## SSSSA COUNCIL/GVSA RAAD: 2009-11

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

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

# MESSAGE FROM THE PRESIDENT/BOODSKAP VAN DIE PRESIDENT

Die jaar is al ver gevorder teen die tyd dat u hierdie boodskap lees. Ek vertrou dat die ekonomiese insinking u nie te veel skade berokken het nie. Die pas afgelope gesamentlike kongres was weereens 'n dawerende sukses, met meer as 400 afgevaardigdes wat die kongres bygewoon het. Dankie vir elkeen van u wat daar was een ook aan die wat 'n bydrae gelewer het. Ek glo dat dit vir almal van u 'n besonder leersame ervaring was. Baie dankie ook aan Eduard Hoffman en sy span vir die reëlings. U sal saam met my stem dat alles baie goed afgeloop het. Die volgende gesamentlike kongres word vir 18 tot 21 Januarie 2010 in Bloemfontein beplan. Teken solank die datum in u dagboeke aan. Die eerste kennisgewing word binnekort uitgestuur.

The year has advanced far at the time of this message. I trust that the economic recession has not done too much damage. The recent Combined Congress was once again a great success, with more than 400 delegates attending. Thanks to all who were there and all who made a contribution, I trust it was a very educational experience for you all. Thanks also to Eduard Hoffman and his team for the arrangements, I am sure you will agree that everything ran smoothly. The next Combined Congress is scheduled for January 18th to 21st 2010 in Bloemfontein, so make a note in your diaries, as the first announcement will soon be sent out.

Dit is my ervaring dat die vraag na grondkundiges en grondkundige dienste hand oor hand toeneem. Hier by die Universiteit van die Vrystaat het ons oor die afgelope jare 'n stewige groei in studente getaal ervaar - ook die wat Grondkunde as hoofvak kies. By die Suid-Afrikaanse Grondopnemers Organisasie (SAGO) is daar ook groeiende belangstelling van grondkundiges en belangstellendes om meer oor die dissipline te leer. Uitnodigings vir die SAGO werkswinkels word tans aan meer as 200 mense versend.

It is my experience that the demand for soil scientists and their services is growing fast. Here at the University of the Free State we have had a steady increase in student numbers, including those choosing soil science as their main subject. At the South African Soil Surveyors Association (SASSO) there is also growing interest by soil scientists and other interested parties to learn more about the discipline. Invitations to SASSO workshops are currently circulated to more than 200 people.

Daar is egter ook uitdagings. Dit lyk of meer en meer werk deur minder mense gedoen moet word. Dit kan dus gebeur dat ongekwalifiseerde persone as konsultante die beroep betree. Ek doen dus 'n beroep op elkeen van u om sover moontlik die vereniging te ondersteun en nuwe lede te werf. Die aansoek om lidmaatskap is op die vereniging se webwerf beskikbaar. Vir dieselfde rede wil ek u motiveer om by die Suid-Afrikaanse Raad van Natuurwetenskaplikes aan te sluit - indien u dit nog nie gedoen het nie. Die nodige inligting is by www.sacnasp.org.za beskikbaar. Daar is

tans net sowat 60 grondkundiges by SACNASP geregistreer. Dit is net deur saam te werk dat ons grondkunde as professie kan bevorder.

However, there are also challenges. It seems that more and more work is being carried out by fewer people, so it can happen that unqualified persons become involved as consultants in soil science. I would call on each of you to support the Society to obtain new members, the application form is on the web site. For the same reason, I would urge you to join the SA Council for Natural Scientific Professions, if you haven't already done so. All the information is at <a href="www.sacnasp.org.za">www.sacnasp.org.za</a>. Currently, around 60 soil scientists are registered, and together, we can ensure the future of our discipline.

Ek wens vir elkeen van u net die beste vir die res van die jaar toe.

Best wishes to each one of you for the rest of the year.

Groetnis

Cornie van Huyssteen (051 401 9247; vhuystc.sci@ufs.ac.za)

## EDITORIAL/REDAKSIONEEL

It is good to hear from various sources of the demand for soil science education at Tertiary level, whether as a first subject or as a secondary one. Most, if not all of the universities are reporting this trend. This ties in nicely with the demand in the workplace for soil contributions to a wide range of projects, which also seems to be increasing.

However, along with this comes the challenge of keeping soil science both relevant and up to standard whan working in these varied environments. The responsibility lies on each one of us to ensure that this continues.

