

Annual Report
2023





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### Introduction from the Chairman

I am extremely proud to be reporting on my first presidential year, which has seen significant progress by the Society on many of its initiatives, spanning professional support for our members, enhanced UK and international policy maker engagement, and outreach activities with non-members and the public.

Maintaining the momentum achieved by the delivery of the World Congress was pivotal for 2023, and we successfully continued to grow the profile of the Society and spotlight the soil science sector, whilst increasing the outreach and impact of our activities. Financial stability was also a key consideration in the sustainable development of our organisation against increasing costs, interest rates and volatile market conditions.

This Annual report sets out our considerable achievements against this backdrop, which includes increased membership, strong financial performance, and delivery of exceptional professional support for our members.

A massive success for 2023 was the array of awards won by the Society for the delivery of the World Congress of Soil Science 2022. The team was successful in securing the Gold Sustainable Initiative Award at the M&IT Magazine Awards, Best Business Event at the 2023 Scottish Thistle Awards and Best Environmental. Social and Governance Event at the 2023 ICE Awards (UK and Germany). These awards are a fantastic achievement and highlight the exceptional work undertaken by the executive team and congress working group. The awards demonstrate how the congress acted as a flagship event in the sector that delivered social and environmental responsibility alongside novel scientific content.

At the end of 2023, Mike Palmer stood down from the Board as Professional **Practice and Development Committee** (PPDC) trustee. I would like to express my sincere thanks to him for his contributions during this important time and his direction in helping shape the future strategy of the Society. I would also like to take this opportunity to welcome Dr David Tompkins, who has now stepped into the PPDC trustee position. David is an Environmental Scientist with a multi-disciplinary background and currently acts as an Associate Director in WSP's Water Strategic Advisory team, where he focusses on bringing the Circular Economy to life within the UK's regulated water sector. He has a wealth of experience, bringing an added dimension to the board, encompassing horticulture, soil science, composting, anaerobic digestion, wastewater treatment, biowaste valorisation and sustainability. We look forward to working with David throughout 2024 and beyond.

Measuring impact has always been a key consideration for the Board, executive team and volunteers. In conjunction with our 2020-2030 strategy, this has been complimented by the launch of our new mission and vision, consulted with the members in the summer of 2023. These statements are used to map out our future direction of travel, whilst helping us understand how we will continue to make a difference.

2023 saw continued turbulence and uncertainty in the financial markets, with many charities concerned about the future outlook and market stability. Against emerging trends across sectors, our finances have remained healthy, and we expect to have made a significant contribution to budget, which will be set out in more detail in our audited 2023 financial report,

available later in the year. Increases in forecast journal income coupled with conservative investing policies, has meant that we expect to have overachieved our income targets. This has been supplemented through prudent financial controls leading to increased efficiencies and a reduction in forecast expenditure.

We continue to act as a leading voice and advocate in Soil Health where interaction with national and international government has been central to our advocacy activities. Throughout 2023, we made a significant impact in this area, strengthening our engagement with key actors. Some personal highlights were presenting to governmental negotiators at both COP 28 in Dubai and SB58 in Bonn, giving evidence at the Soil Health Inquiry, and hearing from UK soils policy makers during our Annual Conference.

As we look to the final year of my Presidency, I am excited for what it holds. Aligned to our new mission and vision, there are a variety of exciting opportunities to raise awareness of the importance of soil to those outside the sector. Our future guidance and science notes, opportunities to engage with UK and international policymakers, and our soil science loan boxes, will provide us with the avenues to do this.

As always, our success as a Society is down to the fantastic work undertaken by the executive team and support we receive from our members, particularly those who volunteer for us. Whether you are a committee member or a volunteer at the events we host and attend throughout the year, I extend a huge thank you to all of you.

#### Dr Jack Hannam

Chair of the Board of Trustees 2023 - 2024

"We continue to act as a leading voice and advocate in Soil Health where interaction with national and international government has been central to our advocacy activities. Throughout 2023, we made a significant impact in this area, strengthening our engagement with key actors."



## **Introduction from the Executive Director**

I joined the society as Executive Director on 5 February 2024 and I am excited to be reporting on such a successful year, led by my predecessor Sarah Garry.

After three and a half years in post, Sarah leaves a legacy of increasing membership by 30%, delivering a successful World Congress of Soil Science and securing UNFCCC Non-Governmental Organization status for the Society, to allow us to share the importance of soil with international climate change negotiators. 2023 was very much in this vein, enjoying robust membership growth, excellent financial performance, fantastic outreach activities and extensive policy maker engagement.

During 2023, the executive team continued to grow and we were delighted to welcome Christine Wangari, who joined us as the Administrative Assistant and Bookkeeper, responsible for secretarial, administrative, and bookkeeping support. Christine graduated from the University of Buckingham in 2022 with a first-class degree in Accounting and Finance and works closely with the team to shore up operations and initiate financial controls central to the continued sustainability of the Society.

Aligning to our 10-year strategy, our initiatives have meant that we continue to grow in membership of the Society, reaching record numbers in 2023. This is in part due to the legacy of the World Congress of Soil Science delivered in 2022, and due to the continued commitment and support from the fantastic body of volunteers and executive team delivering the extensive suite of outreach activities throughout this year. Membership numbers total 937 and with new pathways into the profession being created through the L7 apprenticeship coupled with the continued delivery of impactful initiatives for future years, we expect this trend to continue.

2023 saw the delivery of two conferences, our Annual Conference and Early Careers'

Conference. As you will see on pages 15 and 19, the Annual and Early Careers' Conferences were well received, engaging 260 delegates, over 153 oral and poster presentations, several workshops, site visits and culminating in a Gala dinner. 96% of delegates rated the speakers and their content at both conferences as good or excellent, with 98% reporting that they had learnt something new as a result. It was fantastic to see this engagement and there was a real buzz at both events!

A step change to our operational event planning and delivery of the events was also embedded in 2023, with the team placing sustainable approaches and carbon offsetting at the centre of the conferences. These approaches should be the bedrock of our operations and are integral to reducing the Society's carbon footprint. This is something we will continue to build on and refine throughout 2024 and it was great to see a significant step towards the Society being a carbon positive organisation. Working closely with key stakeholders, the team also ensured that the events left a lasting legacy in the regions where they were hosted, including grass root and community engagement initiatives.

The Society's role in Continuous Professional Development (CPD) is key to ensuring our practitioners have the relevant, future-fit skills to address the significant challenges facing us all. Throughout 2023, we continued to build on our programme of CPD, where we increased our training programme, delivering five Working with Soil courses to over 100 delegates. This provided important developmental opportunities and new skillsets for BSSS members and the wider sector.

