



'SUSTAINABLE OUTDOOR RECREATION' CONFERENCE – DAY 1



PLAS Y BRENIN



CROESO - WELCOME

**Joseph Roberts,
Lead Specialist Advisor: Outdoor Access and Recreation
Natural Resources Wales**





CONFERENCE RECORDINGS & RESOURCES

This conference has been recorded and post event resources will be made available. Stay tuned for our post conference e-zine.





Scan here to view the
ORN Action Plan 2022-25

Theme 3: Sustainable Outdoor Recreation Related Tourism and Visitor Management

- Environmental Sustainability
- Social Sustainability
- Cultural Sustainability
- Economic Sustainability

AGENDA – Day 1 (AM)

10:00-10:20: Welcome

10:20-10:40: What does 'good sustainability' for outdoor recreation look like?
Presentation by Julian Gray, Director, South West Coast Path Association

10:40-11:00: Strategic approach to delivering sustainable tourism
Presentation by Jeanette Uttley, Head of Business Support Transformation,
VisitEngland/VisitBritain

11:00-11:20: The approach to embed sustainability into Snowdonia National Park
Presentation by Helen Pye, Head of Engagement, Snowdonia National Park

11:20-12:00: Panel Discussion
Keynote Speakers





Scan here to submit a question virtually

ASK A VIRTUAL QUESTION TO ONE OF OUR KEYNOTE SPEAKERS



AGENDA – Day 1 (PM)

12:00-13:00: Lunch

13:00-17:00: Site Visits

17:30-18:45: (Optional) Afternoon Activities – Limited places available on each activity

- Famous faces of PYB – Behind the scenes tour
- Open Water Swimming
- Pre Dinner Walk – Coed Brun-Engan

19:00: Conference Dinner (Drinks Reception)

Pre booking essential – Drink voucher

19:30-Late: Conference Dinner (Drinks Reception)

Pre booking essential





Scan here to download the Jamboard APP

SPEED PROJECT/IDEA SWAPPING DURING THE CONFERENCE



WELCOME TO PLAS Y BRENIN

Paul Kennedy, Trustee, Plas y Brenin





PLAS Y BRENIN

NATIONAL OUTDOOR CENTRE

OPERATED BY



ORN 2022

A UNIQUE LOCATION IN THE HEART OF ERYRI
Plas y Brenin is the home of true adventure



PLAS Y BRENNIN





**MORE PEOPLE ACTIVE OUTDOORS AND CONFIDENTLY
EXPERIENCING INDEPENDENT ADVENTURES**

THE OUTDOOR SECTOR



OUR STORY

We're a National Outdoor Centre.
We're 65 years old.

We're here for all those who wish to learn about, train for and experience the outdoors and adventure sports at all levels and do it in a way that meets their needs.

Our key focus is climbing, hiking, padding and biking.

Our groups include schools, outdoor workers, businesses, youth groups and university students.

And we also run private programmes for a whole range of individuals and groups.

We run public courses designed either for formal qualifications or for anyone looking to develop their skills – from whatever start point.

We also run a four-month FastTrack programme and regular adventure days.

On site there is a bar, shop, climbing wall, accommodation and conference/meeting facilities.

And we also run a range of off-site programmes so people can experience PyB even when they are not on site.

WHAT DOES 'GOOD SUSTAINABILITY' FOR OUTDOOR RECREATION LOOK LIKE?

Julian Gray,

Director, South West Coast Path Association



What does 'good sustainability' for outdoor recreation look like?