Thanks to everyone who contributes to the Newsletter (often with only one or two reminders required!!), but we always welcome any soil-related news, or even some thoughts or ideas that you would like to share with the Society members.

Regards,

#### **Garry Paterson**

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

## COUNCIL MATTERS/RAADSAANGELEENTHEDE

Council is requesting all members to send nominations for the Society's Gold and Silver awards. An e-mail was sent, with all the requirements attached, but if necessary, the document is on the web site.

**New Members:** we welcome the following new SSSSA members:

A Rozanov; RG Wadley; F Olivier;

GJ Jordaan:

Ms M Sika

M Smuts:

G van Zyl;

Ms MM Awkes;

LJ Muller;

JD Gagiana;

JD Wiese;

DJ Kritzinger;

AJ Burger;

Ms SE Mchunu;

R Orendo-Smith;

Ms HJH Burger;

M duT Stander;

Ms A Zeelie:

N Visser.

Our membership now stands at 269, once again continuing the gradual upward trend!!

It's good to also see a number of students joining – here's hoping they will continue to be members for a long time to come.

#### MEMBER MOVEMENTS/ LEDE BEWEGINGS

From April 30th, **Piet van Deventer** has left Fraser Alexander after 13 years there to take up a post in the Geology Deaprtment of the University of North West in Potchefstroom (so he at least remains in the same town!)

Christl Bühmann has retired from the Pedology Division at ARC-ISCW at the end of March. Christl was the resident clay mineralogist there since 1989, and she played a great role in establishing, quantifying and updating the mineralogical componet of the soil profile database, which has more than 2 500 entries. Her last responsibility was as the SA Project Leader for the multi-national EU-funded Borassus project which was completed just before she retired. Christl will probably divide her time between SA and Germany, so we wish her an enjoyable retirement.

**Meiring du Plessis**, who was SSSSA President from 1994-96, has retired from the Water Research Commission. His wide experience of soil- and water-related projects will be missed.

**Brenton Mabuza** moved from the Pedology Division at ARC-ISCW to GCS in December 2008, where he became responsible for all of their pedological duties, thus instantly increasing his workload. We wish him all the best.

## Martin Fey na Perth, Australië

Meeste grondkundiges weet reeds dat Martin die diens van Universiteit Stellenbosch se Departement Grondkunde verlaat het vir 'n navorsingspos aan die Universiteit van Wes-Australië. Die terugvoer wat ons van Martin sover kry is dat dit goed gaan en dat sy dogter uit Engeland ook reeds kom kuier het. Ons is nie seker vir watter rugbyspan hy nou ondersteun nie!

Sy pos hier by U.S. se Departement Grondkunde is nog nie gevul nie. Tans is een van die oudstudente (Dr. Ailsa Hardie, wat haar PhD in Kanada behaal het) tydelik aangestel maar ons hoop dat 'n finale aanstelling vir die Grondchemie/vrugbaarheidspos binnekort sal plaasvind.

## MEMBERS OVERSEAS/LEDE OORSEE

Garry Paterson and Piet Nell, of ARC-ISCW, spent a week in Gambia, West Africa in February as part of the final phase of the EU-funded Borassus project, which is looking at the erosion prevention potential of palm mat geo-textiles. Despite leaving from Africa to Africa, economics determined that they had to travel via Dubai and London, so it was a very roundabout route. Christl Bühmann should have joined them, but her connecting flight from Germany was unavoidably delayed by the British snows, forcing her to return to SA.

Garry reports that Gambia is an interesting country, with many similarities to SA, but also many peculiarities, such as shells used as road-building materials, baobabs growing in mangrove swamps and on the coastal sand dunes, as well as a river so wide at its mouth that the opposite bank is out of sight!

## **ARRIVALS!**

Ruth Rhodes (soil scientist at SASRI) has given birth to a healthy baby boy on 29th March 2009. Grant and Ruth named their son Will Grant Rhodes. Ruth was awarded best soil science paper at the combined congress held in Stellenbosch in January 2009, so her pregnancy certainly didn't have any detrimental effects on her work!

Congratulations to the family from all SSSSA members.

