



NbSI NEWSLETTER

October 2022, Issue 15

The Nature-based Solutions Conference 2022 in July - attended by over 300 delegates in-person and 650 online - highlighted the interest and drive of those working with NbS across a range of sectors globally. The event identified the need to continue building the scientific evidence base and to identify best practice in the design, implementation, financing and governance of NbS. There was particular emphasis on how to build collaborative approaches reflecting the knowledge and world views of indigenous peoples and local communities. An [in-depth summary in our conference report](#) includes session overviews and key take-aways. Thank you to the speakers for providing their compelling talks and the delegates for their insight and engagement. Thanks also to everyone who made the event such a success: organisers, tech support, sponsors, and the Natural History Museum and Oxford Martin School teams. In this newsletter, we bring you highlights of recent research and policy developments relating to NbS, feature some best-practice case studies, and highlight new research and education opportunities with 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.




The Agile Initiative “sprint” project [“How do we scale up nature-based solutions in the UK?”](#) launched in September. This 12-month, interdisciplinary project involves working closely with stakeholders to assess the potential for NbS to contribute to national climate, biodiversity and economic targets; to understand the cultural, social and practical obstacles to NbS at all levels; and to strengthen the tools and governance frameworks that are available for decision makers. Outputs will be designed to support key policy processes including net zero strategy, nature recovery, economic recovery, levelling up and the next National Adaptation Plan in early 2023.

[Learn more on Agile webpage.](#)


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:

[Harnessing the potential of nature-based solutions for mitigating and adapting to climate change.](#) In a recent review in the journal *Science*, Director Nathalie Seddon summarises recent work on nature-based solutions to climate change and highlights critical areas for future research.

[Net Zero: science, origins, and implications.](#) A recent study in *Annual Review of Environment and Resources*, co-authored by NbSI Technical Director Cecile Girardin and [ECI Oxford](#) colleagues, includes examination of the role of nature-based solutions in Net-Zero.

[The role of nature-based solutions in supporting social-ecological resilience for climate change adaptation.](#) A paper led by doctoral researcher Beth Turner and co-authored by NbSI colleagues in *Annual Review of Environment and Resources* looks at the potential for nature-based solutions to address climate change impacts over the long-term.

[Can sustainability certification enhance the climate resilience of smallholder farmers? The case of Ghanaian cocoa.](#) A recent study in *Journal of Land Use Science* by NbSI NERC Knowledge Exchange Fellow William Thompson explores the cocoa value chain, the world's 2nd largest chocolate industry supplier, and whether certification can deliver for farmers threatened by the climate crisis.

[Making sure greenhouse gas removal works for people and planet.](#) As part of the *CO2RE greenhouse gas (GHG) removal hub*, NbSI postdoctoral researcher John Lynch has been contributing to an evaluation framework for different carbon removal methods. This will ensure that the full implications of deploying GHG removal methods – whether they might support ecological recovery or risk wider environmental trade-offs, for example – can be assessed alongside their climate change mitigation potential.

NbS RESEARCH



Take a look at our [featured NbS research](#) page where we add digestible summaries of recent studies which make important contributions to the body of knowledge on NbS, including new work from NbSI researchers.

[Protection and restoration of coastal habitats yield multiple benefits for urban residents as sea levels rise.](#) A new study in *npj Urban Sustainability* by Guerry et al. reveals that NbS such as conserving marshlands and restoring beaches, are also protecting against sea-level rise as effectively as concrete sea walls. This is in addition to further benefits including climate change mitigation through carbon storage, nutrient pollution reduction, and opportunities for recreation, incentivising policymakers to prioritise NbS for sea-level rise.

[The risks of overstating the climate benefits of ecosystem restoration.](#) A recently published response by Doelman & Stehfest to the *Nature* paper, *Global priority areas for ecosystem restoration* (Strassburg et al. 2020), asserts that overstating the role of restoration in preventing climate change may undermine mitigation efforts and distract from the core task of reducing carbon emissions.

[Disentangling the numbers behind agriculture-driven tropical deforestation.](#) A recent study in *Science* by Pendrill et al. has found that agriculture drives more than 90% of tropical deforestation, yet only 45-65% is converted into productive agricultural land.

