

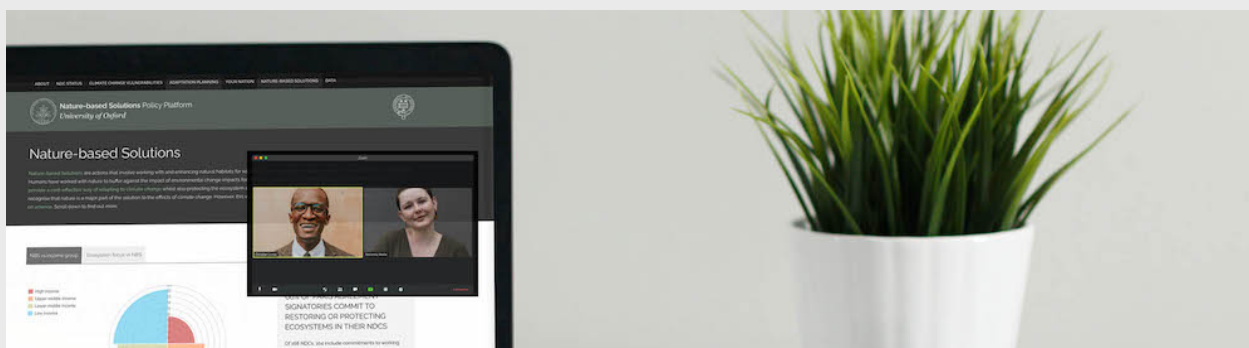


NbSI NEWSLETTER

December 2022, Issue 16

Last month the term 'nature-based solutions' was included in the "Sharm El Sheikh Implementation Plan", the decision text signed by all Parties to the United Nations Framework Convention on Climate Change (UNFCCC) at the end of CoP27. This is the first time the term has been included in a UNFCCC CoP decision text; this is good news as it gives Parties oversight to ensure NbS are implemented with integrity, in particular that they are not used in greenwashing and, by definition, benefit biodiversity and local people. However, there are no solutions from nature unless we keep fossil fuels in the group, so the failure of CoP27 to enhance climate ambition is extremely worrying. In this newsletter, we provide our take on these and other policy developments relating to NbS, share the latest NbS science and best-practice case studies, and highlight new research, education and job opportunities at the NbSI.

If you would like to subscribe to our newsletter, please [sign up on our website](#), where you can also find an archive of past issues.



APPLY NOW

Nature-based Solutions to Global Challenges Foundation Course

The 8-week online course (involving two 2-hour weekly sessions) aims to enhance understanding among professionals from different sectors of the science, policy, practice, financing, and governance of NbS. The first run of the course finished last month and involved participants from all over the world and across different industries and public bodies; the second run starts mid-Jan 2023.

"Increasing private-sector uptake of nature-based solutions can help meet net-zero commitments and support a flourishing nature-positive economy. I highly recommend the Nature-based Solutions to Global Challenges Foundation Course to anyone wanting to strengthen their understanding of the science, policy, practice, financing and governance of NbS."

Hester DeCasper, *International Finance Corporation* (course participant, Nov 2022)

[Find out more including how to apply on the course webpage.](#)

COP27



NbSI's Audrey Wagner, Aline Soterroni and Tasfia Tasnim were on the ground at CoP27, working to highlight the key role of carefully implemented NbS in helping to address the climate and biodiversity crises, whilst supporting the rights and knowledges of Indigenous Peoples and local communities. A summary of key nature-related developments at CoP27 are provided in our roundups for [week one](#) and [week two](#). Highlights included:

[“Nature-based solutions” included in CoP27 Cover Decision text.](#) It is essential that it is widely understood that NbS are not an alternative to drastic emissions cuts, that they must bring local benefits to biodiversity, and also respect the rights, knowledge and livelihoods of Indigenous Peoples and local communities.