## AWARDS/TOEKENNINGS

Last year, SSSSA Council decided to increase the maximum number of SSSSA Honorary Members from ten to fifteen. After Prof Attie Theron sadly passed away last year, there were six vacancies, which were filled by (left to right in photo below) **Abel Botha, Giel Laker, Hilmar Venter, Robin Barnard, Rob Fitzpatrick** and **Penny Grant**. The awards were made at the dinner of the Stellenbosch Congress, and Rob flew in from Australia to collect his award (although he did also have the small matter of a keynote address to deliver!).

We won't try and work out the combined age of the recipients (does such computing power exist in SA?), but suffice it to say that between them, they have provided over a quarter of a Millenium's service to the Society!



The SSSSA has thus now its full complement of *Honorary Members*. These are:

Dr MCF du Plessis, Prof. WJ Fölscher, Dr JG Thompson, Prof. HJ von M Harmse, Mr JJN Lambrechts, Dr CN MacVicar, Dr DM Scotney, Prof. H v H van der Watt, Dr ADP Botha, Prof MC Laker, Dr H Venter, Prof RO Barnard, Dr RW Fitzpatrick and Dr P Grant.

Prof. JM de Villiers, Dr RF Loxton, Prof. ER Orchard and Prof AA Theron (all now deceased) were also honorary members.

#### **CONGRESS AWARDS**

At the Combined Congress at Stellenbosch in January, the following awards were made:

**Under 30 years: Cathy Dowding** for "Oxidative breakdown of acid azo dyes by Mn oxides."

Over 30 years: Ruth Rhodes for "Green manure fallow duration: Does it matter"

**Innovative new technology: Cathy Dowding** for "Oxidative breakdown of acid azo dyes by Mn oxides."

**Soil science contribution for research development: Kimberley Smith** for "Evaluating the response of traditional crops grown in an in-field rainwater harvesting system"

**Poster:** shared between: **Cobus Botha** for "Critical evaluation of indicators describing water productivity in semi-arid areas" and **Liesl Stronkhorst** for "Relationships between soil carbon and selected soil chemical properties in South African soils"

## **DEGREES OBTAINED/GRADE BEHAAL**

## Suid-Afrikaanse/Belgiese PhD vir Willem de Clercq!

Willem het in 2001 'n 6 maande tydperk studieverlof in Gent, België spandeer en is daar oorreed om in te skryf vir 'n PhD, wat hy in Oktober 2002 begin het. Hy het by die Gent Universiteit se Departement Bodembeheer ingeskryf, wat onder die Bio-Ingenieurswetenskappe Fakulteit resorteer. Hy was vir een jaar ingeskryf en het weer sy registrasie in 2008 hernu. In September 2008 het hy sy tesis ingehandig en op 23 Januarie 2009 die verdediging gedoen. Willem het ook gedurende die beginperiode (2001/2) die voorgraadse en gevorderde klasse rondom Geostatistiek en GIS deurloop. In 2004 het Willem ook 'n kursus in Geostatistiek daar bygewoon. Hierdie kursusse het hul toepassingsveld in Grondkunde en vorm die basis vir presisie landbou en bosbou. Hierdie wetenskap vorm 'n raakvlak met tradisionele Grondkunde deurdat gevorderde modellerings- en karteringstegnieke gebruik word. Geostatistiek vorm ook 'n al groter wordende deel van enige ruimtelike wetenskap.

Ons vermoëns in landbou en bosbou om die nuutste tegnieke in terme van presisie landbou te kan aanwend, is baie swak ontwikkel en ons universiteite publiseer min in hierdie verband, terwyl ons in 'n omgewing werk waar ruimtelike verandering en veranderbaarheid 'n groot struikelblok binne landbou is. Die tegnieke om hierdie veranderbaarheid te kan beskryf is tans wêreldwyd hoog in aanvraag en Willem het vir sy PhD spesifieke toepassings hieruit aangebied op verbrakking in die Wes-Kaap.

Die studiemateriaal wat Willem gebruik het was gebaseer op WNK navorsing wat vanaf 2001 tot 2006 gepubliseer is. Die titel van sy PhD is: "Space-time variability of soil salinity in irrigated vineyards of South Africa".

Geostatistiek (of Pedometrics) in landbou het ook veral 'n sterk toepassingsveld binne Agrohidrologie. Die presiese ruimtelike afbakening van die Grondfisika en Grondchemie word al belangriker vir waterbestuur in Suid Afrika. Alternatiewelik, die presiese kartering van gronde deur die gebruikmaking van ko-faktore op 'n sistematiese wyse het baie belangrik geword.

