

# CA course

## 1. Introduction to the farm as an eco-business Facilitator: James Blignaut



### 1.1 'Leaks' on the farm that influence your profitability

- [Conservation agriculture - a pathway to restoration; Prof James Blignaut](#)

### 1.2 Basic introduction to farm economics

- [Regenerative farming: A mere buzzword or a sound financial consideration; Prof James Blignaut](#)
- [The economics of restoration; Prof James Blignaut](#)
- [The economics of restoration and conservation; Prof James Blignaut](#)
- [Financial benefits of converting to CA – Graan SA](#)
- [Groeï sonder herlewing is negatief – Graan SA](#)

### 1.3 The paradigm of regeneration

- [Restoration pays; Prof James Blignaut](#)
- [Regenerative - The new Sustainable; Leah V. Gibbons, Maharishi International University, USA](#)
- [Conservation agriculture in rainfed annual crop production in South Africa; JA Strauss, PA Swanepoel, MC Laker & HJ Smith](#)
- [From the ground up - Regenerative Agriculture; Charles Massy](#)
- [Conservation agriculture is an opportunity for change - Food For Mzansi, Mary Maluleke](#)
- [Conservation agriculture: Address silent change barriers - Food For Mzansi](#)
- [Conservation agriculture: Adopt perfect practices - Food For Mzansi](#)
- [Save on production costs with conservation agriculture - Food For Mzansi](#)
- [Conservation agriculture research in South Africa; Dr Hendrik Smith](#)

## 2. Introduction to ecosystems (capital), ecosystems functions (process) and ecoservices (flows or returns) Facilitator: Andrew Ardington



### 2.1 Farm with nature

- [Why Carbon Credits Are the Next Opportunity for Farmers; Trey Hill/ CNBC](#)
- [Plants are Cool; Don Smith/ Kiss the Ground](#)
- [Messages from Nature that Life is Lacking in the Soil; Dr Elaine Ingham](#)
- [Building Great Soil Starts with Adding Plants; Diego Footer](#)
- [Soil Health Principles; Ray Archuleta](#)

### 2.2 Basic introduction to farm ecology

- [The key to stimulating Soil Biology; John Kempf, Advancing Eco Agriculture](#)
- [Understanding Our Soil: The Nitrogen Cycle, Fixers, and Fertilizer; Jimi Sol](#)
- [The Living Soil: How Unseen Microbes Affect the Food We Eat; Morehead Planetarium & Science Center](#)
- [What is the Soil Food Web; Soil Food Web School](#)
- [Soil Carbon Sequestration and the Soil Food Web; Soil Food Web School](#)
- [Soil Quality; Rattan Lal \(8:00 – 10:26\)](#)
- [Quorum Sensing In The Soil Microbiome; Dr Christine Jones](#)
- [The role of soil animal diversity to produce healthy and resilient soil; Dr Charlene Janion](#)
- [Farm Profits in Root Depth; Dr Elaine Ingham](#)
- [Phosphorus cycling in pasture grazing systems and importance of soil microbiology; Alan Richardson](#)
- [Weeds; Dr Elaine Ingham](#)

### 2.3 Plant-soil-water-economy relationship (by eco-type)

- [Rebuilding The Soil Carbon Sponge, and Cooling the Climate Fast; Walter Jehne](#)
- [Restore the natural ecosystem processes; Glenn Morris](#)
- [Climate Change: The Water Paradigm; Jimi Sol](#)
- [Groter kans vir sukses met 'n deklaag - GraanSA](#)
- [Dié ernstige skade aan grond kan voorkom word - GraanSA](#)

## 3. Introduction to CA/RA production systems for different contexts

### Facilitator: Hendrik Smith



#### 3.1 Basic intro to CA principles

- [Principles of CA \(About CA\); ARC/Grain SA educational video](#)
- [Guide to Regenerative Agriculture \(Why is it important?\); Kiss The Ground](#)
- [What is Regenerative Agriculture; Jimi Sol](#)
- [Conservation-agriculture; Asset Research](#)
- [An Approach to Understand Conservation Agriculture; Anwasha Dey et al. In: Sustainable Agriculture Systems and Technologies](#)

