



Briefing Note: Nature on Prescription

20th May 2021

Rural Policy Group is a visionary think tank shaping the future of the rural economy; established in 2019 it supports economic actors in the rural economy with a programme of knowledge exchange, debate and dialogue with government. The group brings together the best minds in politics, economics, business, finance, medicine and science to discuss the big issues of the day, support rural leaders to find and seize opportunities for progress and growth and lobby policymakers for appropriate innovation.

The Speakers

Barry Gardiner MP: Barry is the Labour Member of Parliament for Brent North. Since first being elected in 1997, Barry has served as Labour's Shadow Secretary of State for International Trade and Shadow Minister for International Climate Change from 2016 to 2020. When in government Barry served as a minister for three departments, including Minister for Biodiversity in Defra. Barry has always been highly active in parliament, serving on the Environment, Food and Rural Affairs Select Committee, the Energy and Climate Change Select Committee, the Public Accounts Select Committee and the Broadcasting and Procedure Select Committees. He has stood on the Finance Standing Committee and scrutinised the budget for three years in a row and played a significant role in scrutinising the Energy Bill through his membership of the Energy Bill Committee. Barry is also the Chair of the All Party Parliamentary Groups on Nature and International Conservation.

Duncan Cochrane-Dyett: Duncan is a specialist Audit and Assurance partner, and the managing partner for Kent region. He is also Head of Healthcare for the firm. He joined MHA MacIntyre Hudson in 2014 as part of the firm's regional and sector growth strategy. He was previously a Director at EY, with more than 15 years with both EY and PwC in London, where he worked with clients ranging from international listed groups to national and local owner-managed enterprises. This period included a 3 year secondment to PwC's Business Restructuring group, working on substantial (often cross-border) financial and operational restructurings such as the NHS's National Implementation Team. Before training as an accountant, he was an officer in the British Army. As Head of Healthcare, he works in three main tiers: Primary care, Secondary care, and Private care involving sectors such as private hospitals, day care, and occupational health. Outside of work, his personal commitment in a voluntary capacity extends over 20 years in a variety of roles, and currently he is a special advisor to the UK Vasculitis Trust, and a director and chair of the Audit Committee of the Valley Invicta Academies Trust.

Tom Dixon: Tom is Managing Director of Sawday's Canopy & Stars. Founded in 2010, Canopy & Stars is part of Alastair Sawday's, and is the UK's leading glamping and outdoor holiday accommodation provider. A letting agency for treehouses, cabins, yurts and other beautiful spaces, Canopy & Stars is a collection of unique, creative places to stay in the outdoors giving you a genuine experience of a life more wild. Tom is responsible for the curation of the Canopy & Stars collection and provides consultancy and advice to owners seeking to set up glamping sites.

Gary Evans: The Forest Bathing Institute (TFBI) was set up by husband and wife team Gary Evans and Olga Terebenina, Founders of and Directors of Holistic Healing Therapy. The TFBI have a team of Forest Bathing guides who run events across the UK with regular events held across the Surrey Hills. TFBI is dedicated



to ensuring that the Japanese scientific studies into Forest Bathing can be replicated and expanded upon across the UK and Europe and its long term goal is to see Forest Bathing+ available as a prescription option for doctors and health care professionals across the UK and Europe as emerging science is rapidly shining a spotlight on the physiological reasons time spent in nature is good for all of us.

Professor Louise Manning: Professor Louise Manning has worked for over 35 years in the agri-food supply chain in a range of roles. Her expertise is in the area of food security and food integrity including food safety, food quality, food crime, policy and governance, social and corporate responsibility, resilience, risk assessment and mitigation strategies. Louise has carried out projects for government bodies and companies throughout Europe and Africa. This work includes strategic risk analysis and mitigation for both corporate organisations and public bodies. She has been published in peer-reviewed journals, authored book chapters and written and edited books in the subject area. Louise's research work also involves undertaking desktop reviews; qualitative and quantitative fieldwork including focus groups, workshops and in-depth interviews, questionnaire design and analysis, strategic framework, communication systems and model design and developing tools to drive risk communication and engagement of stakeholders at all levels of the supply chain.