Hierdie sienswyse word goed gedemonstreer deur die jongste verandering in die samestelling van die "IUSS". Pedometrics het een van die bene van hierdie liggaam geword en is ook die been waarin die meeste navorsings aktiwiteite (beide geld en publikasies) bestaan. Die vermoëe van ons Grondkunde departemente om by hierdie veranderinge in ons wetenskap aan te pas word dus sterk getoets deur eweknie departemente in Europa en elders. Vir die befondsers van navorsing binne Grondkunde, word hierdie aspekte van Grondkunde toenemend belangriker.

Willem se PhD staan offisieel bekend as: PhD Bio-Ingenieurswese (Land en Bosbeheer), Universiteit Gent, België.

## **CONGRESSES/KONGRESSE**

9th East and Southeast Asian Federation of Soil Science, 27-20 October 2009, Seoul, S Korea. The main theme of this international meeting is Soils as a Convergent Technology in Tandem with Human and Ecosystem Health-Enhancement of Soil Performances for Well-being. The 9th ESAFS will be comprised of plenary and invited lectures, symposia and technical sessions including poster presentation. The official language in the conference is English. Symposia include: Soil engineering and technology for human and ecosystem health, Plant nutrition and human welfare, Asiacentric soil informatics, Paddy soils: Better performances for human and ecosystem health. Field Tours include: Designated Districts for Environmentally Sound Agriculture where participants can experience soil survey, research facilities, farming system, temple, ceramic arts, museums etc. Contact persons are Dr. Chung, Doug Young (Chair of Organizing Committee) <a href="mailto:dychung@cnu.ac.kr">dychung@cnu.ac.kr</a> and Dr. Yang, Jae E. (Secretary General) <a href="mailto:yangjay@kangwon.ac.kr">yangjay@kangwon.ac.kr</a>

The International Conference "Soil Geography: New Horizons" is to be held in Huatulco Sta. Cruz, Mexico from 16-20 November 2009. Please follow the link <a href="http://www.soilgeography09.fciencias.unam.mx/">http://www.soilgeography09.fciencias.unam.mx/</a>. For more information, please contact Dr. Pavel Krasilnikov (Chairman of Organizing Committee) by e-mail soilgeography09@gmail.com

The biennial meeting of the Pedometrics commission is now a regular fixture, drawing together soil scientists with quantitative interests to discuss problems such as sampling, monitoring, the evaluation and use of models and spatial prediction. Pedometrics 2009 will be the first of these meetings to take place in Asia. It is organized by Professor Yuanfang Huang and colleagues at the China Agriculture University, Beijing. The conference will tackle the usual wide range of topics, including sampling, geostatistics, pedodynamic modelling, space-time modelling, soil-landscape modelling and scaling issues. Prior to the conference Dick Brus and Martin Knotters from Wageningen will be teaching a course on "Sampling for Survey and Monitoring of Natural Resources". The deadline for Abstracts is 30th April. For submission and more information, see www.pedometrics.org/2009/

## MISCELLANEOUS/ALGEMEEN

### **GIEL LAKER LECTURING AGAIN**

After eight years in retirement Giel Laker has figuratively been "drawn from the old age home" by the University of Pretoria to assist with soil science lectures for the first semester of 2009. He was initially requested to give just the final year undergraduate course in soil classification. Eventually he was also asked to give the special soil science course for the honours students in wildlife management and a few lectures in the introductory soil science course. Fortunately the 22 students in the final year soil classification course are a wonderful bunch and very enthusiastic. They are quite happy to crawl through barbed wire fences and walk long distances during the weekly field practical sessions. The heavy February rains filled the soil pits on the lower slopes with water and Giel had to do some ungainly things at the age of 70 – like having to lie on his belly to dig up some soft plinthic material from the bottom of a Longlands pit to show it to the students. It is quite a diverse group – ranging from different agricultural majors to BSc students majoring in fields such as environmental science and geology. They also represent about seven different home languages, from Xhosa and Tshwana to German and Cantonese. Giel feels that he has become too old for these things and that this semester must definitely be his lecturing swan song.

