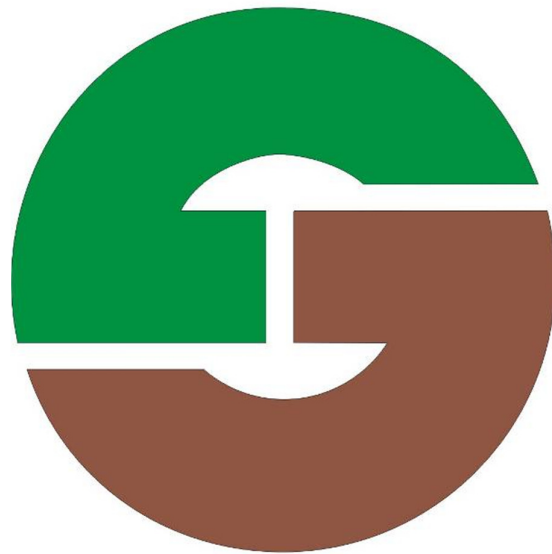


*SOIL SCIENCE
SOCIETY OF SOUTH
AFRICA*



NEWSLETTER

No. 95

May 2013

SSSSA COUNCIL/GVSA RAAD: 2013-15

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The SSSSA does not necessarily agree with opinions expressed in this newsletter.

Die GVSA onderskryf nie noodwendig die menings van bydraes tot sy nuusbrieff nie.

MESSAGE FROM THE PRESIDENT/ **BOODSKAP VAN DIE PRESIDENT**

Beste kollegas/*Dear colleagues,*

Die groot veranderinge waardeur die GVSA die afgelope jare is, het dalk ongesiens verbygegaan. Die impak daarvan is groot en dit is goed dat die lede daarvan kennis neem en insig gee oor die hantering van die veranderinge. Die GVSA het hoofsaaklik drie aktiwiteite nl. lidmaatskap, die gesamentlike kongres en die joernaal, elk met sy administrasie en finansies.

The SSSSA has undergone significant changes over the past few years, which have perhaps gone somewhat unnoticed. The impact of these is great and members need to be informed about them in order to give inputs into the changes. The Society has basically three activities, namely membership, the Combined Congress and the Journal, each with its own administration and finances.

Combined Congress Continuing Committee (CCCC)

Hierdie komitee was oorspronklik net verantwoordelik vir die aanbied van die kongres en dus ook die finansiële risiko verbonde daaraan. Die veranderinge in die joernaal het gelei daartoe dat die verantwoordelikheid vir die hantering daarvan ook na hierdie komitee geskuif is. Die gevolg is dat hierdie komitee 'n heel ander statuut gekry het. Die naam is 'n turksy in enige taal. Kan ons nie maar 'n eenvoudige naam daarvoor kry nie? Die moontlikheid word ondersoek om duplisering te verminder deur kongres administrasie te sentraliseer. 'n Besluit sal daarvoor geneem word nadat die uitslag van 'n ondersoek oor die onderwerp afgehandel is. Vooruitgang impliseer verandering. Natuurlik sal veranderinge wat ten koste van die GVSA strek nie oorweeg word nie.

This committee was originally only responsible for the holding of the Congress and also for the associated financial risks. The changes in the Journal have led to this committee also being responsible for their handling, with the result that the committee underwent a large change in focus. The name of the committee is a problem in either language, so we need to think about another (simple) name for it. The possibility of avoiding duplication by centralizing Congress administration is being investigated and a decision will be taken once the results of the process are completed. Progress implies change, but changes at the cost of the Society will not be considered.

Grondopnames kry ander fokus/*Change in focus for soil surveys*

Grondopnames was gedoen om die grondhulpbron te karteer. Die fokus het wêreldwyd verander en dit diens nou die landgebruiker. Dit is 'n radikale verskil. Die aard van die grond of terrein is al wat saak maak. Dieptebeperkings is nie meer relevant nie en die bereik van pedologiese belang het dieper uitgebrei. Die finansiering het geskuif van die Staat na die industrie. Die vereistes ook anders. Hierdie behoefte raak die aktiwiteite van Grondklassifikasiewerkgroep (GKWG) en die Suid-Afrikaanse Grondopname Organisasie (SAGO).

Soil surveys have historically been carried out to map the soil resources, but the focus has now radically altered to serve the land user. The type of soil or land is all that matters, depth limitations are no longer relevant and the sphere of pedological

interest has spread deeper in the profile. The funding body, and the associated requirements, has changed from the State to Industry, and these needs have affected the activities of both the Soil Classification Working Group (SCWG) and the South Africa Soil Surveyors Organization (SASSO).