Julian Gray
Director, South West Coast Path Association



Sustainability

“meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

*Our Common Future
United Nations
Brundtland Commission
1987*

2030 Agenda for Sustainable Development

People
Planet
Prosperity
Peace
Partnership



Trails and Sustainability



Living Landscapes

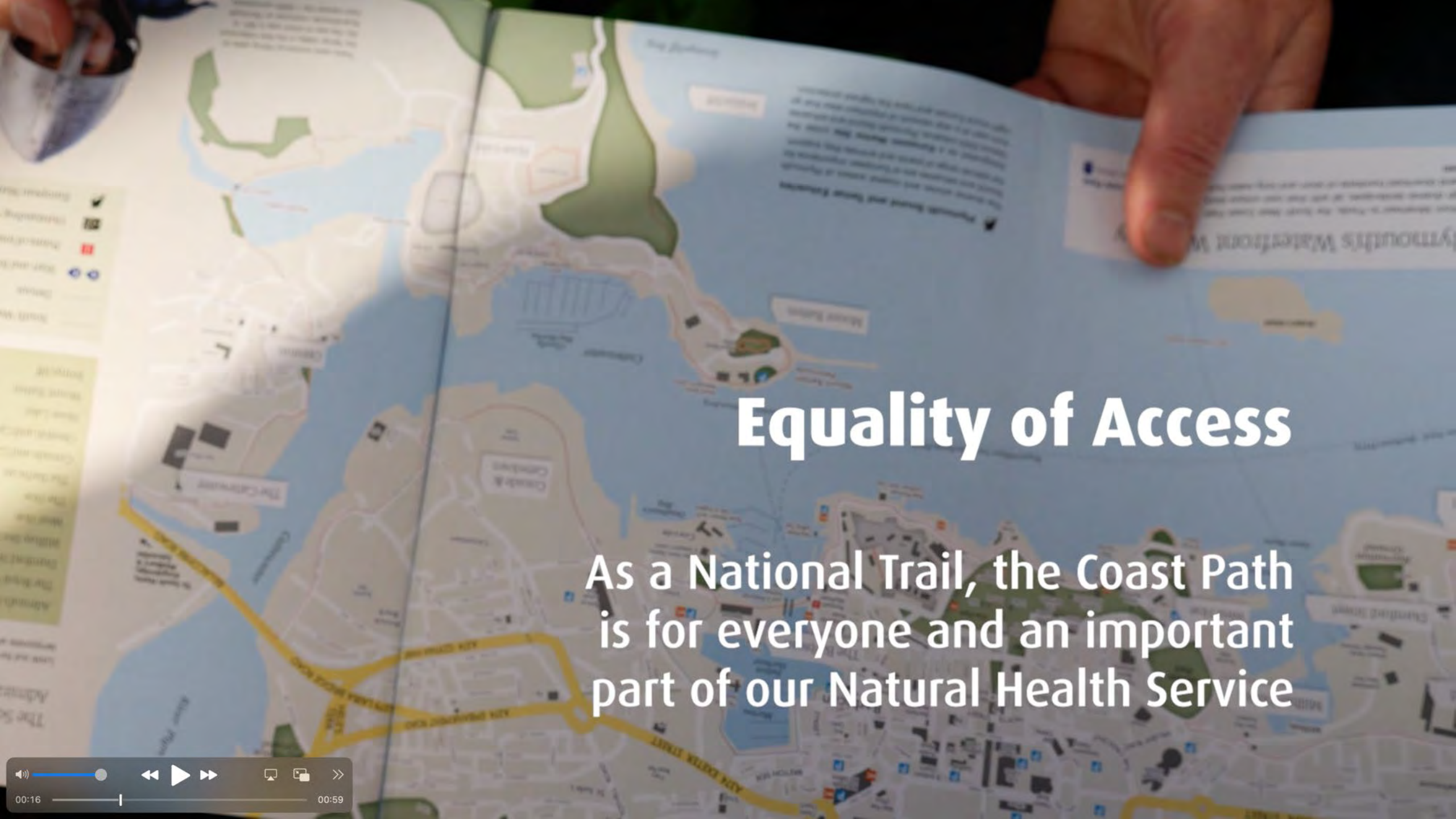


Social



Michinoku Coastal Trail





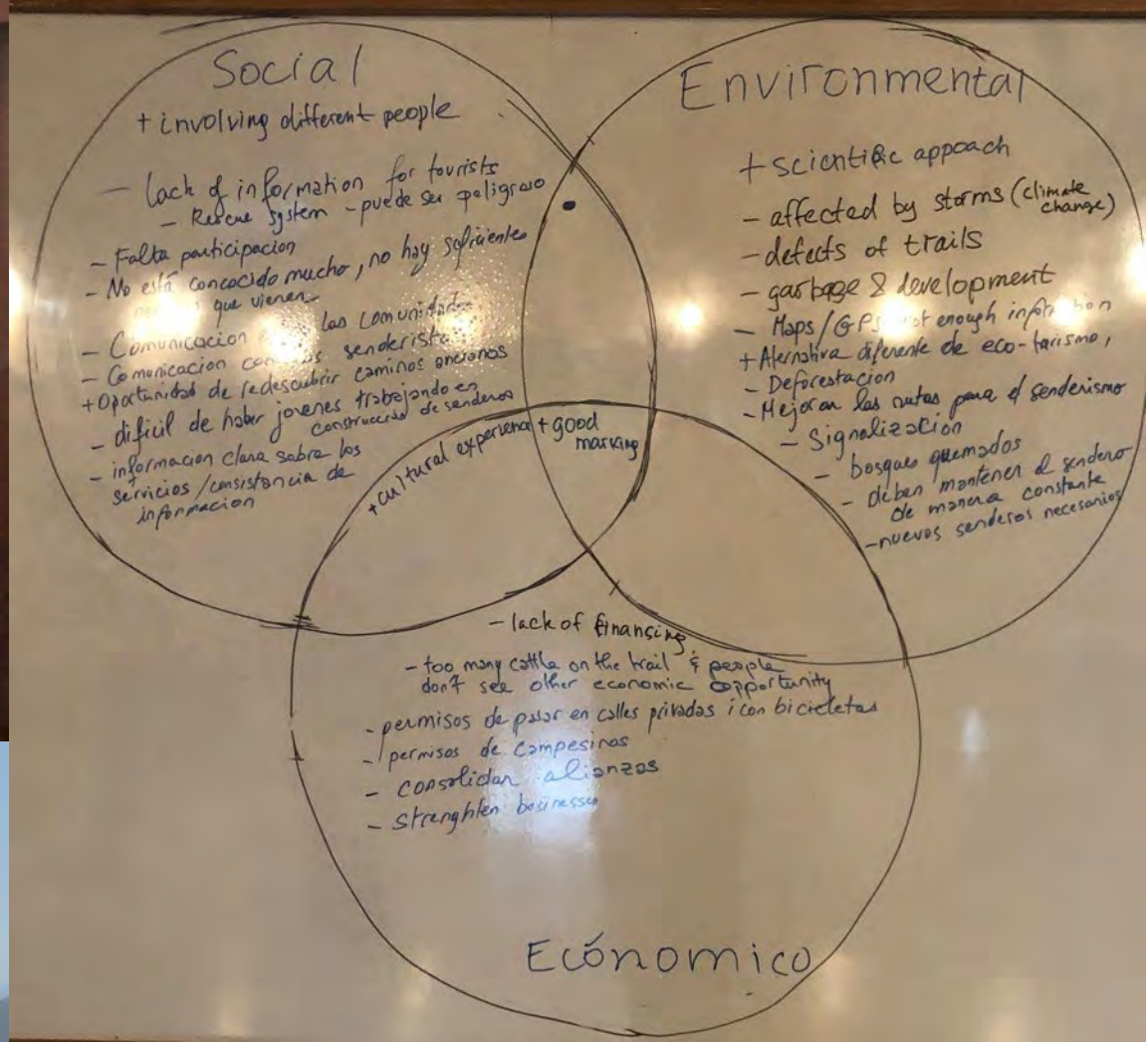
Equality of Access

As a National Trail, the Coast Path is for everyone and an important part of our Natural Health Service