Watch again!

A link to the full RED Talk can be found [here](#).

Summary of insights

Nature is good for us, at least for those who have access to it. Nature has the power to reduce socioeconomic inequalities across society, but the framework of policy and distribution of resources specifically needs to address inequity, otherwise we will simply intensify societal divisions in health outcomes and life expectancy. While social prescribing is rising up the NHS agenda, it is not an issue for the Department of Health and Social Care to tackle alone. We have an opportunity to reconnect with nature and that requires the broadest possible input and collaboration in Parliament, as well as involvement from businesses, charities, academia and civil society.

- Nature is good for our mental and physiological health. The body of scientific research to enable clinicians to prescribe treatments with accuracy and in the expectation of specific outcomes is growing.
- Nature, and the fresh, nutritious foods provided by nature, can reduce socioeconomic health inequalities. Paradoxically, inequality of access to nature and nutrition are key areas of concern for society and in need of policy innovation and intervention from government.
- There is an imbalance in government spending on sickness and aftercare (NHS) and preventing sickness. This imbalance is slowly being redressed as the state's health organisations recognise the benefits of social prescribing and seek to incorporate it into the health & social care framework, particularly in primary care. Preventing sickness would reduce demand for NHS services, increase economic productivity and create a thriving society.
- Nature prescribing as a means of health creation is not simply the remit of government. It is something individuals can choose to do for themselves and others. As such a system of nature on prescription would involve government, the NHS, charities, commercial organisations and individual agency.
- People are seeking out experiences in which they can connect with nature, and it is an area of opportunity for landowners who can provide access to nature with glamping accommodation, forest bathing walks, horse riding trails, outdoor yoga and so forth.



- Connecting with nature changes how we relate to ourselves and to one another.
- Access to the countryside can be challenging for some sections of society and we need to be creative about how we bring nature to people in more urban locations. Both the public and private sectors need to be more ambitious in restoring the natural environment in towns and cities, in their initiatives for city farms and re-wilding public buildings and office spaces for example.
- Nature prescribing, and in broader terms, reconnecting the population with their natural environment, is bigger than the Department of Health & Social Care. It requires cross-departmental collaboration rather than siloed thinking. The Environmental Land Management Scheme for farm subsidies could support farmers and landowners to open up their land to more people. Innovations across all parts of government need to be taken together to inform the framework of nature prescribing.

Political Speaker: Barry Gardiner MP

Most days I will do my 10,000 steps in Kew Gardens. It is good for my physical health and it is good for my mental health. During lockdown, Kew and a particular stone pine I love has kept me sane. My experience is not unique. YouGov polling for The Mental Health Foundation found that being near lakes, rivers or the sea was rated the highest by people in terms of having a positive impact on their mental health. Further, 2017 research from the School of Sports Rehabilitation & Exercise Science concluded that green spaces provide vital health services as well as environmental services. They are equigenic – meaning they reduce socioeconomic health inequalities. Public Health England says more research is needed, but they are suggesting that official guidance could change to put access to nature and time spent outdoors on a comparable level to five-a-day. The ‘120 Minutes a Week in Nature’ study led by the University of Exeter and published in 2019 argues exactly that. It estimates that prescribing contact with nature gives a return of £6.88 on every £1 invested.

The EFRA Select Committee recently did a report into air pollution. It highlighted that 1 in 6 people living with a lung condition experienced reduced symptoms during the first lockdown because of the reduction in traffic. However, air pollution levels in 39 of the 49 cities and large towns they surveyed had returned to pre-lockdown levels by September. Black and minority ethnic people were more likely to be severely affected by the return to higher levels of air pollution. Exposure to air pollution also contributed to BAME patients being more than twice as likely to be admitted to hospital with Covid than white patients. 46% of the UK’s most disadvantaged communities, with larger BAME populations, experience levels of air pollution that exceed EU limits, compared to just 2% of the wealthiest communities.

Salutogenesis is a term which focuses on keeping healthy. Quite a few years ago when John Reid was the Secretary of State for Health (2003 – 2005), I made myself extremely unpopular at a Labour Party meeting by asking why we were spending billions of pounds on a sickness and aftercare service and only a paltry few million on promoting health. We still have not got this balance right.