GKWG/SCWG

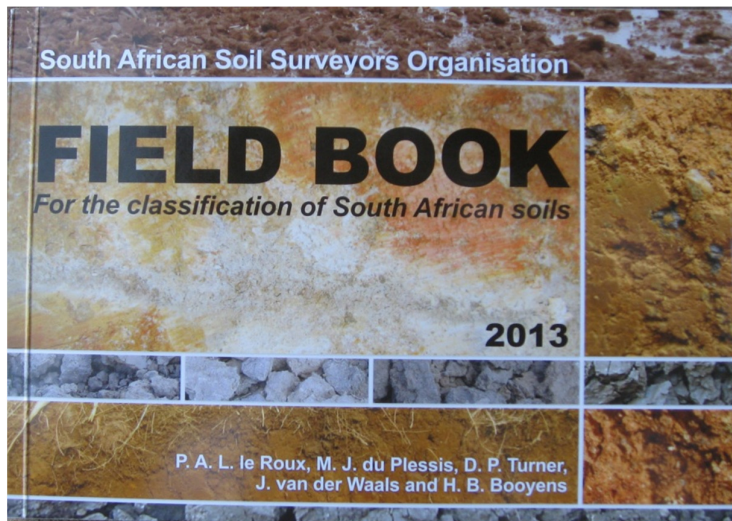
Die werksgroep, 'n geaffilieerde liggaam van die GVSA, het byna die eerste benadering tot die hersiening van die “Blouboek” gereed. Dit sluit 'n opgradering van die diagnostiese kriteria van horisonte in en erken ook 'n paar nuwe grondvorms. Indien daar idees is oor die rigting wat dit behoort in te slaan is dit welkom.

The Working Group, an affiliated body of the SSSSA, is busy with the first draft of the revision of the “Blue Book”. It includes an improvement of the diagnostic criteria for horizons and recognizes some new soil forms. If there are any ideas on the direction to be taken, they will be welcome.

SAGO/SASSO

Hierdie organisasie, 'n geassosieerde vereniging van die GVSA, het pas die “Field Book for the Classification of South African soils” uitgegee. Harde en elektroniese eksemplare kan bestel word by www.sasso.co.za. Dit sal teen die einde van die jaar in Afrikaans beskikbaar wees. Die Field Book ondersteun die toepassing van grondklassifikasie vir die industrie in die veld.

This organization, also affiliated to the SSSSA, has recently produced the “Field Book for the Classification of South African soils”. Hard and electronic copies can be



ordered at www.sasso.co.za, and the book will be available in Afrikaans by the end of the year. The Field Book supports the application of soil classification in the field for the Industry.

Groete/Best wishes.

Pieter le Roux

(051 401 2386; LeRouxPA@ufs.ac.za)

EDITORIAL/REDAKSIONEEL

The SSSSA celebrated its Diamond Jubilee (60th Anniversary), with the first meeting having been held on 27th April 1953 in Pretoria. The meeting was attended by five founding members, namely Dr CH vd Merwe, Prof JJ Theron, Dr J v Garderen, Mr H Klintworth en Mr FJ Rosenstrauch. Annual membership was five shillings (R0.25). This was before Mount Everest had been climbed, before the present Queen Elizabeth was crowned and before the first commercial jet airliner flights. I am not sure about the percentage, but I am sure that the majority of current SSSSA members were not even born then.

What is the point of this reminiscence? It seems to be twofold – firstly, you are all members of an organization with a long and proud history that is going from strength to strength. That is definitely something to be proud of. Secondly, the demand for accurate, scientifically backed soils data (whether on classification and distribution, fertility and potential or on erosion or degradation) is as strong as ever and the South African society needs trained, committed soil scientists in all the disciplines within Soil Science to make a difference to the future

For your information, a message from SACNASP that might be of interest to some of our self-employed members:

Dear SACNASPERS,

Kindly note that the SACNASP PI Insurance scheme kicked off on the 1st of April 2013. Download the full article with new information from our website at www.sacnasp.org.za and click on the "News" button.

SACNASP Team

Finally, I would again like to appeal to members to send contributions for either the newsletter or the web site to myself or to Ailsa Hardie (aghardie@sun.ac.za). It's your Society, and I would like you to make full use of the communication opportunities.

Regards,

Garry Paterson

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

COUNCIL MATTERS/RAADSAANGELEENTHEDE

New Members: we welcome the following new SSSSA members:

Full Members: N Swiegelaar, C Gwiza, EM Mowa, M Jonker, Dr E Mwendera, Mrs CD Neethling, SN Tsanga

Our membership is currently at 332 and remains relatively constant, which is good news for the future of the Society.