[Brazil's incoming President Lula reinforces the fight against deforestation at COP27.](#) Luiz Inácio Lula da Silva spoke out strongly in support of preserving “the vast biodiversity of the Amazon” as a key part of the fight against climate change, and has called for the UNFCCC CoP30 in 2025 to be hosted in Amazonia. He also pledged to set up a Ministry for Indigenous Peoples, essential if Amazonia and other critical biomes are to be ethically and effectively protected.

[Forest and Climate Leaders' Partnership launched.](#) This voluntary partnership of 26 countries (accounting for over 33% of the world's forests and nearly 60% of the world's GDP) has committed to accelerating momentum to halt and reverse forest loss and land degradation by 2030. The partnership will run annual events to build consensus, delivery of and accountability to global forest commitments.

[FEBA adaptation brief on nature-based solutions released.](#) The Friends of Ecosystem-based Adaptation brief helped to elevate the collective voice from the adaptation community, highlighting how and where NbS can inform climate change negotiations.

[World Business Council for Sustainable Development Report on Nature-based Solutions.](#) This report presents recommendations for the role of companies' actions on NbS and how this can be leveraged to deliver against climate, nature and equity. It also examines the role of NbS in net-zero, with supporting issue briefs for companies and insights on future trajectories for NbS in corporate sustainability strategies.

[U.S. Government announces Nature-Based Solutions Roadmap.](#) Backed by a budget of around \$30Bn, this roadmap provides strategic recommendations for implementing NbS as “powerful tools” to enable “climate progress, thriving nature, equity and prosperity” across a wide range of sectors in the USA.

[IUCN Climate Crisis Commission \(CCC\) launched](#) with a mission to advance efforts by IUCN Committees and civil society to reduce greenhouse gas emissions and adapt to climate change.


[ENACT Partnership on Nature-based Solutions launches on Biodiversity Day.](#) This collaboration between IUCN and the COP27 Presidency will drive collective action on climate change and biodiversity. NbSI participated in the consultation ahead of the launch.



NbSI's Audrey Wagner, Seth Thomas, and Beth Turner are attending the Convention on Biological Diversity COP15 in Montreal over the next two weeks, as part of Oxford University's first ever delegation to a CBD COP (which the NbSI convened). At CoP15, our focus is on the role of NbS within the Post-2020 Global Biodiversity Framework (GBF), emphasising that NbS must have positive outcomes for biodiversity and local communities, by definition. NbSI has also partnered with the Global Youth Biodiversity Network, engaging in communications and policy work throughout the next two weeks. Learn more in the [hopes of NbSI and the biodiversity community for COP15](#).


NbSI TEAM RESEARCH

[Home](#) [Research](#) [Education](#) [Policy](#) [Team](#) [News](#) [About](#) [Support](#)



Our research is covered by six themes.

Read about our current research on the different dimensions of nature-based solutions.



Our latest papers, reports and policy briefs can be found on the NbSI publications page. Recent research highlights from the NbSI team include:

[Nature-based solutions are critical for putting Brazil on track towards net zero.](#) A study, currently available as a [preprint](#) and summarised in a [policy brief](#), based on research led by Aline Soterroni, quantifies the role of NbS, such as protection and restoration, and engineered solutions such as bioenergy with carbon capture and storage in Brazil's net zero pathways. The research provides evidence that Brazil cannot meet its climate pledges without implementing NbS, in particular by strengthening legislation to eliminate illegal and legal deforestation, and enshrining that in an enhanced Nationally Determined Contribution.

[Biodiversity outcomes of nature-based solutions for climate change adaptation.](#) Our recent *Frontiers in Environmental Science* paper led by Issy Key clarifies the evidence base on the ecosystem health outcomes of nature-based interventions for climate change adaptation. It finds that carefully implemented NbS can reduce climate change impacts whilst also supporting ecosystem health. However, more research is needed, including more holistic assessments of biodiversity.

[‘Ecolabels’ can encourage more sustainable purchases, but may depend on label design.](#) A recent paper in *PLOS One* co-authored by John Lynch demonstrates how environmental impact labels (or ‘ecolabels’) can influence food purchases in an experimental online supermarket.

