Digital Dimensions of Nature Recovery

7-8 Nov 2024

Cheng Kar Shun Digital Hub, Jesus College, Oxford

Digital Ecologies Conference

D·E

Cheng Kar Shun
DigitalHub
at Jesus College

Leverhulme Centre
for Nature Recovery

1
DIGITAL DIMENSIONS
OF NATURE RECOVERY

Diverse digital technologies—from artificial intelligence and social media to satellite sensing and mapping applications—are touted as potential solutions to overlapping crises of the 21st Century, including the environmental and biodiversity crises and the pressing challenge of nature recovery. Nature recovery practitioners, alongside researchers from across the natural and social sciences, often widely and creatively deploy digital technologies and devices to monitor, model, and forecast environmental change, embracing the promise of the digital for managing and governing nature. Simultaneously, researchers continue to both utilise and critically examine the power of digital media as a means to understand and generate representations of nature, while developing critical approaches to the study of digital technologies and their relationship to nature recovery. Bringing together those who actively engage with and apply digital solutions for environmental issues with others who emphasise the complex and potentially problematic considerations of these same tools will create and catalyse constructive and dynamic new ways of thinking through the role of digital approaches to nature recovery. This two-day conference thus brings together interdisciplinary researchers across the University of Oxford and internationally, with a community of practitioners and policymakers, to critically explore the digital dimensions of nature recovery through a simultaneously conceptual and applied lens.

Leveraging the Digital Ecologies research group's embeddedness within UK nature recovery communities, organisations, and initiatives, this conference is designed to create space for bringing together a wide range of voices, highlighting the complex and potentially problematic implications of digital tools, while exploring opportunities for pragmatic and actionable suggestions for decision-makers. We hope this conference will facilitate knowledge exchange and explore the co-production of innovative solutions for nature recovery through a digital lens, while supporting new connections and discussions between a diverse range of academics, policymakers and practitioners.

The Digital Dimensions of Nature Recovery conference is organised by the Digital Ecologies research group, a group of early career researchers seeking to bridge conversations between more-than-human and digital geographies, media studies, and political ecology. The conference is principally funded by the Leverhulme Centre for Nature Recovery, the Digital Hub at Jesus College, the Agile Initiative, the SoGE's Research and Culture Fund, the Technological Life research cluster, the European Research Council's BoS Project, and the University of Nottingham.

We hope to publish the conference proceedings as an edited collection of the British Ecological Society Journal People and Nature. If you would like to be involved in this, please get in touch or speak to one of the team.

2
ABOUT DIGITAL ECOLOGIES

Digital Ecologies is an interdisciplinary and international research group fostering critical conversations at the interface of more-than-human and digital geographies, political ecology, digital humanities, and media studies to understand the mediation of more-than-human worlds. Our current members include Jonathon Turnbull, Adam Searle, Oscar Hartman Davies, Jenny Dodsworth, Pauline Chasseray-Peraldi, Henry Anderson-Elliott, Karolina Uskakovych, Noemi Duroux, and Caitlin Hafferty.

At the core of our research is a commitment to empirically exploring what we term 'digital entanglement', a condition in which digital technologies have become constitutive to modes of living in more-than-human worlds. It is commonly assumed that digital technologies disengage humans from nature, yet myriad examples point to the opposite: that digital technologies, in certain contexts, can foster convivial human-nonhuman relations. To date, however, there has been only minimal empirical research into the effects emerging digital technologies have in terms of human-nature disengagement and connection. As such, we highlight how digital human-nonhuman relations are always situated, fraught, and complex; inaugurating a range of social and environmental harms, but also positive relations.

Our first book—***Digital ecologies: Mediating more-than-human worlds***—explores forms of digital entanglement across diverse geographical contexts and will be published by Manchester University Press in December 2024. Our past research and events have been kindly supported by the Vital Geographies research group at the Department of Geography at Cambridge, King's College (University of Cambridge), the University of Bonn, the German Research Foundation (project number 446600467), the European Research Council (grant number 949577), the Olso School of Environmental Humanities, and the Technological Life research cluster at the School of Geography and the Environment, University of Oxford.

You can read more about the Digital Ecologies team here:
http://www.digicologies.com/about/team/
We also maintain an active blog on our website.
Submissions are very welcome!

To keep informed on our research and future events, follow us on **Twitter** or **Instagram** and sign up to the Digital Ecologies mailing list: **http://www.digicologies.com/**. Any questions, drop us an email at **team@digicologies.com.**

3
SCHEDULE

9:30	Welcome tea/coffee
10:00	Introduction
10:15	**panel 1 AGRICULTURE**
11:30	**panel 2 MONITORING**
13:00	Lunch
14:00	**panel 3 VISUALISING**
15:30	Break
16:00	**keynote PROFESSOR CHRIS SANDBROOK**
17:30	Welcome Reception

9:30	Welcome tea/coffee
10:00	Introduction
10:15	**panel 4 REMEDIATION**
11:30	**panel 5 URBAN**
13:00	Lunch
14:00	**panel 6 EQUITY AND JUSTICE**
15:30	Break
16:00	**panel 7 FINANCING**
17:30	Conclusion

4
PANELS & ABSTRACTS

KEYNOTE

Professor Chris Sandbrook,
University of Cambridge

Beyond the hype: navigating the social implications
Conservation has become increasingly digital over recent decades. However, the advent of generative Artificial Intelligence promises a new level of digital automation, or 'conservation by algorithm'. In this talk I will explore new developments in Conservation AI – the deliberate use of AI to conserve biodiversity – and some of their social and political implications. I will argue that the conservation sector is paying insufficient attention to the potential risks and downsides of conservation AI, and to the implications for conservation of AI-induced changes to drivers of biodiversity loss in wider society such as agriculture and the capitalist economy.