Giel is also this semester offering the special soil science course for the honours students in Wildlife Management at the University of Pretoria. It is an almost impossible situation, because in 12 lectures and one or two practicals, students of whom most have no background in soil science must be taken from getting to know what things like texture and structure are to being able to understand and use *Soil Classification: A Taxonomic System for South Africa*. During the field practical the very keen interest of the students to learn more about soil was absolutely striking. Students expressed their surprise that so little time is allocated to soil science in their curriculum, because they see it as an absolute key field of knowledge for the work that they will one day be doing.

## ADVANCED SOIL SURVEY TECHNIQUES WORKSHOP

A workshop on Advanced Soil Survey Techniques is to be presented by Pieter le Roux, Johan van Tol and Malcolm Hensley of the Department of Soil, Crop and Climate Science, University of the Free State in collaboration with the Water Research Commission.

Soil survey has not changed much in the past 70 years. Advanced digital techniques are now developed and applied in soil surveying world-wide. The process is often called digital mapping or predictive mapping. Predictive mapping is preferred here as it emphasizes the role of extrapolation and interpolation of data. The technique is now applied world-wide and the USDA uses it to upgrade existing large-scale soil surveys. The terrain model 3dMapper will be used on the workshop. It is custom-made for the purpose and developed by Jim Burt at Wisconsin, USA. Other models like ARC have the same or similar functions. The difference is that 3dMapper is custom made for soil survey application and isvery user-friendly.

#### **Motivation**

The scientific principle of the techniques is based on the classical formula of Jenny relating soil properties to topography as a soil-forming factor. The catena principle was developed in Kenya in East Africa and successfully applied as the scientific backbone of the Land Type Survey of South Africa. The same principle was applied by Malcolm Hensley and co-workers to subdivide land types into smaller, more homogeneous land units.

#### **Benefits**

Predictive mapping reduces fieldwork and/or improves the quality of the soil map. Soil variability is such that it is impossible to do enough observations to capture the variation in soil properties. Any improvement on the accuracy of soil boundaries is therefore appreciated – especially at little cost and with no fieldwork.

A prerequisite for predictive mapping is a soil distribution pattern that is related to terrain morphology. In areas where wind-blown sand dominates soil formation, predictive mapping is less successful. Take note that it is not true for all transported materials. Alluvium and colluvium are related to terrain morphology and therefore effectively identified with terrain analysis. Both small-scale and large-scale soil surveys can be supported by predictive mapping. Soil surveys can also be improved without any fieldwork. The role of expert knowledge in the process must, however, not be underestimated.

## **Application**

The technique was first developed to identify soil suitable for crop production under water harvesting. Soil surveys are expensive and developing farmers can be ruined if settled on land with unsuitable soil. It is since applied for delineating characteristic hillslopes for hydrological purposes and environmental issues.

#### **Date**

The workshop is scheduled for August and the program will run over two days. For more information contact Nancy Nortje at <a href="https://nortje.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.ncbi.nlm.n

#### **SACNASP**

Good news is that the SSSSA has been recognized by SACNASP as a "Voluntary Association" in terms of Section 26 of the Natural Scientific Professions Act of 2003 (see the certificate below). The main benefit is that the Society can now make meaningful contributions to the fields of Soil Science as registered with SACNASP,



as well as aspects such as soil science curricula in schools and other matters. For more details, contact Dr Dave Turner (<a href="mailto:dturner@arc.agric.za">dturner@arc.agric.za</a>; 012 310 2597) who is the SSSSA Council representative with SACNASP.

## GRONDKUNDE BY NOORDWES UNIVERSITEIT, POTCHEFSTROOMKAMPUS

(deur Astrid Hattingh)

Dit is 'n heuglike dag om aan te kondig dat Grondkunde weer by die Potchefstroomkampus van die Noordwes Universiteit begin het na 'n afwesigheid van ongeveer 10 jaar. Die baadjie het net bietjie verander deurdat die klem nou val op grondkunde vir omgewingstudies. Die fokus is dus nou meer op rehabilitasie en omgewingsimpakstudies - die basiese kennis bly egter dieselfde. Dit word

aangebied in die Skool vir Omgewingswetenskappe en –Ontwikkeling onder die Geologie departement. Grondkunde en Geologie vorm saam 'n hoofvak en daar is verskeie vakke wat as tweede hoofvak geneem kan word nl plantkunde, mikrobiologie, geografie en chemie. Daar is reeds begin met 27 tweede jaar studente wat gedurende Junie maand 'n verpligte ekskursie (saam met die geologiestudente) na die Vredefortkoepel en mynhope in die Klerksdorp omgewing gaan meemaak.

