# Nature Pathway Roundtable: Summary of talks and discussion Central Hall, Westminster, 25.10.23

# Presentations Mary Colwell - Introduction

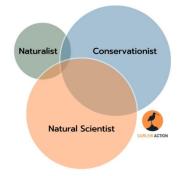
"In the end we will conserve only what we love, we will love only what we understand; and we will understand only what we are taught." Baba Dioum, 1968

# The Problem

Sobering statistics show that most young people between the ages of 5-15 can't identify Nettles, Bumblebees, and Robins. We have lost a relationship with and an understanding of the common life around us. Society is increasingly urban, indoor and virtual, meaning more than two generations are now intellectually, physically, spiritually and emotionally removed from nature, more than at any other point in human history. This at a time when the climate and biodiversity crises are deepening. The forthcoming GCSE in Natural History is a welcome step , but it is only one step in what must be a wider and longer Nature Pathway through education and the workplace. There are three routes that must happen.

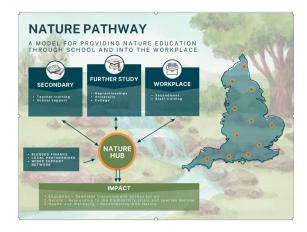
- A more nature literate society where the natural world is part of the national conversation.
- More applied naturalists, i.e., people who can put their understanding of nature into real-world decision making.
- Business, industry, and finance factoring in their impact on nature and how to mitigate it by employing a workforce that is invested in the green economy. Nature Positive solutions, Biodiversity Net Gain and Biodiversity Accounting increasingly need applied naturalists in every sector.

There is often confusion between natural scientists, naturalists, and conservationists. They are related but separate disciplines, and naturalists are by far the least represented. An over-simplified illustration— if you consider a wildflower meadow a naturalist will know the species in it and their relationships, a natural scientist will understand particular species in detail and/or the science behind how a meadow functions (photosynthesis, nutrient cycles, pollination etc) and a conservationist protects it. The intersections are the sweet spots, they are *applied naturalists,* and we need many more of them.



# The Solution

Curlew Action is proposing a network of Nature Hubs across the UK that bring together existing expertise and resources to help prepare teachers to teach the Natural History GCSE and to provide bespoke training for local businesses.



Each hub will draw from existing local resources, be that local museums, Natural History Societies, outdoor education centres, environmental organisations, and charities, all of which will vary place to place. There is a wealth of knowledge out there but no coordination to bring it together. With a central project coordinator and local Hub managers this can be established quickly and efficiently in time to prepare schools for the GCSE and to provide a touchpoint for others to access Natural History expertise.

#### Professor Sir Partha Dasgupta - Keynote

We are part of Nature, not separate from it. We rely on Nature to provide us with food, water and shelter; regulate our climate and disease; maintain nutrient cycles and oxygen production; and provide us with spiritual fulfilment and opportunities for recreation and recuperation, which can enhance our health and well-being. We also use the planet as a sink for our waste products, such as carbon dioxide, plastics, and other forms of waste, including pollution. Nature is therefore an asset, just as produced capital (roads, buildings, and factories) and human capital (health, knowledge, and skills) are assets. Like education and health, however, Nature is more than an economic good: many value its very existence and recognise its intrinsic worth too. Biodiversity enables Nature to be productive, resilient, and adaptable. Just as diversity within a portfolio of financial assets reduces risk and uncertainty, so diversity within a portfolio of natural assets increases Nature's resilience to shocks, reducing the risks to Nature's services. Reduce biodiversity, and Nature and humanity suffer.

Collectively, however, we have failed to manage our global portfolio of natural assets sustainably. Estimates show that between 1992 and 2014, produced capital per person doubled, and human capital per person increased by about 13% globally; but the stock of natural capital per person declined by nearly 40%. Accumulating produced and human capital at the expense of natural capital is what economic growth and development has come to mean for many people. In other words, while humanity has prospered immensely in recent decades, the ways in which we have achieved such prosperity means that it has

come at a devastating cost to Nature. Estimates of our total impact on Nature suggest that we would require 1.6 Earths to maintain the world's current living standards.

