



CONSERVATION AGRICULTURE CONFERENCE 2016

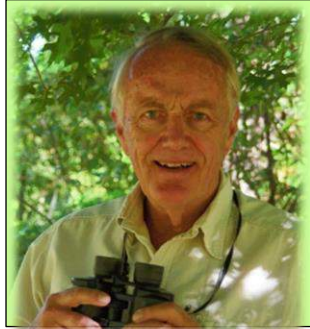
VENUE: ATKV Drakensville

DATE: 6, 7 & 8 September



**International
Decade of Soils
2015-2024**

**NB: The fee for the Conference includes
lunch, dinner, and teas...
but DOES NOT include
breakfast, meat for the braai, and
accommodation!**



DR JOHN HANKS – Guest Speaker is a zoologist by training with his first degree in Natural Sciences from Magdalene College, Cambridge, followed by a Ph.D. on the reproductive physiology, growth, and population dynamics of the African elephant in the Luangwa Valley, Zambia. He has over 45 years of experience in a wide variety of conservation management, environmental education and research projects.

John has worked in several African countries, including Angola, Botswana, Ethiopia, Kenya, Mozambique, South Africa, Zambia, and Zimbabwe. His major most important postings have been: Chief Professional Officer for the Natal Parks Board; Professor and Head of the Department of Biological Sciences, then the first Director of the Institute of Natural Resources at the University of Natal; the Director of the Africa Program for WWF International (based in Gland, Switzerland); the Chief Executive of WWF-South Africa; the first Executive Director of the Peace Parks Foundation. He is the present Chairman of the Lapalala Wilderness School. He has published over 150 scientific papers and three books, with *Operation Lock* and *the War on Rhino Poaching* being published in May 2015.



PASTOR AUGUST BASSON moved to Lesotho in 1993 to pastor the Lesotho Evangelical Church in Tebelloong.

His interest in agriculture was born out of the question that haunted him: How can he preach to people who are hungry?

Healthy soil that grows healthy plants has become a way of life for him. Today agriculture is the platform from which he is doing his ministry.

Their vision is 'Transformation through Sustainable Agriculture' and they are training and equipping pastors, farmers, young people and key members of the community.
His passion is to see life change through agriculture.



DR RIAN TO VAN ANTWERPEN a soil physicist by trade and in his career he has worked on projects which covered soil tillage, root growth, soil health, irrigation scheduling, the use of residue from various sources and soil management.

Rianto is a Senior Soil Scientist and Programme Manager at SASRI, and holds an honorary appointment at the Department of Soil, Crops and Climate Sciences at the University of the Free State.

He also serves on councils of the Soil Science Society of South Africa (President), the International Society of Sugarcane Technologists (Agricultural Commission, Agronomy section) and the South African Sugarcane Industries' Agronomists Association (Convener).

PROF. LEON VAN RENSBURG, professor of Soil, Crops, and Climate Sciences, University of The Free State, born in Port Elizabeth and matriculated at Ugie. For the next two-year period Leon was on active service in the army where he became an artillery instructor. Between 1981 and 1996 he obtained his B.Sc. Agric., Hons, M.Sc. and Ph.D.

Between 1985 and 2003 he worked at University of the Free State, NIGB, and the Agricultural Research Council. He has been Professor in Soil Physics at the University of the Free State since 2004, responsible for pre- and postgraduate students.

Carrier highlights in the past six years: A total of 45 scientific articles, most of which have been published in international publications. Not only is he a prolific author but has also addressed many international congresses, namely in Indonesia, Portugal, Australia, Abu Dhabi, Turkey, California and France. Leon serves on international organisations such as the ICD'S Water Quality Committee, the Advisory Board of The International Salt Management Forum and the Advisory Board of Barari Forest in Abu Dabi; he is Associate Editor of Irrigation and Drainage Journal.



