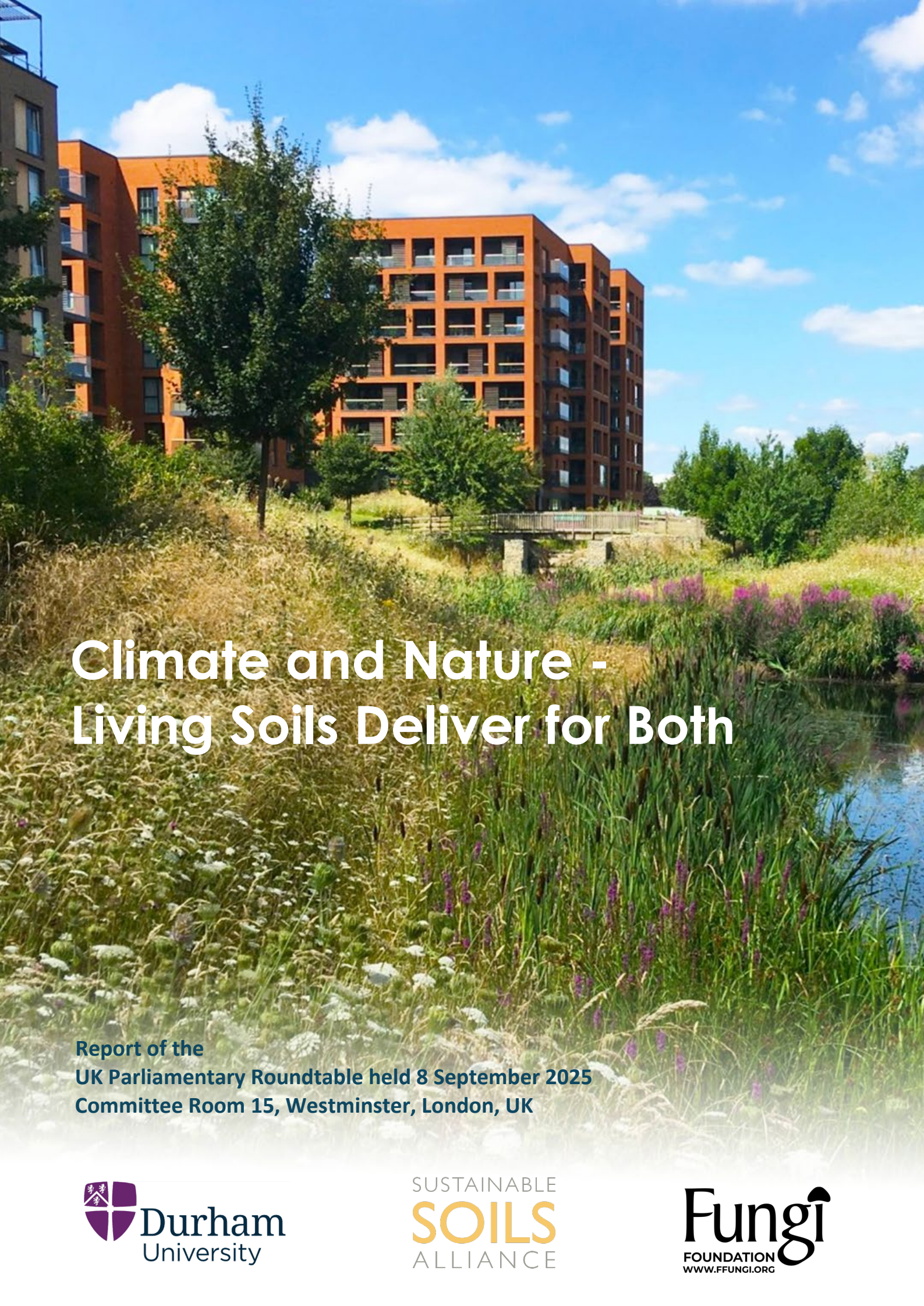

Climate and Nature - Living Soils Deliver for Both

Report of the
UK Parliamentary Roundtable held 8 September 2025
Committee Room 15, Westminster, London, UK

Durham University

SUSTAINABLE SOILS ALLIANCE

Fungi FOUNDATION WWW.FFUNGI.ORG

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Individual remarks may be cited using [named contributor/s] in [this Report as above].

See also
Durham University at https://durham-repository.worktribe.com/output/5188554 and https://www.durham.ac.uk/departments/academic/science/outreach-and-engagement/du-science-100/100-faces-of-science/soil/parliamentary-round-table-8th-sept-2025/

Sustainable Soils Alliance at https://www.sustainablesoils.org/our-work/outputs/climate-and-nature-living-soils-deliver-for-both-parliamentary-event-report

Fungi Foundation at https://www.ffungi.org/blog/the-climate-and-nature-living-soils-deliver-for-both.

Contents

Foreword by Dr Roz Savage MBE MP

Our country's future rests on something so ordinary that we barely notice it, yet so powerful that it shapes our health, our economy and our shared resilience – the living soil beneath our feet. As someone who has spent much of my life learning from nature's patience and strength, I believe that the way we care for our soils tells a deeper story about the kind of nation we want to be: one that nurtures, restores and passes on something better to the next generation.

I was honoured to host this Roundtable, and to meet the farmers, scientists, builders, educators and communities who understand that soil is not just a resource, but a living system on which our food security, our climate goals and our connection with the natural world all depend. At a time when climate change and global shocks threaten supply chains and household budgets alike, strengthening our soils is one of the most practical and hopeful ways we can strengthen Britain – literally, from the ground up.

Across the country, many farmers are showing the way. By working with nature rather than against it, they are rebuilding fertility, protecting water, restoring wildlife and creating farms that are more resilient and more productive over the long term. I applaud their innovative capacity and courage. When we empower farmers, we do more than sustain rural livelihoods – we safeguard our national food security and the wellbeing of every family that relies on a stable, healthy food system.

Regeneration rarely arrives with fanfare. It grows quietly through countless modest decisions – a change in how a field is managed, a hedgerow replanted, soil left to recover, a community choosing to reuse and restore rather than extract and discard. Over time, these small, determined acts add up to extraordinary change. The great achievements we celebrate are built on years of patient effort by people who choose to steward rather than exploit, through intimate knowledge of the land on which they live and work.

What gives me hope is that this work bridges divides. Urban and rural, public and private, local and national – all have a role to play. Whether through construction that respects the ground it builds on, education that reconnects young people with the living world, or policies that align climate, nature and farming, we have the opportunity to rebuild from foundations that are literally and morally grounded.

If we care for our soils, they will care for us in return. They will feed us, protect us from floods, store carbon, support wildlife, and sustain thriving communities. A nation that renews its soils renews its sense of purpose. My thanks go to everyone whose insight and commitment has shaped this Report. Let it be both a call to action and a reminder of what becomes possible when we start from the ground beneath our feet and work patiently, together, to create a vital legacy for future generations.

(photo: Connie Gillies)

Introductory remarks by Dr Merlin Sheldrake

Our health and prosperity depend entirely on what happens beneath our feet. The Latin word for soil, *humus*, and the word *human* both descend from an ancient word meaning 'earth' or 'ground'. Over time, 'Earth' became the name of the planet we live on. Our lives are grounded, literally and figuratively, in the earth. The way we treat soil, then, can tell us a lot about ourselves: what we value, what we choose to call home, how we choose to live alongside others, and the kind of future we choose to create.