Nature's worth to society – the true value of the various goods and services it provides – is not reflected in market prices because much of it is open to all at no monetary charge. These pricing distortions have led us to invest relatively more in other assets, such as produced capital, and underinvest in our natural assets. Moreover, aspects of Nature are mobile; some are invisible, such as in the soils; and many are silent. These features mean that the effects of many of our actions on ourselves and others – including our descendants – are hard to trace and go unaccounted for, giving rise to widespread 'externalities' and making it hard for markets to function well. But this is not simply a market failure: it is a broader institutional failure too. Many of our institutions have proved unfit to manage the externalities. Governments almost everywhere exacerbate the problem by paying people more to exploit Nature than to protect it, and to prioritise unsustainable economic activities. A conservative estimate of the total cost globally of subsidies that damage Nature is around US\$4 to 6 trillion per year.

Enabling the changes we need will also require collective and sustained action to transform the systems that underpin our engagements with Nature, above all our financial and education systems. However, relying on institutions alone to curb our excesses will not be enough. The discipline to draw on Nature sustainably must, ultimately, be provided by us as individuals. But societal change has meant that many people have grown distant from Nature. Interventions to enable people to understand and connect with Nature would not only improve our health and well-being, but also help empower citizens to make informed choices and demand the change that is needed; for example, by insisting that financiers invest our money sustainably and that firms disclose environmental conditions along their supply chains, and even boycotting products that do not meet certain standards. Establishing the natural world in education policy is therefore essential. The development and design of environmental education programmes can help to achieve tangible impact, for example by focusing on local issues, and collaborating with scientists and community organisations.

The transformative change needed in choosing the sustainable path requires the sustained commitment of actors at all levels. It also involves hard choices. There is growing evidence that our preferences are affected by the choices of others – they are 'socially embedded'. Since we look to others when acting, the necessary changes are not only possible, but are likely to be less costly and less difficult than often imagined.

# Robin Walker MP

The UK should be a world leader in nature recovery and supporting biodiversity. We are the country of Charles Darwin, David Attenborough and Sir Partha Dasgupta, and we should be at the forefront of ensuring future generations understand nature, how to interact with it and how to rebuild natural capital. Both in our domestic environmental policies and our international diplomacy we should be striving to create a more sustainable world in which the value of nature is truly appreciated. Education both here and around the world must play a key part in this.

I am now the chair of the cross-party education select committee but a few years ago I was the schools minister who gave the go ahead to the natural history GCSE as part of a nature pathway in our education system. I remember well a crucial meeting with Mary, Caroline Lucas and Tim Oates in which I had been carefully briefed on all the risks, downsides and overlap risks, but between them the team and particularly Prof Oates had answers to all the questions.

It is of course right for the DfE to carefully question and challenge the risks of overlap with existing geography and biology GCSEs but a strong case was made for developing a separate and additional GCSE that could both expand the opportunities for outdoor education and engagement with nature whilst also helping to resurrect academic disciplines of botany, zoology and geology that had fallen away not as part of any deliberate policy, but as a result of the consolidation of exam boards in the 1980s and 1990s.

I was convinced in that meeting that this would and could be an additional and valuable qualification and I look forward to seeing it develop and thrive. I have heard from local pupils and schools in my own constituency of their excitement to be able to embark upon it.

The Natural History GCSE was never an end in itself but part of a pathway connecting a focus on nature in the early years and the primary science curriculum with the A level in environmental science and further vocational opportunities in the green economy. This will meet some of the demand from pupils and teachers alike for more engagement with nature and the outside world and provide a more holistic understanding of the natural environment. It will also begin to address the desire of businesses to see greater skills and a workforce equipped for the sustainability challenges of the 21<sup>st</sup> Century, meeting the very worthwhile challenge set by Professor Dasgupta in his review.