SA JOURNAL OF PLANT & SOIL

There has been some confusion and uncertainty following the conversion of the Journal to an electronic format. Here is some information from the editor, Dr Vicki Tolmay (TolmayV@arc.agric.za), which should help members in this regard.

1) *Elke persoon op die adreslys het in Junie/Julie 2012 hulle persoonlike toegangsinsligting vanaf Taylor & Francis ontvang in 'n persoonlike e-pos wat aan hulle gerig is. Die "Subject" van die e-pos was "Access to South African Journal of Plant and Soil". Dit sou van "TandFonline Support" <support@tandfonline.com> gekom het. Indien daardie e-pos nou weg is moet die betrokke lid "TandFonline Support" <support@tandfonline.com> kontak en die situasie aan hulle stel. Hulle sal bevestig dat jy lid is van die vereniging en vir jou 'n nuwe "link" stuur.*

Each person on the address list received their personal access information from Taylor & Francis in a personal e-mail in June/July 2012. The "Subject" of the e-mail was "Access to South African Journal of Plant and Soil" and would have come from "TandFonline Support" <support@tandfonline.com>. If that e-mail is no longer accessible, a member should contact "TandFonline Support" support@tandfonline.com and explain the situation. They will confirm that you are a member of the society and send you a new link.

2) *Die webwerf vir indien en keuring is <https://mc.manuscriptcentral.com/sajps>. Enigeen kan hier 'n "user" skep en die webwerf gebruik. Daar is duidelik instruksies daar - mense moet net lees en toepas. The website for submissions and review is <https://mc.manuscriptcentral.com/sajps>. Anyone can create a "user" here and use the website. There are clear instructions on the site which can be followed and applied.*

APPOINTMENTS/AANSTELLINGS

ARC-ISCW welcomes **Dr Emmanuel Mwendera** who has been appointed as Programme Manager: Soil & Water Science. He is originally from Malawi and was most recently based in Silverton as a Senior Researcher: Agricultural Water Management at the International Water Management Institute (IWMI).

Five PDP students were appointed at ARC-ISCW in February, including former interns **Siseko Mkula** (Pedometrics), **Conrad Baker** and **Gugu Mahlangu** (Soil Health & Remediation). **Annika Theron** and **Nomfundo Sibiya** have also joined the Soil Health & Remediation Programme and will be mentored by Dr Rasheed Adeleke, along with **Maryam Bello-Akinosho**, a visiting PhD student from Nigeria.

AWARDS/TOEKENNINGS

Congratulations to the following award-winners from the recent Combined Congress, held in Durban in January.

Best paper: **JJ Botha, JJ Anderson, LF Joseph, PP van Staden, K Smith, DJ Beukes & M Hensley:** “Increasing water productivity towards food security through rainwater harvesting and conservation”.

Best Poster: **AH Meyer, J Wooldridge, J Dames & M Joubert:** “Straw mulching affects microbial enzyme activity in apple orchard soils”.

Best paper by author under 30: **PB Botha & WP de Clerq:** The effect of long-term tillage practices on selected soil properties in the Swartland wheat production area of the Western Cape”.

Best Soil Science Contribution for Research Development: “**MJ du Plessis & PJ van Biljon:** “The efficiency of different tine implements and shear type on loosening soil”.

Best Paper on Innovative New Technology: “**LF Joseph, JJ Botha & JJ Anderson:** “Evaluation of maize yield and rainwater productivity under in-field rainwater harvesting and conventional tillage on the Fort Hare/Oakleaf ecotope”.

The award for the **best Soil Science article for 2011** in the South African Journal of Plant and Soil was awarded to the article entitled “Beneficial effect of palm geotextiles on inter-rill erosion in South African soils and mine dam tailings: a rainfall simulator study”, by **DG Paterson, C Böhmann, GME Pienaar & RO Barnard**.

DEGREES AWARDED/GRADE TOEGEKEN

Dr Luthendo Obert Nethononda has been awarded his PhD in Soil Science from the University of Venda. The title of his thesis was “Spatial variability of soil and land evaluation for specific crop ranges for Rambuda Irrigation Scheme in Vhembe District”. He explored the relevance of ethnopedology in scientific taxonomic classification system and soil criteria used in ethnopedology to decide on soil suitability for given crops. Indigenous knowledge of soil and criteria used to decide land suitability for specific crops is often

ignored in scientific soil studies. He found that these “knowledge schools” could be used to complement each other. There were some positive relations between participatory maps and kriged spatial maps, particularly in soil particle distribution across the irrigation scheme. The critical finding was the poor fertility and heavy soil compaction and spatial variability across the irrigation scheme which may be a panacea for most communal irrigation schemes. An interesting finding was the side-by-side use of intermediate technologies comprised of modern and so-called traditional technology communal irrigation scheme, so a dynamic approach for land evaluation was imperative for communal irrigation schemes. He developed dynamic guidelines for land suitability evaluation in communal irrigation schemes. In his conclusion he stresses the need for investigations into integrating some principles of ethnopedology into the scientific soil taxonomic system and further investigation on soil compaction and feasibility of variable-input-application under resource under communal irrigation schemes.

