

76th AGM Agenda

Meeting Date: Tuesday 2 August 2022

Time: 11:00am – 12:00pm

Meeting Number: 76

Location: Gala Room, Scottish Exhibition Centre (SEC), Glasgow

Chair: Bruce Lascelles

	Agenda Item
1.	Welcome and Apologies
2.	Minutes of the 75 th AGM held on 7 September 2021 and Matters Arising
3.	Annual Report 2021
4.	Trustees' Report and Accounts for the year ending 31 December 2021 – <i>see accompanying</i> paper
5.	Appointment of Auditors for the Ensuing Year – <u>HSA & Co</u> .
6.	Board and Council Members – 2022/2023 – <i>see attached paper</i>
7.	Outstanding Contribution Award
8.	Announcement of Honorary Members – <i>see attached paper</i>
9.	Any Other Business

Future Meetings and Events

- Zoom into Soil webinars 12:00 1:00pm
 - o Wednesday 5 October
 - Wednesday 2 November
 - o Wednesday 7 December.

Please submit your votes online ahead of the AGM and by Thursday 14 July at 5:00pm BST.

Agenda Item	6.
Paper	Board and Council Members – 2022/ 2023

1. Introduction Applications have been received from a number of candidates to join the Society's Board and Council. Details of the uncontested applications received are set out below: 2. Marketing, Communications and Policy-Making Trustee The following application has been received from Dan Lambeth: As you will see, I have a long career in public policy, both in the public and private sector over many years. My work has focused on resolving major and often complex policy issues in the glare of the public media including: reform of the civil justice system; the collapse of Equitable Life; resurrecting RBS following the financial market crash; and working with the European Commission on the reform of custody laws in the wake of the Madoff scandal. I now work exclusively on sustainability policy issues with many of the world's largest companies, including the impacts of climate change, preserving biodiversity and promoting the circular economy. I previously have held a number of trustee roles, including Independent Governor of Goldsmiths College, University of London. I am a proven leader in Sustainability and Regulatory Affairs, with over 25 years' experience in government and the financial services industry. I am a Partner at Brunswick Group and advise the world's leading companies on how to navigate the critical ESG issues that they face and engage with their critical stakeholders. In previous roles, I have led on ESG including advising boards on the EU Taxonomy Regulation and the EU Sustainable Finance Disclosure Regulation. Throughout my career I have held leadership roles in government and regulatory affairs, organisational change and risk management. In Government, I have represented the UK at meetings of the EU, G7 and FATF. 3. President Elect 2023 – 2024 (from 1 January) The following application has been received from Paul Hallett: I am pleased to apply as a candidate for President Elect 2023-2024 of the British Society of Soil Science. The BSSS has developed considerably as an organisation since I joined in 1992 and served on Council from 2007-2012. My goal as President would be to continue this positive trajectory, increasing the profile of soil science in Britain and the role our community plays in tackling international challenges. My current role and credentials are particularly suited to this role.

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As President I would advocate the role of soil science in improving and understanding the complexities of soil, with benefits to the wider environment and society. This includes continuing the society's strong education agenda aimed at professional practitioners and students from primary to postgraduate level. I would initiate greater cooperation between institutions that teach soil science in their curriculum, providing a platform to share resources and a one-stop location to allow students to explore training options.

Emphasising the need for an evidence base to make informed decisions about soil would also be a major goal. This would continue the excellent work already conducted by the BSSS that provides knowledge exchange to farmers, engineers, environmental specialists and the public.

To get this evidence requires good science, so another major goal would be to advocate the soil science research community, particularly its links to UKRI, other funding agencies and international partners. Building on the success of the WCSS, the role of UK soil science in helping to tackle global challenges would be emphasised. We should establish closer relations with soil science societies of developing nations so that we can help build their capacity and be agile to emerging international challenges.