NbS RESEARCH



Take a look at our [featured NbS research](#) page where we add digestible summaries of studies that make important contributions to the body of knowledge on NbS. Recent highlights from the peer-reviewed literature include:

[Land tenure drives Brazil’s deforestation rates across socio-environmental contexts.](#) A study in *Nature Communications* by Pacheco & Meyer investigates the relationship between land tenure and deforestation rates in Brazil, revealing that poorly defined land rights lead to increased deforestation rates. The privatisation of such lands can only mitigate this effect if combined with strict environmental policies.

[Mapping the planet’s critical natural assets.](#) A *Nature Ecology & Evolution* paper by Chaplin-Kramer et al. shows that conserving 30 percent of the Earth’s land and 24 percent of coastal waters would sustain 90 percent of nature’s current contribution to people in every country.

[A function-based typology for Earth’s ecosystems.](#) A paper in *Nature* by Keith et al. presents the new IUCN Global Ecosystem Typology: a comprehensive classification framework for Earth’s ecosystems that integrates their functional and compositional features.

We have added these and other new studies to our [online bibliography](#), which now features over 550 publications, which you can filter for habitat type, location, and societal challenge addressed by the NbS.

NbS IN POLICY



In [Featured NbS in Policy](#) we summarise recent NbS-related developments in national and international policy. Here are some highlights.

[Wales to triple peatland restoration](#) after commissioning a ‘Biodiversity Deep Dive’ to assess how nature recovery across land and sea can best be accelerated.

[New UNEP report, Opportunities and Challenges for Scaling Up NbS](#), outlines developments on NbS with global, regional, and national

commitments, key issues, and concerns.

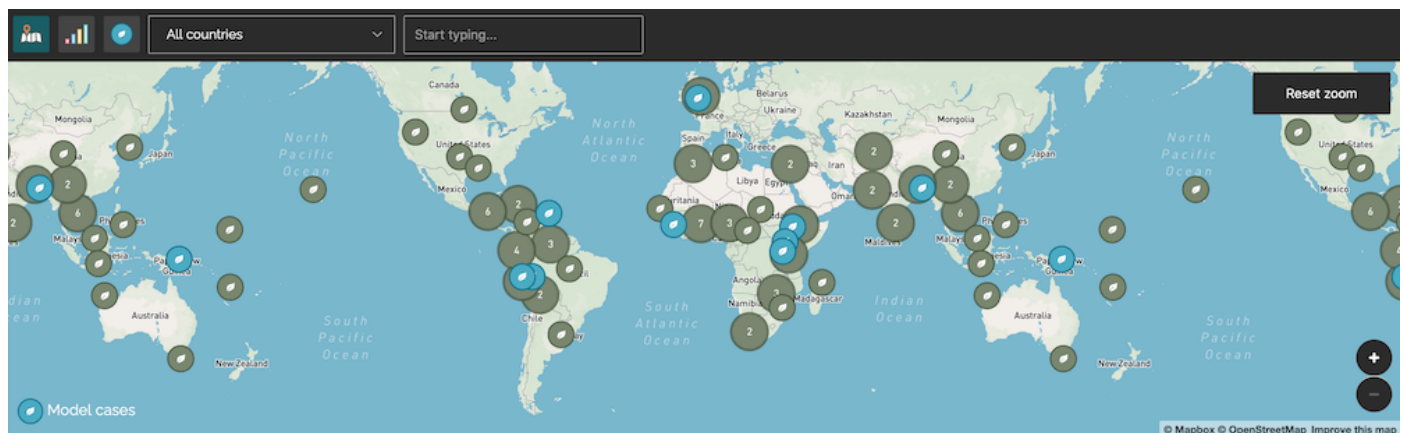
[New RSPB report, A World Richer in Nature](#), outlines how global promises can be turned into a decade of action for nature by the UK Government and devolved administrations in order to get "nature positive" in the UK by 2030.