Soils are alive: they are created and maintained by living organisms, whether fungi, bacteria, plants, or animals. Soils are vast, ancient ecosystems that underlie the regenerative capacity of the living world. Healthy soils are astonishingly busy places, home to more than half of the planet's species. If you imagine the earth as the body of an organism, soil would be one of its most vital organs, a place where life creates more life.

Human life and well-being has forever rested on the health of our soils. As we look to the future of life on a damaged planet, the ways we care for soil have only become more important. Yet we continue to destroy underground ecosystems at an alarming rate: if current behaviour continues, the UN estimates that ninety percent of the planet's soils will be degraded by 2050. This is a problem. When we degrade soils, we undermine our health, livelihoods, and societies.

Conversely, by taking care of our soils, we can help address many of the urgent challenges of our times, from public health, to climate breakdown, biodiversity loss, food security, waste reduction, flood mitigation, water quality, and more. It is these extraordinary opportunities that we explored in this Parliamentary Roundtable. If you

want to know exactly what we stand to gain by adopting soil-centric policies and practices, you are in the right place. Please read on.

As a fungal biologist, I spend a lot of time handling soils and thinking about them. When I'm not handling them, much of my work involves advocating for the protection of soil ecosystems and the organisms that live underground. Nonetheless, in chairing this Parliamentary Roundtable discussion between MPs, scientists, builders, educators, farmers, and public health researchers, I was struck anew by how fundamental soils are to so many aspects of our lives and society.

To care for our soils effectively, we have to work across departments, disciplines, sectors, and demographics. From one perspective, this is an intimidating prospect. But as I realised during this Roundtable conversation, the very fact that soils are central to all of our lives makes this a subject that invites us to look beyond our differences and disagreements and seek common ground. Soil-centric policies and practices have the power to ripple out across communities and society in ways that can help heal our divisions and bring us together.

It is not just the words humus and human that derive from an ancient word for ‘earth’. The word humility shares this linguistic root, and refers to a state of being ‘close to the ground’. Perhaps it’s a word that can bring us back home to earth and help orient us in our relationship with the wild, wet, world beneath us. Soils are ancient life support systems: active participants in the planet’s cycles, making, remaking, and maintaining the biosphere. Our dependence on healthy soils is total. We cannot opt out of this fact. Where we do have choice is in how creatively and respectfully we work with soils to rise to these times of crisis and transformation.

Dr Merlin Sheldrake, UK Policy Lead for the Fungi Foundation
Chair, Climate and Nature - Living Soils Deliver for Both UK Parliamentary Roundtable

(Morchella esculenta, photo: Giuliana Furci/Fungi Foundation)

Keynote presentations

(photo: Neville Fay)

Soil health underpins all environmental improvements

Ellen Fay, Founder and Executive Director, Sustainable Soils Alliance

I'd like to extend my gratitude to Professor Karen Johnson, Cairo Robb, and Dr Roz Savage MBE MP for inviting the Sustainable Soils Alliance to be part of this crucial conversation. Roz, your work is a beacon for what is possible, and I'm grateful to be here. Last year, Roz tabled the Climate and Nature Bill, and it stands out for two key reasons. First, Roz envisions a single, integrated 'Climate and Nature Delivery Strategy'. This strategy would be guided by an assembly that can sustain ambition beyond the typical parliamentary cycle. At the Sustainable Soils Alliance, we've seen eight different Secretaries of State for the Environment in eight years. Nature and the climate don't operate on this short-term timeline. Roz's vision is simply common sense if we are serious about creating a consistent, strategic path forward. Second, Roz recognises that the climate and biodiversity crises are deeply interlinked. They cannot be tackled in isolation. This brings me to the concept of soil-centric policies - where 1, soil outcomes are at the heart of any policy, and 2, soil is the 'invisible thread'.

I say ‘invisible thread’ because soil health impacts and links water quality, food security and public health, nature recovery, flood mitigation, construction – and even aspects of the circular economy. To the policy makers in the room, I hope it does not go unnoticed that the list I have just given is directly taken from the Secretary of State for Environment, Food and Rural Affairs’s very own 5 environmental priorities - which in turn are reflected in the work of the Sustainable Soils Alliance.

This event is groundbreaking, because it puts these different arguments alongside one another for the first time crystalising the need for cross-policy momentum and weight. As the energy sector moves towards decarbonisation, the land use sector is poised to become our largest carbon emitter. This is because it is complex and impacted by a wide range of parties and interests. However, soil offers a huge opportunity. As the Government's own Land Use for Net Zero, Nature, and People Hub has recognised, soil health is critical to every aspect of nature and climate. The EU understands this, which is why they have dedicated 1 billion Euros to their Soil Mission and identified another 100 billion Euros in private finance to support it. We urge the Government to follow these examples and to reconsider the shelving of the Soil Health Action Plan. This plan would set a precedent for strategic policymaking, allowing our soils to do what they do best: enabling all other environmental improvements to happen faster and better.

(photo: Liisa Takala / liisatakala.com)

Healthy soils, healthy lives – linking soil health to public health, economic wellbeing and prosperity

Dr Aki Sinkkonen, Principal Scientist, and Dr Marja Roslund, Senior Researcher, Natural Resources Institute Finland

Hello everybody. It is an honour to be here.

We have studied urban greening and healthy soils. Recently, we published a large cohort study about type 1 diabetes. Type 1 diabetes cuts fifteen years of life. We showed that if healthy agricultural soils were abundant in a child's living environment, the development of the disease was delayed several years. Our collaborators showed in Nature Medicine that farm-like microbiota in non-farm homes protects children from asthma development in Finland and Germany. Studies in the U.S. have shown that asthma incidence is four to six times less among those who have daily contact with healthy soils, compared to those who do not. Proving causality needs intervention trials. Five years ago, we published in Science Advances a nursery intervention trial. We showed that replacing gravel and sand with forest floor, species-rich vegetation and planting boxes enriched skin microbiota and enhanced immune regulation in just one month.

To exclude psychological effects like sensing green, we did placebo-controlled, double-blinded intervention trials. We studied 3 to 5 year-old children in nurseries. The children played twice a day in sandboxes. Around half of the sandboxes contained microbially poor peat-based placebo-sand and the other half contained sand mixed with healthy, microbially rich soil. After two weeks, the immune regulation was enhanced only among those who had contact with the healthy, microbiologically rich sand and soil mixture.

In the second placebo-controlled intervention trial, indoor gardening using healthy soils enhanced immune regulation of adult volunteers in one month, while gardening using commercially produced compost did not. These findings confirm the significance of healthy soils. Children in nature-oriented nurseries had also better coordination, concentration, and nature relationship, and less stress. Similar results have been seen in many countries. Our colleagues followed how regular nature visits are associated with the need for medication. The prescriptions of psychotropic medication decreased by 33%, heart and blood pressure medication by 40%, and asthma medication by 25%.

If annual economic savings are based on changes in medication only, the estimate based on the British population varies between 1.5 and 3 billion pounds per year. If all the costs to national health are included, the conservative estimate of total savings in Britain is 19 billion pounds per year.

To conclude: Scientific evidence on the benefits of healthy soils is overwhelming.

Our intervention trials form the missing link between low-grade inflammation and disease incidence. But how to reach the savings? Urban greening means substitution of

species-poor lawns with species-rich herb communities, multispecies woody plants, planting boxes for city dwellers, use of dead wood and on-site nutrient cycling, like letting autumn leaves degrade on-site.