My experience is of direct relevance to this role. At the University of Aberdeen, I am the programme tutor of the only remaining MSc Soil Science in the UK. I am currently the Vice Chair of Division 2 in the International Union of Soil Science (2018-2022) and previously I was the chair of Commission 2.1 (Soil Physics) that is part of this Division (2006-2010). As mentioned above, I have served on BSSS Council. I am a Core Panel Member on NERC. Over the past decade I have received funding from most of the major UKRI soils initiatives (Soil Security Partnership, Newton NHubs, CZO Networks, Signals in the Soil).

This is an exciting opportunity to further develop the excellent work of the BSSS in advocating UK soil science.

Qualifications

BSc Agricultural Science, University of Guelph, 1992

PhD Chemical Engineering, University of Birmingham, 1996

Career

2013-	Professor in Soil Physics, University of Aberdeen, Aberdeen
present	Grade G, Theme Leader (Delivering Sustainable Production Systems) and
2011-2013	Soil Biophysicist, The James Hutton Institute, Dundee
	Grade F, Leader of Plant-Soil Interface Group, Scottish Crop Research
2008	Institute (SCRI), Dundee
	Band 4, Principal Research Scientist, SCRI
2005	Band 5SPD, Senior Research Scientist, SCRI
2001-2005	Band 6PD, Postdoctoral Scientist, SCRI
1997-2001	Band 6PD, Postdoctoral Scientist, Silsoe Research Institute
1995-1997	

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Other appointments

- NERC Peer Review College Core Panel Member, w.e.f. 01/2014
- School of Biological Science Postgraduate Research Director
- MSc Soil Science, Course Tutor
- Associate Editor, European Journal of Soil Science & SOIL
- Vice Chair Division 2 (Properties and Processes 2017-2022) and Chair of Commission
 2.1 (Soil Physics 2006-2010) International Union of Soil Science
- Council Member, British Society of Soil Science (2007-2012)
- Scientific Committees of International Conferences (World Congress of Soil Science 2022 & 2010, ISMC 2016, Biohydrology 2016, ISRR 2012 – Roots to the Future, ICGBE 2012)
- Published >160 research papers, h-index 48 (Scopus).

4. Professional Practice Committee Trustee (from 1 January)

The following application has been received from Mike Palmer:

Dr Mike Palmer is a member of the Society Council as Chair of the Professional Practice Committee.

Mike is a Director at Land Research Associates (LRA) and joined from the University of Newcastle where he gained a PhD and also undertook consultancy commissions. He is an experienced soil scientist, leading many of the company's projects and is closely involved with the production of soil management plans for development projects and assessment of soil suitability for habitat creation. He liaises with clients, quality controls the company's outputs and leads major projects.

5. Chair of the Professional Practice Committee (from 1 January)

The following application has been received from Eleanor Reed:

I am a Chartered soil scientist working as a National Soil Specialist within Natural England, drawing on a research background to deliver practical soils and agricultural land-use advice within the planning system, including the provision of technical advice to Defra and other agencies at a national level.

Before joining Natural England in 2020, I gained six years consultancy experience as a Soil Scientist, undertaking soil and ALC surveys and preparing associated environmental reports, as well as providing on-site soils advice during construction (most notably, the HS2 Area South Phase 1 works).

I am passionate about engaging people with soils and the environmental benefits that can be secured through the appropriate use and management of soils, including identifying solutions to optimise soil function. To date, I have achieved this through engaging with the BSSS, previously being an ordinary member of the BSSS Council, which included helping co-organise the 2018 BSSS Annual Meeting and hosting a Northern Soils Network Event in 2018.

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More recently, I have taken on the role of incoming chair for the Professional Practice Committee (PPC) and have been organising the Policy Session at the World Congress of Soil Science, which will be the first session of its kind at the World Congress, drawing together an expert group of invited speakers to discuss the complexities, challenges and opportunities of soil policy and governance.

Through my role as PPC Chair, commencing January 2023, I hope to continue to build on the foundations laid by previous PPC chairs, further promoting and building the technical capacity of the Society, reflecting the ever increasing focus on the importance of soils as a nature based solution.