[Defra misses statutory deadline to set new targets for nature, air, water and waste](#). Two coalitions, representing organisations such as the RSPB, Wildlife Trusts, Friends of the Earth and the Woodland Trust, sent a formal letter of complaint to the UK Department for Environment Food & Rural Affairs (Defra), after it missed the deadline.

[World Bank Group policy brief: Nature-based Solutions for Climate Resilience and Adaptation](#) analyses the challenge of scaling up NbS, what is needed, how the World Bank Group is contributing to solutions and what success looks like.

[EU Proposal on regulation on deforestation-free products risks neglecting critical ecosystems](#). On 5 December members of the European Parliament agreed on a final proposal for the regulation, but during negotiations it became clear that only forests as defined by FAO would be included within the law and excluding "Other Wooded Lands".

NbS IN ACTION



Our [interactive global map](#) of good practice NbS has been updated and was [relaunched at COP27](#). Supported with funding from the British Academy, the latest edition debuts multiple new features, including four new information categories for each case, model cases spotlighting information-rich projects with positive ecological and social outcomes, the development outcomes of interventions, and several additional platform functionalities. If you'd like to add your project to this platform, do please get in touch.

Explore our [global platform](#) and [case studies page](#) to learn about a wide diversity of examples of NbS in action from around the world.

NbS IN THE NEWS



[NbS in the News](#) highlights:

[2022 Progress Report on 30x30 in England](#). A new Wildlife and Countryside Link report assessing the Government's 30x30 commitment in England has found that no appreciable progress on governmental policy to protect 30% of the land and sea for nature by 2030.

[Exponential Roadmap for Natural Climate Solutions](#). Scientists from Conservation International and the Potsdam Institute for Climate Impact Research released the report for maximising nature's role in tackling global warming. It finds that to avoid catastrophic climate change, the land sector, including agriculture and forestry, must reach net zero emissions by 2030.

[Not Just Carbon: Capturing All the Benefits of Forests for Stabilising the Climate from Local to Global Scales](#). This WRI report summarises the science on the biophysical effects of deforestation on climate stability, and explores the policy implications of the resulting impact, as well as opportunities to address current gaps through innovations in policies and institutions.

OUR NEWS & ANNOUNCEMENTS

Keep up to date with the activities of the Nature-based Solutions Initiative on our [announcements page](#). Below are some recent highlights.

[First course run of the Nature-based Solutions Foundation course was completed](#) providing participants with knowledge that will enhance future work on nature-based solutions. In Sept-Nov 2022, the course was attended by 29 participants from a wide range of sectors, disciplines and countries, enabling stimulating discussions for course contributors and attendees alike. People joined from Rwanda, Kenya, Norway, Hong Kong, Australia, the USA, UK, France, Germany, Turkey and more.

People's Assembly for Nature launched in November, organised by Involve UK and supported by the RSPB, National Trust and WWF UK. The Assembly has brought together a broadly representative group of citizens from across the country in order to develop a People's Plan for protecting and restoring nature in the UK. Nathalie Seddon is one of two academic leads for the assembly and [spoke at the first weekend](#) in Birmingham. [Her talk](#), along with those of other experts, including Natural England's Tony Juniper, can be found on the [People's Plan for Nature website](#).