00:16 00:59

Nightwings





Sendero Pacifico

Coastal Wild Belt



Economic





South West
Coast Path
NATIONAL TRAIL

Sign up as a Way Maker Plus by 31st October for your place in the Complete Guide

Become a Way Maker

>Support Us

'Good' Sustainability



A STRATEGIC APPROACH TO SUSTAINABLE OUTDOOR RECREATION RELATED TOURISM

Janet Uttley

Head of Business Support Transformation
VisitEngland/VisitBritain



DEFINING SUSTAINABLE TOURISM



Practices taken by visitors and businesses in the visitor economy to minimise the negative environmental and social impacts of tourism and to enhance the economic and cultural benefits for visitors, businesses and host communities

GREEN INDUSTRIAL REVOLUTION – TEN POINT PLAN

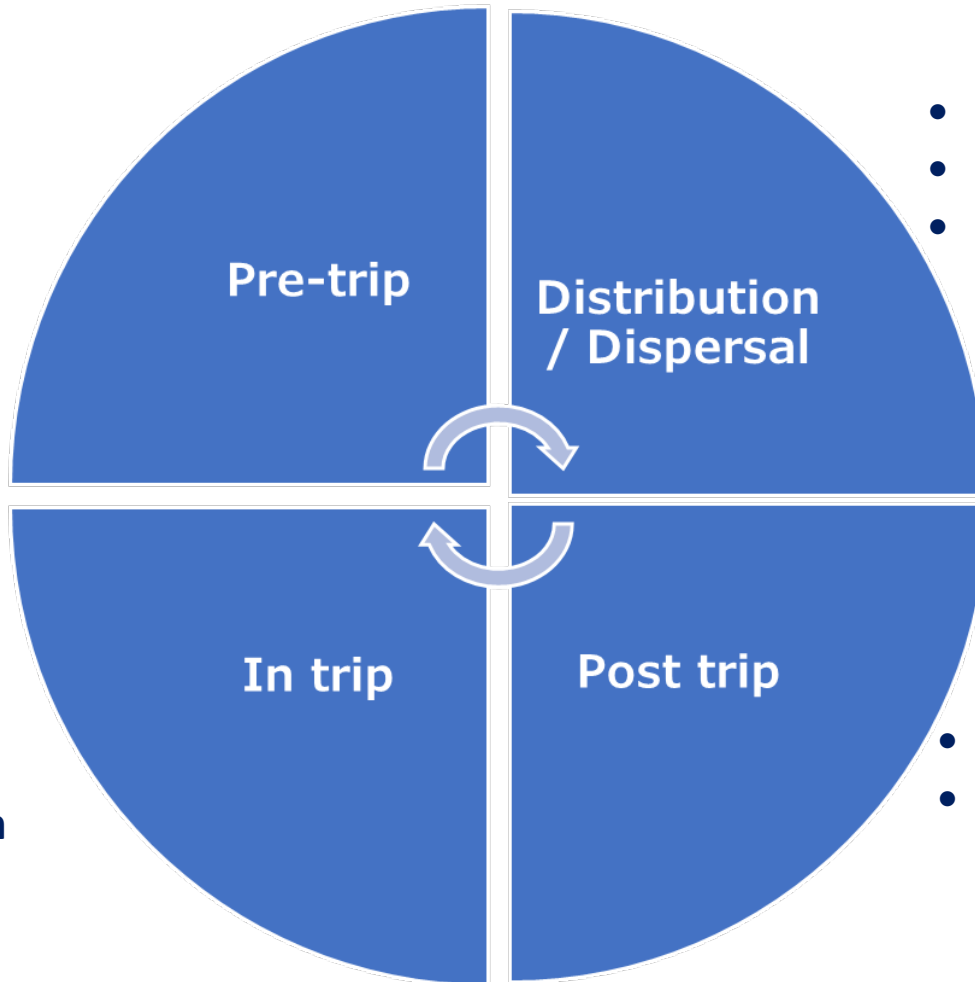


Ten Point Plan released by the UK Government in November 2020 – five of those points directly relate to travel & tourism:

- **Electric Vehicles** – accelerate transition
- **Public Transport** – investment in zero-emission public transport and encourage cycling and walking as more attractive ways to travel
- **Jet Zero & Greener Maritime** – support the difficult to decarbonise industries through research projects for zero-emission planes and ships
- **Homes & Public Buildings** – setting targets to install 600,000 heat pumps every year by 2028
- **Nature** – Protect and restore natural environment, planting 30,000 hectares of trees every year, creating and retaining jobs

ALIGNING THE VISTOR JOURNEY

- **Planning**
- **Bookability**
- **Connectivity**



- **Final Mile – transport**
- **Extending open season**
- **Dispersal –rural/city/coastal**

