

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,

Welcome to the first Soils Scoop of 2026. We are introducing a new format this year to better provide soil information that is relevant to you.

The new format will include a brief Regional Soil Coordinator update if my recent activities and information on local opportunities. In future issues, an update from the Department of Primary Industries and Regions (PIRSA) Soil Collaboration Centre will also be included too. The newsletter will have information on national programs funded through the Department of Agriculture, Fisheries and Forestry, and an update from the National Soil Science Community of Practice. There is also a new segment called Soils in Profile, which is a short article focused on a local soil project or person to highlight the excellent work occurring on soil topics in our region. To finish up, we have the calendar of upcoming soil events which features soil focused field days, workshops and events which are being planned and delivered across the state. If you would like to feature in the soil in profile section of future newsletters or have an event shared in the calendar please get in contact with me via email at lucy.porter@adelaide.edu.au.

Local Programs:

Regional Soil Coordinator Update

Since the last issue in December, the summary report from the Drought Resilient Soil Project development consultation outcomes report has been circulated to stakeholders for comment and review. Feedback is now being collated and incorporated as the project develops further, Please contact me for further information or if you would like to be involved in this project and currently aren't on my mailing list.

The SA Soil Capacity Gap Analysis report is now available on the SA Drought Hub website, Read it here. This report was written to identify the local soil capacity gaps, current soil issues, extension needs and barriers to adoption across the state.

There were many high-quality soil research projects showcased at the GRDC Adelaide Updates on 3–4 February. These ranged from technological advances such as non-destructive 3D root phenotyping for grain research, to field-based studies improving understanding of herbicide residues in soil. Other projects focused on identifying potassium-responsive soils, understanding physical constraints in sandy soils, sustaining yield potential in ameliorated sands, and correcting iron deficiency in faba beans and lentils. Collectively, these projects highlight that managing soil constraints remains a consistent priority for grains industry research and development. For further information check out the update papers available online here GRDC Grains Research Update – Adelaide 2026 - GRDC

Soil Science Australia SA branch is delivering its first Registered Soil Practitioner – Soil Management Training here in 2026.

The program is delivered flexibly through a combination of:

- **Self-paced online modules (Modules 1–4):** Training videos, resources, and assessments you can complete at your own pace.
- **In-person training field days (Module 5):** a two-day practical workshop, where you apply your learning directly in the field, scheduled for May 12 and 13 in Lobethal, SA.

Applications are open now. For more information please see the SSA website for pricing and to register Training - Soil Science Australia.

Opportunities:
The Hills and Fleurieu Landscape Board have an excellent opportunity available for local farmers and landholders to receive free soil testing. Participating farmers will have the option to have a free lab test, biology test and/or soil test kit for their property. For more information follow this link: Free Soil Tests - Expressions of Interest.

The Limestone Coast Landscape Board have their Climate Smart Landscape Grants open to primary producer groups, local landholders, Landcare groups and First Nations peoples. Funding encourages the uptake of practices that prepare land managers for a more variable climate and will include the adoption of new on ground practices and sharing learnings with neighbours, industry colleagues and other land managers. For more information check out their website Climate-smart Landscapes Grants | Engage Limestone Coast Landscape Board.

The Murraylands and Riverland Landscape Board have their grassroots Grants opening from February 16. Grassroots Grants empower community-based organisations, volunteer groups and individuals who work at a local level to help manage the region's landscape and natural assets. Check out their website for further information Grassroots Grants | FLOW.

Check out your local Landscape Board for other opportunities which may be available to you.

PIRSA Soil Collaboration Centre Update
Watch this space, next issue there will be a new segment with updates from the PIRSA Soil Collaboration Centre here.



National Programs:

A reminder for to farmers to complete their National Agricultural Land Management Survey (NALMS).

What is the NALMS?
The National Agricultural Land Management Survey (NALMS) is a survey designed to better understand how farmers across Australia manage their land and adopt sustainable practices.