As member of Parliament for Worcester, I am also the constituency MP for the Office for Environmental Protection, and delighted to hear from them about the work they are doing and want to do more of in schools to increase awareness of vocational opportunities around the environment and protecting nature. They have been at pains to stress the importance of analytical skills and data in these endeavours and in a submission for this meeting, they have commented:

"Specifically on the Natural History GCSE, the five themes are comprehensive, and the content is well thought through. The skills associated with them have been identified including observation and recording, monitoring, cartographic skill and use of digital methods, data, research, and qualitative skills. However, this is mainly focused on skills needed to produce knowledge about the natural world. This could be complemented with an understanding of how the natural environment is managed in policy and decision making and the skills to improve knowledge uptake and use, connecting science and policy."

# <u>Flash Talks</u> <u>Kabir Kaul</u>

As a young person who has just left secondary education, I would like to make a case for embedding nature studies into school <u>now</u>. Some teachers in my secondary school had a great degree of enthusiasm for the natural world and were able to help me in practical environmental education and setting up my Wildlife Society. However, this level of support cannot be guaranteed in every school due to varying interest, resources, and funding. Geography and Biology GCSEs do involve a little bit of theoretical work related to species and ecosystems, but they are a very small part of the courses and involve little practical, hands-on experience, so students may feel that the ecological and scientific processes they are learning about are of little relevance to them.

The GCSE in Natural History will be crucial to students' knowledge and understanding of the interrelationships between organisms and ecosystems, as well as the development of monitoring and surveying skills. The GCSE will also strengthen a pathway to related post-16 education; if more students take the GCSE, they will have a strong foundation of environmental principles and skills, encouraging more to study specialist environmental courses in college. When there has been a rise in eco-anxiety among young people due to greater awareness of the climate and biodiversity crises, the pathway will enable more young people to feel they can make a difference.

Greater nature literacy through a natural history GCSE will help with future decision-making that considers the importance of nature to society.

# Dr Michael Warren

I'm a writer, academic and naturalist and have been a state school English teacher for nearly twenty years. I'd like to offer a few thoughts on the need for a 'nature pathway' which includes not only the GCSE in Natural History, but also the wider educational needs of young people and adults alike. It's about creating something systematic in the social fabric that means we are working towards a society that is nature literate, and which embeds a core understanding about the fundamentally unitary nature of all things.

We deem it right and necessary that all schools deliver on topics such as antisemitism, black heritage and history, neurodiversity, mental health, LGBTQ+, topics that demand our tolerance, awareness, sensitivity and attention in today's world, but basic ecological and environmental awareness are not among them. If we have made room for all these other diversities, then where is bio*diversity* in all of that? There is an entrenched view that nature is a 'nice to have', but not a 'need to have'. A nature pathway in all schools is one of the most significant ways in which we can make nature and all it offers central to people's lives in the future.

I run a wildlife club and have initiated a forest school for our year 7 and 8 students, but my school is in the minority. It's why we need a nature pathway that spans all years in primary and secondary. Knowledge about biodiversity and ecosystems, and a love and care for the right lifestyle choices can lead to healthy, sustainable environments and relationships, and can make a real difference.

No so long ago, student anxiety, exam allowances relating to mental health diagnoses, a vulnerable list, a counselling service, were not part of school life, but now mental health is one of the biggest concerns for teachers nationwide. And we know that one huge cause of poor mental health in adults too is too much time indoors, on screens, on social media, and not enough time outdoors with nature, or engaged in ways which re-connect with places and landscapes. This disconnect has manifest itself in extreme anxieties in young people.

Let me stress that whatever the obstacles or complications to creating and implementing this pathway, the answer cannot be, 'it can't be done'. The stakes are too high. We are facing a crisis, we know that. Education is the way forwards. A nature pathway is the way forwards.

#### **Professor Chris Baines**

As an independent environmentalist I have always worked with the public, private and voluntary sectors. Increasingly, my role is to forge creative partnerships between them. I have chosen examples from my experience in four major industries where an appreciation of natural history has benefitted the business.