Cross sectoral influence is also imperative as we look to address issues surrounding the Climate and Biodiversity emergencies, carbon sequestration and food insecurity. To support this initiative, we shared perspectives on hot topics in soil science with a wide audience delivered through seven Zoom into Soil webinars. We were joined by just under 800

attendees in total and over 90% stated the content was good or excellent. A key legacy of these webinars is knowledge exchange and over 70% said they would use the information in their future practice. The webinars have been viewed collectively almost 5,000 times online, which I'm sure you will agree is a fantastic achievement!

CPD doesn't end with training programmes, conferences and webinars, a core component to this are our publications. Robust leadership from the Editors of our journals, Soil Use and Management and European Journal of Soil Science, has resulted in the publication of groundbreaking research and increased Impact Factors for the journals. This demonstrates the value members and external audiences place on the content within both publications.

Outreach activities were in full swing and 2023 saw the launch of our soil science loan boxes, in addition to supporting Groundswell, Contamination Expo and Open Farm Sunday events. This enabled us to support both members and non-members whilst educating and informing the wider community about soils and inspiring future soil scientists. Since the launch of the soil science loan boxes in April, ten people have hired them, reaching over 500 people starting from as young as five years old!

I hope you enjoy reading the 2023 Annual Report which demonstrates the impact our activities are having aligned to our mission and vision. All of this would not be achievable without our fantastic executive team, members, and volunteers. As such I would like to extend a well-deserved thank you to our staff and volunteers for their hard work throughout this year.

I look forward to working with you all throughout 2024.

Andrew Morris
Executive Director

"Aligning to our 10-year strategy, our initiatives have meant that we continue to grow in membership of the Society, reaching record numbers in 2023. This is in part due to the legacy of the World Congress of Soil Science delivered in 2022, and due to the continued commitment and support from the fantastic body of volunteers and executive team delivering the extensive suite of outreach activities throughout this year."



## Mission and Vision

In 2023, the mission and vision for the Society were reviewed. Developed by Board and member consultation, these documents set the Society's direction of travel and how we will know if we are making a difference.

**Our mission** is to support and promote the discovery of new knowledge of soils and their role in global sustainability.

**Our vision** is to ensure sustainable soils for people and planet.

We will achieve our mission and vision by:

- promoting scientific study and discovery of new knowledge about soil and ensuring it is accessible to a wide audience
- influencing policy and legislation through evidence based advocacy
- supporting our members to develop and continue professional and academic excellence.

## The Challenge We Face

To achieve our mission and vision, the Society must address key challenges including:

- ensuring a sufficient skills base and engagement to deliver sustainable soil management
- driving research, evidence collection and professional excellence whilst experiencing the impacts of changes to academic publishing, income and attitudes to work
- promoting soil health in the face of geo-political uncertainty, a growing population and changing social attitudes in a world of technological innovation.



## **Our Strategy and Future Vision**

## **1** Seeking to publicise the key issues for the soil science community

### By 2025

We will have delivered a clear legacy from the World Congress including a wider range of active stakeholders and increased resources available to members and non-members. We will use our journals and website as mechanisms to deliver this. We will have become a key contact for UK media on soil-related issues and our science and guidance notes will have expanded into valuable resources for members and stakeholders.

### By 2030

Our journals will be recognised as two of the leading international journals relating to soil. We will have become a key contact for international media on soil-related issues and we will expand our guidance and science notes to provide context for an international audience. Our website will include greater guidance and information aimed at scientific and non-scientific audiences.

Promoting change through knowledge exchange across all aspects of soil science

### By 2025

We will be continuing to provide evidence-based information to policymakers at a national level and have become a contact for governments and stakeholders on soil science issues. We will provide dedicated forums for our members to discuss policy and best-practice issues, allowing us to develop recommendations combining academic and practical perspectives.

### By 2030

We will be providing evidence-based information to policymakers at an international level and will take a pro-active approach in responding to international consultations.

International stakeholders will seek out our dedicated member forums as advisory groups across the breadth of soil activities.

Hosting conferences and meetings focused on soils

### By 2025

Using the knowledge and experience we develop from delivering the World Congress, we will deliver an international and interdisciplinary activity by 2025. The activity will recur on a cyclical basis and will establish the Society as a key player in the dissemination of soils-based knowledge globally.

### By 2030

The international and interdisciplinary activity will be delivered for a second time and have developed in size and reach. The activity will attract a broader, international audience with support from major stakeholders

Supporting and encouraging the education of soil science

### By 2025

We will have delivered a clear legacy from the World Congress including a wider range of active stakeholders and increased in-person and digital resources available to members and non-members. This, alongside increased outreach and engagement work, will lead to an increased awareness of the importance of soil amongst a wide range of communities.

### By 2030

We will have delivered large-scale outreach programmes, which aim to increase awareness of soil to audiences which can have a demonstrable impact in its care. As a result, the Society will also be recognised by educators and those already engaged in environmental matters, as a reliable source of information.



## 5 Inspiring the future generations of soil scientists

### By 2025

We will have developed a clear education and training pathway demonstrating the routes into soil science. We will have understood the gaps that exist and developed new courses and content for those within the sector, where the content does not exist. We will continue to work with external bodies to influence the soil science taught at all levels of the curriculum.

We will continue to provide our Early Careers members with the opportunity to network with their peers face-to-face and virtually, and provide support to help them make the transition into Full membership.

### By 2030

We will continue to promote the education and training pathway to members, students and those interested in working with soil. We will work closely with other professional and external bodies to embed soil content into peripheral qualifications, to ensure anyone who works in any context with soil. has the skills to do so.

We will recruit Early Careers members from a wider range of specialisms to encourage collaboration. This will support our members' career opportunities whilst encouraging interdisciplinary working.

Throughout our 10-year vision, we will encourage Society membership as a mechanism to support training and development at all career stages.

6 Ensuring high standards of professional practice for those working with soils

### By 2025

We will require a minimum number of hours of CPD to be provided by Full and Fellow members each year. This will be closely linked to the CSci requirements to encourage more members to obtain CSci status in addition to Society membership. As a result, our members will be well-respected and highly visible as experts in all aspects of soil and its management.

We will update our corporate membership category to allow organisations to demonstrate the value of membership via outcomes aligned to the Society's mission.

### By 2030

Our membership and number of CSci registrants will grow and strengthen as our professional standards are seen as a mark of expertise and are in demand from clients. Our clear education and training pathway will have led to an increase in the number of qualified soil experts and with industry clients specifying our members for soils work. Our external-facing activities will have led to an increase in membership across non-practitioner grades and we will have introduced tangible benefits to encourage membership amongst the non-scientific community.