6. Chair of the Grants and Awards Committee

The following application has been received from Bruce Lascelles.

I am 2021 – 2022 President and a Trustee of the British Society of Soil Science and Chair of the World Congress of Soil Science Working Group and a Director of the company World Congress of Soil Science 2022, set up to deliver the event. I am Past Chair of the Institute of Professional Soil Scientists, which merged with BSSS.

I have a background in Soil Science and Forestry and undertook a PhD investigating the development of soils in North Wales over the Holocene in relation to environmental change and human impacts. After completing a Post Doctoral research project at the University of Leicester looking at the mechanisms of rill formation, I moved into consultancy and have developed significant expertise in habitat creation, restoration and translocation (and was a co-author of the CIRIA Habitat translocation – a best practice guide), and in the design of appropriate soil handling methodologies. This has included work on a wide range of habitats, including lowland raised bogs, blanket bog, heathland, marshy and chalk grassland and river systems.

I am the UK Director of Sustainable Land Management at Arcadis and am passionate about promoting the importance and wider understanding of soils. I am also a member of the Canal & River Trust Environmental Advisory Panel and CIWEM Natural Capital Network Steering Group, and the Cranfield University Environment Industry Advisory Panel.

6. Chair of the Welsh Soils Discussion Group

The following application has been received from Kara Marsden:

I am interested in becoming the Welsh Regional Chair for the British Society of Soil Science for several reasons. Firstly, I am supportive of the British Society of Soil Science's strategic aims and would like to contribute to the society's objectives. Secondly, I have recently been appointed as a teaching and research lecturer in Soil Science at Bangor University, so I feel it is a good stage of my career to widen my contributions, especially within external organisations. Thirdly, I have had experience establishing and running Networks within the School of Natural Sciences and in contributing to running a Special Interest Group within the British Ecological Society, therefore I believe these skills would be useful for planning and organisation of activities associated with this role. Finally, I am passionate about promoting all aspects of soil science including supporting

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education and knowledge exchange within the field and it would be a fantastic opportunity to represent the Welsh region in this regard.

My research interests include nitrogen cycling in agroecosystems, gaseous emissions from soil (particularly N₂O and N₂), methods and techniques for monitoring gaseous emissions from soil and assessing spatial and temporal variability in emissions, rhizosphere processes and plant-soil-microbe interactions. I have 23 peer-reviewed publications, a h-index of 13 and 661 citations (Google Scholar).

Qualifications

PhD in Soil and Environmental Science (2012-2015), Bangor University

Thesis Title: Sheep urine patch nitrous oxide emissions: Measurement and mitigation *Project Description:* The project explored the spatial and temporal variability of N₂O emissions from grazed grasslands, and the potential for nitrification inhibitors to mitigate such emissions.

BSc Environmental Science (First Class; 2010-2012), Bangor University.

Dissertation title: Uptake of amino acid and peptidic nitrogen by three cultivars of *Brassica napus* L. and their corresponding sorption reactions in soil.

Career

2021-now: Teaching and Research Lectureship in Soil Science, Bangor University

2018-2021: Marie-Sklodowska Curie Actions Global Individual Fellowship Bangor University and the University of Melbourne; *Target-N₂O* project – "Targeting N₂O emission hot-spots in dairy pastures for mitigation action: microbes, stable isotope methods and modelling."

2016-2018: Post-doctoral research associate on NERC-funded *Uplands-N2O* project – "Grazing behaviour, urine composition and soil properties are key drivers of nitrous oxide emissions from livestock urine in the uplands"

Other appointments

- Member of the British Ecological Society Special Interest Group (on Plant and Soil Ecosystems) steering committee
- Co-leader of Equality network within School of Natural Sciences, Bangor University
- Member of Association of Applied Biologists.