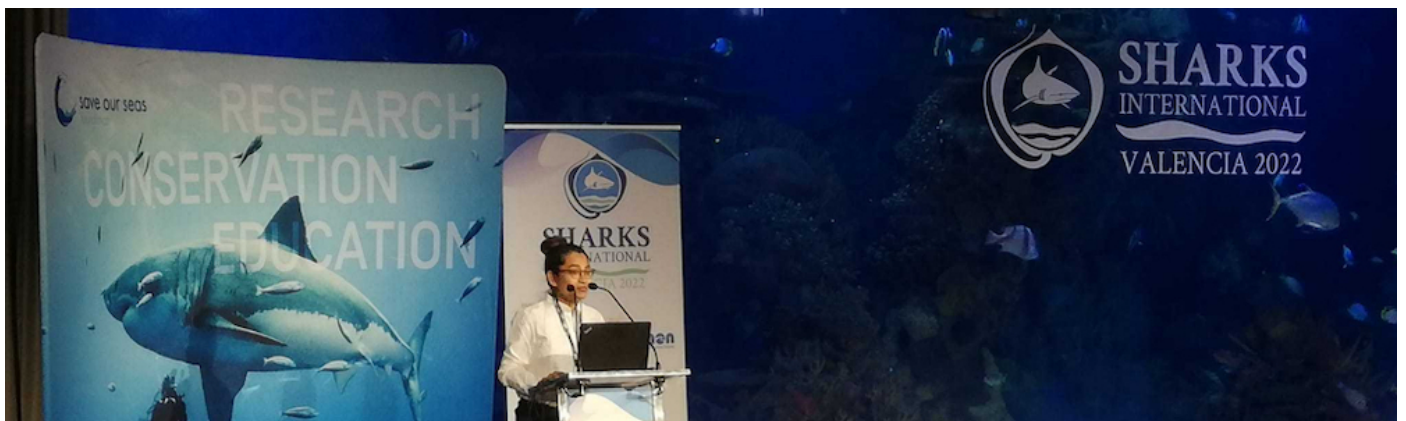
Nat Seddon answering tough questions at the first People's Assembly for Nature in Birmingham on 11-13th November.

Congratulations to Seth Thomas for being awarded one of only four global Youth Communicator Fellowships to attend the UN Biodiversity CoP15 and produce media for the youth delegation. As part of the Global Youth Biodiversity Network he's advocating for the important role of the world's youth at the conference.

Aline Soterroni commented in a [Nature News](#) item on the outcome of Brazil's elections and the need for the new elected government to submit an ambitious climate plan to the UNFCCC. Brazil's current NDC violates the non-regression and progression principles of the Paris Agreement and the country's current net zero pledge is not backed by a robust plan.

Together with other Brazilian experts, Aline also discussed the white paper "[Amazon Tipping Point: The Economic and Environmental Fallout](#)", a modelling work developed for the Inter-American Development Bank at the [GLASSNET Use Case Workshop](#).

Congratulations to DPhil Researcher [Alifa Haque](#) for being awarded the [best student presentation](#) at Sharks International 2022, out of several hundred abstracts submitted and presented both online and in-person.



NbSI's Alifa presenting at Sharks International 2022

NbSI took part in CoP27 panel event '[Blending People's Participation & Nature-based Approaches for Enhancing Community Resilience](#)'. Audrey Wagner and Tasfia Tasnim, alongside ICCCAD Director and NbSI advisory board member Professor Saleemul Huq, discussed the importance of community participation and NbS for resilience to climate change.

[Friends of COP open letter urges UK Prime Minister to attend COP27](#). Together with the other "Friends of COP26", Nathalie Seddon wrote to the UK Prime Minister Rishi Sunak and ministers underlining the importance of his attendance at COP27 in November, and of building solidarity, trust and support in multilateral climate action.

The Agile Initiative 'Sprint' on [Scaling up NbS in the UK](#) held its second stakeholder meeting, with partners from Defra, Natural England, the Environment Agency, WWF, RSPB, National Trust, RBG Kew, UKCEH and the Universities of Aberdeen and Bristol, to update the policy 'hooks' for this work in light of recent political changes. The NbSI team have been visiting our case study sites in Scotland (Highlands Rewilding), Wales ([The Carbon Community](#); see below) and Oxfordshire, to plan fieldwork on how NbS can maximise ecological and socio-economic benefits alongside climate mitigation and adaptation.

[NbSI visits the Carbon Community field site](#). This tree planting experimental field site in Glandwr Forest near Llandovery, Wales, has been designed in partnership with scientists to learn more about how to accelerate and enhance carbon sequestration using nature-based solutions.