- **Buy local**
- **Reduce waste**
- **Improve energy efficiency**
- **Service provision**

- **Long term commitment**
- **Infrastructure investment**

MIDAS – RESEARCH FROM 29 INBOUND MARKETS



Sustainability is an emerging driver of importance in destination selection for international tourists, **most relevant to Buzzseekers** and younger travellers

Most however are lost as to what it means, how important it is and how to navigate it, **leading to a strong degree of scepticism**

Future intentions mirror past behaviour, suggesting we focus on **reinforcing current behaviours around themes of localisation, nature, dispersion (geographic and seasonal) and preservation**

We see evidence of a stronger imprint in terms of perceptions of sustainability in Australia where these themes are being utilised

Key barriers are consistent across markets and segments, all pointing to a need for **greater clarity, signalling and impact reinforcement** to overcome behavioural apathy

Links to:
[MIDAS Webinar recording](#)

[Key Findings](#)

DESIRE FOR WIDE VARIETY OF PRODUCTS & EXPERIENCES

DESIRED EXPERIENCES FOR TRIPS TO.... (Top 3 Box interest)

Britain

Experience coastal places and scenery	68%
Explore local food and beverage specialties	68%
Visit famous/iconic tourist attractions and places	65%
Explore history and heritage (historical sites, architecture)	64%
Visit parks and gardens	58%
Experience rural life and scenery	58%
Experience city life	58%
Enjoy outdoor walks, hiking or cycling	55%
Visit famous shops or shopping streets/centres	54%
Visit museums or galleries	54%
Enjoy fine dining experiences	52%
Attend a cultural/historical exhibition or event	52%
Guided tours/day excursions	50%
Socialising with locals	49%
Visit zoos, aquariums, and wildlife parks	48%
Self-driving tours	47%
Experience pubs, bars and clubs	46%
Attend a live music festival/event	45%
Visit literary, music, film and TV locations	44%
Participate in action and adventure experiences	42%
Visit a winery (e.g. wine tasting/ vineyard tour)	42%
Visit theatre, opera, ballet or musicals	40%
Visit a brewery or distillery	40%
Attend a sporting event	36%
Participate in wellness activities such as yoga, etc.	32%
Attend a learning course (cooking, language etc)	31%
Participate in sport (golf, football, etc.)	29%
Volunteering	25%



WHAT PREVENTS TRAVEL IN A SUSTAINABLE/RESPONSIBLE WAY

Top Ranked Barrier to Engaging in Sustainable Tourism Behaviour



TRAVEL TRADE – GETTING INFORMATION RIGHT

<https://www.greatwestway.co.uk/traveltrade/travel-trade-directory>



ENGLAND'S GREAT WEST WAY[®]

TRAVEL TRADE DIRECTORY
HELPING YOU SELL ENGLAND'S GREAT WEST WAY

4th Edition

500 TRADE FOCUSED SUPPLIER LISTINGS | NEW SPECIALIST TOURS AND ATTRACTIONS | NEW TRADE ITINERARIES

GreatWestWay.co.uk/traveltrade

LANDSCAPE & COUNTRYSIDE ALONG ENGLAND'S GREAT WEST WAY

Along the touring route, glorious and ancient landscapes straddle the Great West Way as it winds its way through gentle hills, sweeping valleys and wildflower meadows, while through Wiltshire it is dotted with prehistoric stones and mysterious white horses. In Wiltshire alone there are no fewer than eight white horses, some close to the route, others worth a detour.

THREE AREAS OF OUTSTANDING NATURAL BEAUTY

The most perfectly built book to the editor who craves the peace and open space of the countryside. It covers three areas of Outstanding Natural Beauty (ONB), which areas have protection thanks to their exceptional landscape character on the Cotswolds, the North Wessex Downs and the Chilterns.

North Wessex Downs AONB
The North Wessex Downs make up the third largest of Britain's AONBs. The area lies in the heart of the chalk hills that stretch across southern England and into other areas a warm sea. Its landscape is very diverse as well as the chalk habitats, there is a rich mosaic of woodland, pasture, heath and open land. It is an ancient landscape defined by the impact of human life over 5,000 years, including fascinating features such as the World Heritage Site at Avebury, 8 Clack White Horses, Savernake Forest, high-rise castle, historic market town and the Kennet & Avon Canal. The name Wessex was used by Thomas Hardy in his novels and based on an earlier region of Saxon Britain. The word 'Wessex' is from Anglo-Saxon 'West' meaning 'West'.

The Cotswolds AONB
A great spot for visitors to experience the Cotswolds in the so beautiful it can't describe the landscape of the Cotswolds. It is well known as the Cotswold Way. This is England at its prettiest.

The Chilterns AONB
Close to London, the southern section of the Chilterns 324 miles long within the Cotswold Way. Consider it a haven for wildlife. Keep an eye out for red kites – the bird of prey was first seen in the region having been reintroduced in 1985.

WILDLIFE TRUSTS

Wiltshire Wildlife Trust
Wiltshire Wildlife Trust has created a ring of nature reserves across Wiltshire by rescuing, rewilding and restoring habitats for wildlife and people from Woodlands, Wiltscombe, and the Cotswold Water Park. They manage 40 nature reserves and 100 miles of rivers throughout the county including public water courses. They manage 40 nature reserves and 100 miles of rivers throughout the county including public water courses. They manage 40 nature reserves and 100 miles of rivers throughout the county including public water courses.