(photo: Tim O'Hare Associates)

Soil reuse and construction and infrastructure developments

Ian Sandiford, Project Director, Persimmon Homes

Every year, building 200,000 homes in the UK, we manage to generate 18 million tonnes of topsoil. That's 900,000 wagons per year, mostly disposed of as waste. To offer a scale, if we were to stockpile that soil it would be roughly 4 times the volume of the Houses of Parliament. So, now that we have identified the quantity of surplus topsoil, we can consider ways to reduce this by-product. By definition, under current legislation, topsoil is 'waste' if discarded, intended to be discarded, or required to be discarded. Developers follow these waste rules, but the rules don't encourage sustainable re-use.

Clearly soil would be better used locally, to make good use of this finite natural resource, whilst saving fuel, carbon, and vehicle pollution. On a typical greenfield housing development, around 75 percent of topsoil becomes surplus during construction. Too

often soil is first stockpiled around the site and then eventually sent to landfill or to quarry restoration sites. There is a practical alternative; send that topsoil directly to local farms for re-use where there's a need, and where the soil can improve the quality of the farmland. Many landowners need additional topsoil because of intensive farming, erosion, or a switch to arable production to support UK food security.

When we transfer soils well, we can have a substantial, real-world impact; sequester carbon, absorb surplus nutrients, build soil health, and improve long-term water quality. I have found first hand that even when opportunities are identified, taking advantage of them can be exceptionally difficult and time-consuming. To do so requires breaking with established norms in construction. Resistance from local authorities can also add programme and cost risk. If better understood, both locally and nationally, we would unlock substantial carbon savings. We would also literally turn what is now waste into carbon capture and food, with all the wider social and economic benefits that come along with that transformation. To get there, we need to encourage Soil Resource Planning that promotes re-use rather than disposal. Of course, system change won't be instantaneous. To avoid delaying development, the first step should be to remove barriers by informing industry and regulators. By enhancing soil health in local farm communities, many UK construction projects can support resilient food systems, cut carbon emissions, and protect soil microbes that underpin many BNG food chains. This is one of the rare examples of a genuine win-win scenario, and it's ours for the taking, should we choose to act.

(photo: Six Inches of Soil)

Education and the impact of a film with 'soil' in the title

Claire Mackenzie, Producer, Six Inches of Soil

Our experience at Six Inches of Soil: The film has been shown over 700 times in person, and now is online to view at home from various streaming providers such as Apple. The reason the film has been so popular is that it is a story of hope - how farmers, young and

old, are working closely with nature and regenerating their soil, land and communities. This is what has attracted people to watch the film, the human connection with soil and that it is the essence of life.

The impact beyond farms, environmental and community groups showing the film is that the Foreign Office has had it translated into Russian and several of the native languages of central Asian countries. Here the film has been shown in embassies to unlock crucial discussions in adapting farming practices in Central Asia. The civil servants have found the film has been a useful way of opening up conversations. The film has been taken into many large companies, Savills, Triodos, American Chamber of Commerce in The Hague, Unilever, Compass, Knight Frank and Rutley.

It has led to us being partners on a campaign on embedding food, farming and sustainability into the UK curriculum, which has now gone on to become the not-for-profit organisation SoilED and Six Inches of Soil are still partners with me now as a director.

We also had a Parliamentary event that shared parts of the film with the attendees and shared the positive reasons to move to farming with nature to regenerate soils, clean up waterways, prevent flooding and to regenerate rural communities and provide jobs and livelihoods for the future.

The problem is that soil is not adequately covered in the school curriculum, nor is it covered in higher education, and therefore general public understanding and awareness is missing. As a result, children will leave school not knowing about soil's importance for carbon sequestration, water storage and infiltration, biodiversity, food provisioning, human health and a variety of other environmental and social functions!

And as we've heard, it is not just in relation to the food production sector that there is a need. There is a need for increased soil-centric resources and education in planning, and the construction sector, including through soil conditions at planning stage, to get sustainable soil management at the forefront of the agenda there. And as our Finnish colleagues have demonstrated, from a public health perspective we would do well to invest more attention to physical human health benefits of contact with healthy soils and living near species rich vegetation.

To really embed the benefits of soil-centric approaches in society, and create soil literate global citizens, we need to start from the ground up, showing care for, and the value of, healthy soils in nurseries and in schools. But we also need action to transform how the current generation of college and university students, workers, business leaders, investors and policy makers take soil into account – or don't – by ensuring education across the board. Films like Six Inches of Soil can help, to stimulate interest and greater awareness including beyond the farming sector, but we really need more targeted educational, research and policy initiatives across many sectors.

Quotes and reflections from other Roundtable participants

(Tower of London, Tower Superbloom, photo: Tim O'Hare Associates)

Tim O'Hare, Principal Soil Consultant, Tim O'Hare Associates

"I have worked as a Soil Scientist in the construction industry for the last 30 years, providing advice on how best to protect and manage soils on a broad range of construction and infrastructure projects. The key to any successful scheme is ensuring that the reinstated soils fully function and deliver their vital services. This is a big ask, given that construction activities are probably the greatest cause of compaction and structural degradation to soils, but it is certainly possible.

Huge amounts of agricultural land are being developed for housing and for major infrastructure projects all across the UK, and the degree to which the soils are properly managed and reinstated is variable but generally poor. Some developers and contractors are trying to deliver schemes using best practice soil management guidance, such as the DEFRA Code of Practice on the Sustainable Management of Soils on Construction Sites, 2009, but there is still a huge lack of awareness and appetite to improve the situation.

I believe it could be greatly improved if the planning system was to instigate better soil management practices through planning conditions. This would kick-start the initiative to better soil management down the line to the designers and the contractors. Where a small proportion of Local Authorities have implemented this approach by forcing developers to carry out a Soil Resource Survey and produce a Soil Resource Plan prior to construction, the protection, management and final quality of soils has massively improved, so we know it does work. There's also still a need for skills training, and educating the designers through CPD, and the workforce through the use of toolbox talks and good soil management plan writing.

Why is there so much surplus topsoil generated by housing developments? Of course, when you convert 100% greenfield to only 40% gardens and landscape, with the remaining being houses and infrastructure, there will be a surplus. However, a huge part of the problem is the intrinsic design that this industry implements. The topsoil layer in most greenfield sites is between 250-300mm thick, so you would think that it would be sensible to replace at least that amount of topsoil when constructing landscaped areas, including back gardens. However, the industry standard is just 150mm of topsoil, and the NHBC's guidance document is only 100mm minimum, and this is placed over compacted rubble or subsoil. The consequence is minimal water attenuation potential, waterlogged topsoil, higher flood risk in winter, higher drought risk in summer, less carbon storage, low soil fauna population, insufficient soil depth for trees and shrubs, and more surplus topsoil to take off-site. This is creating a dysfunctional landscape, poor soil health and a legacy of problems. At a national scale this is disastrous for minimising the impacts of climate change, and certainly not helping to reverse it.

My research on many housing developments (and other construction projects) that do install 300mm of topsoil, as well as decompact the subsoil, has shown that placing 300mm of topsoil into back gardens has so many benefits for the environment, the home occupier, the community and the developer. These include healthy gardens and lawns, greater opportunity to plant trees and shrubs successfully, less issues with waterlogging and drought, lower flood risk, better public open spaces, happier occupants, less complaints, and less post-construction repairs. The joy that home occupiers have when they have a lovely garden or public open space to use and sit in is amazing. Given these benefits and the surplus of topsoil from any greenfield development, we are now looking at opportunities to increase the thickness of topsoil even further, although this too has its challenges to avoid anaerobic conditions developing.