What does the NALMS survey cover?
- Land management practices (cropping, grazing, soil, water, vegetation, livestock, energy)
- Influences on decision-making and adoption of sustainable approaches
- Expected benefits and challenges of new practices
- Networks and support systems farmers rely on (such as Landcare groups or government programs for sustainable agriculture)
- Where farmers get advice and what kind of support would help them improve land management.

How will the NALMS be conducted?
- Opens: 29 October 2025
  Closes: 28 February 2026
- Who: 20,000 selected farm businesses (broadacre, horticulture, dairy, and other livestock enterprises across all mainland NRM regions)
- How: By invitation—participants will receive a letter with instructions to complete the survey online or by post.

Why does NALMS matter?
The NALMS data will help the Department of Agriculture, Fisheries and Forestry (DAFF) design more effective Sustainable Agriculture Programs based on real-world insights into what's working and where more support is needed. Results will be published later in 2026 as a national report and made available on an interactive map with downloadable regional data, showing responses aggregated by region.

Who is conducting the NALMS?
The Social Research Centre (SRC), an Australian social research company, is conducting the survey on behalf of ABARES.

For more information, please see srcentre.com.au/project/nalms.

The Smart Farms Program 2017–18 to 2022–23 End of Program Report is now published and available.
You can read the short report in two formats on the DAFF website at Australian Government investment in Landcare - DAFF

Funded by the Natural Heritage Trust under the National Landcare Program Phase 2 (NLP2), Smart Farms supported projects across Australia to:
- improve soil health, farm productivity and profitability
- manage pests, weeds, climate and market risk.

The program invested in innovative technologies, sustainable agricultural practices, and engagement with First Nations' organisations.

From the Smart Soils National Community of Practice:
The team have spent recent months debriefing from the Soil Science Australia Soil Judging Competition which they competed in late last year, and are now planning for future in person collaboration meetings, which will coincide with:
- The Enhanced Rock Weathering conference in Cairns hosted by JCU in late June. Click here for more information Enhanced Rock Weathering Research in Australia Symposium 2026 - JCU Australia
- The next National Soil Judging competition and Soil Science Australia conference which will be held in Boorloo (Perth) Western Australia in late October and early November. click here for more information: Conference proceedings - Soil Science Australia.

The group are reflecting on the collaborative work undertaken last year, which included a review of government strategic documents and industry blueprints to identify where soil was specified as a priority. This report is referred to as the institutional scan, and you can read here: How Important is Soil? An Institutional Scan by Australia's Regional Soil Coordinators - Soil Science Australia. The group are currently planning collaborative activities for 2026.

Soil in Profile:

Project: Innovative Soil Technologies to Foster Resilience and Climate Smart Crop Production in Australia.

This project is testing innovative soil ameliorants to improve the management of two major soil constraints, soil acidity and soil sodicity, to enhance crop growth and climate resilience. The research is led out of Adelaide University with partners at Murdoch University and various grower groups and other partners around Australia. The researchers are analysing how the treatments work under laboratory and field conditions, focusing on improved soil management and plant growth in constrained soils.

This project is entering its second year out of a three and a half year delivery timeframe. The first year has focused on stakeholder engagement, identifying the prevailing soil constraints to target and then selecting and developing products suitable to be applied as soil amendments. Selected products include micronized lime, micronized gypsum, and enhanced efficiency nitrogen fertilisers for the field trials commencing in 2026. Selected commercial products (ultrafine granules and suspensions) are also being tested in laboratory experiments.

The application and incorporation techniques is a key challenge and opportunity when working with and researching these soil constraints. Planning field treatments need to be carefully managed on a case-by-case basis, depending on local context and subsoil properties. Treating soil acidity and soil sodicity require different approaches and new incorporation methods can pose risks if done without careful planning.