Chris (he/him) is a political ecologist with a range of research interests around the central theme of biodiversity conservation and its relationship with society. His current research investigates the social and political implications of digital technologies for conservation, the relationship between conservation and development, and the values and viewpoints of conservationists.

PANEL 1
AGRICULTURE

Panel chair
Jennifer Dodsworth (she/her)
University of Oxford

Adam Searle (he/him)   *University of Nottingham*

Digital media and ambivalent agricultural futures

Digital media are often imagined as stimulating the algorithmic governance of 'smart' food systems, like indoor high-rise or subterranean farms. The prevailing framing of the interrelation between digitisation and food systems propagates an ecomodernist vision of nature recovery, one whereby biospheric processes are enfolded into the technosphere, thus sparing a greater he extent of predominantly rural land for wilding projects. In this paper I ask how particular notions of 'nature recovery' are enabled by the increasing digitisation of agriculture. Outside of the context of algorithmic high-rise agriculture, I examine how digital technologies, tools, and platforms—in the form of social media, environmental sensors, and audiovisual devices—are mobilised otherwise by communities which envision alternative forms of nature recovery. In doing so, I challenge the prevailing notion that digitisation inherently leads to ecomodernist ideas of nature recovery, arguing for more ambivalent

Charlotte Chivers (she/her)   *Countryside & Community Research Institute, University of Gloucestershire*

Exploring the social dimensions of digital technology in nature recovery: a role for co-design

This presentation will examine the social dimensions of digital technology for nature recovery, focusing on the importance of co-designed, context-appropriate approaches. Drawing on CaSTCo's citizen-led soil and water health monitoring, which is using a digital platform to record findings, and research on Agriculture 4.0, we examine the enablers and barriers to digital tools for supporting nature recovery. Key challenges include digital adoption barriers, marginalisation of less tech-savvy groups, and fostering longevity. Addressing the societal implications of integrating digital tools is critical in enabling these technologies to become integrated, as appropriate, in sustainable nature recovery. This is particularly pertinent as disruptive digital technologies such as AI become more widely adopted.

Hywel Morgan (he/him)   *Chair of Nature Friendly Farming Network Cymru*

Trying to find the Sweet-spot between productivity & biodiversity

Changed our Farming Syste from a conventional farming system to a more nature system by cutting as much inputs as possible, fert, feed, chemicals, reseeding etc. Allowed hedges to grow tall and thick and crested a pond.

Jo Furtado (she/her)   *University of Exeter*

Participatory mapping and modelling on upland common land in the Lake District

Digital mapping and modelling tools that measure and predict future public goods provision are becoming ever more important for planning management of land. This is especially true for landscapes that could deliver multiple public goods and for land managed collectively, such as upland common land. However, those tools tend to belong to – and represent the knowledge and priorities of – organisations outside of farming communities. I will cover work so far with commoners on participatory mapping, training in ecological monitoring, and co-modelling of ecological outcomes, including how it is impacting the process of planning future management of the commons.

PANEL 2 MONITORING

Panel chair
Oscar Hartman Davies (he/him)
Centre for Anthropocene History,
KTH Royal Institute of Technology

Professor Bill Adams (he/him)   *University of Cambridge and*
                                   Geneva Graduate Institute

Digital natures and the search for control

Digital technologies are widely used to remotely sense non-human organisms enrolled in programmes of nature recovery. Devices such as tracking tags, trail cameras or airborne sensors create digital versions of actual nature. Data streams are combined to form digital twins within computers, databases and models. What might be enabled, or threatened, by such digitalisation?

Theo Stanley (he/they)   *University of Oxford*

Technical wildness: Making carbon 'wild' in the Scottish Highlands

Natural capital financing is framed as a central policy instrument for realising nature restoration. However, in Scotland, there is no functioning biodiversity credit market, which means that the "ecological value" of a new forestry project is bundled into the price of the carbon credits it generates. In this talk, I will consider how 'wild carbon' - carbon credits promising ecological uplift alongside carbon sequestration – are made. Nature restoration organisations are increasingly drawing on discursive

and aesthetic elements of the Romantic and the Modern, Scotland's dominant strands of environmentalism, to perform carbon's wildness. These performances form part of a wider culture of nature, which I term 'technical wildness'.

