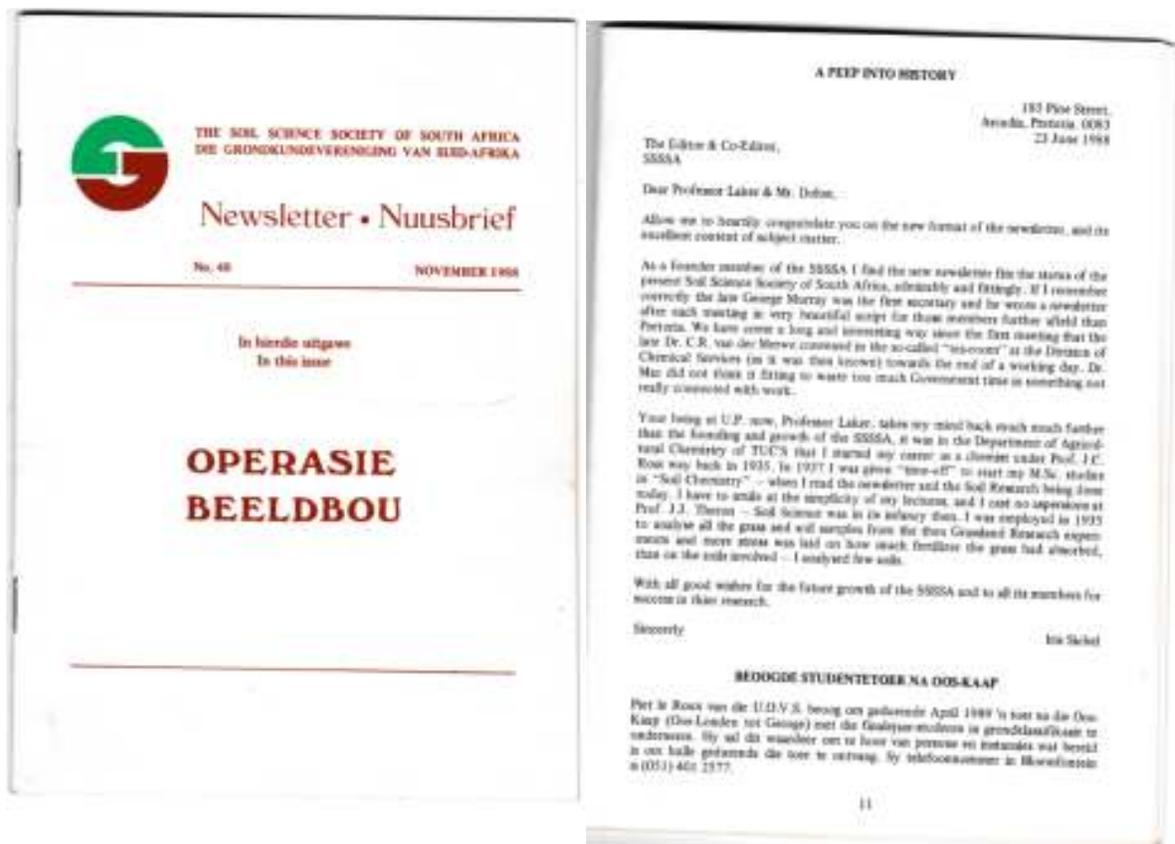
Kind regards.



Jude J.O Odhiambo
(072 378 7716; Jude.Odhiambo@univen.ac.za)

EDITORIAL

The SSSSA Newsletter has undergone quite a few changes in its time. Originally it was an A4 sized collection of a few sheets stapled together. Then in the 1980s it developed into a smaller, purpose designed, A5 booklet, with Prof Giel Laker as the editor. One of the first editions is shown below, with a letter from Miss Iris Sichel, one of the founder members of the SSSSA, commending the editor on a job well done.



I took over in the 1990s, first with the printed booklet style, but later, when a combination of computer technology and unreliable postal services made it more sensible to distribute electronically, the version that you see today was developed.

It still remains a more than useful way of communicating between members, whether news, conferences, reminiscences or anything else.

Please feel free to send me anything you think might be of interest to the members.

Regards,

Garry Paterson
(012 310 2601; 083 556 2458; garry@arc.agric.za)

COUNCIL MATTERS

SSSSA Council is very pleased with the response to the first webinar, on Soil Health, that was held last month. Well over 80 people attended, an excellent number, and all feedback indicates that the standard was excellent. Keep your eyes open for more webinars in the future.

It is a source of frustration to the Society that we are still not able to get fully registered as a non-profit organisation. The hold-up is apparently at SARS, but Council is doing everything possible to expedite the process.