We have added these and other new studies to our [online bibliography](#), which features over 540 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.

[EU lawmakers support a ban of goods linked to deforestation.](#) Members of the European Parliament have voted in favour of a proposal for a law that would ban the sale of agricultural products linked to the destruction of forests in the EU.

[10 Point Plan for Financing Biodiversity announced by Ecuador, Gabon, the Maldives and the United Kingdom.](#) The UK is one of four countries calling for governments around the world to follow a plan for bridging the global biodiversity finance gap ahead of COP15, which is currently estimated to be \$700 billion annually.

NbS IN ACTION

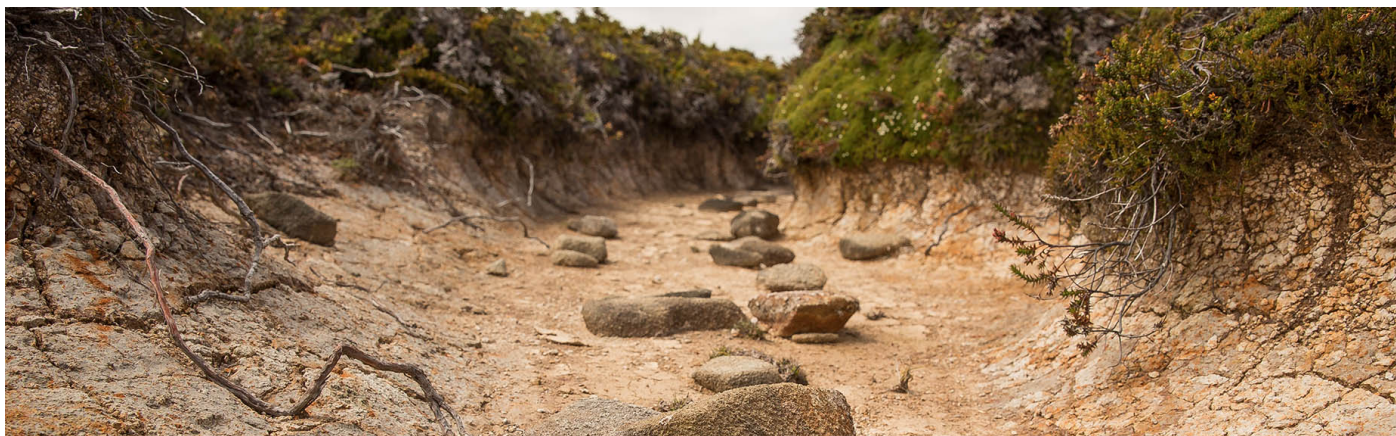
Explore our [interactive global platform](#) and the [Case Studies](#) page of our website to find summaries of a rich variety of examples of NbS in action from around the world.

[Restoration of trout streams, riparian habitat and watersheds.](#) Trout stream adaptation was undertaken in three locations in the Western USA, in Nevada, Idaho and Montana, to address existing and climate-driven causes of degradation through habitat restoration with a whole-landscape approach.

[Indigenous community-led reforestation and agroforestry in the Amazon.](#) Instituto Raoni, the organisational face of the Kayapó, a Brazilian indigenous group that is fighting deforestation of the Amazon, protects and undertakes surveillance over two million hectares of indigenous land, including the largest remaining contiguous segment of the Amazon rainforest.

[Flood recovery and mangrove reforestation in Mozambique.](#) Communities surrounding the Limpopo River Estuary in Mozambique have undertaken restoration and management of the mangrove forests, including maintaining a mangrove nursery, planting seedlings, and monitoring the state of reforested areas.

NbS IN THE NEWS



Here we are featuring some recent NbS news. For more, explore [NbS in the News](#).

[NbSI statement on UK government announcements on nature](#). In the midst of a climate and nature emergency, we are deeply concerned by the UK government's recently announced plans that threaten to scrap vital legislation and incentives that protect nature and human health. We at NbSI are monitoring the ongoing situation closely, and we will continue to work with partners in policy and practice to raise awareness of the extremely harmful impacts of these proposals for nature, health and the economy. [Read the full statement](#).