Eleanor Thomson (she/her)   *Lead Technologist at Gentian Ltd*

Gentian: Precision monitoring for biodiversity

In my talk I'll be giving an overview of Gentian, a green-tech startup founded in 2020. Gentian uses high-resolution imagery and deep learning models to map and monitor biodiversity. We currently cater to three main customers: local authorities seeking insights to improve urban biodiversity; building developers requiring habitat assessments for Biodiversity Net Gain (BNG); and corporations looking to improve their nature-related reporting in alignment with frameworks such as the Taskforce on Nature-related Financial Disclosures (TNFD). Gentian's mission is to deliver accurate, remote biodiversity monitoring to support nature-positive decision-making.

Associate professor   *Stockholm Resilience Center*
Erica von Essen (she/her)

Monitoring the monitors: examining multimodality and multitasking during slow-TV nature program

While a rhetoric of back-to-nature increasingly emphasizes a bare-bones enjoyment with nature, an increasing amount of people use apps and screens to filter their enjoyment of nature. Not only do apps now overlay our nature consumption, but multiple apps and devices—media multitasking—proliferate in use. I examine the forms of multitasking, app- and task-switching, parallel processing, and participatory affordances alongside of nature programming that viewers engage in for the slow-tv nature programme The Great Moose Migration. This includes co-viewing in for example virtual and multispecies configurations. What are the consequences of this multimodality for monitoring wildlife?

PANEL 3 VISUALISING

Panel chair
Wallerand Bazin (he/him) School of Geography and the Environment

Jessica El Mal (she/her)　　　*artist curator*
University of Leeds

The Digital Forest
Jessica's talk will explore the possibilities of digital technology for nature resonance, particularly with migrant/diasporic communities.

Gillian Rose (she/they)　　　*University of Oxford*

Digital ecologies and the ecologies of the digital
Recent work in digital ecologies has focussed on the mediation of nonhuman life by digital technologies of many kinds, from environmental sensors to webcams to digital twins. This contribution instead considers the digital technologies that saturate everyday human life as themselves an ecology. Interaction, interdependence, feedback and resilience: these technocultural qualities are also applicable to the data that circulates through digital infrastructure, and the paper speculates on the consequences of that conceptual move.

Molly Simmons (she/her)　　　*University of Leeds*

Capturing future visions for the Yorkshire Dales landscape through visual methods
The visual nature of landscapes and potential 'visions' for the future make using visual methods to study them an interesting opportunity for unique insights. Images and photographs provide a stimulus for discussion but are also a vehicle for exploring the subjective nature of how different landscape actors view their landscape and what their priorities and concerns may be. This is interesting in a landscape like the Yorkshire Dales that has long standing and continued uncertainties for how land should be or might be managed. Molly explores this in her work using two types of visual method: photovoice and image-based Q-method.

Svetoslava Toncheva (she/her)　　　*Bulgarian Academy of Sciences*

Coexistence 2.0? How interactions between humans and wildlife are mediated in Web 2.0 space
The talk will explore the question of the mediation of the interactions between humans and wildlife in web 2.0 space. An object of analysis is a case of a human-brown bear conflict that occurred in Rila mountain, Bulgaria and initiated heated debates in

diverse social media. The analysis falls within the popular discourse of "re-connection" and "living in harmony" with nature that has been constructed by global conservation agencies and widely postulated in the web 2.0 space. The case shows, however, that the mediation of coexistence 2.0 appears to serve conservation goals but foregrounds the paradox of re-connecting with nature yet living at a distance from it.

PANEL 4
REMEDIATION

Panel chair
Pauline Chasseray-Peraldi (she/her)
University of Liège, National Museum of Natural History of Paris

Jenske Bal (she/her)   *University of Liège*

Remediating biodiversity in agriculture: attaching cow breeds to tradition, land and agroecology
Intensification and specialisation in agriculture have caused the loss of ecosystem biodiversity and genetic diversity within livestock populations. This presentation follows one research project in the Netherlands at the University of Wageningen which attempts to remediate biodiversity by contributing to the development of 'nature-inclusive' farming through the potential added value of Dutch native dual-purpose cow breeds. By unfolding the data practices within this data-based project, we question how datasets shape attachments between cows, lands, traditions, and biodiversity projects.

Víctor Muñoz Sanz (he/him)   *TU Delft*

Cowborgs in the Polder: the design of animal bodies, digital technologies, farm buildings and welfare and the modification, damage, and remediation of Dutch dairy landscapes
The Dutch dairy industry is under scrutiny for its adverse effects on nature, especially in the context of the nitrogen crisis. This presentation shares results from exploratory research conducted in the Cowborgs in the Polder project. The research critically examines the techno-scientific systems entangled with animal life in the dairy industry, aiming to complicate the understanding of the crisis and shift the focus away from cows. Drawing on historical research, document analysis, expert interviews, and architectural drawing, the presentation highlights how cattle genetics, digital technologies, robotics, farm buildings, and welfare are linked to the modification, damage, and remediation of Dutch landscapes.

