

# The SA Soils Scoop

## with LUCY PORTER

**Building networks and sharing knowledge about the health and management of South Australian soils**

**The SA Regional Soils Coordinator** role is part of a national network of Regional Soil Coordinators (RSC), *supported by the Australian Government through funding from the Climate-Smart Agriculture Program under the Natural Heritage Trust.*

The Regional Soil Coordinators work across all levels of industry to understand stakeholder needs and engage with regional and national networks to build the knowledge base and capacity in soil management. The RSCs aim to help inform, protect and develop healthy soils within agricultural systems.

## Hi there,

As we head into winter, there is a feeling of optimism for the season ahead. Rain across many regions in early March has provided hope and a positive outlook for the season to come. Although the rain fell too early to sow into for the winter crops, it has germinated extra fodder, increased ground cover and provided an excellent opportunity for subsoil moisture to be captured and stored.

Fuel shortages and fertiliser shipment uncertainty in agricultural regions have demonstrated the vulnerability of our agricultural systems to global markets which has been stressful and highly expensive for our local farmers. This coming off the back of two financially stressful years of drought is difficult for South Australian farmers.

One option available for making fuel and fertiliser more efficient is adopting and using variable rate technologies. Zoning up paddocks across the farm, conducting soil testing to understand what residual nutrient levels are available and applying fertiliser in a strategic manner can help stretch resources and improve efficiency. Below is a list of some of the local resources which have been developed on the topic which are worth checking out.

- Ag Innovation & Research Eyre Peninsula farmer case study: Microsoft Word - 1.2_Todd Matthews_Cootra_FS2.docx
- MNHRZ Case study via Soils Connect: Optimising Variable Rate Technology for Soil Management - Soils Connect
- Mallee Sustainable Farming case studies, videos and fact sheets: Demonstrating soil zone mapping - Mallee Sustainable Farming
- Upper North Farming Systems fact sheet and case study PrecisionAgDataLow.pdf
- MacKillop Farm Management Group current project information and video resources Improved soil, water and nutrient management through variable rate crop inputs - Climate Smart Landscapes (NHT project)
- The South Australian Grains industry Trust funded a booklet of local case studies: Conversations with Farmers
- The Society of Precision Agriculture Australia has extensive resources available for growers across Australia with many south Australian focused resources included: Australia's leading voice in precision agriculture
- Soil Science Australia resource library has a search function to locate precision agriculture and variable rate fact sheets and resources from across Australia: Smart Soils for Farming – Soil Science Australia



## Local programs

**Regional Soil Coordinator Update:** The PIRSA Regional Soil School training was hosted at the end of March. Participants spent three days travelling through the Murraylands and Riverland region spending time on farms discussing soil constraints and land management issues with farmers across the region. A diversity of farming businesses was visited throughout the trip, demonstrating a range of management options.

Participants had the opportunity to ask questions from the land managers to understand the multiple priorities which they manage, what methodologies that have tried and adopted for their properties. Alongside the landholders, Brian Huges (PIRSA) provided extensive technical advice and soil expertise throughout the tour with Amanda Schapel (PIRSA) and Mary-Anne Young (Consultant).

Regional soil school participants included farmers, agronomists,

university students and South Australian state government employees. Key discussions across the trip focused on phosphorus management across soil types, salinity, and sandy soil management. The study tour visited acidic sands and soil amelioration trials at Yumali, mallee seeps and management option demonstrations at Lameroo, irrigated viticulture at Loxton, no till and crop rotation management at Wunkar, dry saline land sand spreading trials at Holder Siding, dry saline land management using pig manure at Punthari, and variable rate management at Sanderston.

The three-day immersive approach of the regional Soil School provided a practical hands-on training approach for participants. Regional Soil School participant Nastaran Ghasemzadeh commented “Seeing issues such as sandy soils, salinity, and structural decline, and hearing growers’ strong interest in building soil carbon to improve their soil structure, made me think more critically about how research can translate into practical, field-based solutions.”

Attending a rehydrating the landscape workshop hosted by the Murraylands and Riverland Landscape Board, run by Tarwyn Park Training in Keyneton was an informative experience. The ethos of landscape rehydration focuses on recognising patterns within nature and replicating those in farm planning and land management strategies. The principles are known as natural sequence farming which aims to support the small water cycle across the landscape.

Participants were provided with information on their five pillars of natural sequence farming; slow the flow, let all plants grow, careful where the animals go, filtration is a must know and return to the top to recycle the lot and provided with opportunities to ask questions about the concepts.

