

In this summer edition, we celebrate National Meadows Month and feature some of this season's most inspiring stories and solutions from the South West.

With a range of new resources, tools and short films, SWEEP's work is aimed at protecting, restoring, enhancing and building the resilience of our natural environment and the people and businesses supported by it.

Wildflower meadows

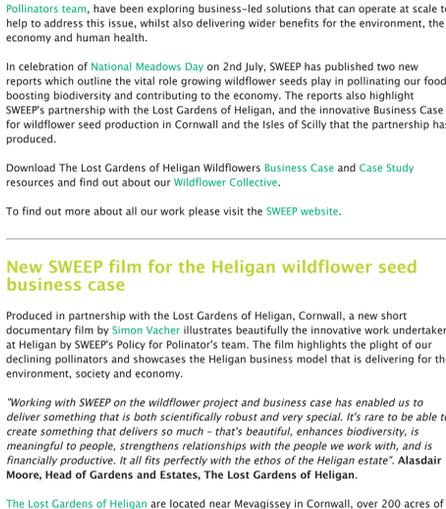


Image: Valentine meadow, Heligan, Cornwall

Pollinator seed helps businesses boom

Pollinator populations have declined alarmingly, in large part due to the loss of 97% of wildflower meadows since the 1930s.

Exeter's Dr Grace Twiston-Davies and Prof Juliet Osborne, who lead SWEEP's Policy for Pollinators team, have been exploring business-led solutions that can operate at scale to help to address this issue, whilst also delivering wider benefits for the environment, the economy and human health.

In celebration of National Meadows Day on 2nd July, SWEEP has published two new reports which outline the vital role growing wildflower seeds play in pollinating our food, boosting biodiversity and contributing to the economy. The reports also highlight SWEEP's partnership with the Lost Gardens of Heligan, and the innovative Business Case for wildflower seed production in Cornwall and the Isles of Scilly that the partnership has produced.

Download The Lost Gardens of Heligan Wildflowers Business Case and Case Study resources and find out about our [Wildflower Collective](#).

To find out more about all our work please visit the [SWEEP website](#).

New SWEEP film for the Heligan wildflower seed business case

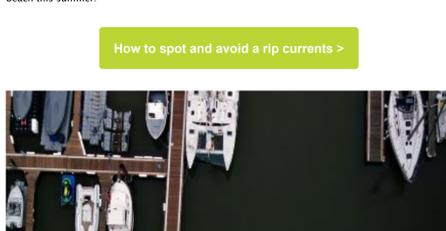
Produced in partnership with the Lost Gardens of Heligan, Cornwall, a new short documentary film by Simon Vacher illustrates beautifully the innovative work undertaken at Heligan by SWEEP's Policy for Pollinators team. The film highlights the plight of our declining pollinators and showcases the Heligan business model that is delivering for the environment, society and economy.

"Working with SWEEP on the wildflower project and business case has enabled us to deliver something that is both scientifically robust and very special. It's rare to be able to create something that delivers so much – that's beautiful, enhances biodiversity, is meaningful to people, strengthens relationships with the people we work with, and is financially productive. It all fits perfectly with the ethos of the Heligan estate". Alasdair Moore, Head of Gardens and Estates, The Lost Gardens of Heligan.

The [Lost Gardens of Heligan](#) are located near Mevagissey in Cornwall, over 200 acres of "garden history, mystery and romance", these are considered to be amongst the most popular estates in the UK.

[Watch the film >](#)

Surfing



North Devon – the UK's first World Surfing Reserve

World-leading research from SWEEP's marine and wave forecasting teams has played a key role in the region being recognised for the quality of its waves and its thriving blue economy.

The designation, awarded by the Save the Waves Coalition, covers approximately 30km of coastline including iconic surfing locations such as Croyde, Saunton, Woolacombe and Lynmouth.

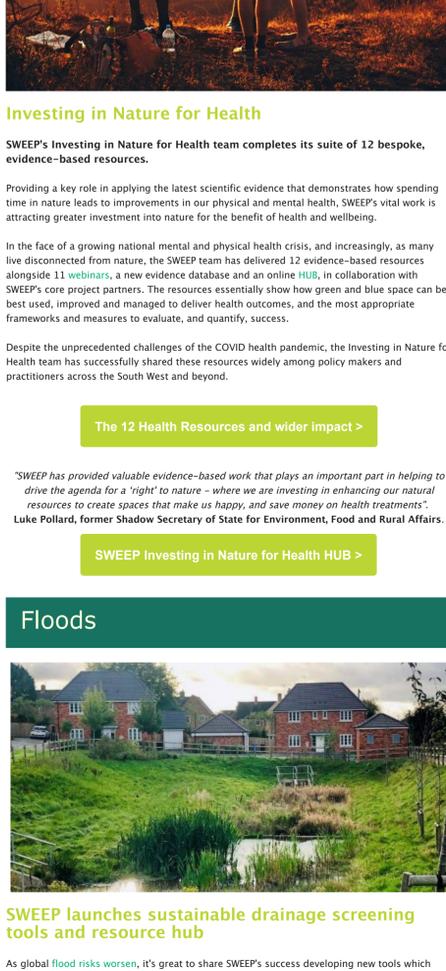
Dr Kit Stokes, from SWEEP's wave forecasting team, was part of the project team. He said:

"We are extremely proud to be part of the UK's first World Surfing Reserve. It represents a real opportunity to celebrate the unique waves and surfing environment in North Devon. Importantly, it will also enable us to introduce measures that will protect our precious surf breaks using scientific research to help us identify threats to wave and water quality, as well as enhance the abundant natural capital of the region."

[Read more on the SWEEP website.](#)

For news and updates from the North Devon World Surfing Reserve, you can register for their newsletter and follow their social media channels via their [website](#).

[Swim Safety film >](#)



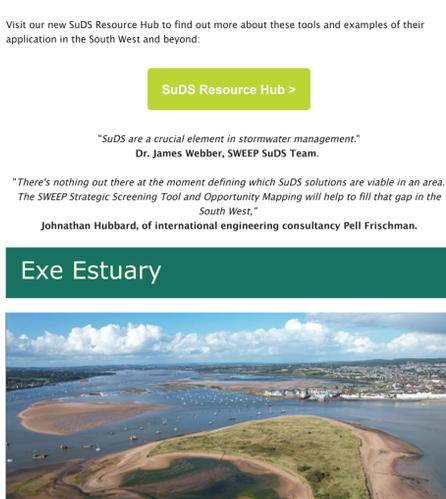
Swim Safely this Summer – with the help of SWEEP

The SWEEP Wave Forecasting team is involved with several projects that have developed cutting-edge methodologies, backed by the science, to deliver new, more timely, higher spatial resolution data. This is already enhancing decision making for those responsible for keeping us safe at the coast, protecting our coastal environment and driving forward new marine businesses.

In our next newsletter we will highlight some of these projects, in particular the ground-breaking work being undertaken with the RNLi at Crantock Beach, Cornwall, where digital beach hazard messaging is being trialled, drawing on SWEEP data.

As the team are experts in rip currents – an issue of significant concern at Crantock – they would like to take this opportunity to share this RNLi safety film with you as you head out to the beach this summer:

[How to spot and avoid a rip currents >](#)



RNLi, Exmouth Marina, Devon, UK

Health



Investing in Nature for Health

SWEEP's Investing in Nature for Health team completes its suite of 12 bespoke, evidence-based resources.

Providing a key role in applying the latest scientific evidence that demonstrates how spending time in nature leads to improvements in our physical and mental health, SWEEP's vital work is attracting greater investment into nature for the benefit of health and wellbeing.

In the face of a growing national mental and physical health crisis, and increasingly, as many live disconnected from nature, the SWEEP team has delivered 12 evidence-based resources alongside 11 webinars, a new evidence database and an online HUB, in collaboration with SWEEP's core project partners. The resources essentially show how green and blue space can be best used, improved and managed to deliver health outcomes, and the most appropriate frameworks and measures to evaluate, and quantify, success.

Despite the unprecedented challenges of the COVID health pandemic, the Investing in Nature for Health team has successfully shared these resources widely among policy makers and practitioners across the South West and beyond.

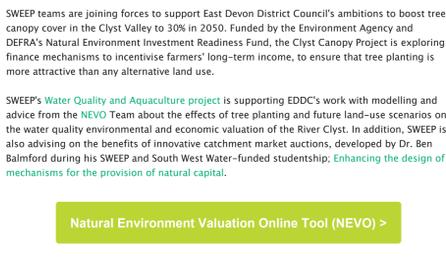
[The 12 Health Resources and wider impact >](#)

"SWEEP has provided valuable evidence-based work that plays an important part in helping to drive the agenda for a 'right' to nature – where we are investing in enhancing our natural resources to create spaces that make us happy, and save money on health treatments."

Luke Pollard, former Shadow Secretary of State for Environment, Food and Rural Affairs.

[SWEEP Investing in Nature for Health HUB >](#)

Floods



SWEEP launches sustainable drainage screening tools and resource hub

As global flood risks worsen, it's great to share SWEEP's success developing new tools which help identify the best locations for sustainable drainage systems in the South West.

FLOOD RISK IMPACT SUMMARY
(by surface water catchment)



Visit our new SuDS Resource Hub to find out more about these tools and examples of their application in the South West and beyond:

[SuDS Resource Hub >](#)

"SuDS are a crucial element in stormwater management."

Dr. James Webber, SWEEP SuDS Team.

"There's nothing out there at the moment defining which SuDS solutions are viable in an area. The SWEEP Strategic Screening Tool and Opportunity Mapping will help to fill that gap in the South West."