François Thoreau (he/him)   *FNRS, University of Liège*

Double-muscled Belgian Blues and the becoming
Belgian Blues are double-muscled animals. This is due to a well-identified genetic trait called muscular hypertrophy (MH), which deactivates the myostatin gene (which stops muscles from growing). So the muscles grow. This genetic trait has led to strong selection and reproduction of purebred cattle in Belgium. Today, this model has probably reached some health and environmental limits. It is said to be "against nature". As the Belgian Blue falls in disgrace, yet it has never been so widespread. In this talk I will follow the MH gene to question the becomings of such efficient metabolic machines.

Camille Bellet (she/her)   *University of Manchester*

The covalences of cowveillance: farm cameras, sensing technologies, and human-animal affinities in dairying
Based on the findings of my current Wellcome Trust project, this presentation focuses on the case of animal surveillance in dairy farming and discusses insights from my historical, ethnographic, and art-based research. The project seeks to experiment with alternatives aimed at 'decentring' the human in the study of human-animal relationships. Investigating sensing technologies and camera surveillance systems, I delve into the effects of visualising cows, particularly through real-time images displayed on computers and smartphones. Through the deployment of relational and multisensory approaches, I find that novel sensations and sensibilities are generated among farmers (beyond sight as a sense) in cow video surveillance. The findings also challenge imaginaries – including our own, as researchers – around human sensory engagements and ways of understanding the experiences of cows. Finally, I speculate on the potential shifts in cows' sensory experiences of being farmed with the advent of remote-sensing cameras. Through this inquiry of and with the senses, I aim to advance an innovative approach to the study of human-animal relationships in and outside farming.
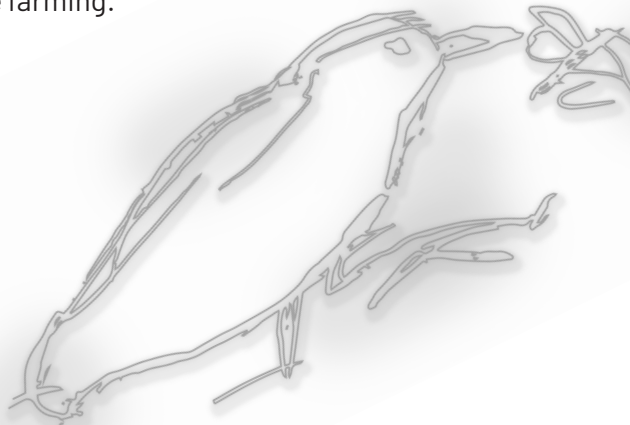
PANEL 5 URBAN

Panel chair
Jonathon Turnbull (he/him)
University of Oxford

Ed Baker (he/him)   *Natural History Museum*
John Tweddle (he/him)

Digital aspects of the Urban Nature Project

The Natural History Museum is investigating the integration odf traditional methods, environmental DNA, ecoacoustics, and community science to monitor and protect urban biodiversity. This work is centred on transforming the Museum's gardens into a digital research laboratory, the Nature Overheard community science programme, and our collaboration with partner sites across the UK. These diverse digital methodologies generate large, novel datasets that are being integrated by a new Data Ecosystem to provide a holistic digital tool for the study of urban nature.

Tash Barnes (she/they)   *Consultant at OnePlanet.com*

Collaborate and connect to place, tech as a tool

Using experience of applying systems-change tech at landscape scale in the rural context for nature-positive outcomes, alongside the flexibility of urban creative imaginaries, this talk will be a speculative exploration of bringing people along on a journey of rewilding the urban landscape. Tash will explore how tech might support emergent communities taking action for nature, the growth of sensitive individual connections to place and a shift from individualism to something more systemic and aligned with nature recovery. Also, the talk will explore how an LNRS might be delivered in part through local micro-actions and why creativity is a core component for delivering a sustainable future.

Hope Steadman (she/her)   *University of Oxford – School of Geography and the Environment*

Smart River Governance: Examining the Feminist Digital Ecologies of the River Thames

The River Thames and its governance has become a site of sociopolitical contestation, with agricultural pollution and illegal sewage spills colouring recent media headlines. In response, groups including conservation charities and wild swimmers have turned to digital media to assist with river quality monitoring, recreation and decision-making. This talk introduces an ongoing research project, which asks how digital technologies are mediating human-river relations in Oxfordshire, and with what consequences. It outlines three themes of research – embodiment, knowledge and governance – and briefly highlights some early findings, based on interviews and participant observation with swimmers and citizen scientists during Summer 2024.

Elliot Newton (he/him)   *co-founder of Citizen Zoo*

How Technology Helps Unleash the Rewilding Potential in an Urban Landscape
In this talk, Elliot Newton will introduce three flagship Citizen Zoo urban rewilding projects in London: the restoration of water vole populations, the reintroduction of beavers, and larger-scale rewilding initiatives utilising free-roaming herbivores. Elliot will offer a practitioner's perspective on the critical role of technology in monitoring and managing these projects. He will explore the use of tools such as NoFence collars for cattle, Remoti systems to control American mink populations, and the application of bioacoustics and GPS-enabled wildlife cameras to support long-term ecological monitoring.