Wiltshire & Wetlands Trust (WWT)

London Wetland Centre
An urban park for wildlife and people. Using the 'Blue' Friends of the Earth to create London's first urban wetland park and garden. Groups can book a guided tour to discover more about the history of the Centre and its wildlife and health benefits to connect with nature. (www.londonwetlandcentre.co.uk)

ANCIENT LANDSCAPES

The National Trust cares for some of the future generations. They will look for a picture of what the landscape will look like in 100 years.

TWO NATIONAL TRAILS

Wiltshire Landscape sites
A variety of fascinating sites across Wiltshire, including Stonehenge and Avebury World Heritage Site. Other sites include the Neolithic Avebury Stonehenge and Stonehenge Avenue, the Iron Age Maidenhead Roman Fort, and the Roman Maidenhead Roman Fort.

Thomas Path National Trail
The Thomas Path National Trail follows the route of the 19th-century poet Thomas Hardy. It is a 100-mile trail through the Cotswolds and the Mendips.

The Ridgeway National Trail
The Ridgeway National Trail is a 46-mile trail through the Cotswolds and the Mendips. It is one of the oldest trails in the UK.



SUSTAINABILITY – ADVICE & GUIDANCE

Green
Tourism



Green Tourism promotes greener ways for businesses and organisations to operate, by offering our members advice on:

- Reducing energy use
- Saving water
- Efficient & eco-friendly waste disposal
- Ethical buying
- Staying local & seasonal
- Minimising food miles
- Promoting biodiversity
- Adopting a smart, sustainable outlook from top to bottom

Case studies and further guidance available on the [VisitEngland Business Advice Hub](#)

THANK YOU

janet.uttley@visitbritain.org

Connect in: [sign up to VB/VE corporate enews](#)

Check out: [Business Advice Hub](#) : [inbound research](#) : [England research](#)

Share PR news: vbpr@visitbritain.org : vepr@visitengland.org

THE APPROACH TO EMBED SUSTAINABILITY INTO SNOWDONIA NATIONAL PARK

Helen Pye,

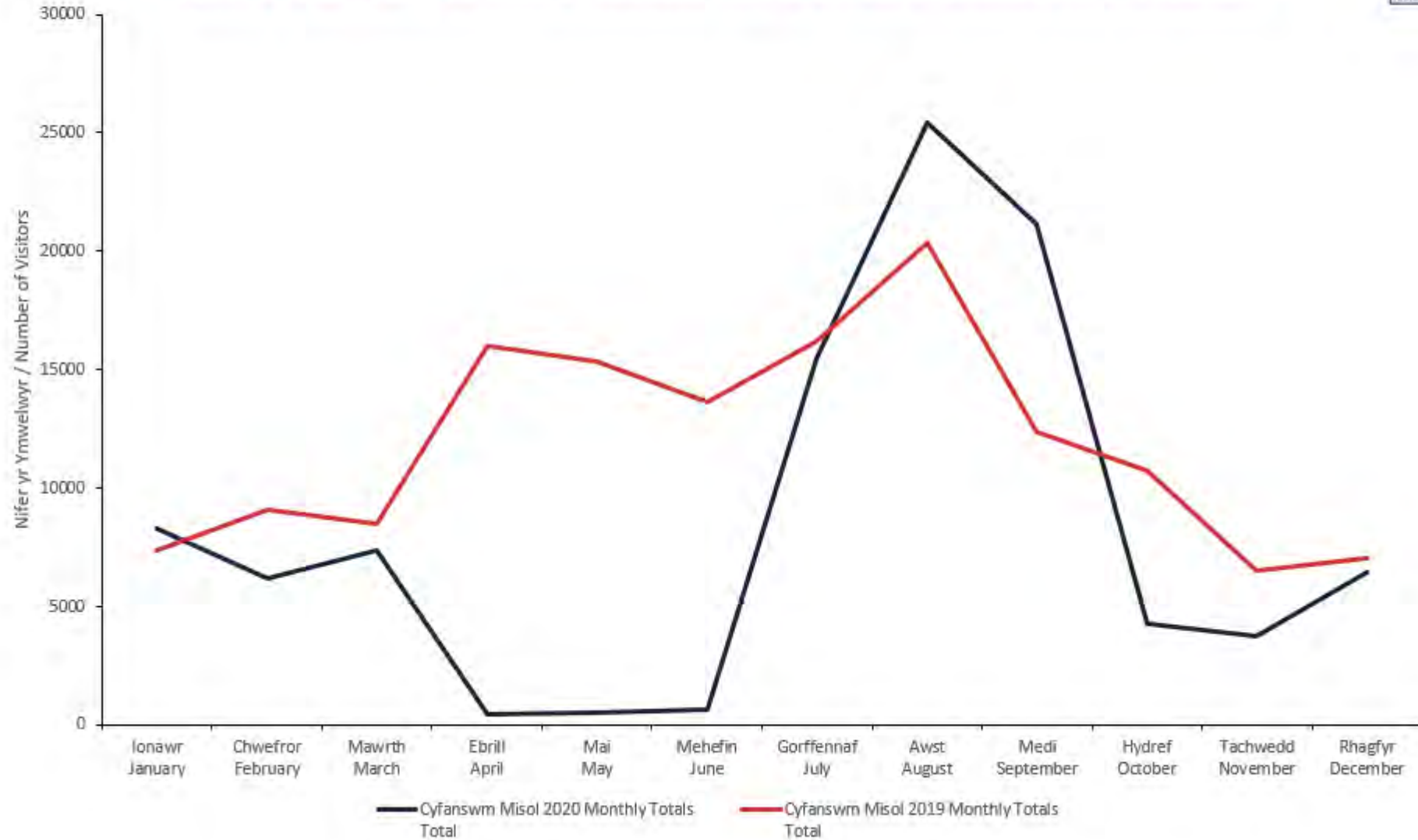
Head of Engagement,
Snowdonia National Park