In May this year, the National Institute for Health Research (NIHR), founded by the Department for Health & Social Care, opened calls for research to inform plans for mental health and social prescribing in the UK. Following the March launch of the government’s Mental Health Recovery Action Plan, which is backed by a one-off investment of up to £500 million and an additional £2.3 billion pounds into mental health services, the NIHR Policy Research Programme says it particularly welcomes insights into nature prescribing to solidify evidence that nature-focussed social prescribing and interventions can have a positive effect on mental health and reduce the demand on the NHS.

The NHS long-term plan commits to expanding the number of social prescribing link workers in primary care with a target on 1000 additional link workers. GPs are able to refer patients to link workers and identify green



social prescribing activities such as local walking and community gardens. In July 2020 DEFRA announced £4 million for a cross-governmental project aimed at tackling mental health through green social prescribing. That pot was increased to £5.5m following contributions from the national cabinet for social prescribing. The project has four stated aims: improve mental health outcomes; reduce health inequalities; reduce demand on the health & social care system; develop best practice in making green social activities more resilient and accessible.

Business Advisory Speaker: Duncan Cochrane-Dyet

Nature prescribing fits neatly into social prescribing. For this to function properly within the NHS, there needs to be processes, structures, procedures and policies, and for all this and the necessary investment to be made available, the empirical evidence of the benefits of nature prescribing is absolutely critical.

A lot of the referral pathways are initiated in primary care; GPs seeing their patients and thinking how best to model their future care. Local health and social care environments are terribly busy with a lot of organisations operating within them, so the role of link workers, who connect the NHS with other organisations, is absolutely critical.

The NHS is constrained by policy and by the requirement for empirical evidence, but there are many organisations, mostly charities, which are remarkably busy with nature prescribing. One such charity is the Veterans Horticultural Community Centre. The Centre is being self-built and horticulture plays a huge part in recovery of veterans. It will act as an information hub signposting veterans to where they can get help as well as offering courses in beekeeping and partnerships with The Woodland Trust and a local farmer to manage their ancient woodlands and hedgerows respectively. One veteran who suffered physical and mental injuries as a result of his experiences during deployment was advised by his GP to take up horticulture. As a result of his work with the charity there has been a marked improvement in mental health and happiness. Empirically, because of the improvement in air quality at the Centre's field and the physical activity involved, his blood oxygen levels have risen from 92% to 97%, which is unheard of according to his consultant. So that is the benefit of nature prescribing.

Wild Tourism Speaker: Tom Dixon

Canopy & Stars has over 800 unusual places to stay around rural Europe, encouraging people to connect with nature through meaningful experiences and live a life more wild. The solution for our wellbeing will never come purely from government, the NHS or commercial organisations; it needs to be a blend of all of those and at Canopy & Stars we are helping people to get into nature and making sure people get the most out of the time they spend outdoors.

The glamping industry is growing rapidly, particularly over the past year. Key trends such as wellbeing, staycations, ethics, sustainable tourism and seeking out experiences not things have contributed to the rise in popularity of glamping during 2020.

It is widely understood now that being in nature is good for you – good for creativity, for mental health, for physical health and even for productivity at work. Our guests are often looking for that nature connection, the wilderness adventure and spending time outdoors.

In terms of commercial opportunities in nature and wellbeing, people are searching for experiences which connect them to nature and ways to experience or enhance their wellbeing within the natural environment. A treehouse in Somerset achieved £89k of bookings in 2019 and nearly 80% occupancy. This is common among Canopy & Stars structures as they provide the connection to nature and increasingly, they provide wellbeing



experiences. Accommodation is part of the experience, but people are looking for much more; they want yoga, forest bathing and other holistic wellbeing services. As a commercial entity, the accommodation is important but there is demand for much more in terms of services and multi-sensory experiences.

It is important that we provide access to nature to those who would not normally have the chance to immerse themselves in nature, such as for children in inner city schools.