PANEL 6
EQUITY & JUSTICE

Panel chair
Mark Hirons (he/him)
Environmental Change Institute

Martha Crockatt (she/her)   *University of Oxford*

Mapping greenspace equity
The benefits of greenspace and green infrastructure for health and well-being are increasingly recognised, as shown by the rise in green social prescribing and numerous research initiatives in this area. There is evidence that socio-economically deprived communities benefit more from greenspace than more affluent areas. Digital mapping can support prioritisation of efforts and funding to increase green infrastructure quality, quantity and access in communities where it is most needed. There are a range of data sources available for this, but key elements are absent, and desk-based research requires local knowledge and research to support improvements in greenspace equity at the community level.

Janet Fisher (she/her)   *School of GeoSciences, University of Edinburgh*

Can deliberation promote procedural equity in nature recovery? Introducing the restoration partnership development toolkit
(Authorship: Janet A Fisher (GeoSciences, U. Edinburgh), Annette Green (Geography, U. Cambridge) and Chris Sandbrook (Geography, U. Cambridge)). Nature recovery initiatives are underway across the UK to address the climate and nature emergencies. Such initiatives are laden with equity and justice considerations,

given the context of stakeholders with differential tenure, power and knowledge, and far-reaching implications for livelihoods and landscape imaginaries. Drawing from literatures on deliberation and conflict transformation, we developed the 'restoration partnership development toolkit', which enables nature recovery practitioners to map out stakeholder perspectives and foster their deliberation. The talk examines whether tools such as this can promote procedural equity in nature recovery, drawing on insights from pilot cases in the Scottish Highlands, Cumbria, and Welsh borders.

Eric Mensah Kumeh (he/him)   *Leverhulme Centre for Nature Recovery, University of Oxford*

Participatory Socio-Ecological Mapping Reveals Novel Insights for Equitable Nature Recovery Interventions

Digital technologies are gaining significant attention in the design, implementation, and monitoring of nature recovery interventions. However, there remains considerable debate over the capabilities and effectiveness of these evolving tools, particularly regarding what they highlight or obscure and who benefits or is excluded. This talk draws on participatory socio-ecological mapping that integrates multi-spectral imagery with gendered workshops within a nature recovery project in Suminakese, a historic and scenic village in Eastern Ghana. By going beyond the sensors, the talk will delve into rich stories, traditions, and practices that are overlooked but are essential if nature recovery efforts are to be equitable and effective in the area.

Jack Reed (he/him)   *University of Exeter*

Young people and postdigital nature connection: Adult perspectives and youth experiences in residential outdoor education

This presentation explores the intersection of mobile technologies, social media, and young people's engagement with nature in residential outdoor education in the United Kingdom. Drawing on three qualitative case studies, the talk contrasts outdoor instructors' beliefs that "phone-free" outdoor experiences are more impactful, with findings that young people's understandings of nature are often shaped by online spaces such as Minecraft and TikTok. Using a postdigital lens, the presentation discusses how a collapsing physical-digital binary influences young people's interactions with and provides implications for contemporary nature recovery policy and practice.

PANEL 7 FINANCING

Tom August (he/him)   *UK Centre for Ecology and Hydrology*

The role of technology in the future of biodiversity monitoring
The decline of wildlife populations across the globe stands in sharp contrast to the rapid growth of technologies like cloud computing and AI. How can we harness these emerging technologies to provide more precise, verifiable, and robust biodiversity monitoring?

Tom will explore his successes and failures to make technology work for biodiversity monitoring, covering acoustics, computer vision and the power of citizen science. Despite their great promise, technologies on their own won't provide a solution to robust, scalable, biodiversity monitoring. They face many challenges, from how we store the vast amounts of data generated, to what the results from these methods really mean. Tom will explore these challenges and suggest how future research might unlock their potential for researchers and business.

Molly Biddell (she/her)   *Head of Natural Capital, Knepp Estate*

Nature Recovery at Knepp – restoring, regenerating and reconnecting landscapes through new tech and high quality data monitoring
Molly will discuss Knepp's approach to nature restoration, touching on some of the exciting landscape scale nature recovery projects currently underway at Knepp. Molly will explain how a new generation of technology and accurate data collection is critical to ensure emerging UK nature markets function properly and with integrity. She will discuss this through the lens of some of the projects she is working on, including Knepp's famous rewilding project, the 100 mile Weald To Waves nature recovery corridor and the government backed River Adur Recovery project. Molly will also touch on the power of technology and data to engage communities with ecosystem restoration.