Ogwen & Idwal - Ffigyrau Monitro 2020/2019 - Ffigyrau Unffordd - Cymhariaeth Cyfanswm Misol
Ogwen & Idwal - Visitor Monitoring 2020/2019 - One Way Figures - Monthly Totals Comparison



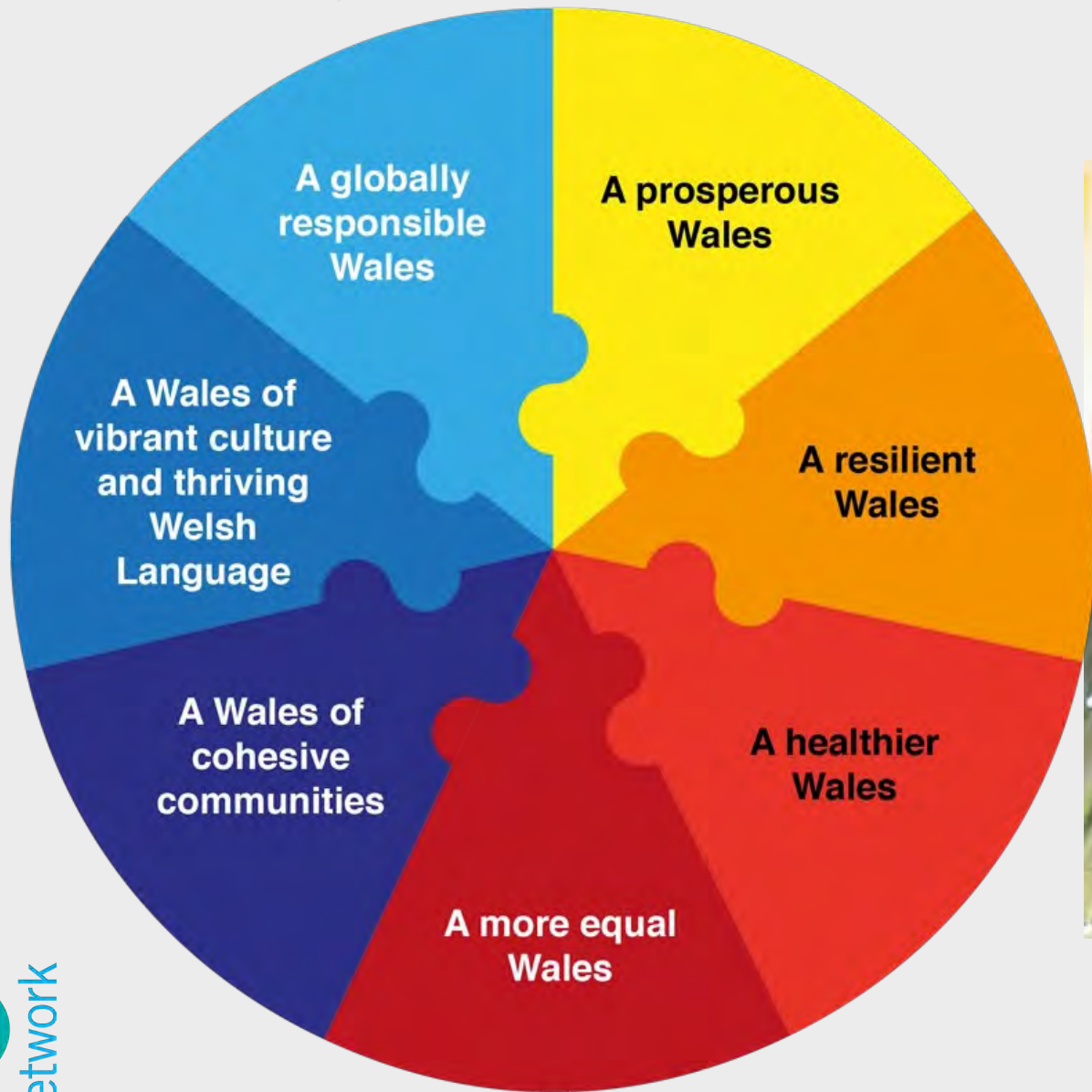
CROWD PSYCHOLOGY





EMBEDDING SUSTAINABILITY INTO NATIONAL AND REGIONAL POLICY





CYNLLUN

ERYRI

THE SNOWDONIA NATIONAL
PARK PARTNERSHIP PLAN

2020

THE STATUTORY MANAGEMENT PLAN FOR SNOWDONIA NATIONAL PARK

MAKING BIG CHANGE HAPPEN







Pen y Pass Pre-booking

PEN Y PASS PRE-BOOKING NOW LIVE

For visits from the 8th of April
onwards.