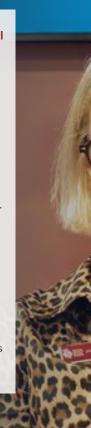
7 Leading on the social and environmental responsibilities of a contemporary society

### By 2025

The Society will have a thorough understanding of its environmental impact across all aspects of its operation and have a clear plan in place to reduce and offset its impact. We will continue to encourage inclusion within our membership by providing diverse role models at events and in our case studies.

### By 2030

The Society will be a 'carbon positive' organisation, having minimised its environmental impacts and provided practical support to projects which outweigh any negative operational impacts. Our positive approach to diversity and inclusion will have led to a demonstrable increase in diversity across our membership.



Farmer, Makeuni County,

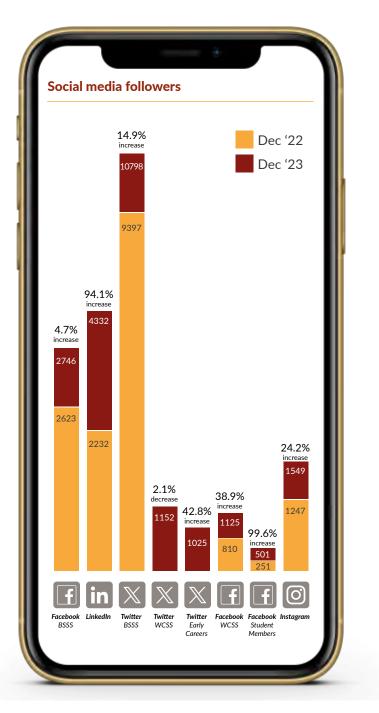
## **Our Year in Numbers**

**Key Numbers** Over 787 7400 people attended views of the our seven **Zoom into Soil Zoom into Soil** content online webinars during 2023 new honorary membe - Dr Bob Jones 4 42 27 new Society Chartered 80 email updates sent **Scientists** to members and were awarded stakeholders this year training hours delivered to 102 delegates 10 12 email updates sent to external news items **Early Careers** soil-related events on our website promoted 93% 10 average increase in engagement across our social **Soil Science Loan** media channels **Boxes sent out** over the year 105% average increase in 18 impressions across our

blog posts

written for our website social media channels

over the year

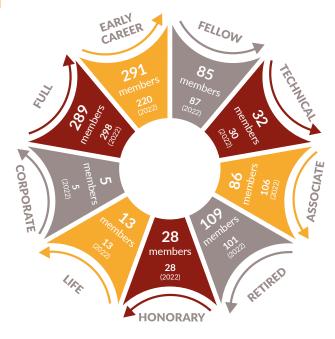


## Our Year in Numbers CONTINUED

### Members

At 31 December 2023, BSSS represented **937** members, the highest number of members in the Society's history and a 6.1% increase on members at the end of 2022 (883).

The Society also welcomed five Corporate Members.



During 2023, BSSS welcomed **172** new members: a 25% increase on 2022!





## Seeking to publicise the key issues for the soil science community

### **Our Strategy said:**

We will raise the profile of the important soil issues via our two prestigious journals, European Journal of Soil Science (EJSS) and Soil Use & Management (SUM), our bi-annual member's newsletter (the Auger), our new website, an enhanced social media presence and by hosting regional, national and international conferences.

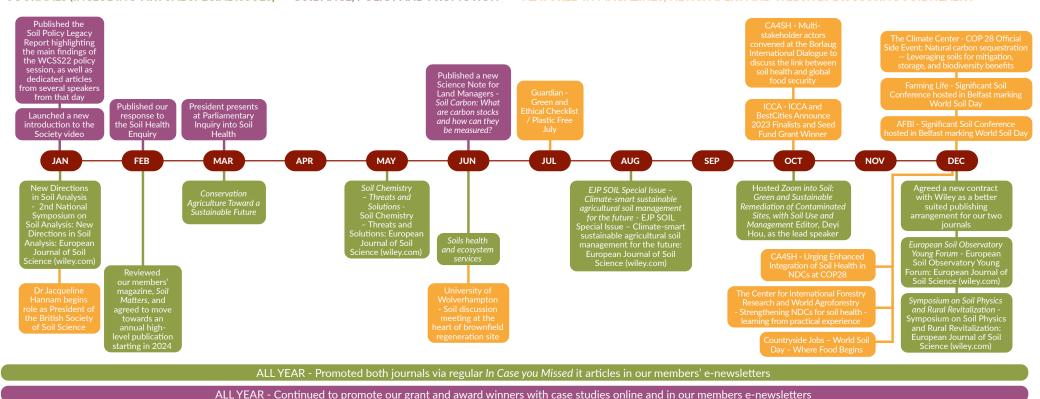
We will actively engage with the media by responding quickly to enquiries, providing factsheets and policy notes ensuring we are acknowledged as the UK's leading authority on soil science.

#### What we set out to achieve:

Agree a suitable publishing arrangement to suit our two journals	$\overline{\mathbf{A}}$
Review Soil Matters to ensure it still meets members' needs	$\overline{\mathbf{A}}$
Publish a comprehensive document summarising the findings from the first soil policy day held during the World Congress	<b>V</b>
Produce a minimum of two guidance notes on relevant topics	
Produce two Science Notes on relevant topics (achieved in-part)	
Review and update existing guidance notes	$\overline{\mathbf{V}}$
Respond to relevant UK and international consultations	$\overline{\mathbf{V}}$

#### **Our Achievements:**

• JOURNALS (INCLUDING VIRTUAL SPECIAL ISSUES) • GUIDANCE, POLICY AND PROMOTION • FEATURED IN MAGAZINES, NEWSPAPERS AND WEBSITES DISCUSSING SOIL HEALTH



TRHOUGHOUT THE YEAR - Reviewed all guidance notes

## Seeking to publicise the key issues for the soil science community CONTINUED

### **Our Impact:**

- The 2022 Impact Factors were 4.2 for the European Journal of Soil Science (4.178: 2021 a 0.5% increase and 3.8 for Soil Use and Management (3.67, 2021; a 3.5% increase)
- Submissions during 2023 for the European Journal of Soil Science increased by 29% compared to 2022, and by 40% for Soil Use and Management.
- There was an increase in all metrics across all social channels from 2022 to 2023 with the highest increase in followers on LinkedIn (94%). The post with the most impressions was our Twitter post about our MRV guidance note for land managers on soil carbon. Our social channels now provide us with direct access to 21.000 organisations and individuals overall.

### In 2024, we will:

- Re-introduce Soil Matters as an annual print publication to members
- Launch a podcast series to highlight the research in our two journals
- Conduct a strategic review of both EJSS and SUMs
- Produce a minimum of one guidance note on a relevant topic
- Produce one Science Note on a relevant topic
- Review and update existing guidance notes
- Respond to relevant UK and international consultations.