Rosie Everett (she/her)   *Scottish Rural College*

Finding people in the natural capital framework: the role of interdisciplinary research in ensuring community benefits in peatland restoration monitoring
The natural capital framework has allowed for large-scale programmes of peatland restoration programmes across the UK with a focus on blending public and private finance for investment into the voluntary carbon credits market. Whilst this is underpinned by the IUCN Peatland Code for delivering high-quality restoration and

ensuring best restoration practice, it is yet to focus on the people and communities in which these projects are being delivered. In this paper, I discuss the current research on community benefit mechanisms to ensure equity and sustainability in

Sophus zu Ermgassen
(he/him)

University of Oxford, Leverhulme Center for Nature Recovery

What tech can and can't do to solve ongoing problems in nature markets

Nature markets have an extremely patchy track record, and advocates often point to the opportunities for technology to solve some of the historic problems with the effectiveness of nature markets. Here I'll outline my perspectives on where I see real opportunities for technology to solve real-world problems with 2 important nature markets: the voluntary carbon market, and Biodiversity Net Gain in England. But then I'll outline how the are some major drivers of their historic shortcomings that result from their political economy and governance weaknesses that cannot be solved by technology, so I argue that in the systems I work in, technology is probably a less important component of the solution to fixing nature markets than some fairly basic aspects of governance reform.

5
BIOS

Bill Adams
Professor, University of Cambridge and Geneva Graduate Institute.

Bill Adams is a geographer who works on conservation and society, with a particular interest in technologies and nature. He held the Moran Chair in Conservation and Development at the University of Cambridge from 2006 to 2020, and is currently teaching at the Geneva Graduate Institute.

Tom August
Dr, UK Centre for Ecology and Hydrology

Dr Tom August's research focuses on the application of new methods and technologies to biodiversity monitoring, with interests spanning the ecology, computer science, engineering, and citizen science. Over the past 10 years Tom has focused on methods to gather more and better data about biodiversity, and ways to disseminate this information to generate positive impacts.

Ed Baker
Natural History Museum

Ed Baker is the Acoustic Biology Researcher at the Natural History Museum, London. His work focuses on how technology and collections can help understand urban diversity, with a particular focus on digital sensor networks and bioacoustic approaches.

Jenske Bal
PhD candidate, university of Liège

Jenske is a PhD in the ERC project "The body societal: unfolding genomics infrastructure in cattle livestock selection and reproduction". She is based at the University of Liege and the University of Amsterdam. Her ethnographic research investigates the infrastructures, practices and techniques for conserving and breeding cattle, especially for breeds native to the Netherlands. Her interests include how breeds and diversities are 'made', heritage, valuations, multispecies relations, relations of feeding and eating, and datafication of nature.

Wallerand Bazin
PhD candidate, School of Geography and the Environment

Wallerand Bazin is a doctoral student at the School of Geography and the Environment working on the politics of aesthetics of nature recovery in agro-pastoral landscapes. He compares the Lake District and the Causses and Cévennes (France), both UNESCO cultural landscapes witnessing respectively woodland regeneration and wolf reintroductions.

Tash Barnes
Consultant at
OnePlanet.com

Tash has a degree in Geography and loves the messy middle space between sciences and art. Her interests circle around wellbeing, creative exploration of place, relationships with nature and community. In her work she uses graph database technology to facilitate thinking about the bigger picture and find opportunities to collaborate better. She is supporting the design of a regenerative AI and navigating a new space between neuroscience, innovation and creativity and ethics.

Camille Bellet
Dr, University of
Manchester

I am an interdisciplinary scholar specialising in post-humanist research. Trained as a veterinary practitioner and epidemiologist, I was awarded a Wellcome Trust Research Fellowship in Humanities and Social Science in 2020. My research sits at the intersection of the environmental and medical humanities, sensory studies, and STS, and draws on sensory methods and approaches from history, ethnography, and the arts.

Molly Biddell
Head of Natural Capital,
Knepp Estate

Molly is Head of Natural Capital at Knepp Estate, one the UK's pioneering rewilding projects. She focuses on leveraging nature markets for Knepp, Weald to Waves and the River Adur Landscape Recovery project. She also works part time at Hampton Estate, a family-run regenerative farming business in Surrey, where she leads nature-based solutions. She facilitates the Upper Adur Farming Cluster group and is a columnist for Farmers Weekly.

**Pauline
Chasseray-Peraldi**
postdoctoral researcher
at University of Liège,
associate researcher at
the National Museum of
Natural History of Paris

Pauline Chasseray-Peraldi is a media studies researcher from Paris. Her research examines the environmental relationship of surveillance and algorithmic infrastructures. Her postdoctoral research in the ERC funded research project The Body Societal, explores feral cows, pastoral practices, and agricultural governance in Corsica. She is a member of the Digital Ecologies research collective, and co-edits the journal Librarioli.

Jack Reed
Dr, University of Exeter

Dr Jack Reed is a postdoctoral researcher on the ESRC-funded Nature Recovery and Regional Development project at the University of Exeter. Alongside nature recovery, he also holds research interests in young people's digital cultures, leisure studies, and postdigital theory.

Mrtha Crockatt
Dr, University of Oxford

Since completing my PhD in fungal ecology I've spent over a decade in environmental NGOs building expertise in forest ecology, citizen science, sustainable agriculture, and, more recently, digital mapping of nature and greenspace with and for communities. I am currently exploring equity of access to the benefits of greenspace.