Overall, the tone of the day was informative and casual, sharing information as ‘another tool in the toolbox’.  As with all land management strategies, there’s a climatic and regional specificity of nuanced implementation which would require consideration. Information on their program is available at their website Tarwyn Park Training: The Home of Natural Sequence Farming.



## Opportunities

Soil Science Australia SA branch is delivering the Registered Soil Practitioner – Soil Management Training here in May. The program is delivered through a combination of: Four self-paced online modules and an in-person training field days (Module 5), which is a two-day practical workshop where you apply your learning directly in the field. Field training is scheduled for May 12 and 13. An option to attend the two day training individually is also available. Please see the Soil Science Australia website for pricing and to register Training - Soil Science Australia.

The South Australian Soil Collaboration Centre Soil Bursary program is open for applications until May 15 2026. The bursary aims to help individuals and groups participate in soil-focused training, events and learning activities that build knowledge, skills and professional networks across the state. It is open to university students, early-career professionals and primary producers who are seeking to improve soil management capability and contribute to long-term soil health. SA Soils Bursary Program 2025-2026 - PIRSA

## National Programs:

**From the Smart Soils National Community of Practice**

Acid sulfate soils have been the theme of focus for the Regional Soil Coordinators in March. The Regional Soil Coordinators have recently had a presentation and discussion session on Acid Sulfate Soils with Dr Vanessa Wong from Monash University to better understand the challenges and management associated with these soils. Acid sulfate soils form naturally under waterlogged anaerobic conditions where sulfides are present. South Australia has acid sufate soils present along coastal areas and in River Murray, Lower Lakes and Coorong, districts and in the peat regions of the Fleurieu peninsula and south east region of the state. Information is available on the Smart Soil Resource library Acid sulfate soils – Soil Science Australia and by contacting the Acid Sulfate Soils Centre | Adelaide University.

## Soil in profile: Hills and Fleurieu Landscape Board

Landscapes Hills and Fleurieu supports local land managers and farmers to sustainably manage the land, water and natural assets across the region. The organisation works in partnership with farmers, communities and industry to improve the long-term health and productivity of local landscapes.

I sat down with Bonnie Armour who works in their Climate-ready Agriculture program to discuss the work they undertake.

> ***"It's all about getting people connected and empowered. It's finding what issues farmers are working through and whose working in research on that topic and bringing them together to share and learn from one another. Farmers are time poor, so we work to ensure we can enlighten them on topics that are relevant for their local farming businesses on things they want to know more about in an efficient and valuable manner.***
>
> ***Fundamentally, this job is about building a healthy and resilient environment, by providing resources and support to land managers on how they can be productive and sustainable and leave their land in a better condition for the future.***
>
> ***The job is a lot about understanding people and their values. We support both early adopter farmers who are always on the lookout for new ideas and technologies to try on their properties, as well as farmers that are not ready to make major changes yet, but who are curious on what is available and supporting them to consider other options which may be suitable."***

There are several soil-focussed projects underway, working with



numerous groups across the region to support their priorities and needs. This includes working with Future Farmers SA to help farmers better understand soil biology connecting local farmers with international experts such as Joel Williams, and other local South Australian farmers to share their regenerative farming experiences and the use of biological foliar sprays.

They are also collaborating with the Milang Agriculture Bureau to improve understanding of nitrogen budgeting. The team have been running workshops on calculating fertiliser requirements, paddock zoning for variable rate application and using local weather station data for informed decision making throughout the seasons.

Working with local groups to deliver and adapt targeted relevant information through successive workshops, supports the community to adopt improved land management practices. Landholders can come and learn, go back and have a go at using that information, then come together again later to discuss the outcomes. This allows a shared learning journey building upon individual's experiences. Information on the Climate-ready Agriculture program can be found here: Caring for soils and... | Landscape South Australia - Hills & Fleurieu.

An exciting opportunity currently on offer is free soil sampling for landholders. There are up to four free soil tests per property available to local land managers, (2 topsoil and 2 subsoil samples each), to encourage farmers to *measure before you manage*. This initiative aims to encourage farmers to be proactive in understanding their soils, and understanding how to tailor inputs and amelioration effectively for the year ahead. Testing includes laboratory analysis, a soil biology test (solvita respiration tests) and a DIY soil test kit. Participants can then attend follow up workshops with a professional soil advisor to help with soil test interpretation and practical tips on managing their specific soils. For more information on this program, check out their website: Sign up for your free... | Landscape South Australia - Hills & Fleurieu.