There are societal trends which are affecting our need to reconnect with nature: the climate crisis; diversity & equality; citizenship & community; stress & anxiety; ruralism; economic uncertainty. All of these factors are fuelling the need to improve our wellbeing and wellbeing tourism is growing twice as fast as global tourism. There is a strong commercial benefit to any business which is involved or becomes involved in the wellbeing industry.

Canopy & Stars is primarily a marketing and booking agency for the owners of the properties, however we also offer a consultancy to landowners who are looking to move into this space. We can help with planning permissions, funding, key trends and how to make their business successful. Together we can do something good for people that is sustainable and ultimately profitable.

Forest Bathing Panellist: Gary Evans

For the last five years we have been working towards a vision for providing a forest bathing via the NHS. We are working with 12 universities to spearhead the science in the UK; researching the positive physiological changes that nature induces. That science was first spearheaded by Professor Lee in Japan, where a doctor can offer a patient with high blood pressure for example medication or a referral to a forest bathing clinic. Upon arrival at a forest bathing clinic, a nurse or doctor will take the patient's blood pressure, send them into the forest and then take their blood pressure again at the end to see whether the forest is helping restore better health. If it does, it is recommended as part of the individual's preventative healthcare regime.

We are working with Defra and Forestry England to raise the level of ambition for how nature can be used for health. We also work with around 100 doctors and professors in different disciplines and are currently applying for research funding to investigate the impact of forest bathing on blood. We have also been commissioned by the Royal Surrey Hospital to help rehabilitate patients recovering from cancer. The applications of forest bathing for cancer and covid are the next stage.

Nutrition Panellist: Prof. Louise Evans

The Royal Agricultural University is re-wilding its campus for the health and mental health of students and the people of the surrounding area of Cirencester. Some of the work will be around reinvigorating the allotments so students can spend time growing food and experience the health benefits of that. The university will also be developing a range of natural features around the campus which staff and students can look at as they are walking around. We have already started mental health walks on the campus and these will continue. Working with young people, I really believe in the 'walking tutorial'; how you interact with people and the things you can talk about are quite different when you are outdoors, as opposed to being inside a building.

It is really important that when we think about our engagement with nature, we think about how we can fit it into our daily work, how we can interact with nature in towns and cities and how people living in towns and



cities can readily access nature for themselves. As the re-wilded campus extends and grows, there will be lots of opportunity for businesses to take inspiration and see how they can embed a particular feature in their own premises. That could be something as simple as a tactical garden – turning a parking space into a small garden where employees can grow fresh produce and benefit from the time in nature, the exercise and ultimately the nutritious food.

Panel Q&A

Question from Christine Elliott, Chair of a healthcare regulator focussed on prevention and wellbeing organisations:

The policy principles and evidence of nature prescribing are bang on, However, evidence also shows that individual agency, the ability to choose from wellbeing options, is crucial for effectiveness. Can we nudge not prescribe and interact rather than intervene on the patients?

Barry Gardiner MP: The nudge theory is where government encourages people to do things rather than legislating and regulating. We have seen this in action with covid vaccinations. Government is encouraging people to get the vaccination rather than legislating a requirement to be vaccinated. They are persuading people by asking them to protect their loved ones and help the economy open up – it is a form of marketing to be sure, but we need to make sure that it is not seen only within the medical context. Whether we choose to get the vaccination has a societal impact. Coming back to nature prescribing, the terminology of prescribing makes one feel that there is something wrong to begin with. In fact, nature is something we all need. We have evolved as part of nature and it is only over the past two centuries as we industrialised and urbanised that we have become disconnected from the natural environment. The connection to nature is good for all our wellbeing so we should nudge and encourage, but from a medical viewpoint, there is value in prescribing nature as a way of resolving physical and mental dysfunctions.

Gary Evans: It is my job to encourage people into nature and I often see people arrive as sceptics and leave with a greater appreciation of nature as therapy. It is often about education. The scientific research we are spearheading at The Forest Bathing Institute to evidence the physiological health benefits can be used for future education. From experience, most people are interested in hearing about how nature helps us and the more tired or stressed somebody is, the more they are looking for ways to help themselves. So, if you can explain how nature can help them relax and feel better, you are giving them a tool for a better life.