DAILY SPACES
AVAILABLE 65

Snowdonia National Park Authority in partnership with JustPark

MEASURING THE RIGHT STUFF



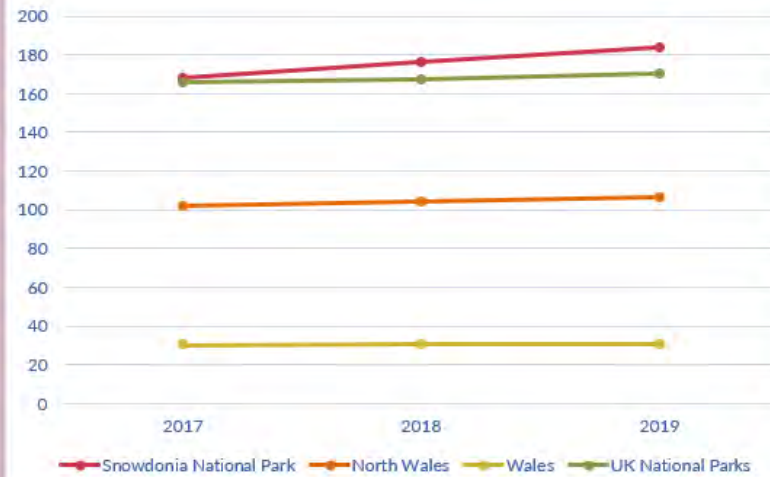
Number of visitors per head of population

	2017	2018	2019
Snowdonia National Park	167.90	176.53	184.12
North Wales	102.32	104.10	106.77
Wales	30.71	31.00	31.02
UK National Parks	165.90	167.38	170.42

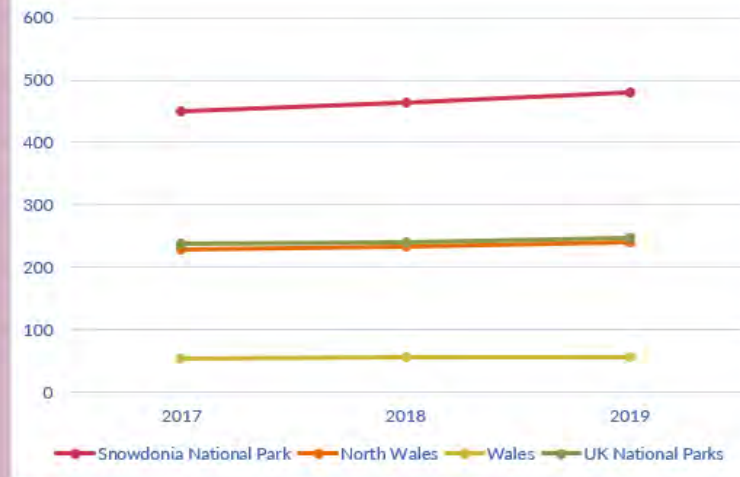
Visitor days per head of population

	2017	2018	2019
Snowdonia National Park	450.16	463.54	480.65
North Wales	229.13	233.65	239.86
Wales	55.21	56.26	57.03
UK National Parks	239.24	241.24	247.06

Number of visitors per head of population



Visitor days per head of population



Data sources:

Snowdonia National Park STEAM Report 2019; North Wales STEAM Report 2019; STEAM Multi-Area Comparison UK and National NPA Overview 2019



START WITH THE INFRASTRUCTURE



Carrots & Sticks



Carrot

[noun] (literal)

A plant of the parsley family, valued for its edible root.

[noun] (figurative)

An incentive or reward to encourage a specified outcome.



Stick

[noun] (literal)

A tree branch that has been cut or broken off.

[noun] (figurative)

A punishment or penalty, used to induce cooperation.