### CASE STUDY: PRESIDENT PRESENTS AT PARLIAMENTARY INQUIRY INTO SOIL HEALTH

The Society's President, Dr Jack Hannam, ioined the Environment. Food and Rural Affairs Commons Select Committee on Tuesday 7 March 2023, to discuss Soil Health. Further to the Society's evidence submission, Jack joined fellow panellists Prof Bridget Emmett, representing UKCEH monitoring by farmers to assess the and having been a special adviser to the 2016 Inquiry, and Martin Ballard with construction and water experience and representing the Society for the Environment.

The panel set out the importance of soil health in mitigating climate change, supporting ecosystems, in food production and with 25% of all global diversity in the soil. The panellists agreed that the scope of the Inquiry should include all types of land use, not just

agriculture, including the 5% of UK land which is domestic gardens.

There was significant discussion around payment schemes for farmers, and the panel also supported the need for regular baseline and changes that should be made in future. The panel agreed that the UK should follow in the footsteps of nations such as Australia, by setting a soil strategy. This would view soils as an asset, like air and water, and provide better protections. As part of the strategy, setting clear targets which can be measured. monitored, and committed to over the long-term would ensure progress could be A recording and transcript from this demonstrated.

To provide land-owners with the support for management, monitoring and the impact this would have on other areas of operation, panel members supported the need for wide-scale education and training to provide the information needed to enable the change.

Risks for soils across all land use were discussed, including microplastics and the need to draw these out of biosolids in particular. With contaminated soil often being sent to landfill, the panel agreed that there were methods to remediate it and regulation should support this.

session can be found on the Government website.



## Promoting change through knowledge exchange across all aspects of soil science

### **Our Strategy said:**

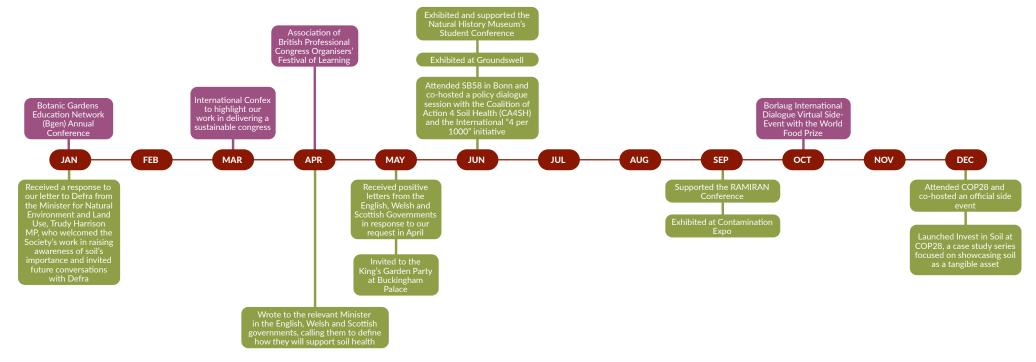
We will seek to support knowledge exchange in soil science through targeted engagement with industry, policy makers, government and educators. We will promote soil science across a range of disciplines using our website, social media and newsletters, with reference to the appropriate scientific research published in our Journals. We will make the latest knowledge available to a wider community audience and provide a forum for debate and to develop new partnerships. We will also monitor government progress in developing new policies and ensure we feed into this process.

#### What we set out to achieve:

Develop a theme of work highlighting the value of soil in a range of contexts	$\overline{\mathbf{V}}$
Develop a digital project to store information gathered to deliver the World Congress tours programme (carried forward to 2024)	
Exhibit at events aimed at professionals, including Contamination Expo	$\overline{\checkmark}$
Agree how to engage with COP 28	$\overline{\mathbf{V}}$

#### **Our Achievements:**

• GENERAL • SPEAKING AT EVENTS



ALL YEAR - Retained our membership of and contributed to membership bodies including the Parliamentary and Scientific Committee, Science Council and Society Publishers' Coalition (SocPC)

## Promoting change through knowledge exchange across all aspects of soil science CONTINUED

### **Our Impact:**

- Gained a new Corporate Member, Rothamsted Research, following our exhibition at Groundswell
- Gained a new Corporate Partner, UKATA, following our exhibition at Contamination Expo
- Built a strong partnership with CA4SH which led to the co-hosting of events at SB58 and COP28
- 153 views on Invest in Soil page
- COP sessions on YouTube 300 views

### In 2024, we will:

- Add a minimum of two more case studies to the Invest In Soil series
- Exhibit at events aimed at professionals, including Contamination Expo
- Strengthen relationships with policymakers, allied organisations and interest groups
- Seek accreditation with UNCCD
- Agree how to engage with SB 60, COP 29 and COP 16

#### CASE STUDY: SB58 BONN CLIMATE CHANGE CONFERENCE

During the Bonn Climate Change
Conference in June, the Society cohosted a policy dialogue session with
the Coalition of Action 4 Soil Health
(CA4SH) and the International "4 per
1000" initiative. The session focused on
soil as an unsung hero, which can help
international governments meet their
mitigation and offset targets, but which
does not share the same legal protections
as air and water.

The joint session focused on the need for urgent intervention at a global scale, to

prevent further degradation of our soils, allow us to support the ever-growing human population and to meet our climate change targets. It highlighted excellent case studies from Aapresid (Argentine No Till Farmers Association), the Welsh Government and Australian Government on how local approaches could help achieve change on a global scale.

In her closing remarks, Claudia Schlepp from the 4per1000 Initiative said, "What we wanted to stress here, is that healthy soils can be a major lever to address all the issues at once. But without sustainable management, they can also aggravate the situation substantially. We therefore need to make sure that increasing soil health is considered in our global ambition to fight climate change and that it is recognised as a central and integrating lever to reach the goals of all three Rio conventions."



## Hosting conferences and meetings focused on soils

### **Our Strategy said:**

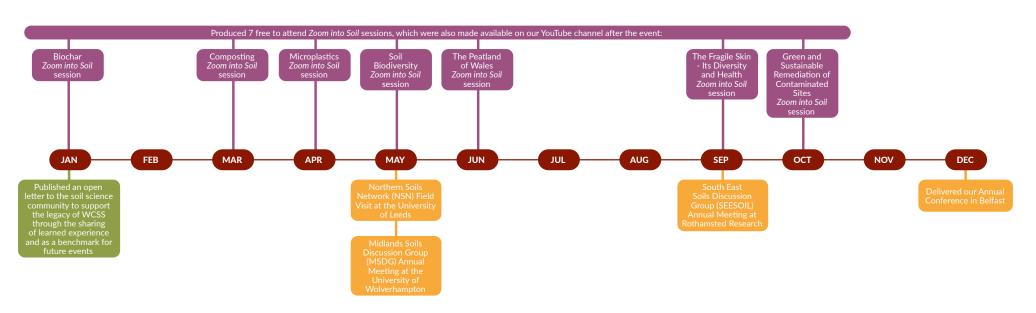
We aim to grow participation in our regional and annual meetings. We will act to develop communication pathways with a wide range of stakeholders and use our meetings to foster debate in the latest scientific and practical issues in soil science. Working with the International Union of Soil Sciences (IUSS) and other international societies, we were committed to delivering the best possible World Congress of Soil Science in Glasgow in 2022 and ensuring this provides a comprehensive legacy for the Society and its members.