Barry Gardiner: There are a lot of comments in the chat about schools getting children into nature. Some schools could do this very well and other schools would find it more difficult, particularly those in urban locations. Parents too have lost the ability to encourage their children to get outside more. We live in a more fearful society and children do not have the freedom to roam alone or with their friends as previous generations could. Some families can escape to the countryside and give their children safe green spaces, but not every family has the means. Education and family are both important, but there are real barriers to getting all children into the wild.

Sarah Calcutt (Chair): There are also comments coming through about forest schools and outdoor classrooms.

Tom Dixon: I have made my own land available to local schools for forest school classes, as do many of the Canopy & Stars landowners. People who own land understand its importance to children and want to share it. Getting into the countryside is about experiences and so our owners provide that not just to guests, but also to the local community and other visitors.



Duncan Cochrane-Dyet: As a school governor I see first-hand that schools will always be constrained by the curriculum and the resources they have.

Question from the audience: Alternative medicine and homeopathy have been available in towns and cities for over 50 years and the benefits are well documented. Could one of the reasons for the slow uptake be due to undue influence of big pharma?

Gary Evans: We have been asked to launch the UK branch of the International Society of Nature and Forest Medicine. This system requires the same system as conventional medicine – an evidence base of physiological science. That is the stumbling block. As the moment doctors can say that nature is good for you, but they cannot be more specific or more accurate in prescribing, and you cannot prescribe ‘good for you’. To take nature therapies to the same level as conventional medicine the research needs to be done so doctors can accurately prescribe effective treatments. Over the past 40 years we have developed a huge technological capability, but we have not turned this to identifying and measuring the health benefits of nature. I could buy an EEG pack for a couple of hundred pounds, take people into the forest while wearing it and publish a study more advanced than some of our leading universities have produced. The technology we have now allows us to take the lab into nature to conduct scientific research and build a body of evidence.

Comment from the audience: Having been involved in recent Environmental Land Management Scheme (ELMS) consulting groups, much has been discussed about the prospect of public access provision to farms and countryside to be included within a revised farms support scheme to replace the CAP subsidies. It appears however that Defra has not picked up on this but could encourage access within an established financial support structure.

Professor Louise Manning: There is a real inequity for access. If you have a driving licence and a car, you can get out into the countryside. If you are at a school where there is resource for transport, then you can access the countryside. I think there is a discussion around where our food is grown and how we produce more food in urban areas as well as in the country, and there is a question around how we access nature in urban areas. Previously we spoke about the two tier food system, which we have because of financial inequity in the UK. It is fantastic that if you can afford it, you can go into the countryside and have a whole range of experiences. But the big question is how we make sure everybody has equal access to the countryside and those opportunities. If everybody had equal access to fresh fruit and vegetables, we would not be so concerned about alternative medicine. If we look at the Healthy Start vouchers being developed for food and milk, we could look at developing that further to create greater access to nature. It is really important that when we are looking at the Environment Bill, the Agriculture Bill, the National Food Strategy and the Food Security Strategy we bring it all together and make sure everybody has equal access to nutritious food and nature.

Barry Gardiner (addressing the point about ELMS and how Defra is implementing the transition away from CAP subsidies): Farmers have been used to receiving payments for a long time for providing access across their land, for styles and footpaths and so on. As we transition to the new environmental land management schemes, it is about paying farmers for providing public goods. And while those goods are primarily environmental, it also incorporates wider public goods. The case does need to be made that access for the public in the way we have discussed today is something that can be looked at. I would caution here; the government has to look at the best use of its resource and farmers equally have to look at the best use of their resource. What we have seen today is that it is possible to monetise those public goods as a benefit stream into the farm income. Land management is not just about production, it is about seeing and developing other income streams for the land.



Thinking of ELMS money, we need to consider whether the farmer can utilise that money to generate income rather than ELMS simply paying for that access to be provided.

Question from the audience: Do you think the pandemic has helped move us forward? The situation has got people thinking about their health and giving more priority to creating good health.

Professor Louise Manning: Covid has highlighted a whole range of challenges for us as communities, including inequities in nutrition & health and the different pressures on different parts of society. It is really important that as we build back better, we consider communities as well as the economy and how we can support health in all parts of society from young children to older people. Older people who have been shielding in their homes for a year have moved very little and the effects show in their mobility and health. We must consider how to support all sections of society.