Congratulations to **Dr Eric Mashimbye** on being awarded his Doctor of Philosophy (Soil Science) degree by the University of Stellenbosch at a graduation ceremony on 12th March. His thesis is entitled “Remote Sensing of Salt-Affected Soils”.

CONGRESSES/KONGRESSE

COMBINED CONGRESS

The next Combined Congress will held in the Eastern Cape from 20th to 23rd January 2014. The venue will be Rhodes University, Grahamstown. As soon as the details have been finalized, members will be informed, and the information will be available on the Combined Congress web-site (www.combinedcongress.org.za).

PRECISION FARMING CONGRESS (25 APRIL 2013)

A very successful Precision Agriculture (PA) Congress was presented at NWU - Potchefstroom Campus on 25 April 2013. We want to thank all the sponsors who helped to make this event a success. It was attended by 180 delegates from the PA sector, farmers and other interested parties. Four international presenters from Australia, USA and France, gave insight into the worldwide development in PA. The Rector of the Potchefstroom campus, Prof Herman van Schalkwyk, gave a presentation of the University's role in agriculture and the future of Precision farming. He pointed out that there are many challenges in Agriculture for the South African farmer and focused on the three legs (research, training and extension) where Universities can play a role. The NWU Potchefstroom campus is working on the Development of several courses in agriculture. Four other national presenters gave valuable inputs in the PA development in terms of agricultural economics, soil classification and mapping, as well as advances in meteorological information. The

success with the application of PA practices of Mr Jozeph du Plessis, a farmer from Schweizer Reneke, received favourable attention.

In the last session of the day, with Prof Pieter le Roux as convenor, it was agreed that the need for such a congress was long overdue and the need for future congresses of this nature is urgently required. The necessity for short courses in PA is also seen as essential.

A pre- and post-Congress tour also formed a very important part of the congress. It was attended by the international presenters Mr Tim Neale and his wife, Peta (a GIS specialist in PA), as well as Prof Sharon Clay (PA specialist in weed science) of North Dakota university. Other participants of the tour consisted of the organizing committee, several delegates of the Potchefstroom Campus, as well as few of the other speakers at the congress. The tour group visited GWK at Douglas, Terratek in Leeudoringstad, TL precise in Oranjeville, several farms in the Viljoenskroon and Fochville areas under guidance of Imre Reckling and ended with a visit to NWK in Lichtenburg. Several social activities at game farms and a visit to the Vredefort Dome made the tour an exciting excursion to remember.

To conclude: PA in Australia is based on a different approach than in SA, due to the high costs of soil analysis. The use of GIS applications like NDVI maps, topography, yield monitor data and other remote sensing applications are used for PA recommendations. The use of controlled traffic in PA systems is urgently needed in SA. The application of PA is not only in soil science, but can also be applied in weed- and pest control, as well as in grazing and animal farming. Standardization is needed; specifically regarding nomenclature, data models, spatial rules, entity identification, etc. Telemetry, remote connectivity and monitoring, apps for mobile devices, data transfer applications, advances in GNSS performance are presently under development and therefore more satellite providers, improved and cheaper imagery, unmanned Aerial Vehicles (UAV's), as well as qualified personnel is urgently needed.

The development in PA can best be summarized by the abstract of Dr David Waits, founder and chairman of SST Software: "Nowadays, no one refers to a TV as a 'Color TV'. Following the advent of color television, however, that is what they were called by practically everyone. Now we refer to simply a 'TV'. A very similar phenomenon is now happening in agriculture. We are still in the early days of adopting new kinds of technology in agriculture and most of us are referring to this effort as 'precision agriculture'. But as these techniques and principles achieve greater and greater acceptance, we will drop the term 'precision' and simply refer to the totality of our endeavors as 'agriculture'. The use of this technology is not a fad and it is not even something optional; those who fully embrace geospatial techniques as a core component in everyday business practices will be at the forefront of agriculture in the coming years."