#### What we set out to achieve:

Host face-to-face Regional Group events and meetings	V
Continue our free-to-attend Zoom into Soil series, partnering with external organisations as relevant	V
Deliver our Annual Conference in Belfast, alongside a tours and outreach programme	V
Support the delivery of Eurosoil 2025	V

#### **Our Achievements:**

• GENERAL • DIGITAL CHANNELS • FACE-TO-FACE EVENTS



ONGOING - Supported the delivery of Eurosoil 2025

## Hosting conferences and meetings focused on soils CONTINUED

### **Our Impact:**

- Across all of our Zoom into Soil webinars, 96% of attendees indicated that they'd gained new knowledge from the webinar and 73% of attendees said that they would use the knowledge learnt as a result of the session in their future work
- Over 700 people attended our seven webinars and they have been viewed almost 8,000 times on YouTube
- 70 delegates attended our regional events
- 160 delegates attended our Annual Conference with 46% completing our feedback survey:
  - 96% of responders rated the content as Good or Excellent
  - 99% of responders said they gained new knowledge as a result of attending the conference.
  - 81% of responders said they will be able to put the new knowledge gained for the conference into practice.
  - 61% of responders rated the tour experience as Good or Excellent
  - 94% of responders rated the conference venue as Good or Excellent

### In 2024, we will:

- Host face-to-face Regional Group events and meetings
- Continue our free-to-attend Zoom into Soil series, partnering with external organisations as relevant
- Deliver an in-person Annual General Meeting, partnering with Natural England
- Deliver our Annual Conference in Cardiff, alongside a tours and outreach programme
- Plan a Soil Judging competition
- Deliver sessions at IUSS and SB60
- Support the delivery of Eurosoil 2025

#### **CASE STUDY: BSSS ANNUAL CONFERENCE**

The BSSS Annual Conference took place on 4 and 5 December 2023 in Belfast, and was a joint event with the Soil Science Society of Ireland (SSSI) with the overall theme: Soil Management and Monitoring. The packed two-day event, set in the historic Assembly Buildings Conference Centre, provided delegates with the opportunity to meet and network as well as hear about the latest research and developments within soil science.

#### **Keynote Speakers and Policy Session**

We were delighted to host five main presentations covering the conference theme from experts including Brian Ervine, Rachel Cassidy, Rachel Creamer, John Gilliland and David Wall. Our main keynote session was a policy event where we heard from representatives from all the devolved administrations and Ireland, providing an overview of the key activities being undertaken at a governmental level. This included presentations from Rachel Boulderstone (DEFRA), James Cooke (Welsh Government), Sallie Bailey (Scottish Government), Brian Ervine (DAERA), Jim Hodgson (DECC) and Mary Cleary (DAFM).

#### Tours

The second day commenced with our scientific and cultural tours. The scientific tour provided delegates with the

opportunity to visit sites in County Down, where 132,700 fields were soil sampled in 2022/23 as part of the four year NI Soil Nutrient Health Scheme. Delegates learnt how whole-farm soil sampling, innovative reporting formats and local water quality monitoring are being used to optimise crop nutrient applications and to improve environmental performance.

#### **Oral and Poster Presentations**

We heard 23 different abstract presentations and had over 60 posters showcasing research in the conference themes of soil health, soil carbon, water management, nutrient management, and technology and innovation.



## Supporting and encouraging the education of soil science

### **Our Strategy said:**

We will support the education of soil science across a wide range of individuals and age groups. We will provide information and resources to teachers, farmers, agronomists, growers, industry and land managers and the public via grants, outreach events, training courses and teaching materials.

#### What we set out to achieve:

- Launch our outreach boxes, to support educators in delivering soils education to young people
- Support the development of the Natural History GCSE, T Level in Agriculture,  $\overline{\mathbf{V}}$ Land Management and Production and work with relevant apprenticeship groups to ensure soil is considered as part of the syllabus
- Attend external outreach events including Open Farm Sunday
- Deliver a project to link cultural voices to the Scottish soils landscape.

### **Our Achievements:**

















 $\overline{\mathbf{V}}$ 

 $\Box$ 



ALL YEAR - Continued to support OCR with the proposal for a Natural History GCSE, City & Guilds with the development of the Agriculture, Environment and Animal Care T Level and joined the Institute for Apprenticeships and Technical Education's 'Green Panel'

ALL YEAR - Promoted the scientific work of our members across our social media channels, alongside soil-focused articles and documentaries aimed at the general public

## Supporting and encouraging the education of soil science CONTINUED

### **Our Impact:**

- 10 physical Loan Boxes were hired, reaching over 500 people
- 147 schools submitted entries to the Countryside classroom competition
- 634 visits from 400 users to our educational resources page
- Educational Resources shared by the Education Authority of Northern Ireland to a number of schools in Belfast.

### In 2024, we will:

- Support the development of the Natural History GCSE, T Level in Agriculture, Land Management and Production and work with relevant apprenticeship groups to ensure soil is considered as part of the syllabus
- Attend external outreach events including Open Farm Sunday
- Engage with British Science Week
- Host a session at the British Science Festival
- Become and accredited adviser to IFATE

#### **CASE STUDY: SOIL SCIENCE LOAN BOXES**

In 2023, we launched our Soil Science Loan Boxes project to further educate young people, families, and the general public on the importance of soils and to encourage further learning and engagement. The boxes contain the resources needed to carry out a number of fun, educational soil-related activities suitable for both children and adults. Our helpful toolkit of resources, boxed up and delivered to the door, helps to share the importance of soil with peers, colleagues, community, or the next generation!

The box helps to address the lack of mainstream education in soil science, which is a result of soils not being covered by the national curricula, limiting public recognition of the importance of soils. Through our research, member conversations, and Outreach Committee, we have seen a demonstrated appetite for educational materials relating to soil science from educators and related organisations.

Professor Lorna Dawson from the James Hutton Institute hired a box to support with engaging farmers with the importance of soil at one of their research farms. Lorna said, "I chose to use the soil texture and soil structure information sheets which went down a treat. When we looked at the soil settling experiment and inspected the reference glass pots to inspect the different particle classes, accompanied by the triangular diagram, it really brought home the difference farmers experience between soils."