Soil acidity is a major soil constraint that occurs when pH falls below optimal levels for crop growth, often due to factors such as nutrient removal by crops, leaching of basic cations, and use of acidifying fertilisers. Severely acidic soils restrict root growth and nutrient availability, while increasing the solubility of toxic elements like aluminium, iron, and manganese. These conditions reduce crop productivity, limit species choice, and can undermine long-term soil health if not managed. Lime application is the best management strategy for acid soils, however due to low solubility it reacts slowly and remains largely in the surface soil. Without deep incorporation, lime does not readily move down the soil profile to treat subsoil acidity in the root zone.

Research Fellow on the project, Dr Joseph Marks said "*With these novel products we hope to better increase the probability that the carbonate within the lime will come in contact with the hydrogen ions that cause the low pH in acidic soils to effectively neutralise the acidity. We also want to understand whether these products can mobilise down through the soil profile to neutralise the subsoil acidity at depth*."

Soil sodicity occurs when excessive sodium is held on soil clay particles, causing soil aggregates to disperse and soil structure to break down. Sodic soils often have poor water infiltration, surface crusting, and reduced aeration, which restrict root growth and plant establishment. These issues lead to reduced crop productivity, increased erosion risk, and ongoing challenges for effective soil and water management. When sodic soils are exposed, they are highly prone to crusting, runoff, and erosion by wind and water, further degrading soil function. Gypsum is commonly used to supply calcium to displace sodium on clay particle surfaces and improves aggregation, but its effectiveness depends on adequate water movement and can be limited in deeper soil layers. Amelioration strategies need to be undertaken with careful consideration to minimise bringing sodic soil to the surface, as it can unintentionally make areas worse.

Over these next two years field trials will be undertaken to demonstrate how innovative soil ameliorants perform across a diverse range of climates and environments. Trials are being delivered through nine groups across five states of Australia, including: Ag Innovation and research Eyre Peninsula (AIREP) and the Department of Primary Industries and Regions (PIRSA) South



Australian Research and Development Institute (SARDI) in South Australia; the Mingenew – Irwin Group, Facey Group, and Western Australian No-Till Farmers Association in Western Australia; AMPS Agribusiness in New South Wales; Riverine Plains in southern New South Wales and northeast Victoria; Birchip cropping group in Victoria; and Southern Farming Systems in Victoria and Tasmania. Ag Excellence Alliance will be supporting the extension of the project outcomes with farmers. Coincidingly, pot and laboratory experiments will be undertaken at Adelaide University Waite Campus to measure and understand the functionality and efficiency of these novel ameliorants.

The team are currently developing a website group portal platform for encouraging transparency across trial sites and to foster collaboration between the partner organisations. It will serve as a space for the groups to connect with one another and share information and have discussions about their learnings. This project aims to drive the development, trialling, adoption, and roll-out of climate-smart, sustainable, innovative tools and on-ground farm practices that increase the agriculture sector's productivity and profitability.

The Innovative Soil Technologies to Foster Resilience and Climate Smart Crop Production in Australia Project is supported by the Australian Government through funding from the Climate-Smart Agriculture Program under the Natural Heritage Trust (4-JYO5SEX).

The project team at Adelaide University includes A/Prof. Luke Mosley, Dr Han Weng, Dr Shervin Kabiri, Dr Chris Saunders, Dr Joseph Marks, Dr Erinne Stirling, Jessica Spencer, and Suhair Hamad.