Social media has actually been an ally in holding housing developers to account with poor quality residential gardens and public open spaces. In the past, there was no one

to complain to apart from your neighbour about the state of the garden for the new house you had just bought or moved into… 150mm of topsoil over compacted hardcore and rubble. However, these days new home owners and residents form WhatsApp groups or post complaints and images on social media, highlighting issues of poor quality gardens to a much wider coverage. This concerns the PR side of developers, and now each have 'customer complaint departments' to rectify problems.

Soil should be regarded as the biggest component of any sustainable drainage system (SuDS). Often there is a lot of focus put on the engineering side of SuDS … but soil is the biggest 'sponge' for attenuating water for plant uptake and for groundwater recharge.

I have had the privilege of working on the construction or renovation of some of the greatest public parks and green spaces across the UK and worldwide. I can honestly say that designing and installing the correct soil systems delivers the best landscape schemes, and in turn, creates spaces where people are happiest and nature can also thrive. Healthy soils are fundamental for the delivery of nature-based solutions, ecosystem services, flood mitigation, Biodiversity Net Gain and carbon sequestration, and the construction industry has a huge part to play in their delivery."

(Soils supporting health and well-being, amenity and community, photo: C. Robb)

Sarah Dack, Specialist Environmental Public Health Scientist, UK Health Security Agency

“The trouble with Health is you’re sort of on the peripheries of soil all the time. We need a reasonable soil in cities for green infrastructure... trees are very cooling and provide places for people to exercise. We want the physical activity, we want well-being and cooling... But actually you can't have green spaces if you don't have the soil...

The other thing is the whole flood management sort of side of things. If you've got a good soil, you know you're going to get more rapid infiltration and you know you're going to get less surface flooding. So yes, we’re dealing with the things that need soil, if you like; it's just not obvious to many.

We're trying to highlight that, if we did recognise this aspect more clearly and put more of a focus on soil, it could help with so many things especially in urban areas.

In the UK we’re used to our narrow range of temperatures, so we're not really adjusting to the heat... heatwave mortality is increasing. We also have high levels of depression, obesity... all have the potential to decrease with access to green spaces and so we need soil!

Houses are overheating as they are not designed for our new summer temperatures... and we know that trees and vegetation reduce the heat. In terms of achieving the national house building targets... for actually achieving homes that are liveable in, I would have thought soil quality would have a big impact. And it will help with biodiversity, and to certain extent with equity and fairness. This may seem odd, but we've homes overheating in summer, and it always affects the young and the old the most without alternatives such as going into air-conditioned offices or having gardens to escape into. It impacts more on people with the least amount of money and people who are vulnerable and can’t escape the heat. Without green spaces and cooling spaces those people have nowhere to go to cool off. I'm sure Persimmon and others will plant a few trees when they're making large detached housing, but the need for cooling spaces is within existing homes in urban centres so, we need to go back and retrofit some of this....

We don't do enough on prevention. That's the whole idea with vaccines, although for this it is difficult to get uptake. But take it a step further and making sure people are living in the right sort of homes, not too hot, too cold, too damp... and able to stay active. All these things, you know, help people to live healthily and happier and not need the NHS or social care as much, you know? Everyone is happier when they are healthier. A little bit of retrofit and a green space goes a long way!”

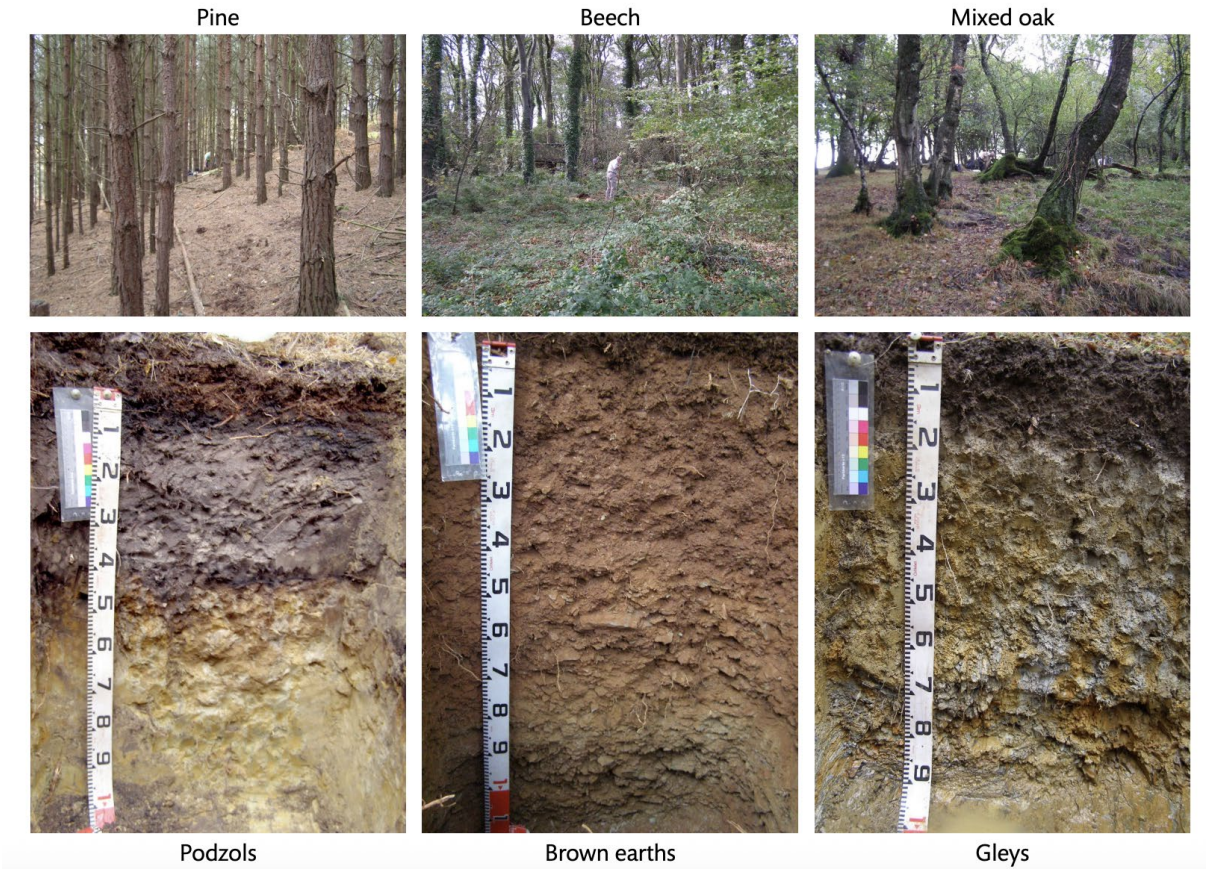
(Fully functional soil including sustainable drainage system (SuDS) delivery, photo: Tim O'Hare Associates)

Chris Jones CMgr FCMI, Research and Development Manager, Northumbrian Water Group

"Water services are intimately connected to catchments and soils and degraded soil health compromises the delivery of sustainable water supplies, increasing treatment costs, chemical use, and operational complexity. Healthy soils hold rainfall, mitigate flood risk, and filter pollutants before they reach watercourses and nature-based solutions (e.g. trees, wetlands, cover crops) enhance soil's ability to buffer nutrients and retain water. Catchment land use and soil protection are recognised as critical to securing water quality at source and Northumbrian Water Group (NWG) is developing integrated catchment stewardship plans for its ten major catchments by 2030. Nature-based solutions, such as riparian buffer planting, wetlands and infiltration features, land use change and grazing controls and hedgerow restoration and erosion barriers, help to lower treatment costs, reduce carbon emissions by up to 95% compared to end-of-pipe treatment, and improve ecological health.