## Inspiring the future generations of soil scientists

### **Our Strategy said:**

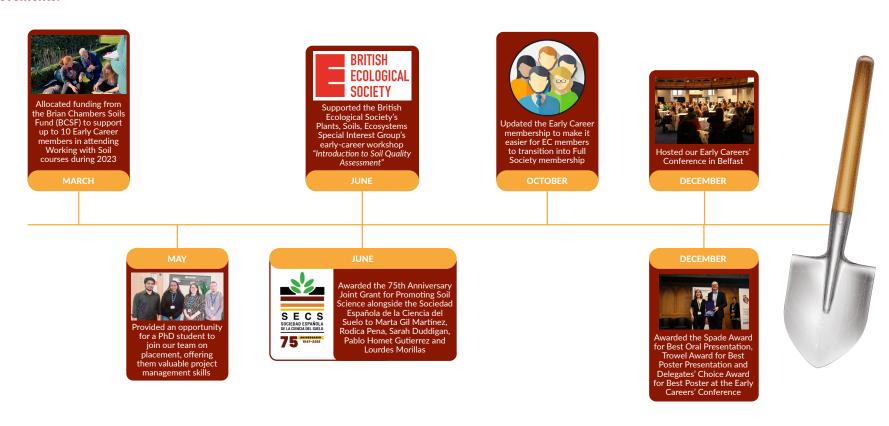
We will continue to support the development of early career (EC) members working in soil science. We will fund a biennial conference dedicated to ECs and give them prominence at our Society Annual meeting. Through our education committee, we will support teachers and engage in community projects to inspire the next generation of soil scientists.

#### What we set out to achieve:

Host our bi-annual Early Careers' Conference

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### **Our Achievements:**



ALL YEAR - Published six issues of the Early Career members' newsletter, Eye to the Horizon

ALL YEAR - Published interviews or case studies with soil scientists at various stages of their career: (Feb) Benjamin Butler, (Mar) Lizzie Sagoo, (May) Saoirse Tracy, (Nov) Daniel Evans

## Inspiring the future generations of soil scientists CONTINUED

### **Our Impact:**

- EC Conference delegate numbers: 100
- Feedback %s
  - 62% of responders were EC members
  - 96% of responders rated the content as Good or Excellent
  - 99% of responders said they gained new knowledge as a result of attending the conference
  - 81% of responders said they will be able to put the new knowledge gained for the conference into practice.
  - 61% of responders rated the tour experience as Good on Excellent
  - 94% of responders rated the conference venue as Good or Excellent
- Average open rate of 64% and average click rate of 17% for Eye to the Horizon
- Increased our Early Career membership by 32% to 291 members

### In 2024, we will:

- Provide a minimum of one PhD placement opportunity
- Publish a minimum of three interviews with soil scientists at various stages of their career
- Host an Employer Networking Session for Early Career members at our Annual Conference in Cardiff

#### **CASE STUDY 1: EARLY CAREERS' CONFERENCE**

The Early Careers' Conference took place on 6 and 7 December 2023, immediately after the BSSS and SSSI Annual Conference. The two-day programme allowed a wide range of Early Career members from academia, industry, and policy to come together for a variety of themed sessions, including keynote presentations, oral and poster presentations, three workshops, and a social dinner.

#### Workshops

Dr Daniel Evans, from Cranfield University, led a superb and thought-provoking workshop on grant funding, sharing his experience in finding and securing research funding as an ECR and outlining different types of funding available and effective approaches to writing research proposals. Jessica Potts, Jay Ryan and Liv Hoyland, on behalf of Arcadis, delivered a fantastic workshop tailored to provide ECRs with valuable insights and guidance on how to kickstart their journey outside of academia.

#### **Oral and Poster Presentations**

Delegates heard from 20 oral presenters and viewed over 50 poster presentations, showcasing the excellent research that ECRs had undertaken. Congratulations to Catriona Willoughby, winner of the best oral presentation, Elisabeth Appleton, winner of the best poster, and Megha Kaviraj, winner of the inaugral delegates' choice award for best poster.













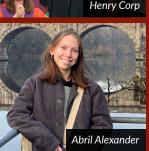
## Inspiring the future generations of soil scientists CONTINUED

#### **CASE STUDY 2: AWARD WINNERS**

BSSS is proud to sponsor a prize and trophy for a number of awards within academic institutions, which are presented to students based on criteria set with each one. The 2023 award winners each received two years' Society membership as part of their prize:

- Clara Marie Laetitia Delanau Most Promising Soil Scientist at Cranfield University
- David Thomson Undergraduate Award at Harper Adams University
- Winfred Athembo Postgraduate Award at Harper Adams University
- Abril Alexander Undergraduate Award at Lancaster University
- Henry Corp Best Student in Soil Science at Royal Agricultural University
- Mario Santano Santos Outstanding performance in a soil science based Honours or MSci project at University of Aberdeen
- Marcin Matkovic Outstanding performance in a soil science based MSc project at University of Aberdeen
- Thomas McNeil Best soil-science related dissertation at University of Reading
- Yuxin Ma Margaret Oliver Young Pedometrics Award











#### **CASE STUDY 2: GRANT RECIPIENTS**

The following grants were awarded in 2023, supporting members and organisations to develop soil science skills.

Case studies from grants given are regularly published on our website. Find out more about the activities we have been supporting at: www.soils.org.uk/education/case-studies/.

NAME	GRANT	AMOUNT
Marta Gil Martínez, Rodica Pena, Sarah Duddigan, Pablo Homet Gutierrez, Lourdes Morillas	75th Joint Anniversary Grant	£2,000.00
Asa Beeby	Brian Chambers Soil Fund	£250.00
Chris McCloskey	Brian Chambers Soil Fund	£765.00
Bethany Norris	Brian Chambers Soil Fund	£410.00
Amin Sharififar	Brian Chambers Soil Fund	£800.00
Catherine West	Brian Chambers Soil Fund	£250.00
Carmen Sanchez-Garcia	David S Jenkinson Fellowship	£5,000.00
Nisha Choudhary	Early Career Conference Grant	£500.00
Mahboobeh Fallah	Early Career Conference Grant	£500.00
Mollie Frost	Early Career Conference Grant	£500.00
Sara Martinengo	Early Career Conference Grant	£325.00
Prudence Mhlophe	Early Career Conference Grant	£500.00
Gianni Micucci	Early Career Conference Grant	£500.00
Tanu Priya	Early Career Conference Grant	£500.00
Megan Purchase	Early Career Conference Grant	£300.00
Gemma Shaw	Early Career Conference Grant	£500.00
Paul Smith	Field Equipment	£981.82
Hannah Lindsay-Kirk	Innovation	£410.00
Paul Smith	Innovation	£466.98

## Ensuring high standards of professional practice for those working with soils

### **Our Strategy said:**

We will provide dedicated training courses such as our Working with Soils series, as well as industry focused events in support of Continued Professional Development, providing high professional standards and assisting with maintaining Chartered Scientist registration.