[Investments in coastal nature-based solutions: opportunities for national and local governments](#). A report by Silvestrum Climate Associates, published as part of the Knowledge Series of the Blue Natural Capital Financing Facility (BNCFF), provides an overview of the topical challenges and explores options for addressing regulatory and governance issues as barriers to coastal NbS implementation.

[The contributions, perspectives and recommendations of Indigenous Peoples on nature-based solutions](#). An infographic by Tebtebba (Indigenous Peoples' International Centre for Policy Research and Education) captures the results of the scoping study and also puts forward recommendations towards the operationalization of NbS respecting human rights, including indigenous rights.

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.

Our new [Executive Education Foundation Course on Nature-based Solutions to Global Challenges](#) started on 26 September. Attended by 29 participants from a wide range of sectors, disciplines and countries, the course promises to be stimulating for all - teachers and participants alike.

The [Nature-based Solutions Conference 2022](#) brought together delegates from across science, policy, practice, Indigenous communities, and business, to discuss how to ensure that NbS support thriving human societies and ecosystems. [Visit the NbSI news page](#) for day summaries and find a [full in-depth overview in our conference report](#).

[Net Zero Pathways for Brazil](#). A recent [Oxford Net Zero seminar](#) discussed net zero pathways for Brazil, based on the research led by Research Fellow [Aline Soterroni](#). The seminar, which also featured the Former Minister for the Environment of Brazil, Izabella Teixeira, highlighted that there is no credible net-zero pathway without nature-based solutions.

[The Future of Adaptation – Stockholm Environment Institute Oxford 20th anniversary event](#). An SEI Oxford event celebrated leading innovation in adaptation research and practice, featuring NbSI Director Prof Nathalie Seddon who highlighted the need for rapid scaling up of nature- and place-based, holistic approaches to tackling the impacts of climate change.

[Nature based Insetting announce project pilot with TNFD](#). Nature based Insetting, a social venture spin-out of the Nature-based Solutions Initiative, is piloting a project from the Nature based Insetting model with the Taskforce for Nature Related Financial Disclosure (TNFD).

[NbSI visit to The Lye Valley nature reserve](#). In the summer, some of the NbSI team visited the Lye Valley, Oxford, with a tour from Judy Webb of the Friends of Lye Valley, looking at how the fen works and nature-based solutions for tackling brook-bank erosion.

We warmly welcome multiple new members of the NbSI team:

- [Emily Warner](#) joins as a postdoctoral researcher to examine the biodiversity outcomes of restoration efforts in Oxfordshire and the central Scottish Highlands as part of the Agile Initiative [research sprint](#) on UK nature-based solutions and the [Leverhulme Centre for Nature Recovery](#).
- [Caitlin Hafferty](#) also joins the UK nature-based solutions Agile sprint, as a postdoctoral researcher focusing on the governance and equity dimensions of nature-based solutions, and exploring the governance of nature restoration efforts across the UK.
- [Zachary Posnik](#) joins as a researcher working on geographic information systems which can identify and map NbS opportunities, natural capital and ecosystem services accounting, green infrastructure implementation, and climate adaptation and mitigation across the UK.
- [Caleb Bram](#) joins as a fourth-year student studying Biology (MBiol), under the supervision of Professor Nathalie Seddon and Dr William Thompson for Master's research on the environmental and economic trade-offs of coffee agroforestry in Vietnam's Central Highlands.

NbS PERU NEWS



NbSI Perú organised the "[Evidence of the potential of nature-based solutions for socioeconomic recovery in Peru](#)" workshop to share the results and obtain feedback on the multi-case study on the socioeconomic recovery potential of NbS in the country and to open a space for dialogue on its relevance for public policies.

Instituto de Montaña's 'Scaling Up Mountain EbA' project has started its effectiveness and impacts evaluation to generate evidence on the results of the EbA measures implemented in four communities and how they are helping the inhabitants to adapt to current and future impacts of climate variability.

Scaling Up Mountain EbA has been recently selected as a study case for a new publication on nature-based solutions and decent employment by the International Labour Organization, soon to be published.