IN MEMORIAM

Professor Theo van Rooyen, one of the leading lights in soil science over the past few decades, has passed away at his home in Great Brak River, Western Cape. Theo was Professor of Soil Science at UNISA for many years, as well as the co-author (with Prof Hennie van der Watt) of the Soil Science Glossary, which helped many SSSSA members and others. On behalf of the Society, our heartfelt condolences to his family.

Below are reminiscences from two of Theo's former colleagues and friends.

***Theo van Rooyen:** my vriend en kollega ek onthou jou as 'n gesinsman met Daniel jou vrou, twee seuns en 'n dogter en 'n paar kleinkinders;*

as mede-direkteur van ons firma Pedoplan International Consultants CC wat meer as 400 grondopnameprojekte (van so klein as 2 ha tot so groot as 60 000 ha) binne Suid-Afrika en in al ons buurlande uitgevoer het en die dag toe ons vir ons lewens gevrees het in Malawi tydens een van so'n projek;

as akademikus wat pedologie met soveel ywer en liefde aan studente oorgedra het; as mede-samesteller van 'n Verklarende Woordeboek vir Grondkunde wat ek self baie moes raadpleeg;

as beesboer wat so lief vir sy beeste was dat, indien hy vir jou 'n beesboud vir Kersfees belowe het, hy eerder die beesboud aangekoop het, om sodoende sy geliefde diere se lewens so te probeer spaar;

as golfspeler met 'n enkelsyfer voorgee;

en as 'n platjie wat ons M-student tydens ons veldbesoek aan hom so laat skrik het dat hy 'n geweerskoot na 'n denkbeeldige leeu in die KNP afgetrek het met daaropvolgende kwaai teregwysing deur die Bestuur van die Wildtuin.

Dankie vir die voorreg om hierdie eerbewys te kon skryf.

Eben Verster

Pretoria, Oktober 2021

TWO ENTHUSIASTIC YOUNG SOIL SCIENTISTS 50 YEARS AGO **by Giel Laker**

The recent death of Theo van Rooyen made me think back 50 years to when, around 1970, Theo and I were together for a few years as lecturers in soil science at the then University of the Orange Free State. We were energetic, enthusiastic and zealous. We believed that if soil science and soils were neglected, the whole world would perish. We preached this strongly and were willing to tackle anyone who did not care enough about these!



At one point the city council of Bloemfontein decided to develop a new suburb in an area which we knew was covered by Valsrivier soils with strongly swelling pedocutanic B horizons. From experience, we knew that buildings on such soils crack like mad. So we decided to phone the city engineer to warn him that they should not develop a residential area on those soils. Theo did the talking, with me sitting next to him. The city engineer was not very friendly, to put it very mildly. He told us in no uncertain terms that they did not need a soil map to decide where to develop a residential area and eventually slammed the phone down in Theo's ear. The rest is history, as the saying goes. The suburb called Fichardt Park was developed there. It was in the days when milk was still delivered at your door in two-pint bottles each morning. According to urban legend, one guy once said to his neighbour that he was more lucky than the neighbour, since the milkman could not yet deliver his milk inside his house through a big crack in a wall!!

I clearly recall another instance when we were perhaps a bit over-zealous. The University had a small exhibition hall at the Bloemfontein agricultural showgrounds. Every year the University gave one department the opportunity to advertise itself by means of an exhibit in the hall during the time of the agricultural show. And so it became the turn of soil science one year. The hall had benches around the walls and a big square glass-surrounded, somewhat elevated area in the middle. Theo came with the idea that the glass-encased area was ideal for creating a soil landscape. So off we went with a bakkie and spades and carted a few bakkie loads of soil into that holy area! We created a real landscape with hills and valleys, cultivated areas and rangelands. We even borrowed a few miniature tractors and implements from the local John Deere agency.

Then there was the 1970 Soil Science Society Congress at the University campus. Theo and I were sort of the main persons responsible for organising it. It was long before the days of computers and such things. People who intended to present papers had to mail in their abstracts. We spread these on the floor of the office of Prof Roelf Burger, Head of the department. We grouped them into logical groupings for sessions. But then there were too many for this session and too few for that one and we had to physically move them between sessions until they fitted in. Also at that time, GPS did not exist, so for the richer guys, who came by car, signposts had to be put up on electricity poles along main routes through the city to show them the way to the congress venue. Fortunately the Automobile Association and Rondalia were always willing to make sign boards available free. Of course, these had to be put up high enough to make it difficult for naughty students to steal them as souvenirs to put in their rooms. Theo was taller and more athletic than me, so he had to get onto the ladder to put them up as high as possible.