## Housebuilding

When developers Lendlease agreed to redevelop 2000 empty apartments on the troubled Heygate Estate in London's Elephant and Castle, they regarded the five-storey high London plane trees as a valuable asset. Two aspects of the trees' natural history proved to be a vital revelation. Firstly, despite their huge size, almost all of the trees' roots grow within the top metre of the ground – precisely where new services and foundations are needed. Secondly, these trees were heavily dependent on unintended irrigation from leaking water mains. This knowledge guided the construction process, and Elephant Park and the surrounding homes have won major awards, influenced greatly by the cool, mature environment that the trees create.

#### **Mineral extraction**

Forty years ago, sand and gravel quarries were seen as environmental threats. Once techniques were developed for softening the excavations and enhancing the scope for water margin vegetation, the full wildlife potential began to be realised, the cost of refilling and reclamation was reduced, and now a huge proportion of our lowland wetland nature reserves have their origins in the minerals industry.

#### Water management

The London Wetland Centre, beside the tidal Thames at Barnes, is popular with the public and is highly successful ecologically. Twenty-five years ago, Thames Water plc saw their four redundant concrete Barnes reservoirs as a liability. I was a board member of the Wildfowl and Wetland Trust at the time. Forging a partnership between the water company, developers Berkley Homes and that natural history charity created sustainable benefits for all parties and a great educational resource.

#### **Electricity transmission**

For the past ten years I have chaired an independent advisory board for the National Grid. As the next generation of energy transmission is rolled out across the landscape and the seabed, this presents a once-in-a-lifetime opportunity to create the *Natural Grid*. With offshore windfarms managed as marine ecosystem recovery zones, and hundreds of kilometres of new overhead lines offering an opportunity to restore connectivity to our damaged terrestrial landscapes, a creative collaboration between conservation and the energy industry is a very exciting prospect.

#### Rebecca Johnes and John Hopper, Department for Education

Rebecca Johnes (Sustainability and Climate Change Unit)

DfE published the Sustainability and Climate Change Strategy for the Education and Children's Services Systems in April 2022. The strategy sets out commitments to 2030 on climate education, green skills and careers, the education estate and digital infrastructure, operations and supply chains. The commitments focus on supporting teachers in teaching climate change and other environmental issues. We are committed to a whole system approach to teaching and empowering young people to tackle environmental issues, both inside and outside the classroom. Since launching the strategy, we have started a phased roll-out of the National Education Nature Park, which was launched on 4 October 2023. It enables young people to take practical action to improve the biodiversity of their education setting's grounds while learning about nature's role in climate change. They will take part in community science, in biodiversity monitoring, mapping and data analysis - learning important skills for the future, underpinned by a strong foundation in numeracy. At the time of the roundtable, we had had over 600 settings sign up to join the Nature Park. This has now risen to over 700 settings. We have announced £15m capital grant funding for the 2023-24 academic year to support the Nature Park roll-out, with specific focus on supporting children with SEND and others with barriers to engaging with the programme. We have recently appointed two youth focal points, in collaboration with SOS-UK. This is to ensure that young people are supported to feed into the implementation and evaluation of the strategy.

#### John Hopper (Team Leader, GCSE and A level policy)

We remain committed to developing the natural history GCSE. We agree it is very important to give young people a sound knowledge and experience of the natural world and its rich variety of species and habitats. We know that there is huge interest in and expectations for this GCSE and we understand the frustration at the time it is taking. The development and introduction of a brand-new GCSE is a complex process. Introducing a brand-new GCSE outside a major reform process is a rare event and the fact that we are doing this is a testament to the strong arguments put forward for it by Mary Colwell and Tim Oates, among others. We have been working with all the exam boards but most closely of course with OCR, and our DfE appointed subject experts have also been inputting into the work. All of this effort is to ensure that we have a knowledge rich set of subject content that really does justice to the rich variety of species and habitats, including observing some of those species in their natural habitats. When we have that in place, we will be reaching out to key stakeholders, including field naturalists, with the details of our plans and seeking their views. Then we will have a full public consultation in the first half of 2024. Once we publish final subject content after that, exam boards will develop their specifications and get them accredited by Ofqual.