#### 3.2 Evidence-based outcomes

##### 3.2.1 Grain crops

- [Principles of CA \(How to get going\); ARC/Grain SA educational video](#)
- [Principles of CA \(Crop rotation\); ARC/Grain SA educational video](#)
- [RA research results and adoption rates in SA; Dr Hendrik Smith](#)
- [Soil Microscopy: A View into Regenerative Organic Soils; Northeast Organic Farming Association of NY](#)
- [Projects; Asset Research](#)
- [Regenerative Agriculture: The Drought Resilient Farm - by Dave Strickler \(video\)](#)

##### 3.2.2 Livestock

- [Regenerating Grassland: How to Stop Grasslands From Turning Into Deserts](#). Author: Adam Khan, co-founder of End Political Contributions and author of the books, Fill Your Tank With Freedom and Self-Reliance Translated
- [Carbon Moooves — Smiling Tree Farm](#).
- [Grazing Down the Carbon: The Scientific Case for Grassland Restoration with Richard Teague \(video\)](#)
- [Regenerative agricultural practices - saviour or scam; A C Franke, E Kotzé, M C Mathye](#)

##### 3.2.3 Horticulture

- [10 Regenerative Agriculture Practices Growers Should Follow \(by heliae.com\)](#)
- [Soil Restoration: 5 Core Principles, by Christine Jones | EcoFarming Daily](#)

## 4. Introduction to CA/RA practices for different contexts

### Facilitator: Hendrik Smith



#### 4.1 Basic intro to CA practices

- [Cover Crop grazing; Isaiah Jones, Kinwood Farm](#)
- [How to grow crops that resist pest attacks; Dr Elaine Ingham](#)
- [Demonstration: How Ruminants Improve Water Retention; Allan Savory](#)
- [The value of soil cover; Ant Muirhead](#)
- [Herlewingslandbou boeredag Ottosdal; Landbouweekliks](#)
- [CA and Cover Crops; GrainSA](#)
- [CA - A Fresh Approach; GrainSA](#)

- [Influence of Leguminous Cover Crops on Soil Chemical and Biological Properties in a No-Till Tropical Fruit Orchard; Ariel Freidenreich et al.](#)

## 4.2 In South Africa and international case studies and experiences

### 4.2.1 Grain production

- [Conservation Agriculture in South Africa; Grain SA](#)
- [CA Farmer Danie Slabbert, Reitz; Grain SA](#)
- [CA Farmer Izak Dreyer, Vrede; Grain SA](#)
- [CA Farmer Koos Bezuidenhout, Migdol; Grain SA](#)
- [CA Farmer Cobus van Coller, Viljoenskroon; Grain SA](#)
- [CA Farmer Bruce Shepherd, Bergville; Grain SA](#)
- [CA Farmer Anthony Muirhead, Winterton; Grain SA](#)
- [CA Farmer Bertie Coetzee, Prieska; Grain SA](#)
- [CA Farmer Koki Mokoka, Vanderbijlpark; Grain SA](#)
- [Drought mitigation through CA, Langgewens, Tygerhoek and Riversdale; Western Cape Department of Agriculture](#)

### 4.2.2 Livestock

- [Regenerative Farmer Barry Meijer, Oudtshoorn; GreenBio](#)
- [Livestock Farmer James Brodie, Klein-Karoo; GreenBio](#)
- [Holistic land management in the Karoo, Roland Kroon; GreenBio](#)
- [Utilising livestock in the rehabilitation of grazing in the wildlife industry, Johan Bouwer; GreenBio](#)
- [A New \(Re\)Generation, by Kiss The Ground \(video\)](#)
- [Charles Massy | Regenerative Agriculture's Great Catalyst \(Australia\) – podcast by Charlie Arnott, in Regeneration Journey](#)

### 4.2.3 Horticulture

- [Integrating Horticulture as Integral part of a Regenerative Farming System - Groundswell 2022 \(video\)](#)
- [Gardening With Livestock, by Takota Coen, Canada \(video\)](#)
- [CA Farmer Bertie Coetzee, Prieska; Grain SA](#)
- [Beautiful 8 Acre Permaculture Farm Combines Trees, Livestock, and a Productive CSA Market Garden, by Regenerative Films \(video\)](#)