We were both sport enthusiasts and when there was an opportunity, we would make use of it. It was long before professional rugby, so practices of Springbok rugby teams were open to all, and so we could go to the Free State stadium to watch them practice when there was a test in Bloemfontein. It was fun to stand close to the sports correspondents of the newspapers and listen to all the inside stories which they were talking about. We sometimes would watch cricket at the Ramblers, one day very greatly disappointed. Rhodesia played against Free State and we wanted to see Colin Bland, Rhodesia's very elegant Springbok middle order batsman and best fielder that the world has ever seen, bat. But he never got a chance to bat. Jono Clarke, one opener, and Ulyett, the number 3, each got a century. But the big fly in the ointment was Ray Gripper, the other opener, who made more than 270 runs. No wonder he got so many runs, because Steve Strydom, who played rugby and cricket for Free State and became a top rugby referee, dropped Gripper no less than 13 times that day! Those were the days!

I saw Theo the last time in January 2015. When he heard that I was coming to the congress in George he told me that I should not ask the people of the guest house to pick me up at the airport, he would pick me up. He came from his home in Groot Brakrivier. met me at the airport and drove me around for the rest of the day.

But now Theo is no longer with us and I can only salute an enthusiastic soil scientist and a fun person.

CONGRESSES

COMBINED CONGRESS 2021 → 2022

As previously mentioned in the President's Message, the next **Combined Congress** that was due to be held in Cedara (KZN) in January 2021 was postponed until 2022, due to the Covid-19 situation. It will now be a virtual/online event taking place from 24 to 26 January 2022.

The second announcement has been distributed and the cut-off date for abstracts is very close, so please register as soon as possible.

Hydropedology



The poster features a central text area with a sunset background. At the top right is a circular logo with a blue 'Water' side and a brown 'Soil' side, separated by a white yin-yang-like shape, with the word 'Hydropedology' arched above it. Below the main title, there is a list of conference themes and keynote speakers. At the bottom, a row of five small images shows a building, two water buffaloes, a soil profile, a thatched-roof house, and a lioness with her cubs.

SAVE *the* DATE!

The 4th International Conference
on **Hydropedology**

23 – 26 August 2022
Skukuza, South Africa
Registration open 30 November 2021

Keynote Speakers:
Johan Bouma
Jeffrey McDonnell

Conference themes:

- Soil water as a key to soil functions and soil health
- Catchment structures, Soilsclapes & Quantitative Pedogenesis
- Structure-function relations at the pedon scale
- Soil Water, Matter and Energy Fluxes - including hydrological extremes
- Multiscale Modelling of Hydrologic Systems
- Hydropedology in environmental policy
- Digital soil mapping and hydropedology

Contact:
Johan van Tol
vantoljj@ufs.ac.za

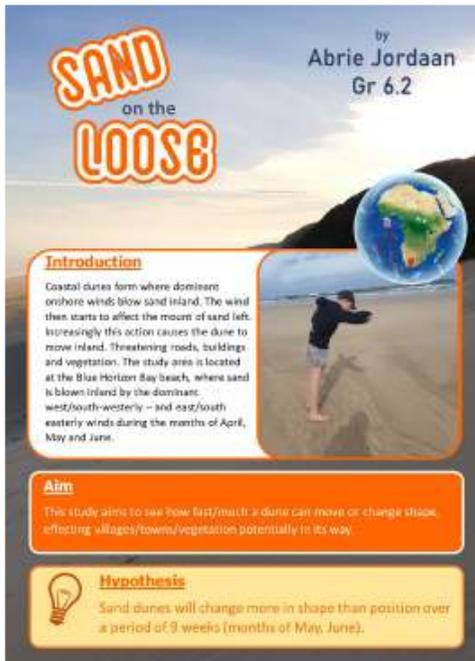
There will be a conference on Hydropedology in the Kruger Park next year. For details, contact Johan van Tol at vantoljj@ufs.ac.za

ESKOM EXPO

The 2021 version of the Eskom Expo for Young Scientists was held last month, and again the SSSSA sponsored awards for the two best soil-related projects in the junior and senior categories. The event was held virtually, so all entries were provided as electronic documents that could be evaluated, unfortunately without the opportunity to interact with the entrants themselves. Nevertheless, the standard was high and the judging panel from ARC-NRE (Michael Kidson, Ashira Roopnarain and Maryam Bello-Akinosho) were unanimous on the two award winners for 2021. These are:

Junior Award: Abrie Jordaan (Gr. 6) from Port Elizabeth, who compiled a project on how sandy dune soils move.

Senior Award: Ruby McCulloch (Gr. 10) from Cape Town, for her project on comparing plant growth using various types of grey water.