7. Chair of the Northern Soils Network (NSN)

The following application has been received from Chris Cantle:

I would like to take the NSN chair role on because I believe that collaboration and knowledge-sharing are important to drive innovation and improve outcomes across industry and academia. As chair, I would aim to encourage an active NSN community and communication with other regional groups and offer learning opportunities for early careers scientists and students, including virtual and face-to-face events where possible. As a STEM ambassador, I would also look for opportunities to raise awareness of soil science with younger audiences, which can help to reduce the widely-recognised skills shortage in the discipline. I am a principal soil and geoenvironmental scientist at Jacobs, with experience at a range of project scales and through full project life-cycles, from inception to implementation. I have worked in a variety of sectors, including nuclear, transportation, utilities and environment.

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Education and Qualifications

- · MSc Soil Science (Distinction), University of Aberdeen, 2015
- BSc First Class (Hons) Geography, University of Portsmouth, 2012

Certifications, Memberships and Affiliations

- · Chartered Scientist (CSci)
- · Member of Institution of Environmental Sciences (MIEnvSc)
- · Member of the British Society of Soil Science (M.I. Soil Sci)

Areas of Expertise

- · Environmental Impact Assessment
- · Qualitative and quantitative land contamination risk assessment
- · Geoenvironmental ground investigations/monitoring and soil surveys
- · Sustainable management of soils and materials during construction
- · Soil science in landscaping and habitat creation/conservation.

Action

The Society Board suggests that members vote in favour of all the proposed appointments.

Agenda Item	8.
Paper	Honorary Membership

1. Introduction

Honorary Membership is a discretionary award made by the Society to persons who have been a Full Member of the Society for at least 10 preceding consecutive years and/ or who have made an exceptional contribution to the objects of the Society.

2. Michael Goss

Michael Goss has been nominated by members:

Michael Goss has had a long and distinguished career in soil science involving research, education and outreach, and since his retirement in 2009 has continued to be fully engaged. After graduating, he joined the Letcombe Laboratory, then Rothamsted before becoming a divisional head at the Macaulay Land Use Research Institute, developing his long-standing interest in plant—soil relations and environmental issues. He left the UK in 1990 to be the first incumbent of the endowed Chair of Land Stewardship at the University of Guelph, Ontario, Canada. He finally became the Director of the Kemptville regional campus of the University, where he was tasked with rebuilding their research capacity and reinvigorating their education programme.

His research has included nitrogen availability in soil and losses to the environment, the transport of pathogens from manure applications on soil to water resources, enhancement of N-fixation by grain and fodder legumes, interactions between legumes, rhizobia and mycorrhizal fungi. He has continued to work on mycorrhiza and N fixation for sustainability since his retirement in collaboration with the University of Évora, Portugal, on the movement of contaminants through soil with Memorial University, Newfoundland and drought tolerant crops with the Californian Polytechnic State University.

Michael has also shown a commitment to soil science outside academia by encouraging extension support for farmers while at Guelph. This is a vital aspect of extending University research and knowledge to improve soil use, and soil and land sustainability. He was an expert witness charged with evaluating farming practices implicated in the fatal microbial contamination of a municipal water supply. Subsequently he was invited by the Minister of the Environment (Ontario) to be a technical expert for water protection.

Michael has taught and advised undergraduate and graduate students and developed educational courses. He has also examined research theses at various levels.

Since Michael retired, he has continued to add to the books and papers he wrote during his employment. Importantly, in relation to the Society he has been Deputy Editor (2010–2013) and Editor-in-Chief (2014–2019) of Soil Use and Management. The expertise gained in his working life provided an excellent background for these roles. During this period from 2010 to 2019 he gave

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unstintingly of his time, which included attendance at many BSSS Council meetings and other conferences; the latter ensured that he knew where the current cutting edge of research was leading.

Not wishing expertise gained over a lifetime to be wasted, Michael took on the daunting task as co-Editor-in-Chief of the updating and revision of the Encyclopedia of Soils in the Environment. The first edition was an excellent resource and undertaking a new edition is a major commitment to soil science.