Senior staff from NbSI and the Leverhulme Centre for Nature Recovery submitted a response to the Call for Evidence on the Retained EU Law (Revocation and Reform) Bill which is being considered by UK Parliament. In common with many other organisations such as the Wildlife Trusts, National Trust and Wildlife and Countryside Link, we are very concerned that the 'sunset clause' in this bill could lead to the loss or weakening of crucial environmental protection for habitats, species, water and air quality, as there is far too little time for 2400+ items of legislation to be comprehensively reviewed before the deadline at the end of 2023.

Masters student [Caleb Bram](#) was awarded funding from the Tropical Agriculture Association and the Eurofins Foundation to support his study on trade-offs between environmental and socio-economic outcomes of coffee agroforestry in Vietnam's Central Highlands.

We welcome:

[Dr Minerva Singh](#) joins as a Research Associate jointly with the School of Geography and the Environment. Minerva is working on climate change mitigation and infrastructure resilience in Bangladesh and globally.

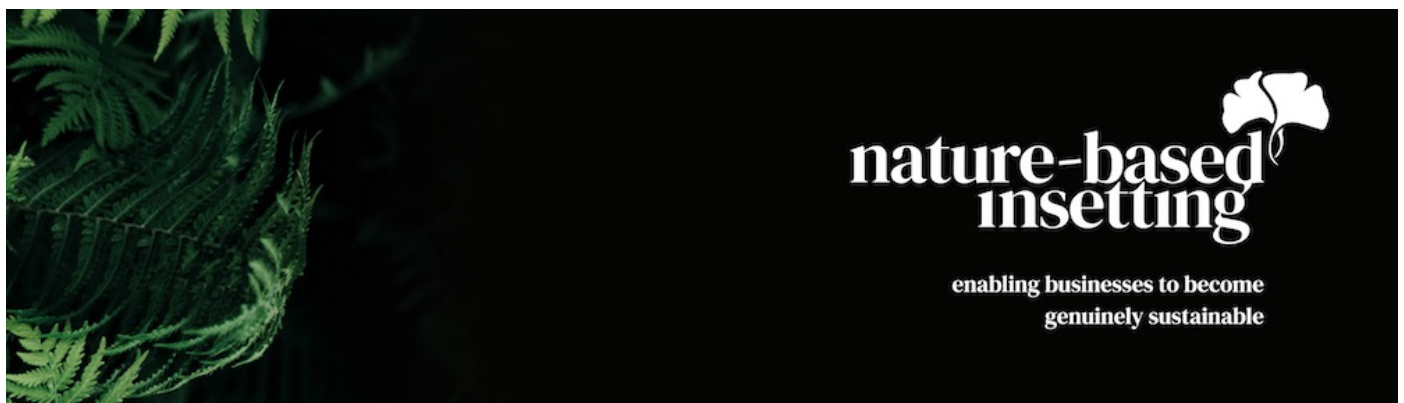
[Dr Van Thi Hai Van](#) joins as a Research Associate. Her work will contribute to the [High Agricultural Reforestation Potential \(HARP\) Toolkit](#) project which facilitates knowledge exchange between scientists, practitioners and industry regarding successful and sustainable agroforestry-based reforestation in tropical agricultural landscapes, like Vietnam, as an NbS for climate mitigation and adaptation.

We say farewell to:

After five years with us, [Alexandre Chausson](#) has moved on to an exciting new post as Nature-based Solutions Specialist in WWF-UK's nascent NbS hub where his role will be to provide technical expertise on monitoring, evaluation, and learning to WWF-UK and a cohort of NbS projects across geographies. The work bridges science, finance, and practice of NbS that work for people and nature through sustainable finance, providing tailored support to projects on the ground. He will also support knowledge-exchange and stakeholder engagement efforts across the WWF network and partner organisations.

[Georgia Hole](#) is taking up a Post-Doctoral Research Fellowship at ARU in Cambridge to join the UKRI-funded project *Beavers and socio-ecological Resilience in Inuit Nunangat*, building on her previous doctoral Arctic research experience. She will investigate the northward expansion of beavers in the Canadian Arctic using remote sensing, dendrochronology, and occupancy modelling, examining their colonisation of shrub-tundra environments as part of the ongoing rapid climatic, ecological and socio-economic changes occurring in the Arctic.