THE EFFECTS OF DIFFERENT TYPES OF GREY WATER ON BASIL

First Name(s): Ruby

Surname: McCulloch

Category: Agriculture

Sub-category: Crop science

Province and Region: Western Cape, Cape Town

School: Parklands College

Grade: 10

APPOINTMENTS

Dr Adornis Nciizah was promoted from Senior Researcher at ARC-Infruitec-Nietvoorbij (Stellenbosch) to Specialist Researcher, back at the ARC-Natural Resources and Engineering's Soil, Climate and Water campus (Pretoria) on 1st August 2021. Adornis has a PhD in Agronomy from the University of Fort Hare and specialises in the fields of Conservation Agriculture, crop production under various climatic regimes, and soil and water use.



Dr Nondumiso Sosibo, previously at ARC-Small Grains in Bethlehem, was appointed as researcher in the Soil Science division at ARC-NRE (Arcadia) from 1st October.

DEGREES OBTAINED

Sibongisele Mgozeli, a PDP student at ARC-NRE (Soil, Climate and Water campus), was awarded his PhD degree at UNISA, with the title: *“Agri-mat and grass mulch effects on selected soil physical and chemical properties, runoff, crop growth and yield in South Africa”*.

Patience Chauke, a researcher at ARC-NRE (Soil, Climate and Water campus) was awarded her MSc degree at UNISA, with the title: *“Soil phosphorous availability and utilization efficiency by soybean under a short term no-till in smallholder farms in South Africa”*.

MISCELLANEOUS

SOME SNIPPETS ABOUT SSSSA CONGRESSES

Giel Laker

We are nearing the 70th anniversary of the Soil Science Society of South Africa in 2023. I hope that the SSSSA Council will not overlook it again, as happened with the Diamond Jubilee (60th anniversary) in 2013. It only received a little bit of attention two years too late in 2015. I therefore thought that it will be good if some of us could perhaps share some snippets in the next few editions of the newsletter to set the scene. I will start with a few snippets about congresses.



The first congress was held at the University of Pretoria in July 1965. The registration fee was R2-00. (Yes, R2-00. It is not a typing error!) But to put it in perspective: My salary as researcher in the Department of Agriculture at that stage was something like R1320-00 per year (not per month). Sessions were arranged according to the commissions of the International Soil Science Society. Two of the early legends of soil science were among the keynote speakers who opened sessions, namely Dr. C.R. van der Merwe and Prof. J.J. (Koos Kompos) Theron. The first part of the programme is shown below.

SOCIETY OF SOIL SCIENCE OF SOUTH AFRICA.

PROGRAMME

of Congress held in „Nuwe Kleinsaal“ of the
University of Pretoria, 19-21 July, 1965.

MONDAY 19th JULY.

9.00 a.m. Welcoming address (Dr. S.J. du Plessis, Chief, Director
of Agricultural Research).

Opening (The Hon. H. Martins, Deputy Minister of
Agricultural Affairs).

Chairman's address (Prof. W.J. Pölscher, Chairman
S.S.S.A.)

10.30 a.m. Tea Break.

11. a.m. Commission on Soil Fertility and Plant Nutrition.

- ① Changing concepts of soil fertility (E.R. Orchard).
- ② n Evalueer van P- ekstraksietodes vir gronde onder
tabakverbouing (H.G. Sayman).
- ③ The influence of tobacco and oats on the nitrate nitrogen
content of a black clay soil (A.D.P. Botha).
- ④ Sporelemente in grond (C.P. de L. Beyers).

12.30 p.m. Lunch.

2.00 a.m. Cation balance in maize leaves and its effect on
yield (E.R. Orchard).

- ⑤ Voedingselementstatus van blare en oeseienskappe van
Valencialemoene (A.A.B. Bruwer & W.J. Pölscher).
- ⑥ Effekte van stikstof-bemesting op oes- en blaarsamestelling
by sitrus. (D.H. Bester).
- ⑦ Plant Sodium: a guide to improving the reliability of
foliar diagnosis (R.T. Bishop).
- ⑧ Die bepaling van sporelemente in plante - die hede en die
toekoms (W.J.A. Steyn).

3.45 p.m. Tea Break.

4.00 p.m. Fosfaatverwantskappe in n santal gronde van die O.V.S.-Streek
(S.P. du Plessis)

⑨ Die bepaling van die kalkbehoefte van grond (L.L. Eksteen).

4.30 p.m. Discussion period.

One congress was held outside South Africa, namely the 5th congress, which was held in Salisbury (now Harare) in Rhodesia (now Zimbabwe) in February 1973. At the time Rhodesia had a group of excellent soil scientists, under leadership of the brilliant Penelope (Penny) Grant, who were members of the Society. They made significant contributions at congresses. One of the more unforgettable Rhodesians was the rather eccentric Philip Watson, the termite expert.