Contribution by Astrid Hattingh



Last day of the Precision Congress tour at NWK. Front (left to right): Tim and Peta Neale from Australia, Prof. Sharon Clay (South Dakota, USA), Astrid and Johan Hattingh, Jan du Toit. Back: Lion, Martiens du Plessis, Carina de Beer, Kosie Oosthuizen and Prof Huib (Hamburg, Germany)

First GlobalSoilMap Conference, Orléans, France, 7-9 October 2013. **GlobalSoilMap** (www.globalsoilmap.net) is a project supported by the International Union of Soil Sciences and many of the world's leading research and soil science universities and agencies. **GlobalSoilMap** is hosting a conference a primary focus of which is to inform the soil science and cognate communities and widen the participation of interested parties/entities, including fellow digital soil mappers and soil scientists generally end-users, modellers (hydrological, ecological, climatic, economic, sociological) in bringing the local information to a global audience to solve some of the world's most pressing environmental challenges. Potential users of the information from the soil science and wider community are welcome to participate. <https://colloque.inra.fr/GlobalSoilMap-2013> For information, send a mail to: Dominique.Arrouays@orleans.inra.fr

Utilization and protection of halophytes and salt-affected landscapes, IUSS Commission 3.6 conference, 4-6 September 2013, Kecskemét, Hungary. The conference will be held in the House of Nature, Kecskemét (Hungary) on 4-6th September 2013. The title of the event is "Utilization and protection of halophytes and salt-

affected landscapes". It is supported by the European Cooperation in Science and Technology (EU FA 0901 COST program), the International Union of Soil Sciences (IUSS), Hungarian Academy of Sciences together with the Kiskunság National Park Directorate. Theme: The main objective of the conference is to foster continued discussion among researchers all over the world investigating issues of salt-affected soils (SAS) and saline/sodic landscapes (lagoons, lakes, marshlands, grasslands, etc.) from the viewpoints of soil science, plant physiology, ecology and nature protection. The sessions will cover topics as the ecology and protection of salt-affected landscapes; new results on salt-affected landscapes including spatiotemporal changes, mapping and relationship with groundwater properties, and research related to sustainable agriculture on salt-affected soils and sustainable use of halophyte plants. Detailed conference topics are available on:

<http://members.iif.hu/tot3700/salinityconferencehungary2013.html>

The event will consist of several plenary sessions followed by a poster presentation section. In addition, a field trip is also included, during which the participants will visit the typical saline/sodic natural and agricultural landscapes. Convener: Tibor Tóth, Institute for Soil Sciences and Agricultural Chemistry, Centre for Agricultural Research, Hungarian Academy of Sciences (tibor@rissac.hu) Venue: House of Nature, Kiskunság National Park, 19 Liszt Ferenc Street, Kecskemét, Hungary H-6000 Contacts: András Szabó (andras.szabo@rissac.hu), Kitti Balog (kitti.balog@rissac.hu)

WOCAT

The World Overview of Conservation Approaches and Technologies (WOCAT) held their latest Steering Committee meeting in South Africa recently. The South African WOCAT co-ordinator, Lehman Lindeque from DAFF, hosted participants from more than 20 countries, including representatives from FAO, government departments, funding organizations, academic institutions, commercial companies and research bodies.

The programme was held at the Arcadia Hotel in Pretoria and kicked off with a two-day "Share Fair", where presentations were made concerning aspects of soil and water conservation, reclamation, education and case studies from all over the world. On Day 3, the participants travelled to a farm east of Pretoria to do a mapping exercise, followed by a visit to Ukuvuna Urban Farming Projects, an organic farming enterprise in Midrand, where everyone was very impressed by what could be produced sustainably on an area as small as 1 ha. The owner of the project, Mr John Tsina, has a busy programme involving training and education of the guiding principles to both communities and local government officials.

The week closed with two days of WOCAT Committee business and workshops, where planning was done for a wide range of activities and projects in the years to come. For those interested, visit the website at www.wocat.net



Lehman Lindeque briefing the WOCAT workshop participants before the mapping exercise



Some of the helpers at the Ukuvuna Urban Farming Project in Midrand

NEWS FROM STELLENBOSCH UNIVERSITY

Soil Carbon Day Workshop

The Soil Carbon Day organized by the Department of Soil Science, Stellenbosch University (SU), as part of the “Germany-South Africa Year of Science” initiative was successfully held in Stellenbosch on 15th February 2013. The workshop focused on soil carbon management and sequestration, biochar amendment of soils and soil health. The workshop attracted over 140 participants, including soil science researchers and students from every major university in South Africa, researchers from the Agricultural Research Council and National Department of Agriculture, agricultural consultants, and members of the Fertilizer Society of South Africa. The workshop featured 3 plenary lectures by visiting German Scientists, Prof Yakov Kuzyakov (Univ. Goettingen), Prof Bruno Glaser (Univ. Halle) and Prof Richard Sikora (Univ. Bonn).