Piet van Deventer is voltyds van 1 Mei 2009 aangestel en bied Gronddegradasie en rehabilitasie, Neotektoniek (Senosoïse geologie, ingenieursgeologie en geofisika) asook bietjie Geohidrologie aan. Piet gaan ook dadelik begin met 'n aantal Astrid Hattingh is deeltyds/tydelik aangestel en bied tans navorsingsprojekte. (grondchemie, -fisika, gevorderde Grondkunde -meganika, kleimineralogie,ens) op tweede jaarsvlak aan. Dr Jan-Marten Huizenga van Johannesburg Universiteit sal ook in Junie by die departement aansluit as Geochemikus met oppervlakreaksies in die lae temperatuur en -druk omgewing as spesiale opdrag. Die geologie afdeling van die vak word aangebied deur Prof. Marthie Coetze (departementshoof) en Cobus van Rensburg met ondersteuning van Belinda Venter wat die XRD afdeling behartig. Die klem val dus op die sogenaamde "Critical Zone" wat veral in die Suid-Afrikaanse konteks belangrik is ten opsigte van volhoubare grondgebruik, omgewingsbewaring, besoedeling as gevolg van mynbou en nywerhede, waterkwalitiet, veilige voedselproduksie en dan algemene omgewingsrehabilitasie en -remediasie.

Die huidige eerste jaars is ongeveer 110 en die totale nuwe kursus beloof 'n geweldige groot sukses te wees. Verskeie navrae is al ontvang van voornemende MSc en PhD studente. Dit is 'n heerlike gevoel as die studente so entoesiasties is oor Grondkunde omdat hulle kan sien hoe praktykgerig die vak is en dat dit 'n saambindende geologie geografie onderwerp tussen aan die plantkunde/mikrobiologie/dierkunde aan die anderkant. Daar was reeds 'n versoek van die kant van die studente na die dekaan om grondkunde as onafhanklike hoofvak te kan neem. Ons hoop dat dit dalk eersdaags waar kan word. Grondkunde bly tog 'n basiese bousteen waarsonder die mens/dier/plant nie kan leef nie. Grond moet dus bewaar word, aangewend word volgens potensiaal en gerehabiliteer word waar dit skeef geloop het in die verlede. Daarvoor het ons baie Grondkundiges nodig. Navrae kan gerig word aan Astrid by handrid@mweb.co.za of Piet by 10058591@nwu.ac.za

#### DEMAND FOR COURSES IN LAND USE PLANNING

Different people have recently individually expressed the need for training in land suitability evaluation and land use planning to Giel Laker (<a href="mailto:mlaker@mweb.co.za">mlaker@mweb.co.za</a>). They are concerned about changes to Land Use Planning courses in some cases, where they have become production planning rather than land suitability evaluation and land use planning, and the termination of such courses in other cases. Concerned persons include people like lecturing staff in agricultural extension at the Universities of Pretoria at Fort Hare and a senior official at the Water Research Commission. Giel

has been asked to write the study material for a module in land use planning for a new diploma course for irrigation extension officers, sponsored by the Water Research Commission and coordinated at the University of Pretoria.

Some students in the 2009 final year soil classification course at the University of Pretoria are very disappointed that a course in land use planning, which they wanted to take, is no longer in their curriculum. They are so serious about the need for such course that they have asked Giel Laker whether he would be willing to give them some course in land use planning as a block presentation during the last week of the winter holidays and the first week of the second semester. They are willing to pay him from their own pockets for this – so serious are they about it. It appears as if other students, not in the soil classification course, are also interested to join in. Whether such "private" block course will become reality still has to be seen, but the concern of the students reflects the demand for courses in land use planning.

Since high quality soil surveys and correct evaluation of soil quality and soil suitability for different uses are key components of land suitability evaluation and land use planning, the Soil Science Society of South Africa and the soil science fraternity in general should take a hard look at playing a role in providing in the expressed demand for courses in land use planning.