The pre-congress excursion for the 1975 congress in Blydepoort was through the Kruger National Park, with a fantastic buffalo fillet braai the first evening. It is by now well-known that the Blydepoort congress has become notorious as the least

scientifically orientated congress ever, with a session even being cut short so that a party could begin.

The Silver Jubilee congress of the Society was held in Pietermaritzburg in July 1978. At this congress, the awarding of a silver medal for a paper presented at a congress was introduced and Malcolm Hensley was the first recipient. Roy Simonson, the world famous pedologist from the USA, was the special guest. After the congress he visited the soil science departments at the different universities. When he visited the University of Fort Hare we thought that it would be nice for the students if he could address them a bit. His speech was very short: *“Good morning gentlemen, I hope your lecturers keep you under pressure the whole time while you are here. That is what I do with my students, because that is what you will be under when you start working. Good day and good luck.”*

The first combined congress was held in Durban in January 1980. That was during a period when congresses of the SSSSA was held once every 18 months. This was done because it was felt that not enough research was done to produce enough high quality papers for a congress once a year. Crop Science congresses were held once a year. This means that “pure” soil science congresses alternated with combined congresses. A very striking pattern emerged immediately, which persisted, namely that much larger numbers of members of the Society attended the “pure” soil science congresses than attended the combined congresses. At the 1978 congress (see photo below), there were, for example, 95 delegates, with only 67 soil science delegates at the 1980 combined congress.

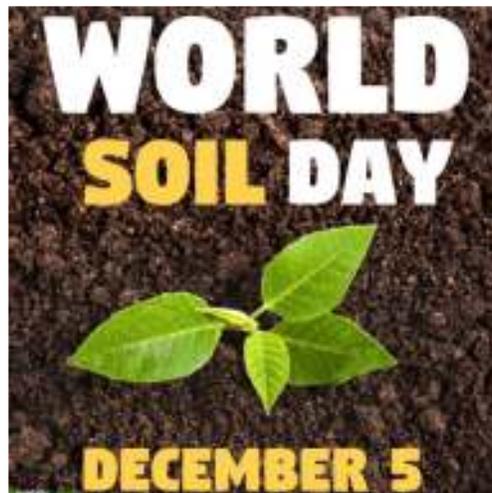


Then later the SSSSA was forced to fall in with having only combined congresses once a year. The number of soil science delegates steadily dwindled further to the point where barely 50 members of the Society presently attend a congress. And that while the society has a much higher number of members than in the 1980s. By far the largest number of delegates ever at a congress of the Society was at the 10th congress, the “pure” congress in East London in July 1981, which was attended by about 160 delegates!! At that stage the Society had only a bit more than 250 members.

I am not going to write anything more again about the 1989 congress at the Wild Coast Sun Hotel and Casino. Except to repeat that sessions were attended poorly because delegates found the topless girls around the swimming pool more interesting than boring presentations!

Lastly, I cannot help to mention this: In those days (around the 1970s-1980s) the biggest nightmare for anyone at a soil science congress was to have to chair a session in which Dr Arend Streutker presented a paper. Arend absolutely refused to be disciplined by any chairman. He presented a paper as long as he wished to. And with long I mean loooooong!!! And this was not once-off, it happened every time – and he presented a paper at basically every congress! Just keep in mind that Arend was a good and very serious scientist. What he presented was high quality science, but he was just totally over-enthusiastic when he presented it.