Speakers at Carbon Day Symposium

Prof Kuzyakov, an expert in organic matter turnover in soils, spoke about the importance of soil carbon in soil fertility and about his cutting-edge, stable isotope research studies on the turnover and sequestration of carbon in soils. Prof Bruno Glaser, the current chairperson of the European Biochar Research Network, spoke about biochar amendment of soils, the importance of biochar characterisation and the promising field studies involving composted biochar being carried out in Europe. Prof Sikora, an expert in soil health, spoke about his research into rhizosphere ecto- and endophytic micro-organisms that promote plant resistance to soil pathogens and nematodes. Local speakers included Dr Anthony Mill (SU) who talked about trading soil carbon on the international

market, Mr Michael Back (Backsberg, Paarl) who talked about carbon-neutral farming, Dr Ailsa Hardie (SU) who talked about the biochar research programme at Stellenbosch University, Mr Stephen Malherbe (ZZ2) who spoke about soil carbon management at ZZ2 (the largest tomato producers in South Africa). The workshop received a lot of positive feedback afterwards, as e-mails poured in from participants expressing how much they enjoyed and learned from the workshop. The presentations are posted on www.sun.ac.za/soil/socaday.html

New peer-reviewed SOIL SURVEY JOURNAL hosted by University of Stellenbosch, South Africa, calls for submission of manuscripts:

The Soil Survey Journal is addressing the interests of soil scientists working in the field of soil survey and mapping. It should also be of interest to a broader community of environmental scientists requiring specific soil information. This initiative was proposed by a group of South African soil scientists and supported by many leading soil scientists world-wide to broaden publication of, and access to, soil information. However, it's only the authors that can make this work.

Soil Survey Journal is an on-line, open access publication hosted by Stellenbosch University, South Africa. Publication is free of charge and the operation of the journal is supported by volunteer effort of editors and referees. Currently we expect to publish at least two issues per year. The sections will span subjects from Field Notes (short communications), Views and Reviews (Theoretical, position and discussion papers) to Articles (Concise experimental work) and Reports (non-peer-reviewed section targeting publication of existing soil survey reports at any level of detail).

To get acquainted with the journal policies, editorial team, submission requirements and procedures, please visit the journal homepage <http://soji.journals.ac.za/pub>

Dr. Andrei Rozanov (Dept Soil Science, Stellenbosch University), editor: Soil Survey Journal

SOIL CLASSIFICATION WORKING GROUP

The Working Group is currently busy with an update of the Blue Book, and one of the tasks is to evaluate all the soil photographs that have been obtained, and those that are still needed. It is also the intention of the Working Group to collect other photos of specific soil-related features that may help surveyors with identification and/or classification to put in the book or on the SSSSA web site. If you have any good photos of soil profiles (it doesn't matter if there is no measuring tape – that can be inserted), or any other soil feature, please contact the co-ordinator, **Ernst Jacobs** (Ernst@arc.agric.za; 012 310 2668) to discuss.

NEWS FROM NORTH-WEST UNIVERSITY

New course

A 4-year BSc Agric course will be established at the North-West University, Potchefstroom Campus, within the next two years. Major subjects will be Soil Science, Agronomy and Agricultural Economics. Most of the protocol has been completed and submissions to different authorities have been made. However, Soil Science modules related to environmental issues will remain in the Environmental Geology department.

Post Graduate studies:

Pieter Pretorius completed his MSc with the title “The implementation of a geo-environmental decision support system for development on dolomites”, under the supervision of Piet van Deventer.

In 2012 the following students completed their honours projects (NRF-THRIP funded) under the supervision of Piet van Deventer:

- Dawid Malo: “The effect of seepage pollution from gold mine tailings on vegetation change”
- Gloria Dube: “Penetration resistance (PR) of gold tailings material of the Harties no. 1-4 Gold TDF complex, Stilfontein”
- Melani van der Merwe: “The geochemical monitoring of potential soil pollution from a gold tailings dam facility”

MSc projects in progress, under supervision of Piet van Deventer (NRF-THRIP funded), include:

- Jaco Koch: “Uranium migration modelling and gamma ray assessments on a gold tailings disposal facility”
- Alida Slabbert: “Surface impacts of gold mining activities on the Kromdraai/Koekemoerspruit: a situation analysis”
- Angelique Daniell: “Monitoring and modelling of soil and groundwater pollution from a gold tailings dam”
- Tanya Orlekowsky: “Investigating soil algae and cyanoprokaryotes on gold mine tailings facilities”
- Mike Seiderer: “Nitrogen fixation of legumes in different mine tailings growth mediums”

Four NRF-THRIP funded honours projects are also in progress in 2013.