NWG treats 100% of its sewage sludge through advanced anaerobic digestion (AAD), recovering energy and producing biosolids for reuse on land. We see the reuse of treated biosolids on agricultural land as a core part of a circular economy approach. When managed properly, biosolids return nutrients and organic matter to soils, reduce reliance on manufactured fertilisers, and support soil health and carbon outcomes. That support is conditional on strict regulatory compliance, robust assurance, and clear evidence of

safety and sustainability. We also recognise the growing regulatory, environmental and societal pressures facing agricultural reuse, which is why we are actively engaged in sector-wide scrutiny, research and contingency planning to ensure resilient and responsible bioresource management in the future."



(cropped photo montage: BioSoil soil monitoring network/Elena Vanguelova/Forest Research)

Dr Elena Vanguelova, Senior Biogeochemist/Soil Sustainability Research Leader, Forest Research

"From a scientific perspective, living forest soils are fundamental to delivering climate and nature outcomes together. They are not simply a substrate for tree growth; they are a critical form of natural capital that underpins carbon storage, biodiversity, water regulation, and wider ecosystem resilience. In fact, around three-quarters of forest carbon is stored below ground, in soils, peat, and humus layers. That means any serious strategy for Net Zero, nature recovery, or woodland expansion must put soil protection and soil health at its centre.

Long-term research shows that woodland soils can accumulate substantial carbon over time, particularly where management is sustained and disturbance is minimised. On mineral clay soils, carbon can continue to accrue for centuries, while the greatest gains often emerge only after several decades. By contrast, on peat and other organic soils,

poorly planned planting or excessive ground preparation can trigger carbon losses that may take years to offset. This is why the right tree in the right place, combined with soil-sensitive management, is essential.

Healthy woodland soils also deliver far beyond carbon. They play a major role in slowing water flow, storing floodwater, reducing diffuse pollution, improving water quality, and supporting the biological communities that make woodlands resilient and productive. They therefore contribute directly to multiple Government priorities, from the 25 Year Environment Plan and the Sixth Carbon Budget to natural flood management, clean water, and sustainable domestic timber production.

The key message for policy is simple: if we treat soil as critical infrastructure rather than an afterthought, one well-designed woodland intervention can deliver multiple public goods at once. Protecting forest soils, rewarding long-term stewardship, minimising disturbance, and monitoring soil health should be seen not as optional extras, but as essential to achieving joined-up policy for climate, nature, and people."

(Tim Mead on Yeo Valley farm in south west England, photo: Tim Mead / Yeo Valley)

Tim Mead, Founder and Director, Yeo Valley Organic

"Soil is where everything begins. It's not just the foundation of farming – it's the foundation of life itself. Healthy soil grows 95% of our food, stores more carbon than all the world's plants and forests combined, and quietly supports every ecosystem we

depend on. As farmers, we have a choice: we can deplete this extraordinary resource, or we can be the custodians who repair and restore it.

At Yeo Valley, we've learned that when you get the soil right, everything else follows. Regenerating soil isn't a niche idea – it's one of the biggest opportunities we have to tackle climate change, rebuild biodiversity and secure the future of food. Soil is our natural ally, right under our feet, and it deserves our respect and protection."

(Healthy soils delivering nature-based solutions (NbS), photo: Tim O'Hare Associates)

Daniel Iddon, Founder of Re-Genus

"Healthy soils sit beneath almost every system we rely on, yet they remain overlooked in policy, planning and investment decisions. The Roundtable reinforced that soils are not simply an environmental issue, but foundational to climate resilience, public health, infrastructure performance and long-term economic stability.

The UK imports around a million tonnes of synthetic fertiliser each year, with significant losses to air and water. Yet there is sufficient industrial residue supply to replace much of this through circular, lower-carbon alternatives. From a life cycle perspective, the carbon savings are substantial, alongside reductions in eutrophication and improvements in soil function. The challenge is not technical feasibility, but behavioural and structural inertia.

Regenerative farmers are demonstrating momentum, supported by initiatives such as the Sustainable Farming Incentive, which nudge rather than mandate change. However, the wider system, including input-driven advisory models and weak carbon pricing signals, still favours synthetic dependency.

Total cost accounting makes the case clear: water treatment costs, nutrient neutrality constraints on development, air quality impacts and chronic health pressures are all connected to how we manage soil.

Putting soil health at the centre of decision-making is not ideological. It is practical economics – and a necessary step towards a more resilient and prosperous UK."

(Soil sampling in northern England, photo: SoilMove)

Matthew Orman, Executive Director and Public Affairs, Sustainable Soils Alliance

"Because soil underpins so many policy areas, it needs its own coherent action plan built on shared, foundational tools for decision-making. That starts with a framework which identifies the full range of threats to soil health and the measures required to

mitigate them. It must recognise the breadth of soil functions, move beyond a narrow catchment lens, and provide not only metrics but a clear interpretive structure to guide appropriate action.

Such a framework also has to reflect the influence of the wider supply chain. Food and drink companies, insurers, water companies and financial institutions all have material interests in resilient soils, and the sector is increasingly aware that soil carbon alone is not a sufficient indicator. Balancing carbon with measures such as water-holding capacity brings resilience into view and broadens the set of actors who need to be engaged.

By neglecting soils, we are missing significant opportunities for private sector investment and for aligning commercial incentives with long-term soil stewardship. Many businesses still do not fully account for the risks associated with degraded soils or the pressures their own practices place on farmers. With a weak regulatory environment, these influences remain largely unchecked. Yet there is now greater appetite for a level regulatory playing field, recognising that all businesses ultimately depend on the same finite soil resource. A pre-competitive, regulated approach would raise standards across the board and avoid penalising those who try to lead.

The idea that all regulation is bad for business is misplaced. The real risk lies in the absence of the right regulation - particularly in an area as fundamental as soil."

(Soil assessment in Wales, photo: C. Robb)

Dr Simona Capisani, Associate Professor of Environmental Philosophy, Durham University

"*Farmers are sometimes portrayed as unwilling, sceptical, or resistant to nature and climate-focused policies. However, for the most part they both understand the importance of soil health and would prefer to prioritise it. Disengagement or resistance to top-down policies can result, though, when specific place-based needs, values, challenges and issues aren't taken into consideration in the development as well as the implementation of such policies. For example, in my research and discussions with farmers in the north of England there is a perception that policies that are developed in the south of the country may not explicitly consider or understand the specific challenges that Northern agricultural communities are facing. Additionally, the time horizon of a particular policy may not cohere with on-the-ground realities. Even if farmers want to comply, they often face barriers to adoption, which include difficult trade-offs that compel deference to short-term considerations against long-term commitments to overall soil health. This is often read (externally) as a type of ideological resistance, when it could be a matter of differing underlying values and assumptions about risk.*

Farmers often describe themselves as 'constantly hedging,' and that they understand sustainability as the integration of both ecological as well as economic sustainability. Constant shifts in incentives, unreliable or inapplicable time scales, and different weighing of a range of values can all contribute to a mismatch between relevant communities managing land and soil health and those who are developing the policies that structure such management. When there is any top-down engagement with communities, it is often in the form of one-off consultations. This minimal, non-iterative, and non-integrated policy development between governance agencies and communities can contribute to the erosion of trust which adds an additional barrier to sustainable soil practices and policy development.