If you would like to know further information about this program, please contact project leadA/Prof. Luke Mosley at luke.mosley@adelaide.edu.au

Calendar of soil events 2026:

February

10 **AIREP pre-sowing member days, Tight Budgets Big Yields – Wangary** Events from July 30, 2019 – February 25, 2021 – AIR EP

11 **AIREP pre-sowing member days, Tight Budgets Big Yields – Wirrula** Events from July 30, 2019 – February 25, 2021 – AIR EP

11 **NYLB Carbon Farming Workshop – Waite**

12 **AIREP pre-sowing member days, Tight Budgets Big Yields – Rudall** Events from July 30, 2019 – February 25, 2021 – AIR EP

12 **MFMG Focus on Carbon with a tour of TFI Murray Bridge** Focus on Carbon with a tour of TFI Murray Bridge

12 **Ag Ex Alliance UNFS Carbon Clarity Workshop – Burra** Carbon Clarity Workshop

12 **Ag Ex Alliance UNFSCarbon Clarity Workshop – Laura** Carbon Clarity Workshop

13 **Ag Ex Alliance UNFS Carbon Clarity Workshop - Melrose** Carbon Clarity Workshop

13 **HFLB Turning Paddock Variability into Profit – Woodchester** Register here.

17 **Landscapes SA Carbon Farming Webinar Series – Online** Supply chain, industry and financial perspectives on emissions reporting

19 **BIGG Annual Conference Angaston** Events from February 15, 2023 – October 26, 2023 – Barossa Improved Grazing Group

19 **Waite Research institute seminar series - Dr Stephen Lee, SA Drought Hub – Waite** Events for Feb 2026 – Waite Campus

23 **Landscapes SA Carbon Farming Webinar Series – Online** Cutting Inputs Without Cutting Production: Fertiliser and Emissions on Farm

25 **LCLB Carbon Farming and Carbon Calculator Workshops – Coonalpyn** Carbon farming workshops in... | Limestone Coast Landscape Board

25-26 **SA Drought Hub – Adelaide** Designing Engaging Extension Workshop with Jeanette Long

March

2 **SAAL Carbon Accounting Workshops** Carbon Accounting Workshops

11 **Hart Field Site Getting the Crop in Seminar – Clare** Hart Field Site Group - Getting the Crop In Seminar

11 **MSF Mallee Research Update – Karoonda** Mallee Research Update – Karoonda, SA

12 **MSF Mallee Research Update – Browns Well** Mallee Research Update – Browns Well, SA

12 **NYLB waterwise Field Day Melrose** Waterwise Field Day

17 **MSF Pre-Seeding Workshop – Murray Plains** Pre-Seeding Workshop – Murray Plains, SA

18 **MSF Pre-Seeding Workshop – Bowhill** Pre-Seeding Workshop – Bowhill, SA

18 **SPAA Precision Ag expo – Toowoomba QLD** SPAA Precision Ag Expo 2026

18 **NYLB and WoTL Carbon Farming Workshop – Kadina** Kadina Carbon farming for women workshops - Kadina Tickets, Wed, Mar 18, 2026 at 9:30 AM | Eventbrite

19 **MSF Pre-Seeding Workshop – Lameroo** Pre-Seeding Workshop – Lameroo, SA

19 **MNHRZ Autumn Update – Manoora** Mid North High Rainfall Zone

23-26 **Tarwyn Park Training** Learn Natural Sequence Farming - Kapunda Learn Natural Sequence Farming

25 **Landscapes SA Carbon Farming Webinar Series – Online** Soil Carbon in SA: What Builds It, What Loses It, and What You Can Influence

25 -26 **SAAL Landscape Rehydration Bootcamp** Landscape rehydration bootcamp

26 **SPAA Big Tech Big Ideas Ag Field Day – Dubbo NSW** Big Tech Big Ideas Dubbo NSW

26 **NYLB Soil salinity workshops with Chris McDonough – Southern Yorke Peninsula** Southern YP

27 **NYLB Soil salinity workshops with Chris McDonough – Northern Yorke Peninsula** Northern YP

EVENTS

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April

22 **HFLB Landscape rehydration workshop – Location TBA (Hills and Fleurieu) Keep an eye on here:** Events

23 **HFLB Landscape rehydration workshop – Location TBA (Hills and Fleurieu) Keep an eye on here:** Events

May

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

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

July

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

August

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

September

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

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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