#### **IUSS ALERTS**

GlobalSoilMap.net is a new global project that aims to make a new digital soil map of the world using state-of-the-art and emerging technologies for soil mapping and predicting soil properties. It was launched in New York in February. The new digital map will consist of primary functional soil properties at a grid resolution of 90 by 90 m. It will be freely available, web-accessible and widely distributed. GlobalSoilMap.net was initiated by the IUSS Working Group on Digital Soil Mapping in 2006. The consortium, which is led by ISRIC - World Soil Information (Wageningen, Netherlands), includes the Joint Research Centre of the European Commission (Ispra, Italy), the Commonwealth Scientific and Industrial Research Organization (Canberra, Australia), the University of Sydney (Sydney, Australia), the Chinese Academy of Sciences (Nanjing, China), the Earth Institute at Columbia University (New York, USA), the US Department of Agriculture - Natural Resources Conservation Service (Morgantown, USA), IRD (Montpellier, France), the Brazilian Agricultural Research Corporation (Embrapa, Rio de Janeiro) and CIAT-TSBF (Nairobi, Kenya). For more information visit <a href="https://www.globalsoilmap.net">www.globalsoilmap.net</a> which also has a press release.

**Earth Learning Idea** (ELI) was developed as an internet-based support network for teacher trainers and teachers of earth science across the globe, by providing educational resources that will promote interactive teaching and the development of investigational and thinking skills, whilst provoking educational debate - minimizing costs by using voluntary effort and commitment wherever practicable. ELI was established in 2007 as a run-up to the International Year of Planet Earth (IYPE) with its primary activity in the 2008 IYPE. By early November their website had over 8500 visits from 115 countries. The response was so

encouraging that ELI will continue the project into 2009. See the Earth Learning Idea website at <a href="https://www.earthlearningidea.com">www.earthlearningidea.com</a>

32,000 pages of soil science "unearthed": All proceedings of 18 World Congresses (1927-2006) have been scanned and are available as PDF on the IUSS website (under World Soil Congresses). So that means that you now have full access to all articles published in these proceedings. Each volume is one PDF – some are rather large (500 Mb) and may take some time download but it gives you access to hundreds of articles. You can search through a PDF with the <CTRL F> command and type your keyword or author name or any combination. Ideally, each paper is added to the large international literature databases and we welcome all suggestions how that should be materialized and financed.

A new issue of Pedometron has been published in March. The newsletter contains information on the Richard Webster Medal, GlobalSoilMap.net, a report from the national scale soil monitoring workshop, and a couple of articles that make you think (Why indicator kriging should be abandoned; Preparing developing-country students for pedometrics; Alex's most preferred pedometrics paper; Spatial coverage sampling on various spatial scales; Mapping research hot-spots using citation rate and Google geocoding service; Pedomathemagica) and there is the pedometrician (Dick Brus) and non-pedometrician (Johannes Lehmann) profile. The Newsletter can be downloaded here <a href="www.iuss.org">www.iuss.org</a> and from <a href="www.pedometrics.org">www.pedometrics.org</a>

#### **HUMOUR**

A weed is a plant that has mastered every survival skill except for learning how to grow in rows.

What do you get if you divide the circumference of a pumpkin by its diameter? Pumpkin pi.

What does the letter "A" have in common with a flower? They both have bees coming after them.

Soil surveying requires lots of water - most of it in the form of perspiration.

Have you heard of the garlic diet?

You don't lose much weight, but from a distance your friends think you look thinner.

#### **Definitions**

Boy: Noise with dust on it.

Chickens: The only animals you eat before they are born and after they are dead.

Dust: Mud with the juice squeezed out.

Mosquito: An insect that makes you like flies better.

Raisin: A grape with a sunburn.

Chemicals: Noxious substances from which modern foods are made.

## **Questions**

What would we have called the colour *orange* if it wasn't a fruit?

Why does *cleave* mean both split apart and stick together?

If vegetarians eat vegetables, what do humanitarians eat?

If sunflower oil comes from sunflowers, what does baby oil come from?

What do you call a mushroom who buys everyone drinks and is the life of the party? A fun-gi.

#### People are like Potatoes!

Some people never seem motivated to participate, but are content to watch others: They are called "Speck Tators."

Some are always looking to cause problems and really get under your skin: They are called "Aggie Tators."

There are those who are always saying they will, but somehow, they never get around to doing: We call them "Hezzie Tators."

Some folks spent a lot of time sitting and peering into their garden: They are called "Medi Tators."

There are those that try to maximize their crop yields while reducing expenses: We call them "Compu Tators."

#### 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.

#### <u>Aims</u>

- 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.