A nature-based solution to improve water quality contaminated by acid rock drainage (ARD) is being developed by the Cordillera Blanca Peasant Community and Instituto de Montaña. Through the [construction of a new wetland cell](#), the community seeks to reduce disaster risks to their livelihoods (livestock and agriculture).

[During session 7 of the NbS Conference 2022](#), NbSI Peru team presented the results of the study "Evidence of the potential of nature-based solutions for socioeconomic recovery in Peru". A key finding was the importance of local participation throughout the different stages of the interventions.

NbS BANGLADESH NEWS

The COP27 South Asia Regional Resilience Hub is led by the International Centre for Climate Change and Development (ICCCAD), Bangladesh. The South Asia Hub is delivering a programme of in-person and virtual engagements to bring the local voice to the global platform from September to November 2022, culminating in an online event from 20–30 September. A number of sessions have touched upon the issues related to NbS and LLA. [Learn more on the COP27 South Asia Regional Resilience Hub webpage.](#)

KEY EVENTS

[CBA16: putting the LLA principles into practice](#) | The 16th International Conference on Community-based Adaptation to Climate Change | 3-4 October 2022 - Online.

[Conference of the Parties \(COP27\) to the UNFCCC](#) | 7-18 November 2022 - Sharm El-Sheikh, Egypt.

[Conference of the Parties to CITES \(COP19\)](#) | 14-25 November 2022 - Panama City, Panama

[Conference of the Parties to the Convention on Biological Diversity \(COP15\)](#) | United Nations | 7 - 19 December 2022 - Montreal, Canada

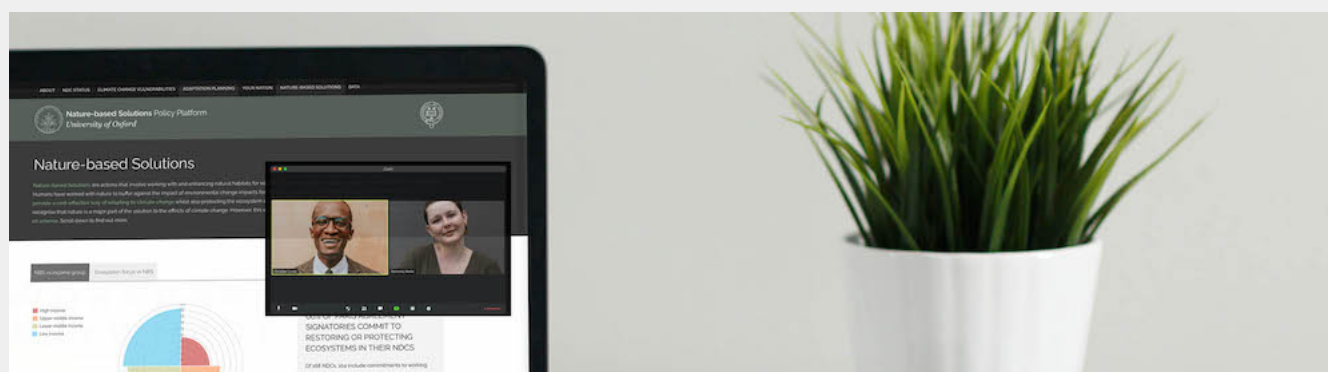
JOBS

[Postdoctoral Research Associate in Machine Learning](#) in the NbSI and Leverhulme Centre for Nature Recovery.

With a specialism in natural language understanding or information retrieval, the Research Associate will engage in internationally leading research in the analysis of heterogeneous text-based data at scale. They will bring state of the art machine learning to the heart of NbS and 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 28th October 2022

[Role and application details.](#)



Nature-based Solutions to Global Challenges Foundation Course

The 8-week online course is an introduction to nature-based solutions for professionals working in a range of sectors – aiming to improve awareness and understanding of the science, policy, practice, financing, and governance of NbS.

Commencing September 2022 and January 2023, each week world-leading experts from Oxford University and beyond will cover a critical theme, during presentations and interactive workshops.

Find out more about the course and how to apply by visiting the [course webpage](#).

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.

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