

## Newsletter - Autumn 2021

As the World's spotlight falls on Glasgow for the UN Climate Change Conference (COP26) this month, the importance of placing natural capital at the heart of decision-making is headline news. Delivering on important targets, such as net zero (as well as wider environmental and economic benefits) and mitigating against the worst effects of climate change requires that we change the way we make use of our natural environment and how we make decisions about it.

This newslettter highlights areas of the SWEEP team's recent work and activities of particular relevance to the COP26 agenda.

Best wishes, The SWEEP Team

New film showcases the impactful work of SWEEP

## SWEEP as an Exemplar of the Natural Capital Approach in the South West

sneep

We have launched a new SWEEP film to showcase what the Natural Capital Approach can do for business, policy and people, whilst also enhancing and safeguarding the natural environment.

The film, which was screened at COP26, highlights some of the ways in which the SWEEP teams have worked with project partners to place nature at the heart of decision making in the South West region. Featuring case studies from South West Water, The Lost Gardens of Heligan Estate, The North Devon Marine Pioneer, and Cornwall Council, the film shows how applying the Natural Capital Approach in practice has the potential to bring about real change.

Prof Ian Bateman, Director of SWEEP, said: "Our latest film provides an excellent and exciting introduction to the diverse and deep relationships SWEEP has built with business, government and community groups in the South West."

Watch the film >



When Science Meets Economics: The Right Tree in the Right Place for NetZeroPlus

Prof Ian Bateman, Director of SWEEP, and Prof Richard Betts delivered a workshop at COP exploring the importance of land use change in delivering Net Zero and, in particular, how we ensure new policy in this area is evidence led. The NetZeroPlus (NZ+) project is helping the UK reach its Net Zero 2050 climate target. The NZ+ team aim to show how planting trees removes greenhouse gas emissions from the atmosphere, while also providing additional benefits. These include enhanced biodiversity, water quality, leisure, and health.



SWEEP researchers Dr Matt Ashley and Dr Sian Rees have contributed to a recent Blue Carbon briefing for the Parliamentary Office of Science and Technology.

This discusses the importance of the UK's marine ecosystems to sequestering atmospheric carbon dioxide, and the policy that is needed to ensure that marine habitat damage doesn't in fact increase the release of carbon.

Find out more >



One of our SWEEP affiliated PhD students, Cara Patel who is co-funded by the Medical Research Foundation and the University of Exeter, is investigating how climate change might affect the evolution and spread of antimicrobial resistance (AMR) in the environment. The aim of this research is to provide evidence to support decision making and environmental policy to minimise environmental AMR and subsequent spread to human microbiomes, and therefore maximise natural capital of river catchments.

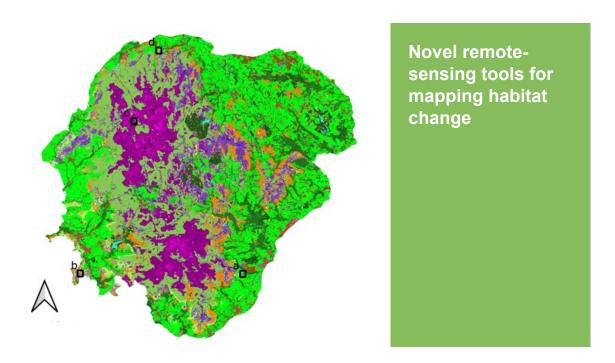
## Find out more >



SWEEP researchers, Dr Donna Carless, Dr Mandy Robinson and Dr Ben Jackson, have developed an innovative online portal to record interventions to improve water quality, as part of South West Water's (SWW) award winning catchment management programme, Upstream Thinking (UST). The UST Portal allows partner delivery organisations to record engagement activities and interventions, in more detail and at greater depth than was possible before.

Launched in July 2021, this unique tool has already impressed OFWAT auditors and provides SWW with a powerful mechanism to record performance relating to environmental targets. The tool will also enable SWW to look into the future, to better understand and model the impacts on biodiversity, water quality and SWW assets of their UST interventions. This knowledge will enable SWW to make better investment decisions at the next Ofwat price review and to understand how the use of Catchment Management and Nature based solutions can deliver against asset requirements, nature and climate.

## SWEEP Upstream Thinking Portal >



SWEEP researchers, Dr Dave Luscombe, Dr Naomi Gatis and Dr Donna Carless, have developed a series of novel, easy to use, habitat mapping tools that translate cutting-edge geospatial research into high quality spatial data for land managers. This new technology makes monitoring patterns and dynamics in the environment more accurate than ever before and in turn, this enhanced information can then be used to improve environmental decision making.

More information and links to tools >



SWEEP is providing critical guidance to local planning authorities who need to consider how to balance the difficult task of finding land to build new homes, with the increasing risk of coastal erosion and flooding. SWEEP researchers Dr Tim Poate, Dr Kit Stokes and Prof Gerd Masselink are working with various Local Planning Authorities, providing expertise in coastal management, wave forecasting and the effects of climate change on our shoreline.

Impact summary PDF >



Climate change is threatening access to green and blue space

Climate change is threatening our access to green and blue spaces, yet evidence increasingly shows that this access provides us with health benefits that extend beyond 'feeling good', to longer term improvements in our physical and mental health and wellbeing. SWEEP researchers, Kate Hind, Dr Ben Wheeler, Dr Becca Lovell and Andrew Edwards-Jones are working with a range of stakeholders to increase investment in this area and to inform more effective project implementation and evaluation. For example we are supporting the social prescribing work of the Wildfowl and Wetlands Trust and stimulating public debate with our range of webinars and resources.

SWEEP Investing in Nature for Health Hub >



NatWest bank, one of COP26's Principal Partners, has literally put SWEEP on its map! The SWEEP programme is highlighted in the South West by NatWest as an "amazing" example and "leading the way" in terms of helping Britain go Green and addressing climate change.

SWEEP is contributing to four innovative projects, exploring ways to drive private finance investment in nature and tackle climate change, recently awarded funding under the pioneering Natural Environment Investment Readiness Fund - in Cornwall, East Devon and Sussex.

SWEEP's North Devon Marine Pioneer project contributed to the Strategic Business Case for the pioneering Blue Impact Fund and SWEEP's PhD student Ben Balmford developed novel auction mechanisms designed to incentivise positive environmental outcomes. SWEEP also helped partners develop Business Cases around Investing in Nature for Health and planting wildflowers for pollination and tourism.

For regular news and progress updates, please visit the SWEEP website at www.sweep.ac.uk.