LOUW JOUBERT from Trelleborg comes from an engineering background and has been serving the tyre industry for 18 years. His knowledge is incomparable and is the longest serving technical and support manager in the South African tyre industry. In 2005 he introduced floatation tyres for use on pivots; he was the first in the country to implement the narrow dual wheel to fit in the rows of maize and potatoes. His knowledge of machinery allows him the unique expertise of converting tyres and rims to required specifications.

JEANNE HANDS Area Sales Manager for Agricultural tyres in KZN, new to the tyre industry.



BILL BERRY, M.Sc. Agric. (Agronomy) has been consulting in the agribusiness and rural development field for the past 15 years. He also has 20 years of experience in crop production research and extension, managing Agricultural Research Council and Government research sections, and has built up a solid knowledge of conservation agriculture farming methods and mechanisation.

Between 2001 and 2005 he was involved in planning, implementation and management of a large commercial crop production enterprise in Sudan, growing cotton, sorghum, sunflower, maize, wheat and sesame, using no-till methods on up to 8 000 hectares. His research work initially concentrated on crop physiology, general agronomy, soil physics, soil water and energy balances in tillage systems, and crop modelling.



BRIGHT MASHIYANA CEDARA

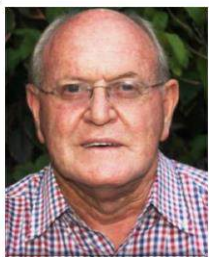
B.K. Mashiyana obtained:

- a Diploma in Analytical Chemistry at Mangosuthu Technikon
- BTech Chemistry at Vaal Triangle Technikon
- Certificate in Total Quality Management, and
- Certificate in Financial Management at UNISA



Worked for Sasol Fertilizers in Secunda and Sasol Nitro Phalaborwa.

Presently working for the Department of Agriculture and Rural Development in Cedara since 2004.



PROF. CHRIS DANNHAUSER has become a well-known motivator and inspiration for many farmers in South Africa, who over the years has helped them in pasture selection and management. Having retired from The University of Limpopo he is now able to continue assisting farmers with planted pastures and veld management.

Chris, born in "Riemland" in Petrus Steyn, OFS, where he later matriculated from the J A Malherbe High School. With farming in his blood, Chris then attended Potchefstroom University obtained his B.Sc., B.Sc. Hons and M.Sc., and later was awarded his Ph.D. at The University of the Free State.

Chris has written 20 scientific, 15 popular scientific publications as well as 26 popular articles, including many articles in most of the major agricultural publications in our country. He has also published four handbooks. He did scientific presentations at international congresses in Ireland, Hungary, Austria and the Czech Republic, and 38 at local conferences.

Many students have been under the watchful eye of Chris over his mentoring career as lecturer: 10 years at Potchefstroom Agricultural College and 21 years at the University of Limpopo. In addition has supervised 11 M.Sc. and 3 Ph.D. students. He has lectured and done research at many institutions, mainly in the summer rainfall areas of South Africa in places like Potchefstroom, Pretoria and Limpopo, in collaboration with the ARC. As a private consultant, and also adviser for Selected Seeds, we can look forward to get information about management and Grass Ley Crops!



DR ANNEMIE ERASMUS (Ph.D.) Researcher (Entomology) at the Agriculture Research Council, Grain Crops Institute (Potchefstroom), and currently since 2008 is at the Crop Protection Department.

Projects she is currently involved with are the Deployment of Bt technology for control of the African stem borer, *Busseola fusca*, and Comparison of insect complexes in conservation and conventional tillage systems.

Annemie holds M.Sc. and Ph.D. Degrees in Environmental Sciences (Plant Protection).

M.Sc. Thesis (2004 - 2006): Comparative Phenology of Lepidoptera on Genetically Modified Bt- and Non-Bt maize.

Ph.D. Thesis (2007 - 2010): Response of selected non-target Lepidoptera, Coleoptera and Diptera species to *Cry1Ab* protein expressed by genetically modified maize.