RESEARCH PROJECT AT ARC-ISCW

A three year research project at ARC-ISCW to look into various aspects of the stockpiling of soils on open cast coal mines has recently commenced. The project is funded by Coaltech and will look at physical, chemical and microbiological aspects of the stockpiling process. While many mines now use a continuous “Cut and cover” technique that minimizes the amount of time that soil is stockpiled, this is not always the case, and some stockpiles are as old as 15-20 years. Much work has been done on the rehabilitation aspects of mine soils, but if the preceding stockpiling is poorly done, then even the best rehabilitation practices will be problematic. For information, contact the project leader **Garry Paterson** (garry@arc.agric.za; 012 310 2601).



20 year old stockpile – is it useable?

INTERNATIONAL SOIL JUDGING COMPETITION

Prof Cornie van Huyssteen from UFS has been invited by Stephen Cattle, the chair of Soil Education to help with soil judging at the next IUSS World Congress of Soil Science in Jeju, South Korea. He is an official at the competition and coach of the South African team. The contest is open to two teams of students. Contestants get time to describe soil profiles, classify them and to make some interpretations – the team who gets the most points for getting these descriptions, classifications and interpretations correct, wins. Each team has an academic coach (who cannot help during the contest pit descriptions) and there are 1-2 days of practice pits before the contest on the third day. The US has a long and rich culture of soil judging and the response of students to this activity is outstanding. Interested students can contact Cornie at vanhuyssteenCW@ufs.ac.za .

SASSO IN KRUGER NATIONAL PARK

The last workshop of the South African Soil Surveyors Organization (SASSO) focused on ecosystem services of different soils. They had a workshop based at Skukuza, in the KNP and visited the “Super Sites” of research. The question to be answered when Environmental Impact Assessments are carried out is: “How are ecosystem services affected?”

Change in the environmental setting impacts on the agricultural ecosystem and the main focus was previously on food production. However, it is shifting to global issues and C stock is competing for first place. What is the role of different soils? The relationship between vegetation and soil in the KNP emphasizes the very specific services with which soils are supporting the natural ecosystem.

SOIL ATLAS OF AFRICA

Are you aware of the new Soil Atlas of Africa? It was mentioned in Farmer's Weekly recently. According to the EU website, it can be downloaded, but at over 500 MB this might not be such a quick process.

For more details, visit the website:

http://eusoils.jrc.ec.europa.eu/library/maps/africa_atlas/

HUMOUR

Only a Seffrican Understands

AG

This is one of the most useful South African words. Pronounced like the "ach" in the German "achtung" it can be used to start a reply when you are asked a tricky question, as in "Ag, I don't know." Or a sense of resignation "Ag, I'll have some more mieliepap then." It can stand alone too as a signal of irritation or of pleasure.

BELL

South African vernacular for telephone call; as in "Ja, Boet, I'll give you a bell just now." (Which means phoning anytime from now to eternity).

BIOSCOPE

A local word now losing a little fashion. Meaning movie theatre, cinema, flicks or pictures, depending on which part of the world you come from.

BOET

This is an Afrikaans word meaning "brother" which is shared by all language groups. Pronounced "boot" as in "foot", it can be applied to non-brother. For instance a father can call his son "boet" and friends can apply the term to each other too. Sometimes the diminutive "boetie" is used. Don't use the term with someone you hardly know -- it would be thought patronizing.

CATCH A TAN

This is what you do when you lie on the beach pretending to study for your matric exams. The Brits, who have their own odd phrases, say they are getting "bronzed". Nature has always been unkind to South African school children, providing beach and swimming pool weather just when they should be swotting for the mid-summer finals. If you spend too much time "catching a tan" at exam time, you could end up catching a sharp "klap" from your pa (see below).

DONNER

A somewhat rude word, it comes from the Afrikaans "donder" (thunder) and means "to beat up." Your rugby team can get donned in a game, or your boss can donner you if you do a lousy job.

DOP

This word has two basic meanings; one good and one bad. First, the good. A dop is a drink, a cocktail, a sundowner, a noggin. If you are invited over for a dop be careful. It could be one or two sedate drinks or a blast, depending on the company you have fallen in with. Now the bad. To dop is to fail. If you dopped Standard Two (Grade 4) more than once, you probably won't be reading this.