Jennifer Dodsworth
University of Oxford

Jennifer is a social scientist interested in the cultural geographies and environmental politics of animals, agriculture, and nature conservation. She focuses on using participatory methods to enhance agri-environmental governance, bridging academia and policy. Jennifer currently leads a research project funded by Defra at the University of Oxford, supporting the development of England's new agri-environment schemes. She is also a tenant hill farmer in Cumbria.

Jessica El Mal
artist curator and PhD candidate at University of Leeds

Jessica El Mal is a British-Moroccan artist and curator with a particular interest in ecology, globalization and migration. Her work addresses global structures of power through critical research, multidisciplinary projects, and speculative future imaginaries. Recently her work has been concerned with water as a political and spiritual entity, employing cyanotype, textiles and sound in her installations. She has had exhibitions both nationally and internationally including Open Eye Gallery, Liverpool, Castlefield Gallery, Manchester, MAMA Rotterdam, and JAAL Riad, Marrakech. She runs community arts programs in nature for people with experience of migration for which partnerships have included The Arab British Centre, Journey's Festival International and the Forestry Commission. She is also the co-director of A.MAL Projects, an art and research initiative between North Africa and Europe.

Caitlin Hafferty
Postdoctoral Researcher at the Environmental Change Institute

Caitlin Hafferty is a Postdoctoral Researcher at the Environmental Change Institute who is interested in the governance, politics, and democracy dimensions of nature recovery and Nature-based Solutions. She conducts theoretically-driven research with real-world impact through inter- and transdisciplinary approaches, collaborating with government, private business, charities and community initiatives.

Charlotte Chivers
Countryside &
Community Research
Institute, University
of Gloucestershire

Charlotte is a research fellow in interdisciplinary social science. Her work focuses on co-designed research for securing nature recovery. She leads the social science aspects of CaSTCo, on integrated catchment management, and recently led an ELM test and trial. She also works on EU-funded MINAGRIS, TERRASAFE, and SPRINT.

Rosie Everett
Dr, Scottish Rural College

Dr Rosie Everett is a post-doctoral research associate (Scottish Rural College, Edinburgh) and a Senior Scientist at Zulu Ecosystems. Her work focuses on delivering best practice and people-focussed programmes of peatland restoration in natural capital markets in which she has collaborated with UNEP, DEFRA, NatureScot, Natural England and Historic England.

Janet Fisher
Dr, School of
GeoSciences, University
of Edinburgh

Janet is an environmental social scientist interested in environmental change, human wellbeing and the social dimensions of conservation. Her recent work has involved using social science to inform and improve the character of debates about changing land use in response to the nature and climate emergencies.

Jo Furtado
University of Exeter

My PhD is part of RENEW, a research partnership between the University of Exeter and the National Trust focussed on nature renewal through a people-in-nature-approach. I previously worked in climate and nature policymaking for various green NGOs, most recently as a climate policy specialist for the WWF-UK.

Hope Steadman
University of Oxford –
School of Geography
and the Environment

Hope is interested in how digital technologies are shaping human-nature relations. Her DPhil research explores the ways in which technologies are mediating new ways of knowing, experiencing and governing river quality. She also holds a Master's degree in Nature, Society and Environmental Governance from the University of Oxford.

Theo Stanley
Dr, University of Oxford

Theo Stanley is an environmental geographer who recently completed his PhD at the University of Oxford. His doctoral research investigated how carbon finance affects how nature restoration and reforestation take place in the Scottish Highlands.

Oscar Hartman Davies

Centre for Anthropocene History, KTH Royal Institute of Technology

Oscar Hartman Davies is an environmental and cultural geographer from London. Now a postdoctoral researcher, he holds a DPhil in Geography and the Environment from the University of Oxford and is actively involved in the nature recovery world as co-founder of the youth-led nature recovery organisation, Youngwilders. Oscar's research focuses on the social, political, and ecological implications of sensing and surveillance technologies used in marine research and governance, and he is a core member of the digital ecologies research group.

Eric Mensah Kumeh

Dr, Leverhulme Centre for Nature Recovery, University of Oxford, Postdoctoral Researcher in Land-Use Governance and Nature Recovery

Eric is a postdoctoral researcher focused on power and equity in land-use governance. Passionate about land access in rural Africa, he examines how multi-level governance of nature recovery influences land-use choices and decisions among marginalized and underserved communities in mosaic landscapes characterized by diverse and divergent interests in low-income countries.

Elliot Newton

Co-foudner, Citizen Zoo

Elliot Newton is a co-founder of Citizen Zoo, an innovative rewilding organisation dedicated to transforming urban landscapes through community-driven projects. By adapting and applying rewilding approaches, Elliot and Citizen Zoo aim to place local people at the center of their initiatives and foster a more nature-rich urban environment. For over a decade, Elliot has led numerous large-scale ecological restoration efforts, including species reintroductions such as water voles to the Hogsmill River and the large marsh grasshopper across its former range. He was instrumental in establishing the London Beaver Working Group and has been a key member of the Ealing Beaver Project, which achieved London's most urban beaver reintroduction with a strong community focus. Additionally, Elliot has played a strategic role in developing and implementing rewilding strategies across London.