#### What we set out to achieve:

Identify the current training and qualifications available for practitioners in soil science and propose how any gaps could be filled	☑
Continue the development of the Level 7 Soil Science Apprenticeship	V
Deliver a number of Working with Soil training courses	V
Scope Continued Professional Development (CPD) recording mechanisms	V

#### **Our Achievements:**

### **Working With Soil Courses**

- April Delivered the A Practical Introduction to Soils in England and Wales course at Shuttleworth College
- May Delivered the A Practical Introduction to the Soils of Scotland course in Aberdeen
- July Delivered the virtual An Introduction to Soil Classification course
- October Delivered the A Practical Introduction to Soils in England and Wales course in Aberystwyth
- November Delivered the Introduction to Agricultural Land Classification course at Cranfield University

### **Membership Body**

- August Approved one new Honorary member - Dr Bob Jones
- October Approved four new Societ Fellows - John Boardman, Ian Bull, Fleanor Reed and Balwant Singh
- October Provided guidance and recording mechanisms to Full and Fellow members for their Continued Professional Development (CPD) submissions

### **Influencing Education**

- November Gained approval for delivery of the Level 7 Soil Scientist Apprenticeship
- November Applied to become the End Point Assessment Organisation for the Level 7 Soil Scientist Apprenticeship

### **Professional Registration**

 December - Reviewed 25 new membership applications during 2023 and two new Chartered Scientist registrations



## Ensuring high standards of professional practice for those working with soils CONTINUED

### **Our Impact:**

- Increased our membership from 883 in 2022 to 937 in 2023, a 6.1% increase and the Society's highest ever number of members
- 100% of people rated the ALC course as good or excellent. 23 delegates attended at Cranfield University.
  - "Good mix of theory and practical. The exercises were very useful."
  - "The team were very engaging and created a relaxed environment, where everyone felt comfortable to ask questions."
  - "I'm more confident in applying ALC in my line of work."
  - "Using real scenarios has helped show how to work up data into mapping."
  - "A great introduction to ALC; has widened my knowledge base and with experience I hope to undertake my own ALC's in the future."

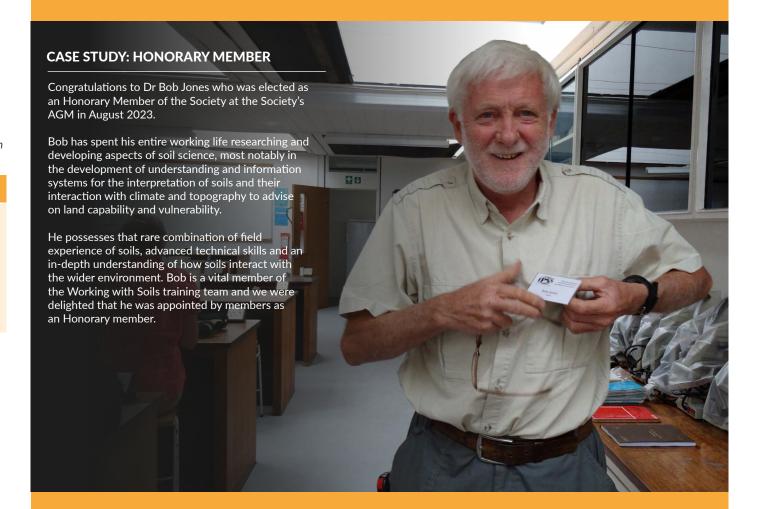
### In 2024, we will:

- Survey the membership to help identify the current position of training and qualifications in soil science and propose how any gaps could be filled
- Finalise the End Point Assessment Organisation application for the Level 7 Soil Scientist Apprenticeship
- Deliver a number of Working with Soil training courses.

#### CASE STUDY: LEVEL 7 SOIL SCIENTIST APPRENTICESHIP

A huge thank you to the Employer Group which has successfully developed a Level 7 Soil Scientist (Masters' Level) apprenticeship. The apprenticeship will allow employers in England to use the Apprenticeship Levy to fund training for their employees.

Cranfield University and Cornwall College will be working hard to ensure training delivery can begin in 2024 and 2025 respectively. They will be supported by the Society through our application to become the End Point Assessment Organisation (EPAO) to award successful apprentices with their completion certificates.



## Leading on the social and environmental responsibilities of a contemporary society

### **Our Strategy said:**

We will provide leadership in the areas concerning the socio-economic responsibilities of a modern Society. We will ensure all members have equality of opportunity, irrespective of age, race, disability, sex, religion or other protected characteristics. We will ensure our activities are planned with issues of equality, inclusion and diversity at the forefront of all decision making and that we act environmental responsible and achieve carbon neutrality where possible.

#### What we set out to achieve:

Review our Society vision and Key Performance Indicators (KPIs) to ensure they remain fit for purpose

Ensure we have up to date Terms of Reference and policies

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Introduce an Environmental Working Group to consider how the Society can achieve its environmental targets

### **Our Achievements:**

### ED&I

- February Signed a letter of commitment to Equity, Diversity and Inclusion (EDI) with the Science Council
- February Introduced an EDI champion on each of the Society's committees

### **Awards**

- July Awarded Best Environmenta Social and Governance Event at the 2023 ICE Awards for WCSS 2022
- September Awarded the Gold Sustainable Initiative Award and Bronze Legacy Award at the Meetings & Incentive Travel Magazine Awards for WCSS 2022
- November Awarded the Silver Award for Sustainability Champion at the 2023 Association Excellence Awards for WCSS 2022
- December Awarded the Best Business Event at the 2023 Scottish Thistle Awards for WCSS 2022

### **Membership**

- February Introduced a new member benefit with Dell Technologies
- March Reviewed Society Terms of Reference and policies
- July Member consultation on Society's mission and vision
- December Delivered an
   Extraordinary General Meeting to
   elect a new Trustee
- December Presented the Outstanding Society Contribution Award to Xavier Portell for his significant contribution to support Early Career members and develop new grant ideas

### Legacy

- March Planted trees at Cranfield University in aid of the 'Trees for Climate' scheme to help mitigate climate change
- July Hosted a campfire session at the ICE Conference: Delivering an Event Legacy on a Budget
- October Added key case studies to our Delivering Sustainable International Events document