CV

Current role: Co-EDITOR IN CHIEF, ENCYCLOPEDIA OF SOILS IN THE ENVIRONMENT 2nd Edition.

Previous role: EDITOR IN CHIEF, SOIL USE AND MANAGEMENT

Last full-time position:
Director
University of Guelph, Kemptville Campus,
Box 2003, 830 Prescott St.,
Kemptville, Ontario, K0G 1J0,
CANADA

Kemptville Campus (formerly College) was founded in 1917. I was appointed 1st September 2005, and retired from the position 1st May 2009. This Regional Campus of the University of Guelph had annual expenditure of \$12,000,000. It delivered education and research with a focus on northern and eastern Ontario. It had three research stations at Winchester, New Liskeard and Emo. New Liskeard housed the provincial beef research herd owned by Ontario Cattlemen's Association. It was also the location of the Horticultural unit and Seed Potato Upgrading Distribution Lab. This is a major facility concentrating on vegetative propagation of disease-free horticultural crops through tissue culturing.

At Kemptville, there was dairy, equine, agronomy and environmental research, and a major effort in technology transfer related to the use of renewable fuels, such as biodiesel. The major focus of my directorship was the rebuilding of Kemptville's research capacity and capability together with reinvigorating the educational programs. Two university faculty members and two College Professors (all with Ph.D. or equivalent qualifications) were hired to meet these objectives. A degree-level program, the Bachelor of Bio-Resource Management, Equine Management was started in the third year of my tenure. Students spend the first two years at Kemptville before transferring to the Guelph Campus for the last two years. Other members of the teaching staff were encouraged to build up their research activities. I oversaw the development of a successful proposal by two faculty members for joint Canadian Foundation for Innovation and Ontario Research Foundation funding to renovate an existing building as a large animal research laboratory. Similarly I championed a successful proposal for funding to renovate an old bull-test barn and turn it into a modern dairy barn with an automated (robotic) milking system. Both these buildings were part of a wider plan for infrastructure development on the Campus, where many of the buildings were constructed before 1970.

THE CHAIR OF LAND STEWARDSHIP:

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This research chair was established in 1987 by a one-time endowment of \$1million by the then Ontario Ministry of Agriculture and Food. The purpose of the position was to stimulate, through research and extension, an awareness by the agri-food sector of the importance of the environment. Within the University the position is also charged with stimulating multi-disciplinary research.

Synopsis of Activities:

Research

As the first Chair of Land Stewardship I developed a research programme to assess the impact of agriculture on the environment. The goal of this programme was been to develop and apply a program to investigate the nitrogen budget for Ontario farms, with the objective of quantifying the contribution that agriculture makes to sources and processes of nutrient contamination of water resources. An important achievement was the Ontario Farm Groundwater Quality Survey (OFGWQS), which provided important benchmark information on the state of provincial ground water. The experimental programme has included field experimentation to assess the plant availability of nitrogen and the losses by leaching from land applied animal manure and paper mill biosolids, and computer modelling of nitrate leaching. This basic assessment approach was included in a major project, initially funded by the Ontario Ministry of Agriculture and Food (OMAF), which resulted in development of a decision support program (MCLONE4) for manure management on swine, dairy, beef and poultry farms. I managed a project to link MCLONE4 with OMAF's decision support program for land application of manure (NMAN).