## **Discussion**

<u>John Gregson</u> (John Lewis Partnership): There are around 70,000 people in business, many of whom would derive personal and professional benefit from having a better understanding of natural history and its place in the economy. If we build advocates within the workforce, it will encourage more young people to engage and take jobs where they can use their understanding of nature for the good.

David Hill (Environment Bank): Set up the Environment Bank in 2006 because he was dissatisfied with how we manage the environment, especially the way biodiversity is treated within planning and development control. He devised the concept of biodiversity net gain and lobbied government resulting in it being mandated into law via the Environment Act 2021. He raised £240 million with sustainability investors Gresham House to create and manage sites for natural capital and biodiversity across the UK, rebuilding ecosystem function in the process. Environment Bank uses the economics of nature to conserve and enhance wildlife at scale. Finding appropriately qualified ecologists who understand ecological systems is challenging in terms of the pace at which they can design, create, and manage sites for biodiversity enhancement. Environment Bank is scaling up its UK activities and aiming to establish businesses overseas, but they urgently need to see many more young people with skills and passion about nature to work with them. We do everything too slowly in UK/ Western Europe, we need more ambition. It took David 14 years to get Biodiversity Net Gain into law! But now there is a chance that more young people will find a rewarding career in ecology, especially given the immense and recent increase in interest by corporate business to become 'Nature Positive'. Where a company can demonstrate through disclosure that it is reducing its impacts on natural capital and compensating for residual impacts by investing into large land-based management projects, it will be favoured by investors over a company that isn't taking such measures. And all of this new methodology, monitoring, biodiversity design and natural capital accounting, will demand a major increase in young people entering the profession. They therefore need to have a good grounding in nature at an early age which is what this amazing initiative will provide.

<u>Stuart Broadley</u> (Energy Industries Council): Net zero, from point of view of businesses, has become more about reducing carbon emissions than increasing biodiversity. If there is an increase in pressure/demand for natural history, it will encourage companies to think more about how their work impacts nature. Change the messaging to industry, it is not just about reducing carbon, offsetting negative effects on nature is important too. Change messaging and accelerate/change demand for school leavers to have more natural history qualifications.

<u>Nick Acheson</u> (Naturalist and wildlife writer): There's a mounting body of evidence (see Jules Pretty and colleagues at University of Essex, Richard Louv) that humans are happiest, healthiest, and most productive when we have meaningful contact with nature. From an evolutionary perspective this makes perfect sense. Only in the last three generations have we become separated from nature. For the entire span of our evolution everyone's survival and prosperity depended on an intimate understanding of nature. This goes beyond nature being nice to have. Both in a physical sense and a psychological sense nature is fundamental to our survival. Happy, healthy, fulfilled humans are positively good for the economy. Incorporating nature at the core of education must not be seen as a cost. It must be seen as an investment in our physical and mental health, leading to productivity and the economic growth. Nature is the answer, not a challenger.

John Miller: How do we stop the Natural History GCSE becoming a nice to have, a soft option? Parents will start discussing GCSEs for 2025/6 pretty soon and schools will need to train teachers to be ready to teach it. Who owns the market readiness for the GCSE so that when it goes live, everything has been prepared and supported beforehand? We need to know dates, milestones, timelines for the GCSE – when will that be available? Is there a Gantt chart to make sure all milestones are met? Is there a single owner to make sure all is in place, especially since new GCSE's don't happen very often? Communications must be right, and universities must value it.

<u>Sally Hayns</u> (CIEEM): The best way to stop the Natural History GCSE from being a soft subject is to make sure there are jobs for them to go to. The DfE is on charge of the overall strategy prior to first teaching. Since the GCSE was approved, lots has happened, e.g., our <u>Green Jobs</u> for Nature campaign. Also, <u>CIEEM</u> and <u>Lantra</u> are launching a report on non-degree entry into environmental roles and working to redefine the apprenticeship landscape. Need to get the communications right and to get universities and employers to value it. Another issue is that young people are leaving university with a degree in environmental subjects but are still being asked to work for free or on low pay - this puts a lot of people off. This might be solved by working with universities to include more practical work and placements and working with companies to stop unpaid internships. There is a crisis coming in terms of lack of ecologists and we must tackle it now.