WORLD SOIL DAY 2021

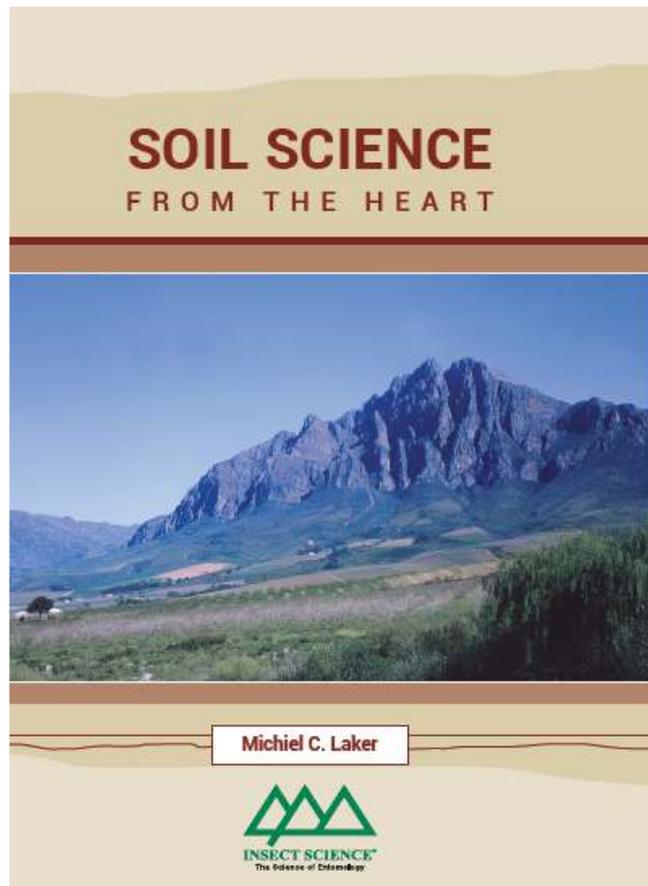


As you may know, the UN, supported by the IUSS, encourages people to celebrate World Soil Day on 5th December every year. The theme for 2021 is: *"Halt soil salinization, boost soil productivity"*, and the ARC-Natural Resources and Engineering, in conjunction with the Department of Agriculture, Land Reform and Rural Development, will be hosting a webinar on Friday 3rd December, with a range of interesting topics on the above theme. All those who are interested are most welcome to attend.

For more information, contact Adri Laas at ARC-NRE (012 310 2518, AdriL@arc.agric.za).

New Book (1)

"Soil Science from the Heart" by Prof Giel Laker



To all interested,

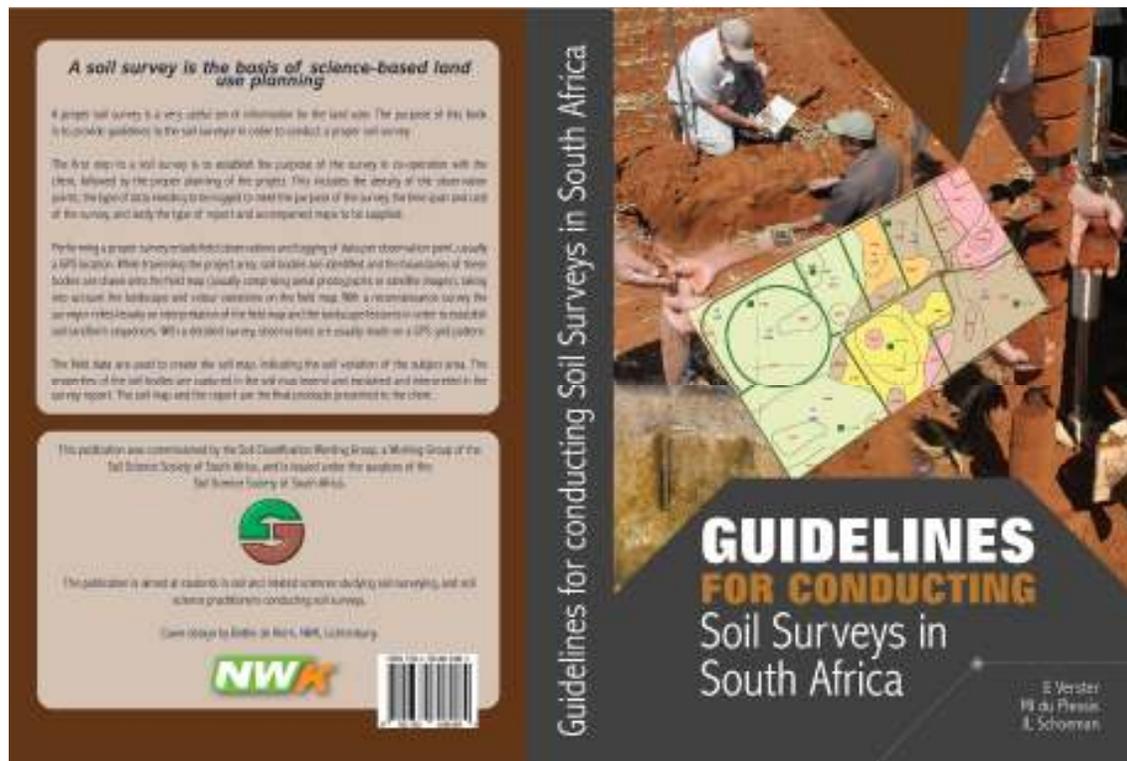
As promised in the last Newsletter, The book "**Soil Science from the Heart**" by **Prof Giel Laker** has just been published by SOLOVIVO (Pty) Ltd, and can be ordered from Gerhard Nortje. The book is 492 pages long.

Contact details: SOLOVIVO (Pty) Ltd, Tel: +27 83 501 8680/E-mail: gerhard@solovivo.co.za

Cost: R400, excluding postage.

ISBN number: 978-0-620-94754-1.