Her research focus is on applied integrated pest management with regard to insects in an agro-ecosystem. Principle research responsibilities include the study of the epigeal arthropod diversity in conservation agriculture and the ecosystem services it provides, as well as the study of resistance evolution on pests against Bt maize and the effect of GM maize on the environment.



PROF. ROB MELIS is a man with many "caps", a professor who qualified in tropical agriculture at University of Wageningen, Holland, where he was awarded his M.Sc. He has a Ph.D. from the University of Natal, and is a researcher, plant breeder, business and marketing manager.

He has been involved in research in Gabon (Ivory Coast) as well as in South Africa; lectured and supervised 19 graduated Ph.D. students.

In 1990 he started Pro-Seed cc, a plant breeding company and has developed and marketed more than 50 dry bean, green bean, tomato, chillies, and sweet pepper and paprika cultivars.

When starting out into a commercial enterprise Rob had a vision to have suitable dry bean cultivars for our local conditions which he has achieved admirably.

Dry bean production is an alternative option that is not only profitable but as a legume can fit into a crop rotation on most farms.



MARTIN ADAMS has been involved in the farm machinery industry for 48 years and has had loads of infield practical experience which he is anxious to share with and to assist farmers.

In 1985 Martin became involved with the first No-Till Study group in KZN to investigate the practice and look at the technicalities of this system of crop establishment and production.

Fortunately Martin's interest in No-Till was kindled into a passion regarding No-Till.

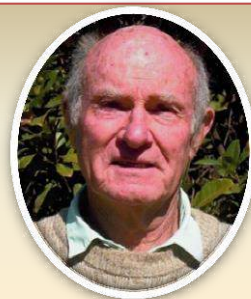
He became The No-Till Club and Martin became a member when the Club was launched in 1998. At that time while he worked for Rovic Leers he assisted many farmers to adapt their existing planters to be able to plant the No-Till way with the Yetter components being imported. He visited Brazil in 2004 when the company started to import Kuhn No-Till planters and seed drills.

He retired from Rovic Leers in 2012 and in 2015 he was approached by The No-Till Club of KZN to write articles specifically about No-Till planters and seed drills.

BILL KERR, an old Weston College student where he matriculated and proceeded to do his two year Diploma in Agriculture at Cedara Agricultural College. Many of you will have read Bill's regular column in The Farmer's Weekly about the many aspects of vegetable production. Much of the knowledge he is so apt in writing about, helping many people know more about producing vegetables, was gained from his practical in-field experience.

After qualifying at Cedara, Bill worked for nine years for H. L. Hall and Sons in Nelspruit, involved in large scale vegetable production. For the following five years he became involved in the vegetable dehydration at Barvale Factory as agricultural manager. At Mayford Seed he was appointed as technical director and this filled the next 10 years with good experience. Here he conducted evaluation trials and selection and was technical support for the Mayford agents in the field.

He then needed to meet the challenge to start his own breeding programme on cucurbits, carrots, capsicum, greenbean and tomato cultivars. At the same time he has been conducting ways of using the No-Till CA system to improve the soil on his property and also assisting large scale vegetable producers in South Africa.



CHARLIE MACGILLIVRAY farmed the family dairy farm for 40 years on the Karkloof in KZN. He recently retired from farming after selling his outstanding Holstein herd of 420 registered cows. Other than dairy farming, he adopted No-Till CA, Charlie won many Master Dairyman awards.

Over the past 20 years he practiced "No-Till" or "Strip Tillage" CA achieving a steady increase in yields and a significant reduction in fuel costs. Organic Carbon increase in the soils have been significant and a driver in the yield equation.

Charlie has won the Clive Montgomery floating trophy for the highest milk yield per cow in a herd of over 300 cows in milk, the "Ten Ton" Maize Club award between 1994 and 1997, and also the Provincial Super Soya Competition. He was actively involved in the Holstein breed society, in both the dairy and AI industry.