<u>Tim Oates</u> (Cambridge Assessment): Young people are subject to mixed signals and competing messages about our behaviour and its impact on the natural world, we must do better by them and help them (all of us) focus more on the natural world. We must give young people agency and the knowledge to make the right decisions by giving them a deeper understanding of the contribution of the natural world to their future.

<u>Kabir Kaul</u> (naturalist and conservationist): Concerned about equity of resources in secondary schools. He was involved with <u>70 nest boxes for 70 years</u> - schools signing up to put boxes on their grounds. It is clear some schools have more resources than others. What mechanisms are, or could be, put in place to ensure a range of schools can take up nature education fully?

<u>Chris Baines</u> (Ecologist): Patron of the <u>Countryside Management Association</u> - a lot of professional rangers, conservation officers and others are already doing work in schools and we could make better use of that. Also tap into that Third Age, and 'Grey Power 'that exists in society, plenty of people have knowledge they are keen to share. There are many career-changers with valuable transferable skills that want to move into the environmental sector. This could be facilitated in a couple of years *if* the sector were willing to create many more paid apprenticeships, valuing the skills they already have.

<u>Dominic Buscall</u> (Wild Ken Hill): In reality, it is not just conservationists and ecologists who will do the work of nature recovery; much will be done by lawyers, financiers, operations experts, communicators, and others. We need these specialists to speak

the common language of nature in order to work with experienced naturalists. Elsewhere, not only has society become illiterate on the natural world, but also the adjacent realm of food and farming. We think bread comes from the supermarket. This is a key factor in our poor diet, which causes bad health and environmental outcomes. Introducing more nature education could generate real knock-on benefits by improving our understanding of how food is produced.

<u>Rhodri Williams</u> (Home Builders' Federation): From an engineering perspective, hugely enthusiastic. House building is moving away from more traditional engineering to more nature-based, green engineering initiatives. Home building associations are very supportive of this initiative. HBF and the house building industry were also highly supportive of last summer's motion to propose the compulsory use of swift boxes in all new build homes. I spoke with Matt Vickers MP to 'Make Swift Boxes Compulsory on New build properties' petition in July 2023. Unfortunately, it didn't get approved, but everyone thought it was a great initiative. Barratt Homes have been affiliated with the RSPB for years. Vistry Group work in association with the British Hedgehog Preservation Society. Whilst I entirely appreciate new housing isn't popular with the principal of the objectives of the nature pathway, they do recognise the wider issues and take nature, ecology and enhancement and mitigation seriously.

## Further points

Ecological consultants without natural history training can make poor decisions, which have a real impact on planning decisions.

There is a broader context, nature is not just beneficial to the economy but to our creativity, sense of place, local identity, and well-being. An emotional/spiritual connection to nature is as important as a scientific one. Producing long-term, sustainable, pro-nature behaviours needs a deeper connection to the natural world. See the University of Derby's <u>Nature</u> <u>Connectedness research group</u>.

Enrichment modules would be invaluable, the rich cultural framework within which we view nature – poetry, art, literature. Expressing and engendering awe and wonder about the natural world through the arts is essential to a holistic approach. See <u>Prof Simon Kövesi</u>.

Make better decisions if nature literate and can assess a range of options, e.g., singer/songwriter <u>David Gray</u> is offsetting his recent world tour by helping restore saltmarsh and seagrasses.

The Natural History GCSE needs to fit within a larger educational framework - at present there is no A Level to follow on with. Environmental Science does not include natural history, that could be redesigned to accommodate it.