Johnathan Hubbard, of international engineering consultancy Pell Frischman.

Exe Estuary



Adopting a 'wholescape' approach to water quality assessments

SWEEP's Water Quality and Aquaculture team have co-produced a West-Leading 'wholescape' assessment of water quality in the Exe Estuary catchment with First Country Rivers Trust.

Providing an integrated assessment across the land-sea interface, it represents one of the first attempts to address the linkages between freshwater, estuarine and coastal waters in terms of water quality status, local and up-stream pressures, and the impacts of these pressures.

"The Exe Estuary catchment investigation is one of the first case examples of a 'wholescape' approach being implemented in the UK". Dr. Ross Brown, SWEEP Impact Fellow.

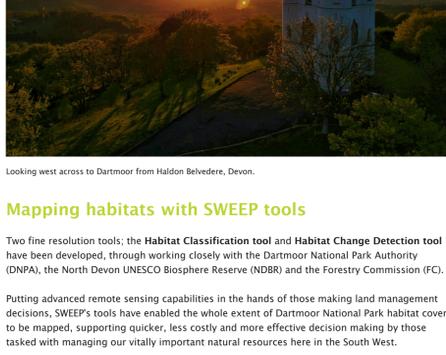
You can read more about the investigation in the Exe Press Summer Newsletter 2022, produced by the Exe Management Partnership:

[Exe Press Summer Newsletter 2022 >](#)

The full report is available to download from SWEEP's [Water Quality and Aquaculture Hub](#), where you can also find other resources, including a description of modelling work underway, [linking future land-use scenarios to water quality and shellfish health](#) and a new 'acid herbicide wash-off exploration tool'.

[SWEEP's Water Quality and Aquaculture Hub >](#)

Clyst canopy



Boosting tree canopy cover in East Devon's Clyst Valley

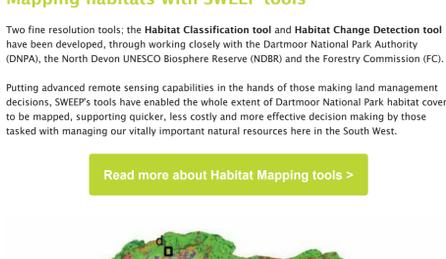
SWEEP teams are joining forces to support East Devon District Council's ambitions to boost tree canopy cover in the Clyst Valley to 30% in 2050. Funded by the Environment Agency and DEFRA's Natural Environment Investment Readiness Fund, the Clyst Canopy Project is exploring finance mechanisms to incentivise farmers' long-term income, to ensure that tree planting is more attractive than any alternative land use.

SWEEP's Water Quality and Aquaculture project is supporting EDDC's work with modelling and advice from the NEVO Team about the effects of tree planting and future land-use scenarios on the water quality environmental and economic valuation of the River Clyst. In addition, SWEEP is also advising on the benefits of innovative catchment market actions, developed by Dr. Ben Balmford during his SWEEP and South West Water-funded studentship, [Enhancing the design of mechanisms for the provision of natural capital](#).

[Natural Environment Valuation Online Tool \(NEVO\) >](#)

For more detail on EDDC's ambitions, see [Clyst Canopy: A Local Test of CIEM Carbon-offsetting Principles](#), authored by Simon Bates, Project Manager, EDDC.

Habitat mapping tools



Looking west across to Dartmoor from Haldon Belvedere, Devon.

Mapping habitats with SWEEP tools

Two fine resolution tools, the [Habitat Classification tool](#) and [Habitat Change Detection tool](#) have been developed, through working closely with the Dartmoor National Park Authority (DNPA), the North Devon UNESCO Biosphere Reserve (NDBR) and the Forestry Commission (FC).

Putting advanced remote sensing capabilities in the hands of those making land management decisions, SWEEP's tools have enabled the whole extent of Dartmoor National Park habitat cover to be mapped, supporting quicker, less costly and more effective decision making by those tasked with managing our vitally important natural resources here in the South West.

[Read more about Habitat Mapping tools >](#)



Kenick Reservior, Dartmoor National Park, Devon, UK.

Please get in touch for further information about any of the SWEEP Team's work. We would also love to hear from you if you would like to nominate a SWEEP initiative, person, project or team for us to highlight in our Autumn edition. For the remainder of the year, we will be celebrating and showcasing and celebrating this ground-breaking NERC funded research activity and hope you will join us at one of our events!

[More details to follow in the Autumn newsletter.](#)

Yours,
The SWEEP Team

For all SWEEP's news and resources, please visit the [SWEEP website](#) at [www.swEEP.ac.uk](#)

We hope you are enjoying our features this month and we always welcome your feedback. Do feel free to share this newsletter with anyone you think would be interested.

[Forward this newsletter to a friend or colleague](#)



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