He is now involved in local Community and Conservation organisations, is Chairman of the Karkloof Conservancy, established to promote **Agri/Avi-tourism**, and promotion and preservation of BIODIVERSITY. An intended benefit being to create additional employment, with opportunities and ENVIRONMENTAL awareness, in the local community. He is fluent in Zulu, and communicates his experiences and advice to emerging farmers.



PAUL DOBSON moved from SA to farm in the Mkushi area of Zambia in 1993 after being a forestry contractor in the Greytown district of KZN. He became a member of The No-Till Club of KZN in 2000 and won the SEED Growers' competition in 2006.

Paul farms a total of 2530ha of which 200ha is used to produce seed maize for SEEDCO, depending on seed quotas available. In addition he plants 100 to 150ha of commercial maize and 50ha for annual fodder crops for growing out heifers bred from his 400 breeding cow herd made up mainly of Boran and Red Angus. He also runs a flock of 150 Dorper type sheep.

His livestock run on 200ha of improved pasture, re-enforced with a hardy legume called Stylo. He apparently uses the sheep to plant the seed. There is also 150ha dry land veld pasture.

Paul was responsible to get sponsorship from various companies in Zambia for four No-Till Club Members to address several farmers' gatherings on 2009 to discuss No-Till Conservation Agriculture.



JURIE BEZUIDENHOUT, describes himself as a "boerseun" from North West Province, has been farming with his father for the past four years. He tells of his passion for farming, which over the many years of dealing with farmers, proves to be one of the most important ingredients to make a successful farmer.

Of the four years that he has been on the farm, three have been drought seasons. That in itself is called "The University of Hard Knocks", but Jurie has been following what Gabe Brown has been doing in the USA and has introduced cover crops into his crop rotation along with No-Till Conservation Agriculture to regenerate the soils on their farm.

STEVE HEARDER qualified as a Millwright at Iscor in Newcastle in 1991. Millwright is a dual trade covering both electrical and mechanical fields. He spent many years in the electrical industry building up experience from maintenance to designing and building electrical panels that were exported to South Sudan, Mozambique, Zambia and locally.

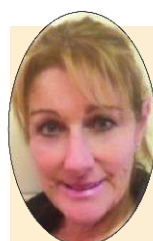


He then designed electrical panels for a primary and booster pump set for trials that Eskom wanted to do with auto restart, monitoring and cell phone control. Eskom later approached him to join their staff where he has been for the past seven and a half years.

Steve's current position with Eskom is to assist farmers with possible energy efficient technologies/methods to reduce consumption. By monitoring their supplies it can be determined whether or not an increase or decrease is needed and if there might be voltage problems which need to be sorted out.

Steve has worked with some farmers in the Winterton and Bergville districts doing tests to see how technology can assist with the farmer using less water and reduce their electricity costs with the centre pivots on their farms

A further duty he has is to produce booklets and pamphlets for Eskom's customers to promote safety, energy savings, etc.



FELICITY MITCHELL, M.Sc. graduate from Rhodes University, is Scientific Manager: Natural Resources at the KZN Department of Agriculture and Rural Development, and is stationed at Cedara Research Station.

She is not only a research scientist but is the author of two Soil Science textbooks as well as being the author/co-author of 23 refereed scientific publications.

Felicity has been nominated onto the National Reference Committee to develop new legislation for the Protection and Development of Agricultural Land and the Sustainable Land Management Act, which will replace Act 70 Subdivision of Agricultural Land and the Conservation of Agricultural Resources Acts.

A recent significant achievement was the development of the Land Potential Map for KZN and the agreement by all District and Local municipalities to include this data in wall-to-wall schemes so as to protect high value land for food production in line with the SPLUMA Act.

Her main research areas are land degradation, improved agricultural production systems, natural resource management, soil crusting and compaction.