Mark Hirons

Senior Researcher at the Environmental Change Institute

Mark Hirons is a Senior Researcher at the Environmental Change Institute who is interested in addressing inter-linked social and environmental challenges through interdisciplinary research. He is broadly engaged with research that investigates issues of well-being, inequality and justice with respect to climate change and natural resource governance.

Adam Searle
University of Nottingham

Adam Searle is a cultural, historical, and environmental geographer and Senior Research Fellow at the University of Nottingham. His research examines the relations between science, technology, and ecology. He is a founding member of the Digital Ecologies research group and an editor of Digital Ecologies: Mediating More-than-human Worlds (Manchester, 2024).

Víctor Muñoz Sanz
Dr, Assistant professor, Critical Environments Group, Department of Urbanism, Faculty of Architecture and the Built Environment, Delft University of Technology

Víctor Muñoz Sanz is an assistant professor at TU Delft, where he develops critical research on the spaces of the past, present and future of work. Víctor qualified as an architect at the School of Architecture of Madrid, and holds a master of architecture in urban design from Harvard University and a PhD from Universidad Politécnica de Madrid.

Hywel Morgan

Chair of Nature Friendly Farming Network Cymru. Also Agriculture Advisor Plantlife Cymru. Upland Beef & Sheep Farmer in the Western edge of Bannau Brycheiniog. Working with Nature not against it is what our farm system tries to do. Much of 2024 has been spent involved with the Welsh Government working on the SFS.

Eleanor Thomson
Dr, Lead Technologist at Gentian Ltd

Dr. Eleanor Thomson is Lead Technologist at Gentian Ltd, a greentech start-up that uses spatial data to map and monitor biodiversity to help businesses understand their impact on nature. She holds a DPhil in Environmental Research and an MSc in Environmental Change and Management. In addition to her work at Gentian, Eleanor is a postdoctoral researcher in ecological remote sensing at the University of Oxford. Beyond her academic and professional roles, Eleanor co-founded the Oxford Drone Society, to help promote the use of drone technology in scientific research.

Svetoslava Toncheva
Bulgarian Academy of Sciences

Svetoslava Toncheva is associate professor in environmental anthropology, Bulgarian Academy of Sciences. Her research focuses on human-nonhuman interactions, convivial conservation, multispecies ethnography and large carnivores. She is a research partner in "Wild Rodopi" NGO, working on brown bear conservation, the author of the monograph "Humans and bears. Politics and coexistence models" (in Bulgarian) and number of other publications in international peer-reviewed journals.

Sophus zu Ermgassen
University of Oxford

I am an ecological economist specialising in biodiversity finance. I currently hold ongoing expert advisory roles for Natural England, the UK Treasury, and the International Advisory Panel on Biodiversity Credits all relating to nature markets. I co-lead a team of 8 researchers working on ecological economics and nature markets at the University of Oxford's Nature-positive hub. I'm co-host of the European Society for Ecological Economics podcast "Economics for Rebels". I've appeared on BBC Countryfile, Sky news, and regularly in the media on stories relating to nature markets, was named as one of the 100 most influential environmental professionals in the UK by newspaper the ENDS Report in 2022, won the UKRI Natural Environment Research Council's early career policy impact award in 2023, and in 2024 won and came runner up in 2 internal awards across the University of Oxford for research impact.

Molly Simmons
University of Leeds

PhD researcher based in Leeds and funded by the Peter Sowerby foundation as part of their network on barriers and benefits of landscape-scale restoration in the Yorkshire Dales. Interested in different 'visions' for the future of this landscape, how they relate to restoration, and how they are, or might be governed.

Erica von Essen
Associate professor, Stockholm Resilience Center

Erica von Essen joins digital ecologies from a perspective of changing human-wildlife relations. Her research focuses on technologically mediated engagement with wildlife, including in documentary and citizen science formats. Erica has expertise in hunting, problem animals, poaching, trophy hunting, environmental and animal ethics, rural studies and wildlife management.

Gillian Rose
Professor, University of Oxford

Gillian Rose is Professor of Human Geography at the University of Oxford and a Fellow of the British Academy. She is the author of Feminism and Geography (Polity, 1993), Doing Family Photography (Ashgate, 2010) and Visual Methodologies (Sage, fifth edition 2023). She is currently working on a book provisionally entitled Animated Urbanism: Seeing Urban Life Digitally, From Google Street View to Disaster Movies.

Hope Steadman
University of Oxford –
School of Geography and
the Environment

Hope is interested in how digital technologies are shaping human-nature relations. Her DPhil research explores the ways in which technologies are mediating new ways of knowing, experiencing and governing river quality. She also holds a Master's degree in Nature, Society and Environmental Governance from the University of Oxford.

6
PRACTICAL INFO

Location: Cheng Kar Shun, Digital Hub,
Jesus College, University of Oxford

Contact details for emergencies:

Caitlin's number: +44 7511 659176
Jonny's phone number: +447581222672
Noemi's phone number: +39 349 076 5255