## Leading on the social and environmental responsibilities of a contemporary society CONTINUED

### **Our Impact:**

ED&I make up of Zoom Into Soils and conference

- Zoom into Soil:
  - 10 male presenters
  - 4 female presenters
  - 4 male chairs
  - 3 female chairs
- Conference:
  - 5 male presenters
  - 5 female presenters
  - 3 male chairs
  - 4 female chairs
  - 15 female oral presenters
  - 9 male oral presenters

### In 2024, we will:

- Review our Society vision and Key Performance Indicators (KPIs) to ensure they remain fit for purpose
- Ensure we have up to date Terms of Reference and policies
- Establish an ED&I working group

### CASE STUDY: WORLD CONGRESS OF SOIL SCIENCE 2022 (WCSS 22) AWARDS

The World Congress of Soil Science 2022 was the biggest project in the Society's history to date, in what was our 75th Anniversary year. It was a 10 year process from bid to delivery, and BSSS was at the forefront of this, organising and delivering the whole event in partnership with the International Union of Soil Sciences (IUSS). Attended by over 1700 delegates online and in-person, the Congress was held between 31 July and 5 August 2022 at the Scottish Event Campus in Glasgow, and was flanked by an exciting menu of soil science activities, such as the soil tours, soil judging programme, and outreach activities under the banner of arts programme page.

We had several pillars to the Congress but the environmental pillar of the

event was a standout feature, thanks to innovative practices such as online poster presentations, carbon-labelling delegate food, and serving smaller, locally sourced meals to minimize waste. This also included commissioning what we believe to be one of the first ever Environmental Impact Assessments (EIA) of an international congress.

Through the Congress, BSSS created a long-lasting legacy including:

- Engaging 3,000 residents with soils; helping them to understand the role soils play in climate change mitigation
- Minimising our environmental impact, commissioning what we believe to be the first environmental impact

assessment of an international scientific congress, and sharing our learnings.

As a result, the World Congress was nominated for several awards around our legacy and sustainability credentials, and formed a framework that organisations and event planners could learn from. We were delighted that the event won:

- Gold Sustainable Initiative Award at the M&IT Magazine Awards
- Best Business Event at the 2023 Scottish Thistle Awards
- Best Environmental, Social and Governance Event at the 2023 ICE Awards (UK and Germany)







## **About Us**

The British Society of Soil Science (BSSS) was founded in 1947 and is an established international membership organisation and charity committed to the study of soil in its widest aspects. The society brings together those working within academia, practitioners implementing soil science in industry and all those working with, or with an interest in soils.

Research on soils and enhanced understanding and engagement with soils is essential for agricultural, landscaping, construction, remediation, conservation and archaeological projects, as well as policy direction on critical topics such as climate change.

We promote research and education, both academically and in practice, and build collaborative partnerships to help safeguard our soil for the future.

Anyone with an interest in soil is welcome to become a member and attend our conferences and webinars, receive complimentary access to our two scientific journals, the European Journal of Soil Science and Soil Use and Management and a host of other benefits.

### Thank you to our Corporate Members and Donors

















### Follow us on social media:













## **Our People**

#### **Our Trustees**

**Jack Hannam** 

President 2023/24

**Bruce Lascelles** 

Past President (until 31 December 2024)

**Paul Hallett** 

**Incoming President** 

Mike Palmer

Professional Practice & Development Committee Trustee (until 31 December 2023)

**David Tompkins** 

Professional Practice & Development Committee Trustee (from 1 January 2024)

**Anirban Sarkar** 

**Finance Trustee** 

**Dan Lambeth** 

Marketing, Communications and Policymaking Trustee

**Our Executive Office** 

Sarah Garry

Executive Officer (until 17 November 2023)

**Andrew Morris** 

Executive Director (from 5 February 2024)

**Christine Berrill** 

Project Coordinator (until 15 February 2023)

**Natalie Coles** 

Operations & Business Development Manager

**Dominic Simms** 

Communications, Marketing and Events Coordinator

**Christine Wangari** 

Administrative Assistant and Bookkeeper (from 15 May 2023)

Taimoor Khan

MIBTP Professional Internship PhD Student (22 May to 21 August 2023)

**Our Council** 

Jack Hannam (Trustee and Chair)

Nikki Baggaley (Scottish Soil Discussion Group Chair)

**Chris Cantle** (Northern Soils Network)

Kirsty Charles (Early Careers Chair/Co-Chair) - until 31 December 2023

Lynda Deeks (South West Soil Discussion Group Chair)

Jenni Dungait (Editor, European Journal of Soil Science)

Marcelo Galdos (South East England Soil Discussion Group Chair) – from 27 February 2023

Sarah Garry (Executive Officer) - until 17 November 2023

lain Gould (Midlands Soil Discussion Group Chair)

Paul Hallett (Trustee)

Deyi Hou (Editor, Soil Use and Management)

**Bruce Lascelles** (Trustee)

Kara Marsden (Welsh Soils Discussion Group Chair)

Mark Nason (Ordinary Council Member)

Mike Palmer – Professional Practice & Development Committee Chair (until 31 December 2023)

**Lois Phillipps** (Outreach Committee Chair)

Danielle Roche (Early Careers Co-Chair) - from 1 June 2023

**Our Commitees** 

Our committees are led and managed by our volunteers who deliver the strategy of the Society through the groups. Thank you to all of our volunteers who gave their time to our various committees in 2023.

The Chair of each Committee is also a member of the Society Council.

**Early Careers Committee** 

Chair / Co-Chair: Kirsty Charles (until 31 December 2023) Co-Chair: Danielle Roche (from 1 June 2023)

Outreach Committee

Chair: Lois Phillipps

Professional Practice and Development Committee Chair: Eleanor Reed

**Grants and Awards Committee** 

Chair: Bruce Lascelles

**Publications Committee** 

Chair: Paul Hallett

**Our Regional Groups** 

We operate six Regional Groups to meet the needs of our members in different parts of the country. Each of the Regional Group Chairs is also a member of the BSSS Council and implements the Society's strategy, regionally.

Midlands Soil Discussion Group

Chair: Iain Gould

**Northern Soil Network** 

Chair: Chris Cantle

Scottish Soil Discussion Group

Chair: Nikki Baggaley

South East England Regional Group (SEESOIL)

Chair: Marcelo Galdos (from 27 February 2023)

South West Soils Discussion Group (SWSDG)

Chair: Lynda Deeks

**Welsh Soil Discussion Group** 

Chair: Kara Marsden



## **Contact Us**

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Image Credits: Our thanks go to CA4SH, Chris Cantle, Earth Minutes, Lorna Dawson and the Environment, Food and Rural Affairs Committee - UK Parliament for the images which have been used in this publication.