New Book (2)



The much-awaited “Guidelines for conducting soil surveys in South Africa”, by Martiens du Plessis, Eben Verster and Jan Schoeman, is almost ready to go to print. The book promises to provide a logical, all-inclusive guide to the vital process of recording our soils, their features, classification and their distribution. The intention is to have an official launch in conjunction with the Congress in January 2021. Enquiries to Martiens du Plessis (martiens@nwk.co.za).

New Book (3)

Agreenco Glossary: Environmental Rehabilitation of Mines

P.W. van Deventer, J.M. Hattingh & P.M. Harris



FORWARD FROM THE AUTHORS

Decision-making in environmental rehabilitation and risk management for mine residue facilities is a complex process that integrates multiple site conditions. It is often difficult to comply with inconsistent and conflicting objectives of the different disciplines involved. Knowledge and expertise from other fields, and the views and perspectives of several interested parties within mainly the mining industry, can make it no less difficult. In addition, there are quite a few techniques and processes to get closer to the final product of rehabilitation, and they might often change over time as new ones appear or old ones become redundant. Recognition and appreciation for these complexities have led to developing several frameworks and methods for conceptualising, establishing and validating the final rehabilitation programmes.

The focus of this Glossary is on the rehabilitation of mine/mineral residue facilities (MRFs), which include mine tailings storage facilities (TSFs), waste rock dumps (WRDs), and in some instances also discard material, including the footprints and impacts of these MRFs. Together with the MRFs, mine-related water features and ecological aspects are also discussed briefly. Even though the Glossary is mainly related to the rehabilitation of MRFs in general, it also, to a limited extent, covers the ecological restoration of polluted and disturbed structures. A glossary with such a multiple interdisciplinary composition will have loose ends, deficiencies and omissions that require more attention in new and updated editions, especially in new research fields and emerging techniques. The authors encourage readers and users of this Glossary to create awareness and report any shortcomings and gaps for future inclusion in follow-up editions.

The most common and essential aspects of MRF rehabilitation encompass mining and mining methods, metallurgy, geology, pedology, geochemistry, biology, ecology, various water aspects, environmental engineering, geotechnical engineering and civil engineering that are relevant to MRF designs and MRF rehabilitation techniques. Definitions and explanations were obtained from well-defined literature, i.e., handbooks, published articles, dictionaries

and glossaries, as well as the industrial and technical vernacular terminology in many cases. The compilation results from a thorough study of many existing glossaries, papers, reports, books, technical reports, journals in the public domain and academic research documents. The references contain the most frequent and practical definitions and terminology used. In many cases, tables, diagrams and photos were used to demonstrate the physical and or practical description and or application of terms.

All the efforts would be in vain if the Glossary did not find its way to the users. The first aim of the manuscript is to assist with standardising required definitions in this field and facilitate communication between rehabilitation practitioners, consultants, scientists, researchers, regulators, and mines. The second aim is to provide essential baseline vocabulary knowledge and information to post-graduate students at universities and other institutes as well as new and young scientists, engineers, technicians, contractors, regulators, consultants and rehabilitation practitioners.

An attempt has thus been made to collect as much of the technical terms and definitions in the field of mine residue rehabilitation as possible. Works such as these are bound to have certain shortcomings. With constructive criticism and suggestions, the authors hope these may be eliminated from a later edition. A new generation will add new terminologies and technologies and update the shortcomings. The authors tried to compile this Glossary alphabetically, but in some cases, subjects were grouped to get a logical arrangement. The Glossary has been designed and written with both specialist and non-specialist readers in mind.

The Glossary for rehabilitation of mine impacted land was compiled over the last three years by the three main authors and fourteen assistant authors and covers more than two thousand definitions used in the field of rehabilitation. The compilation of this wonderful reference document was generously funded by Agreenco.

The aim of the glossary is to provide terminology guidance to industry to obtain consistency in communication, establish a uniform language across disciplines and to provide a baseline of language that is specific to the expertise and application of land rehabilitation. This document has been several years in the making and is the first to consolidate terminologies from around the globe applicable to land rehabilitation and restoration.

According to authors, P.W. van Deventer, J.M. Hatting and P.M. Harris, the decision-making in environmental rehabilitation and risk management for mine residue facilities is a complex process that integrates multiple site conditions that are often inconsistent and conflicting. This work, focusing mainly on mine residue deposits, also touches on ecological restoration of polluted and disturbed structures, and the following disciplines will hopefully also find the glossary useful: Agricultural engineering; Botany; Climatology; Civil engineering (design of MRF structures); Contractors (mining, rehabilitation, civil, tailings, etc.); Environmental engineering; Geotechnical engineering; Ecology; Geochemistry; Geology; Mining and metallurgy; Soil science/pedology

For the betterment of the industry, the Board of the Land and Rehabilitation Society of Southern Africa (LaRSSA) have generously decided to publish the Glossary online, making it freely available. This wish has been made possible by a generous sponsorship from Agreeenco, allowing the Glossary to be published and maintained on the LaRSSA website (www.larssa.co.za). A hard copy can also be obtained from LaRSSA by contacting admin@LaRSSA.co.za.