This relates back to the importance of governance infrastructure itself. This general concern is vital for better integrated climate and biodiversity policy, and particularly important for soil insofar as soil governance sits at the intersection of a range of different priorities (from housing, to agriculture, to urban resilience, to health, to food security). Therefore, there needs to be specific consideration of how governance infrastructure can support integration between top-down and bottom-up governance. There's also a lost narrative potential when soil is relegated as a narrow side issue rather than a central component of governance. As I mentioned, soil is central to multiple sectors and policy concerns. A soil-centric approach to governance is advantageous as soil offers both a material focal point and also serves as a node for addressing how different kinds of relationships between different kinds of communities and policies intersect, contradict, and/or complement each other. In this way, a focus on soil can help the UK assess its success in its commitments to international as well as local communities. Climate and biodiversity policy have been artificially segregated in the international sphere and often in national and local level governance systems. However, there is increasingly an effort to re-integrate them. Thus, it is vital to consider how such re-integration can be facilitated by

national governments in coordination with sub-state actors. Soil-centric approaches offer a concrete opportunity to do so.

For too long, soil has been the Cinderella in the nature and climate governance space. Considering its centrality both in communication as well as policy design creates a multitude of opportunities for buy in, coordination, and better cooperation across multiple levels of governance and action."

(Female and male Sminthurides malmgreni (springtails) in leaf litter, Slapton Wood, South Devon, photo: Andy Murray - chaosofdelight.org)

Natalie Bennett, Green Party peer

"When I studied soil science as an agriculture undergraduate in Australia in the 1980s, it was taught as a chemistry subject. Yet now we've come to understand the rich, teeming ecosystem under our feet, the tardigrades and springtails, the bacteria and fungi, the way plants manage - you might say "farm" - the systems around their roots. And realise that industrial agriculture, practices encouraged by successive governments and pushed on farmers by multinational food companies, is not just dramatically destructive of the life of the soil, but a threat to our food security, and our very lives as holobionts, each of us an ecosystem blending human and microbe.

Yet that understanding has yet to be translated into the kind of transformative policies we need to be, as geographer Jamie Lorimer puts it, "probiotic", supportive of life.

Much action needs to be taken by the government in Westminster, to ensure the protection of our rich soils, from that under ancient forests and our (few remaining) meadows to farmland and (particularly) peatlands, to stop the casual flinging around of poisons by industry, and the unnecessary use of biocides in everything from socks to soaps (subject of my private Member's Bill last year).

But caring for the soil is something that local government can also play a major role in. Whether at the most basic level that is protecting it from being unnecessarily smothered in concrete or tarmac, or in promoting biodiversity through good management practices (reminder, the soil doesn't support biodiversity, it is biodiversity), or treating organic "waste" as the rich resource that we urgently need to replenish on our land, they have a huge role to play. And an opportunity to innovate and work with communities, which are growing increasingly aware of the need to work towards their own food security, protect their public health, and enrich their lives with flourishing green spaces.

Caring for the soil must not be an afterthought, but come in at the start of every decision, every planning process, every political choice. For it is caring for our own future and that of future generations."

(Durham University and Outdoor and Sustainability Education Specialists soil literacy event, photo: Rachel Moore/OASES)

(Compost-soil life under the microscope at the Islington Grow Show, 2025, photo: C.Robb//Dominic Suckley/Mildmay Community Food Project)

Support for soil-centric approaches

Dr Tony Juniper CBE, Chair, Natural England

"This Report underlines the growing body of evidence that soil is at the heart of the country's critical infrastructure, underpinning our wildlife, water regulation and food security while mitigating the impacts of a changing climate. The many pressures on soil health mean that we need to collaborate across sectors, including farming, construction, water, Nature restoration, spatial planning and public health to set our soils – and Nature more widely – on the path to recovery."

Mary Creagh CBE MP, Parliamentary Under-Secretary of State (Minister for Nature), Department for Environment, Food and Rural Affairs

"Healthy soil provides benefits for society and the environment by underpinning the ecosystem services we rely on. Responsible, sustainable soil management supports food production, biodiversity, water quality, carbon storage, and helps reduce flood risk while improving water retention during prolonged dry periods. Actions in the Environmental Improvement Plan 2025, together with national soil monitoring under the Natural Capital and Ecosystem Assessment programme, will guide our ongoing approach to improving soil health, protecting communities and supporting farmers."

Professor Rosie Hails MBE, Nature, Land & Evidence Director at the National Trust

"Healthy soils are the foundation of a thriving environment, resilient landscapes and sustainable food production. With UK soils under significant pressure, we strongly support efforts to place soil health at the heart of policymaking. Stronger protections, better data, and incentives for nature-friendly farming are essential to restoring the condition of our soils and tackling the climate and nature crises together. Healthy soils aren't optional – they're vital for a future where people and nature thrive together."

Martin Lines, CEO of the Nature Friendly Farming Network

"Healthy soil is the foundation of farm resilience and national food security - it underpins productivity, water management, biodiversity and carbon. A soil-centric approach to policy is one of the simplest ways to deliver multiple outcomes at once, but it only works if it's practical on farm: clear baselines, good advice and long-term certainty. This Report reinforces the case for putting soil at the heart of decisions - and investing steadily now to avoid much bigger costs later."

Mark Lloyd, Chief Executive Officer, The Rivers Trust

"Soil management is absolutely fundamental to water management. Healthy soils allow water to soak into aquifers, reducing flood risk and pollution. Run-off from poorly-managed soils, construction sites and roads is one of the biggest sources of pollution of our water courses. The best and cheapest place to manage water is where the raindrop

hits the ground. We wholeheartedly support moves to soil-centric policy making and policy development."

(Continuing Professional Development (CPD) event, photo: Tim O'Hare Associates)

Professor Jess Davies and Professor John Quinton, Soils in Planning and Construction Task Force, Lancaster University

"We support initiatives that highlight the vital role of soils and promote working with them to build a sustainable future. The Roundtable's diverse perspectives - from scientific insights on soil and human health to industry voices - were encouraging. As founding members of the Soils in Planning and Construction Task Force, we have collaborated across sectors for over five years to integrate soil sustainability into policy and practice. We strongly endorse the 'whole society' approach called for here and are committed to advancing soils as the foundation of healthy, sustainable places."

Rebecca Hearn CEnv, Kerry Murray CSci and Sophie Hoyland, Co-directors, Midlands Land Events CIC (MidLE)

"One of MidLE's impact aims is to improve understanding and management of soils through knowledge sharing and good practice across the land, property and environmental community. By bringing together the wealth of relevant guidance and policy that exists, through the SILOtoSOIL Tool, MidLE and partners aim to improve cross-disciplinary soils awareness, enable users of the Tool to identify opportunities for collaboration, and develop the coherent transdisciplinary approach, called for in this Report, that delivers for environmental wellbeing, people and the economy."

Dr Emma Wilcox CEnv, Chief Executive, and Martin Ballard CEnv, Chair of the Soils and Stones Project, Society for the Environment

"The Society for the Environment's Soils and Stones Project supports this important Report's findings, emphasising soils' vital role in environmental wellbeing and sustainable economic growth. Chartered Environmentalists (CEnvs) from all land-growth sectors are developing holistic policy and promoting best practice (https://socenv.org.uk/soils-and-stones-project/). We have advocated since 2019 for risk-based standards, transdisciplinary collaboration and formal recognition of soils' ecosystem services, whilst promoting policy reform, soil passports and circular economy growth, to ensure soils are valued and protected."