### 4.2.4 Smallholders

- [Smallholder CA; Bergville; Grain SA](#)
- [Regenerative agriculture seen as answer to averting Africa's growing food crisis | Reuters Events | Sustainable Business](#)

## 5. Assessing on-farm impact and progress of CA/RA implementation

### Facilitator: Hendrik Smith

- [Assessing Soil Health Using a Microscope Part 1; Meredith Leigh](#)
- [Assessing Soil Health Using a Microscope Part 2; Meredith Leigh](#)
- [Assessing Soil Health Using a Microscope Part 3; Meredith Leigh](#)
- [Assessing Soil Health Using a Microscope Part 4; Meredith Leigh](#)
- [Soil Quality index; Rattan Lal](#)
- [Water Infiltration Test & Comparison; Land Stewardship Project](#)
- [Water Infiltration in No-Till vs. Conventional Soil; Kelly Attebury](#)
- [Stikstofbestuur C: N, Roelie Steyn; Bewaringslandbou Wes-Kaap](#)
- [Plant Sap Analysis - How to take a sample; Crop Health Labs](#)
- [Bio-stimulants and -fertilisers; Fritz Otto](#)
- [Soil quality indicators in conventional and conservation tillage systems in the Brazilian Cerrado; Luiz Alberto da Silva Rodrigues Pinto et al. Environmental Earth Sciences](#)
- [Identify Differences in Weed Spatial Distribution between Conventional and Conservation Agriculture; Nebojša Nikolic et al. Sustainability](#)



## 6. From theory to practice

### Facilitator: Andrew Ardington



#### 6.1 Steps of adaptation and implementation of on-farm CA/RA. What must you do?

- [From theory to practice; BURLEIGH DODDS SERIES IN AGRICULTURAL SCIENCE](#)
- [Herlewingslandbou en Presisie Tegnologie; Danie bester](#)
- [Gaining Ground: Successful No-till Farmers Tell Their Stories; The Downstream Project](#)
- [A Regenerative Secret; Dr Allen Williams](#)
- [Handbook of Regenerative Agriculture; USAID](#)
- [Bio-stimulants in Plant Science: A Global Perspective; Oleg I. Yakhin](#)
- [Benut die natuur se gratis dienste – Graan SA](#)
- [Só integreer ons vee in 'n bewaringstelsel – Graan SA](#)

#### 6.2 Monitoring your progress and change.

- [How Sheep Farming Makes Soil Healthier In South Africa; Channels Tv](#)
- [Disappearing dust storms, Rene Stubbs, Karkloof; Western Province No-till Club](#)
- [The burnt mulch, Anthony Muirhead; Western Province No-till Club](#)
- [Soil fertility and soil health; Neil Miles](#)

## 7. Value chain / Global context

### Facilitator: James Blignaut



#### 7.1 Value chain analysis by branch and changing the place of entry into the value chain

- [Heal the land heal the people 1; Dr Hendrik Smith](#)
- [Heal the land heal the people 3; Dr Pieter Prinsloo](#)
- [Heal the land heal the people 5; Prof James Blignaut](#)
- [Food Rules; Michael Pollan](#)

#### 7.2 Farmer innovations

- [We Are Joyce Farms; Joyce Farms: Joyce Farms Heritage Aberdeen Angus Beef / Joyce Farms Heritage Poultry](#)
- [Regenerative Agriculture - Grass Fed vs Grain Fed; RegenAg SA](#)
- [Sustainability in the South African Dairy Industry – a project by MilkSA; ReStory](#)
- [Farm with mother nature; GreenBio](#)

## 8. Life after the CA/RA course (networks, mentorships)

- [Educational Stewardship Program; Kiss The Ground](#)
- [INTEGRA](#)
- [Grow Healthier Soil, Food and Profits; Soil Health Academy](#)
- [Soil Health, Planet Health, Human Health; RegenAg SA](#)
- [Herlewingslandbou Boeredae; Dr Hendrik Smith](#)
- [Siening en redes vir betrokkenheid in 'n bewaringslandbou proef, Hendrik Odendaal, Standerton; Landbouweekblad](#)
- [Siening en redes vir betrokkenheid in 'n bewaringslandbou proef, Nicol de Vos, Kinross; Landbouweekblad](#)
- [Food Club Hub; Regenerative Agriculture Association of SA](#)