Photo Competition

The Soil Science Society of South Africa is again running the “Beauty of African Soil” photo competition this year. We received a cash sponsorship from **AGT Cover Crops & Forages** for prize money, and entries are open now. Send your best soil pictures to Corrie Swanepoel (SwanepoelC@arc.agric.za) **from now until 1st December 2021**. The following rules apply:



Competition details

The competition runs **until 1st December 2021** and is open to all SSSSA members. If any winner is in arrears with membership fees, those outstanding fees will be subtracted from the prize amount.

Photos can be submitted to **Corrie Swanepoel** at SwanepoelC@arc.agric.za

Photo requirements:

- The entered photo **must feature African soil prominently**. It may also feature plants, animals or humans, but the focus should be on soil.
- The photo should have been captured by the person entering the competition.
- Each SSSSA member may enter up to four photos. (*Note: If sent via email, only one photo at a time, alternatively use WeTransfer*).
- Photos must be in digital .jpeg format and must not exceed 10 MB in size.
- High resolution photos are preferred (above 1.5 MP).
- Make sure that if you have any persons featured in the photograph, you have their permission to submit the photo to the competition. Likewise, if your photo is the property of your employer or company.
- No copyrighted photos should be submitted.

Categories:

1. **SOILS UP CLOSE**
2. **SOILS IN LANDSCAPES/AGRICULTURE**
3. **SOIL AND PEOPLE/ANIMALS**
4. **LIVING SOILS (WE ARE LOOKING FOR PICTURES ABOUT SOIL HEALTH, SOIL ORGANISMS OR SOIL CONSERVATION)**

Information required with your submission:

- The category for which you are submitting the photo
- A title for the photo
- The location where the photo was taken
- Optional – any background information regarding the photo

Judging:

- The SSSSA Council members, in consultation with a professional photographer, will judge the entries and select the winners in each category.
- Winners to be announced at the Combined Congress 2022.
- Winners in each category will receive their certificates at the SSSSA AGM, to be held during the Combined Congress in January 2022.
- Winners will receive cash prizes, sponsored by **AGT Cover Crops & Forages**.
- Top entries will be featured on the SSSSA website, newsletter and Facebook page, and displayed at the Combined Congress 2022.

NOTE: by submitting your photo, you grant the SSSSA 'copyright' to use the photo in SSSSA promotional material, adverts, fliers, brochures, posters, newsletters, websites and social media. The photographer reserves ownership of the photo but gives the SSSSA permission to use the photograph as mentioned above. The photographer's name will, wherever possible, be featured with the photograph.

HUMOUR

Some comments from customers at the Royal Danish ice cream shop:



SOIL SCIENCE SOCIETY OF SOUTH AFRICA: MISSION

The SSSSA is a scientific society, which, in the interest of its members, promotes the advancement of soil science and soil technology as well as the responsible practicing thereof by its members with the view to the long-term sustainable utilization of the environment in the interest of the community.

Aims

1. Promotion and protection of the professional status and prestige of soil science as a science and career.
2. Promotion and extension of the society.
3. Promotion of the standard of training of soil scientists and technologists.
4. Creation of opportunities for the free exchange of ideas on soil science and technology.
5. The obtaining and dissemination of knowledge, information and ideas having relevance to soil science by means of discussion and publication.
6. Promotion of contact between the society and other bodies with common or similar interests, both within South Africa and overseas.

GRONDKUNDEVERENIGING VAN SUID-AFRIKA: MISSIE

Die GVSA is 'n wetenskaplike vereniging wat in belang van sy lede verbind is tot die bevordering van grondkundige wetenskap en tegnologie, en die verantwoordelike beoefening daarvan deur sy lede met die oog op die lang termyn volhoubare benutting van die omgewing in belang van die gemeenskap.

Doelstellings

1. Bevordering en beskerming van die professionele status en aansien van grondkunde as 'n wetenskaplike beroep.
2. Bevordering en uitbouing van die vereniging.
3. Bevordering van die standaard van opleiding van grondkundige wetenskaplikes en -tegnoloë.
4. Skepping van geleenthede vir vrye gedagtewisseling oor grondkundige wetenskap en tegnologie.
5. Die verkryging en verspreiding van kennis, inligting en idees wat op grondkunde betrekking het by wyse van samesprekings en publikasies.
6. Bevordering van skakeling tussen die vereniging en ander liggame met gemeenskaplike of soortgelyke belange, beide in Suid-Afrika en in die buiteland.