Dr Amy McDonnell, Co-Executive Director, Zero Hour

"Current legislation has failed to establish binding targets for soil health, and recent weakening of environmental protections has left it increasingly at risk. Protecting soil means safeguarding the foundations of life: our ability to grow food, sustain ecosystems, and mitigate climate change. This is not just an environmental issue, but a matter of national security. We support Roz Savage in calling for soil-centred policymaking and urge the Government to act on this Report."

Blake Stephenson MP for Mid Bedfordshire

"Mid Bedfordshire is home to Cranfield University's National Soil Resources Institute, and I am proud this important expertise sits in our constituency. I support Cranfield and call on DEFRA to fund a modernised National Soil Inventory, giving councils site specific information on infiltration, runoff and erosion to manage flooding across our communities. Planning should require soil surveys, soil management plans and responsible soil reuse, underpinned by National Soil Inventory data, to protect homes, farmland and local infrastructure."

(Sowerbyella rhenana, cropped photo: Giuliana Furci/Fungi Foundation)

Conclusion by Professor Karen Johnson, Durham University, Department of Engineering and Cairo Robb, Collaboration for Interdisciplinary Sustainable Soils Project CIC

A soil-centric approach to policy, including in construction and infrastructure delivery, offers the UK Government a coherent, evidence-based pathway to improve public health, restore biodiversity and accelerate the transition to a circular economy.

Soil is not inert waste: it is a living ecosystem that hosts more than 50% of species, including the flora, fauna and funga that we define collectively as wildlife. Healthy soil underpins all above-ground biodiversity and therefore should sit at the heart of the UK's nature recovery ambitions as well as its implementation of international commitments under the Global Biodiversity Framework agreed at COP15 of the Convention on Biological Diversity. If the Government is serious about reversing nature decline - which it has acknowledged is among the worst globally - then protecting and rebuilding soils must be central to policy.

Healthy soils are equally foundational to human health. Biologically active soils support urban green infrastructure that improves air quality, regulates temperature, mitigates flooding and enhances mental wellbeing. Increasing evidence shows that contact with healthy soils directly improves immunity, as does spending time in healthy soil supported environments. These preventative health benefits translate into reduced long-term pressure on the NHS, potentially saving billions by lowering rates of respiratory illness, inflammation, heat stress and stress-related conditions. Soil management and restoration is therefore not simply an environmental measure; it is preventative public health policy.

Reusing healthy soils in construction projects - through careful excavation, storage and reinstatement of the soil profile - or through remediation that enhances soil health where necessary with redeployment into landscaping and habitat creation - aligns with local nature recovery, landscape restoration and the forthcoming Circular Economy Strategy. It ensures living material is kept alive and in productive use, reduces embodied carbon from importing manufactured materials and cuts landfill pressures. Methane emissions from landfill account for a significant share of UK greenhouse gases, and materials such as clean soil contribute to this burden unnecessarily when misclassified as waste rather than as a recoverable biological resource.

Empowering local authorities to adopt soil-centric planning policies, incorporating soil resource survey and soil management plan conditions and standards would enable local authorities to cut materials going to landfill, reduce landfill emissions, meet their climate targets and deliver higher-quality biodiverse green infrastructure locally.

Critically, Biodiversity Net Gain (BNG) creates a policy mechanism and funding stream to restore habitats through development. However, recommendations within the Fingleton Review - based on equivocal evidence - risk undermining these opportunities by narrowing environmental requirements in ways that could discourage meaningful locality-specific soil restoration and reuse. Instead, empowering local healthy soil reuse would rebuild the very ecological foundations upon which BNG depends, dovetailing with place-based local nature recovery plans. The Fingleton Review recommendations also jeopardise the wider co-benefits that protecting and restoring nature, including rebuilding soil health, deliver for the health and wealth of the UK.

Promoting agroecological, regenerative and fungi friendly farming practices through ambitious, well-funded and long-term iterations of the Environmental Land Management schemes (ELMs) could help drive long-term improvements in farm soil health and underground fungi protection. The Sustainable Farming Incentive could leverage implementation of Whole Farm Plans that establish soil health as fundamental to farm activity and require that a soil health assessment be carried out alongside other baselining on entry.

With landfill tax rising and housing delivery accelerating, the opportunity for the construction and housing sectors to embrace soil reuse is immediate. The forthcoming Circular Economy Strategy and 25 Year Farming Roadmap can be transversal if both double down on a commitment to healthy multi-functional soils. Given the stark warnings in the Government's recent national security assessment on *Global Biodiversity Loss, Ecosystem Collapse and National Security*, the imperative for transformative change in our relationship with biodiversity and global supply chains is plainly evident.

The issues raised during the Roundtable discussions have relevance across all four nations of the United Kingdom. This Report focuses on the English policy context. Some Roundtable participants pointed to soil-centric policy initiatives occurring elsewhere in the UK as good practice examples to be emulated. These included Scotland's longstanding policy on free and open access to soils data; Northern Ireland's comprehensive agricultural soils baseline survey programme; Cardiff Council's use of planning conditions to ensure sustainable soil management in development and construction, and the inclusion of 'concentration of carbon and organic matter in soil' as a national Well-being Indicator (Indicator 13) under the Well-being of Future Generations (Wales) Act 2015 in Wales. That Act provides an important lever for long term policy-making, and notably also includes 'a globally responsible Wales' among its seven national Well-being Goals.

If the UK truly wishes to demonstrate real leadership for climate, nature and people, we must not only value soils at home, we must also value and care for soils beyond our national borders, through supply chains, in foreign investment and in the activities of UK based companies abroad. We need to increase soil literacy and identify and address our impacts and dependencies on global soils, to support soil security and sustainable development globally, in line with the UN Sustainable Development Goals.

Since the Roundtable took place in September 2025, the EU has adopted a Soil Monitoring and Resilience Directive, the Pan-African Parliament has adopted a Model Law on Sustainable Soil Management in Africa, and the International Union for Conservation of Nature (IUCN) has adopted multiple resolutions addressing soils and soil biodiversity, including Resolution 8.007 on Soil Security Law. The recent trilogy of international Advisory Opinions on climate change from the International Court of Justice, the International Tribunal for the Law of the Sea, and the Inter-American Court of Human Rights, have emphasised the importance of safeguarding nature and biodiversity in addressing and responding to climate change. The legislative developments mentioned above point, in addition, to an international recognition of the need for explicit soil-focused policy and legislation.

The UK Government and the Government of Chile have together demonstrated important international leadership in advancing the Convention on Biological Diversity's *2020-2030 Plan of Action for the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity* adopted at COP15, by launching the International Pledge for Fungal Conservation, which encourages states to include fungi in their biodiversity strategies, policies and legislation. Following the Pledge, at an event in the Houses of Parliament in January 2026, the Fungi Foundation launched an MP briefing on *Protecting and restoring the UK's fungi*. It is time to act on the understanding that the way we treat our soils, with all the amazing microbial and faunal diversity they hold, and vital contributions to people they provide, are matters of common concern locally, nationally and globally.

Still, much remains to be done to move away from siloed working and towards more soil-centric policy-making and delivery. The Roundtable discussions reinforced the key importance of the policy priorities identified in the pre-Roundtable policy briefing, which is included in the Appendix to this Report.