EINA

Widely used by all language groups, this word, derived from the Afrikaans means "ouch." Pronounced "ay-nah", you can shout it out in sympathy when someone burns his finger on a hot mealie (corn) at a braai (bbq).

GRAZE

In a country with a strong agricultural tradition, it is not surprising that farming words crop up (pun intended) in general conversation. Thus, to graze means to eat. If you are invited to a bioscope show, you may be asked: "Do you want to catch a graze now?"

HEY

Often used at the end of a sentence to emphasize the importance of what has just been said, as in "Jislaaik boet, you're only going to get a lekker klap if you can't find your takkies now, hey?" It can also stand alone as a question. Instead of saying, "excuse me?" or "pardon?" when you haven't heard something directed at you, you can say "Hey?"

HOWZIT

This is a universal South African greeting and you will hear this word throughout the land. It is often used with the word "no" as in this exchange: "No, howzit?" "No, fine." "No, izit?"

IZIT?

This is a great word in conversations. Derived from the two words "is" and "it", it can be used when you have nothing to contribute if someone tells you at the braai "The Russians will succeed in their bid for capitalism once they adopt a work ethic and respect for private ownership." It is quite appropriate to respond by saying, "Izit?"

JA-NEE

Afrikaans for "Yes/No". This expression's origin is believed to have originated when a family member starts talking politics (what else do we talk about in South Africa?) and you don't want to cause a political argument and get klapped or donnered. Then every now and then you mutter, "Ja-Nee." (pronounced yah-neah)

JAWELNOFINE

This is another conversation fallback word. Derived from the four words "yes", "well", "no" and "fine", it means roughly "how about that?" If your bank manager tells you your account is overdrawn, you can say with confidence "Jawelnofine."

JISLAAIK

Pronounced "Yis-like", it is an expression of astonishment. For instance, if someone tells you there are a billion people in China, a suitable comment is "Jislaaik, that's a hang of a lot of people, hey?"

JUST NOW

Contrary to its apparent meaning, 'just now' can mean anytime from now right through to the next millennium. Asked to do a job you don't particularly like, you would reply: "Ja, I'll do it just now".

KLAP

Pronounced "klup" - an Afrikaans word meaning to smack, whack or spank. If you spend too much time at the movies at exam time, you could end up catching a sharp klap from your pa. In America, that is called child abuse. In South Africa, it is called promoting education.

LEKKER

An Afrikaans word meaning nice. This word is used by all language groups to express approval. If you see someone of the opposite sex who is good-looking, you can exclaim "Lekkerrr!" while drawing out the last syllable.

NOW NOW

In much of the outside world, this is a comforting phrase: "Now, now, don't cry - I'll take you to the bioscope tomorrow." But in South Africa, this phrase means a little sooner than soon. "I'll clean my room now now, Ma." Knowing that you will receive a well-deserved 'klap' if you don't do it at once. It is a little more urgent than "just now".

PASOP

From the Afrikaans phrase meaning "Watch out!", this warning is used and heeded by all language groups. As in: "Your ma hasn't had her morning coffee yet Boet, so pasop and stay out of her way." Sometimes just the word "pasop" is enough without further explanation. Everyone knows it sets out a line in the sand not to be crossed.

ROCK UP

To rock up at some place is to just sort of arrive. You don't make an appointment or tell anyone you are coming - you just rock up. Friends can do that, but you have to be selective about it. You can't just rock up for an interview or at a five star restaurant. You give them a bell first, *then* you can rock up.

SARMIE

This is a sandwich. For generations, school children have traded sarmies during lunch breaks. If you are sending kids off to school in the morning, don't give them liver-polony sarmies. They are the toughest to trade.

SCALE

To scale something is to steal it. A person who is "scaly" is not nice. He's a scumbag and should be left off the Christmas party invitation list.

TACKIES

These are sneakers or running shoes. The word is also used to describe automobile or truck tyres. "Fat tackies" are big tyres, as in "Where did you get those lekker fat tackies on your Volksie, hey?"

VROT

Pronounced "frot". A wonderful word which means "rotten" or "putrid" in Afrikaans. It's used by all language groups to describe anything they really don't like. Most commonly it describes fruit and vegetables whose shelf-lives have long expired, but a pair of tackies (sneakers) worn a few times too often, can be termed "vrot" by unfortunate folk in the same room as the wearer. Also, a rugby player who misses important tackles, can be said to have played a vrot game; but not to his face because he won't appreciate it. We once saw a movie review with this headline "Slick Flick, Vrot Plot."

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 practising 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.