Landscapes Hills and Fleurieu have many great online soil resources available, including the new *Five Steps to Healthy Soils on Grazing Properties* guide, which includes practical tips and considerations for improving soil health. Caring for soils | Landscape South Australia - Hills & Fleurieu.

**The following resources are also available:**

- Knowing Your Soils Ute Guide
- Knowing Your Soils South Australia
- Pasture Weeds Guide
- Soil sampling for a lab test

**Video series**

- Measure before you manage – Understanding your soils
- What lies beneath – How your soils influence pasture growth
- Using a simple kit to test your soils
- How to prepare for a lab soil test
- Knowing Your Soils Ute Guide
- Using pasture weeds to read the landscape

This project is supported by the Australian Government through funding from the Natural Heritage Trust under the Climate Smart Agriculture Program

# Soil Events Calendar

## MAY

**12-13** **Soil Science Australia Soil Management training – Waite Campus**
Urrbrae Training - Soil Science Australia

**16** **Soil Pit Day Young in Soil and Earth Science Society – Location TBA**
Young in Soil and Earth Science Society Adelaide | Facebook

**20** **Micro and Macro-Biology for Soil Health - Location TBA (Hills and Fleurieu)**
**Keep an eye on here:** Events

**29** **MFMG Autumn Sticky Beak Friday (Livestock) Location TBA Limestone Coast (MFMG)**
Events - Autumn Sticky Beak Friday

## JUNE

**1-4** **Australian Agronomy Conference Agronomy for a diverse future – Darwin** Home

**1-4** **Hort Connections - Adelaide**
Horticulture's premiere conference and trade show | Hort Connections

**TBA** **HFLB Biofertilisers and Soil Health - Location TBA (Hills and Fleurieu) Keep an eye on here:** Events

**TBA** **HFLB Knowing your Soil Tests – Location TBA (Hills and Fleurieu) Keep an eye on here:** Events

**25-26** **Enhanced Rock Weathering Research in Australia symposium and field visit – Cairns**
Enhanced Rock Weathering for Agriculture Field Trials | Australia

**26** **MFMG Winer Sticky Beak Friday (Livestock event) – Location TBA Limestone Coast (MFMG) -** Events - Winter Sticky Beak Friday - Limestone Coast

## JULY

**TBA** **YISES Zooming into Horizons workshop – Waite Campus Urrbrae Young in Soil and Earth Science society**
Young in Soil and Earth Science Society Adelaide | Facebook

**21** **Hart Field Site Winter Walk – Hart**
Hart Field Site Group - Winter Walk

**29** **GRDC Grains Research Update – Cummins**
GRDC Grains Research Update – Cummins - GRDC

**30** **GRDC Grains Research Update – Streaky Bay**
GRDC Grains Research Update – Streaky Bay - GRDC

## AUGUST

**3** **Ag Excellence forum and Awards – Adelaide**
Annual Forum by Ag Excellence

**5** **GRDC Grains Research Update – Maitland**
GRDC Grains Research Update – Maitland - GRDC

**6** **GRDC Grains Research Update – Burra**
GRDC Grains Research Update – Burra - GRDC

**14** **YISES Soil mentoring night Young in Soil and Earth Sciences Society - Location TBA Adelaide** Young in Soil and Earth Science Society Adelaide | Facebook

## SEPTEMBER

**TBA** **YISES Soil Pit Day - Location TBA**
Young in Soil and Earth Science Society Adelaide | Facebook

**8** **AIREP Lower EP Crop Walk – Lower EP**
AIR EP Lower EP Crop Walk (8 September 2026) | AIR EP

**9** **SARDI MAC annual field day – Minnipa**
SARDI MAC Annual Field Day (Minnipa, 9 Sept 2026) | AIR EP

**15** **Hart Feld Site Hart Field Day - Hart**
Hart Field Site Group - Hart Field Day

## OCTOBER

**11** **Hart Field Site Spring twilight Walk – Hart**
Hart Field Site Group - Spring Twilight Walk

**13-15** **Australian Almond Conference – Adelaide -**
Events Archive - Australian Almonds

**28-31** **Soil Science Australia Australian Soil Judging Competition – Boorloo (Perth)**
Soil Judging - Soil Science Australia

## NOVEMBER

**1-5** **Soil Science Australia National Conference - Boorloo (Perth)**
Soil Science Australia National Conference

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**SMART SOILS FOR AGRICULTURE**

Australian Government Department of Agriculture, Fisheries and Forestry | Future Drought Fund | SA DROUGHT HUB | Adelaide University

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