Adopting a whole of society approach to education about the multiple cross-sector benefits of healthy soils, and treating soil as valuable natural capital rather than degradable or disposable waste, offers joined-up gains for climate, health, biodiversity and the economy. A nation that rebuilds its soils rebuilds its ecosystems, its resilience and itself.

(Some Roundtable participants and attendees, photo: Ellie Sandiford)

Acknowledgments

Durham University, the Sustainable Soils Alliance and the Fungi Foundation wish to thank Dr Roz Savage MBE MP for hosting, and all the Roundtable participants for giving so generously of their time and expertise to take part in, the Roundtable, and for contributing to this Report. We also extend our sincere gratitude to everyone who contributed supportive comments for inclusion in this Report.

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In addition, we wish to express our appreciation to Sarah Hyland and Martin Gleghorn at Durham University Library, Mark Tallentire and Angela Gemmill at Durham University Comms, Tilly Kimble-Wilde at the Sustainable Soils Alliance, Rocío Ñancupil, Alejandra Olguín and Alina Prigordova at the Fungi Foundation, and Matt Moon, Charlotte Conybeare and Liam Mason at Magdalene College, for helpful technical support.

Appendix – Pre-Roundtable Policy Briefing

POLICY BRIEFING for MPs attending UK Parliamentary Roundtable
Climate And Nature - Living soils deliver for both
Date and Time: Monday 8 September 2025, 5.00 -7.00pm **Location:** Committee Room 15

EXECUTIVE SUMMARY

"**A nation that rebuilds its soils rebuilds itself**".[1] Healthy soils are a powerful, yet under-utilised ally in achieving Climate And Nature (CAN) goals, and delivering on key Government missions. Soil-centric policies offer integrated, cost-effective solutions for departmental priorities in health, infrastructure, environment and education. Leadership in adopting soil-centric approaches can support a thriving and resilient economy and produce a healthy more productive workforce, whilst supporting planetary health.[2]

How soil-centric approaches CAN help deliver Government priorities across departments

PUBLIC HEALTH

- **Cooling urban areas**: Trees and other vegetation can reduce surface temperatures by up to 24°C compared to concrete but rely on healthy soils to survive and thrive.[3,4]
- **Air pollution mitigation**: Urban and rural sustainable soil management reduces airborne dust and particulates, supports pollutant-filtering vegetation, and can lower ammonia and greenhouse gas emissions arising from fertiliser use.[5,6]
- **Enhancing physical health**: Spending time in microbially rich soil environments that produce positive bioaerosols (like in forest bathing), and touching healthy soils both indoors and outdoors, can boost immunity, as well as reduce inflammation, asthma, and diabetes, potentially saving the NHS more than £19.5bn.[7,8,9,10]
- **Enhancing mental health**: Green prescribing and access to healthy green and blue space improves mental health, helping generate NHS savings and creating healthier communities.[10,11]
- **Improving nutrition**: Healthy soils can enhance food nutrient content, and involvement in food growing projects encourages fruit and vegetable consumption in children and adults.[12,13,14]
- **Biotech and innovation potential**: Soil is a biotech exploration reservoir; soil organisms are the source of many antibiotics, and healthy soils are key to addressing antimicrobial resistance.[15,16]

CONSTRUCTION & INFRASTRUCTURE

- **Considering soil early in projects**, by using soil surveys, soil management plans, and following the DEFRA Code of Practice on Sustainable Use of Soils in Construction, can optimise land use, reduce risks, delays, surface runoff, failures and complaints, helping generate savings.[17,18,19,20,21]
- **Waste reduction:** Soils made up 57% of landfill tonnage in 2020. Local reuse of clean construction soils can help generate savings and reduce GHG emissions.[22]
- **Flood mitigation**: Healthy soils allow water infiltration and water storage. Construction can reduce water infiltration by up to 99%.[23] Surface run off and flood risks increase when soils are not properly considered in Sustainable Urban Drainage Systems and other drainage schemes.[24]
- **Landscaping, habitat and species survival and success**: Good and appropriate soil conditions are critical for urban tree survival and growth,[25] and can determine the outcomes of woodland creation, Biodiversity Net Gain and Local Nature Recovery Projects.[26]

ENVIRONMENT

- **Biodiversity:** Soils host ~60% of global biodiversity, during one or more lifecycle stage.[27,28]
- **Pollinators:** Approximately 70% of wild bee species nest below ground.[29]
- **Water quality**: Agriculture accounts for ~61% of nitrate and ~28% of phosphate pollution.[30] Healthy soils and sustainable farming and construction practices can reduce surface water runoff and nitrate leaching to groundwater with potential savings for water treatment costs.[31]
- **Carbon storage**: Soils store more carbon than vegetation (including trees and forests) and the atmosphere combined, but degraded soils are net greenhouse gas emitters.[32,33]
- **Regenerative agriculture**: Endorsed globally for climate adaptation and resilience.[34,35]
- **High property values**: Linked to access to green and blue spaces and to low flood risk.[36,37]
- **Soil degradation**: Estimated to cost >£0.9–£1.4bn annually, with 80% of costs borne off site.[38]

EDUCATION, SKILLS & PROFESSIONAL TRAINING

- **Outdoor learning**: Can improve attendance, attainment and pupil behaviour.[39,40]
- **Soil literacy gaps**:[41] Lack of soils education[42] and connection to soils, from nursery to CEO level, limits sustainable decision making, the potential for a skilled workforce and innovation.
- **Soil specific training, skills, resources and continued professional development**: Needed in economics, investment, procurement, contracts, human resources, planning, construction, ecology, monitoring, reporting and verification, as well as in land sectors and beyond.[43,44]
- **Fungi education**: Vital for biodiversity and carbon cycles, yet often overlooked.[45]
- **Soil is a finite resource**: it takes many years for soil to form naturally, and seconds to destroy.[46]

POLITICAL MANDATE AND PUBLIC SUPPORT

The UK can show leadership in rebuilding soil health. This will support the CAN bill objectives and provide co-benefits across several Government sectors, helping to cut through siloed working. There is a growing appetite for increased 'stick' rather than 'carrot' in relation to soil health in food and farming and in construction and infrastructure, to provide a level playing field and drive long-term improvements.[47] In July 2025 the International Court of Justice doubled down on states' climate obligations and their concomitant responsibilities to protect the biosphere.[48] This coincides with the recent Government commitment to strong international leadership and integrated delivery for climate, nature and people.[49]

THREE POLICY PRIORITIES FOR NATIONAL AND LOCAL GOVERNMENT

1. Mandate 'Soils First' in all planning – for net zero, construction and infrastructure projects

2. Invest further in developing the UK circular bioeconomy and incentivise the adoption of regenerative nature-based farming practices to address water quality, farm profit margins, net zero ambitions, reduction in synthetic inputs, increasing biodiversity and improving food security

3. Update education, skills and continued professional development to:

- value all soil functions and ecosystem services
- equip decision-makers and other workers with sustainable soil management knowledge, skills, interpretation frameworks and resources, and
- adopt soil-centric approaches in policy and practice to support, accelerate, and show leadership in the transition to a clean, green net-zero economy

to benefit current and future generations and create global citizens

CALL TO ACTION FOR MPs

➢ **Attend the Roundtable** on 8 September 2025, 5.00 -7.00pm, Westminster, Committee Room 15
➢ **Champion cross departmental soil-centric policies** for climate and nature

Endnotes - Policy Briefing for MPs attending UK Parliamentary Roundtable on Climate And Nature - Living soils deliver for both

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