Whichever pathway to reach Net Zero you subscribe to, the energy transition will require massive infrastructure change – thousands of massive wind turbines and solar parks, miles of new cabling and connecting hardware to deliver the new energy system. Delivering this, in a harmonious way with the environment, will require more ecological educated and skilled practitioners across multiple disciplines.

# **Quotes**

# David Hill (CEO Environment Bank)

"It is critical that more people value nature, not just for its intrinsic value but because of the overriding dependence of global economies on natural capital. Companies providing services and goods from accountancy, engineering, insurance, food production, construction, mining, forestry, agriculture, water, and corporate finance to name just a few, will all soon need to recruit ecologists at scale. Early years exposure to the value of the natural environment, as now about to be made a reality through Mary Colwell's initiative of a GCSE in Natural History, is key to building a much larger professional entity with very high prospects of obtaining rewarding jobs. At Environment Bank our ground-breaking work in nature restoration backed by large-scale investment requires us to recruit highly qualified ecologists with an understanding of natural systems. There is currently a significant shortage of such professionals which will be a general constraint on the growth of the restoration of the natural environment."

## Simon Kövesi (Professor of English and Scottish Literature, University of Glasgow)

One of the most important pathways to nature is via the arts and humanities. Poetry and fiction, visual and conceptual art, music, history, and philosophy – among a multitude of other strands of creative and critical endeavour – can all help us experience the natural world, can help us understand our relationship with it, can provoke our emotional and intellectual awareness of nature, and can help enliven our responsibilities towards local species and global ecosystems. Art can also help us unpick the language, ideologies and politics which inscribe the sometimes damaging divisions between 'us' and the complex constellation of things and processes we call 'nature' – might even help us worry at that word 'nature' – at how it might push the stuff of the natural world away from the human world; nature as everything-other-than-human can be an alienating thing. While landscape, animal and environmental histories can help us see how natural life has always been shaped, corralled, and delimited by human activity; hedges the product of enclosure acts; fenland drainage the product of entrepreneurial agribusiness; zoos and newly imported foodstuffs the product of international exchange and empire. That our natural heritage is manmade is not to be shied away from; that our histories are informed and determined by the natural world is to be celebrated. The more we engage with and argue over the past's formations of our natural inheritances, the more we will provoke the kinds of deep nature literacy Mary Colwell's 'Nature Pathway' project regards as being essential to the future of the planet. The arts and humanities have a key role to play in ensuring that people can 'feel' nature through greater love and understanding. I will finish with a few hopeful lines from John Clare, our greatest nature poet:

All nature has a feeling, wood, fields, brooks Are life eternal – & in silence they Speak happiness – beyond the reach of books There's nothing mortal in them – their decay Is the green life of change... (1845)

# Sally Hayns (CEO CIEEM)

"If we are to succeed in tackling the biodiversity crisis, we need to make sure we have enough people, from all backgrounds, who can provide the skills, insight and commitment to take forward nature's recovery. We currently don't have enough people to meet job demands and this will only get worse unless we act now. By engaging and inspiring young people through nature connectedness and by creating more diverse pathways into fulfilling and rewarding nature-related jobs, we are investing in delivering better outcomes for people and nature."

# Dominic Buscall (Founder of Wild Ken Hill)

"Working on the frontline of nature recovery, it is clear to me that this monumental challenge will require interdisciplinary skill sets. Fundraisers, lawyers, financiers, operations experts, communicators and many more will need to work with naturalists and conservationists to deliver 30x30 and other environmental goals. To do so, these professionals will need to speak a common language. As such, it is vital that professionals and specialists from a variety of sectors have the opportunity to become more nature literate. This not only means giving opportunities to the professionals of tomorrow - today's children - but also looking at retrospectively educating parts of our workforce".

# Nicola Abbatt (Environment and Sustainability Manager, Tilhil Forestry)

"It was a pleasure to join the roundtable meeting to discuss the new Natural History GCSE in Westminster. This fantastic initiative fills a gap in secondary education, let's hope it inspires young people to engage in the natural world and move into careers in sustainable forestry and woodland management addressing the skill shortage we have in the sector."