Bacteria are the most ubiquitous contaminants of farm drinking water wells, and their fate and transport to water resources has become the main direction for the research programme. The original observation of common and frequent contamination of domestic farm wells with bacteria indicative of faecal contamination (OFGWQS) was followed up with an epidemiology survey to determine the consequences to the health of families drinking water from rural farm wells. To identify the potential sources of bacterial contamination in ground water, a suite of bacterial indicators was selected and tested. The suite allows animal manure sources and septic sources to be distinguished. The transport of bacteria from land application of manure and sewage biosolids is now a major focus. I lead a program linking the Universities of Guelph and Ottawa, Health Canada, Agriculture Agri-Food Canada, OMAF, Ontario Ministry of the Environment (MOE), that aimed to develop an indicator system for the risk to water resources of pathogens present on farms in Ontario. I also headed an investigation into the importance of preferential flow in the transport of pathogens to ground water. That project involved many of the same organizations as the larger program. I am involved in research to develop a design tool for vegetated filter strips to remove contaminants from runoff water before it enters surface water courses. Microbial contamination of surface water used primarily for recreation is an important issue, and I am working to develop approaches to identify contributory sources, particularly the significance of wild life, septic systems and gray water from boats.

Research Direction in the OMAFRA-University of Guelph Enhanced Partnership

From September 1996 to July 2004 I was Director of the Resources Management & Environment Program, which is part of the enhanced partnership agreement between the University of Guelph and the Ontario Ministry of Agriculture, Food and Rural Affairs for agri-food research and development. The program, which is funded at about \$4 million annually, employed the equivalent of 11 full-time University faculty members and three faculty from the regional Campuses of the University. It also supports the equivalent of three secretaries and five technicians.

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Extension

The main thrust in extension is to provide technical support to farmers who wish to develop best management practices on the farms to increase the efficiency of nitrogen use, thereby reducing losses to the environment. Part of this effort is through participation in the Ontario Farm Environmental Coalition's (OFEC) Water Quality Working Group, and involvement in the Partners in Nitrogen Use Efficiency Project, which I developed to identify whether application of current Best Management Practices can reduce the mass of nitrate-nitrogen leaving the rooting zone of commercially-grown crops.

The research related to nutrient management and the contamination of rural wells with nitrate and bacteria was recognized as providing critical underpinning information relevant to the judicial examination of events surrounding the death of seven people and illness of 2000 others in the town of Walkerton, Ontario (The Walkerton Inquiry). I was the sole expert witness, agreed by relevant parties with standing, called to evaluate the farming activity in the area surrounding the critical town well, and practices carried out on the farm, which was the origin of the bacterial contaminants that caused the outbreak. At the same time, I was also asked to provide the Inquiry with a position paper providing information on the policy and regulatory framework, and biophysical understanding, relative to manure management in Ontario and comparable jurisdictions. The paper also provided the Inquiry with an assessment of the spatial distribution of manure production in the province, and a projection of the trends in animal production, with the associated manure creation and distribution, over the next decade. Details of the testimony and the position paper can be found in the Inquiry reports. More recently I was asked by the Ontario Minister of the Environment to serve on a technical experts committee and make recommendations related to the instigation of source water protection planning in Ontario.

Teaching

I normally taught two courses: Soil Plant Relations - given at the undergraduate level to fourth year students, and Soil Productivity - a graduate course. I resumed my teaching program at Kemptville in fall 2006, and give the basic soils course to Associate Diploma and Bachelor Degree students. In 2008 I also shared the development and presentation of a second year degree course in Pasture management.

International Links

I collaborate with the University of Évora, Portugal on enhancing the potential for arbuscular mycorrhizas and symbiotic nitrogen fixation in sustainable agriculture. I also collaborate with Adrian Unc from Memorial University, Newfoundland, on the survival and transport of contaminants through soil, and with Ashraf Tubeileh from Horticulture and Crop Science Department, California Polytechnic State University, on drought tolerance in field crops.

I am a member of the Scientific Advisory Board of LEAF (*Linking* Landscape, Environment, Agriculture and Food), an R&D Unit of The University of Lisbon, School of Agriculture (ISA), Portugal. I also served as a member of the External Advisory Board for **iCAAM** - Institute for Mediterranean Agricultural and Environmental Sciences, University of Évora, Portugal.

Action

The Society Council suggests that members vote in favour to elect Michael Goss as an Honorary Member.

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