We thank Alex and Georgia for all their hard work and team spirit over the years and wish them both well. We will miss you!



Nature-based Insetting is working with the TNFD and Global Canopy

A social venture spin out of the NbSI, Nbl works at the interface of research and practice, applying cutting edge science to help private sector organisations implement nature-based solutions with integrity. [Learn more about Nbl](#), its quantitative model approach, pilot with the [Taskforce on Nature-related Financial Disclosures](#), and new partnership with [Global Canopy](#).

NbS PERU NEWS



[NbSI Peru](#), led by Instituto de Montaña, will soon publish a synthesis policy report on the short-term economic recovery potential (employment, livelihoods, productivity) and on long-term development outcomes (food and water security, climate change adaptation) of implementing nature-based solutions in Peru. Stay tuned!

The [final workshop of the global program](#) "Scaling Up Mountain Ecosystem-based Adaptation", organised by IUCN and held in Washington D.C., involved representatives from Peru, Colombia, Kenya, Uganda, Nepal and Bhutan. The validated the results of the impact assessment and identified opportunities to develop the resilience of mountain communities and ecosystems. Florencia Zapata, co-director of the Mountain Institute, presented the main findings of the effectiveness and impact assessment conducted in the communities of Miraflores, Canchayllo, Tanta and Tomas, in the Nor Yauyos Cochash Landscape Reserve.

[Instituto de Montaña participated in COP27](#). Mirella Gallardo, IdM' co-director and Scaling Up Mountain EbA coordinator, took part in various side-events and panels and showcased our work on EbA and NbS.

[The construction of a new wetland cell](#) in the Cordillera Blanca Peasant Community has concluded. This [nature-based solution](#) was co-implemented by the community and Instituto de Montaña to improve water quality contaminated by acid rock drainage (ARD), which is related with glacier retreat and reduce disaster risks to their livelihoods (livestock and agriculture).

JOBS

[Senior Research Associate in Machine Learning](#) - Leverhulme Centre for Nature Recovery. With a specialism in computer vision, the researcher will engage in internationally leading research in the analysis of heterogeneous text-based data at scale, working closely with NbSI. They will bring state of the art machine learning to the heart of nature recovery, specifically to track the rapidly evolving field via published scientific articles or web-based text reports, by advancing state-of-the art deep learning techniques for text analysis and summarization.

Deadline: 12:00 noon on 19 December 2022.

[Role and application details.](#)

NbSI Communications and Outreach Officer. The post holder will promote and share the research and other outputs of the NbSI via social media, the NbSI website, and a regular newsletter; translating scientific findings so that they are accessible to decision makers and the general public. The candidate must have a science background, experience in communicating scientific evidence to diverse audiences and be able to write blogs and briefings, often at short notice. Capacity to work flexibly and complete tasks quickly is essential. Get in touch if interested.

Deadline: mid-January 2023.

[Postdoctoral Researcher with Nature based Insetting.](#) Nbl are seeking a researcher with high expertise in data and spatial analysis to join their research team. This is an exciting opportunity to be part of an ambitious mission to translate cutting-edge science into practice and to help companies set and meet net-zero and nature positive pledges whilst building resilient supply chains.

Deadline: 9th Jan 2023.

[Role and application details.](#)

Nature-based Solutions to Climate Change

Key messages for decision makers



We are promoting the [NbS Guidelines](#) to encourage their broad adoption by businesses and governments. The goal is to ensure investment in NbS is channelled to the best biodiversity-based and community-led NbS and does not distract from or delay urgent action to decarbonise the economy. To continue to build momentum around this we are inviting additional signatories from research, conservation and development organisations across the globe. [Watch an overview of the guidelines](#) to learn more. If you would like to add your organisation as a signatory to this letter please contact: Nathalie Seddon: nathalie.seddon@biology.ox.ac.uk.