Tom Dixon: Pre-Covid trends around ethics and time in nature accelerated during the pandemic and I expect that will continue. Nature prescribing has benefits beyond our individual health. It affects how we manage the land and often it is managed more sensitively. So, in benefitting our own health we are also supporting biodiversity and so on. Plus, it creates jobs which as help with gender equality and a whole range of factors which can improve society as a whole.

Question from the audience: How can the connection with nature continue if there is going to be millions of new homes. Really good planning that includes ample green space for families and ample space for farms to feed local populations. Importing food can mean importing environmental destruction.

Professor Louise Manning: Today we have been talking about using land for a range of purposes other than producing food, and if we put less land into food production the food has to come from somewhere. That has a whole set of environmental impacts as a result. We have to think very carefully about how we achieve net zero by 2050. If achieving that goal means the countryside offsets the carbon footprint of urban areas, then we will not be producing food on that land, we will be offsetting the carbon of multi-national corporations and cities in rural areas. If we are looking at ensuring a co-ordinated policy of ensuring everyone has access to nutritious and affordable food, we have to look at that at the same time as net zero. This is a complex issue and cannot be looked at in a linear way, as food policy tends to be. Otherwise, those who can afford to buy sustainable food will do so and those who cannot will have less and less food choice. The extensive tree planting target will have an impact on our countryside and environment, but it will also reduce the land available to produce food. The environment and food production need to be thought about together.

Barry Gardiner MP: The important thing about planting trees is planting the right tree in the right place. The possibility of using prime agricultural land to plant trees in a wholly inappropriate way is something we need to get a grip on. I wholeheartedly endorse Louise's comments.

My All Party Parliamentary Group on Nature discussed the ability of planning authorities to have ecological expertise to feed into the planning process. In 2014 only one in three local planning authorities had an in-house ecologist capable of engaging in the planning process and screening developments. Since then, the situation has got worse with local government cuts. It is now critical that the expertise developers are able to bring to bear to push through a development are matched by expertise within local authorities to enable them to resist development. Without the ecological expertise, we are going to see ad hoc planning decisions taken around the country without adequate environmental input into the process.



In terms of international trade and importing environmental degradation, international trade depends on a complex balance of producer and consumer interests. I say this as the former Shadow Secretary of State for International Trade. The recent fourth round of the Australia negotiations has highlighted this in a very particular way. The NFU and farmers are desperately worried about the impact of Australian lamb imports. If you take the sheep out of the Uplands, the Lake District, Scotland and so on, you do not just change farming, you change the landscape. If the landscape is different, the tourism industry is different. Some of the people involved in the negotiations see it as a zero sum game; support the farmers or give consumers cheap meat. However, it is a much wider consideration and interests need to be balanced. Giving consumers cheap meat at the expense of farming would change the whole dynamic of the country. The other question is around what consumers want. Consumers want local production. They want to buy local food. They recognise that air miles and shipping miles contribute to climate change and they would rather not feed into that system. Government is failing to see the localised picture and that people want to support their local community.

Closing Statements from the Panel:

Tom Dixon: I would like to see access to nature for all and greater equality in access.

Professor Louise Manning: I would like to see schools, hospitals and businesses all across the country look at how they can rewild their facilities, so everybody has a space in nature. I would also love to see the Wholesome Wave programme in the US, which links health to fruit and vegetable consumption, to be replicated as a similar programme here in the UK.

Barry Gardiner MP: We need to change how we think about health and wellbeing in our society. We must start ensuring that people are less susceptible to preventable diseases and that is about air quality, access to nature and nutrition. It is vital that we educate our children from the earliest possible age about the importance of physical activity. We need to reconnect young people to the natural environment; we need a generational wave of people who know where milk, eggs and meat come from. We need to understand where we come from; we are part of nature. Forgetting that has led to problems such as covid and climate change.

Duncan Cochrane-Dyett: I would really like to see the basic primary care model and associated local organisations give more resource and more time to each patient. That requires additional resource in the resource provision model of the NHS, particularly with regard to additional people.