SHERPA'R WYDDFA

rides through mountain scenery that take your breath away

SHERPA'R WYDDFA

ENVIRO e100
Camarth
Llanberis

Llanberis
Pery Pass
Bwlly-Ced
Parthmady
Bwllyllan

H46WY

SAFETY

SAFETY
PLEASE

BOOTS ON THE GROUND







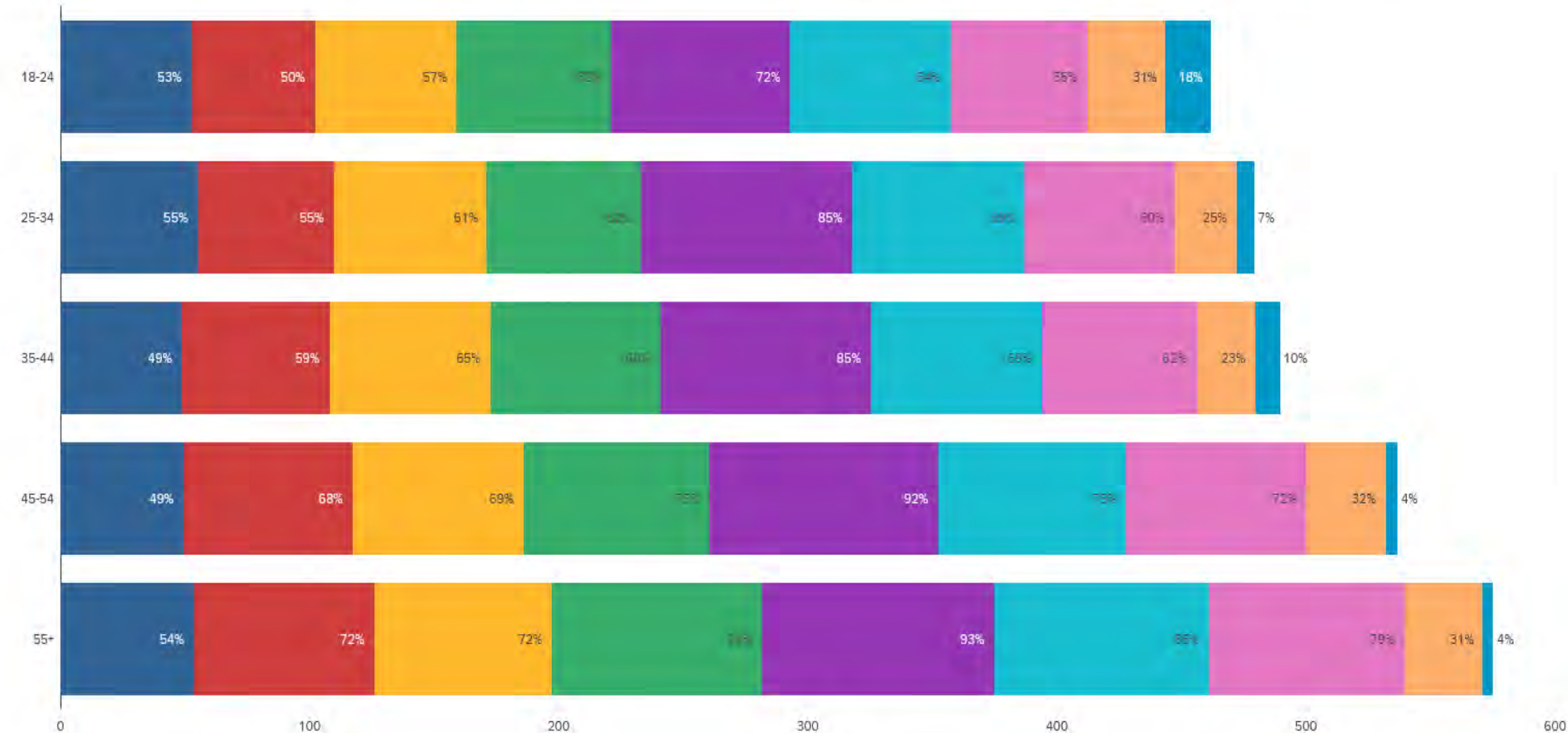
INFLUENCING VISITOR BEHAVIOR



Countryside rules and guidelines

Before taking this survey, which, if any, of the following countryside rules and/or guidelines in England and Wales were you aware of? (Please select all that apply)

- You must only camp in campsites
- You must not light fires
- You must only have barbeques where permitted
- Dogs must be kept under close control when on a footpath
- Litter should be taken home or disposed of in a public bin
- Access to gateways or driveways must not be blocked when parking
- Emergency vehicles must have access to gateways and driveways
- Permission is required for activities such as wild-swimming and stand-up paddle boarding
- None of these



Age
Age

LIKELIHOOD OF FOLLOWING COUNTRYSIDE RULES AND GUIDANCE

YouGov Survey, Feb 2022

Likelihood of following the countryside rules and guidelines

On a scale ranging from 0 to 10, where 0 is "Not likely at all" and 10 is "Very likely"...How likely, if at all, would you be to follow each of the following England and/ or Wales countryside rules and/ or guidelines when you next visit the countryside?

	18-24	25-34	35-44	45-54	55+	All
You must only camp in campsites	42	46	61	64	70	61
You must not light fires	51	59	70	76	82	72
You must only have barbeques where permitted	36	51	66	72	78	67
Dogs must be kept on a lead when on a footpath	47	55	67	73	80	69
Litter should be taken home	72	85	88	88	93	88
Access to gateways or driveways must not be blocked when parking	57	78	83	83	89	82
Emergency vehicles must have access to gateways and driveways	66	83	86	88	92	86
Permission is required for activities such as wild-swimming and standup paddle boarding	34	38	47	47	56	48
Unweighted N	113	235	260	242	605	1,455

DIOLCH | THANK YOU

gan | from
Bartneriaeth Yr Wyddfa
The Yr Wyddfa Partnership



MONEY TALKS



FUTURE CHALLENGES & OPPORTUNITIES





CONTACT DETAILS AND WAYS TO CONNECT

Helen Pye

Head of Engagement, Snowdonia National Park Authority

Email: Helen.pye@eryri.llyw.cymru

Twitter: [@Helen_Pye](https://twitter.com/Helen_Pye)

Linked-In: [Helen Pye](#)





Scan here to submit a question virtually

PANEL DISCUSSION

AGENDA – Day 2

09:15-09:30: Welcome to day 2

09:30-10:00: Environmental Sustainability
Presentation by Dr Christian Dunn

10:00-11:00: Seminar Session 1

11:00-12:00: Seminar Session 2

12:00-13:00: Plenary Wrap-up and speed project/idea swapping

13:30 – 14:00: Lunch and Departure





AFTERNOON ACTIVITIES

17:30 – 18:45

**Famous Faces of PYB –
A behind the scenes tour
Meet in Bar**

**Open Water Swim
Meet at Lake**

**Pre Dinner Walk –
Coed Brun-Engan
Meet in Dining Room**



PLAS Y BRENIN





CONFERENCE DINNER

19:00 - Drinks

Bar

**(Present your token
for you free drink)**

19:30 - Dinner

Lecture Room

After Dinner Presentation

Snowdonia Dark Skies & PYB



PLAS Y BRENIN





LUNCH

During lunch, please get ready for heading to your chosen Site Visit. Please make your way to your seminar room for 1pm.

Site Visit 1: Lecture Room

Site Visit 2: Bryn Egan Bunkhouse

Site Visit 3: Staff Room

Site Visit 4: Gwynant

Site Visit 5: Meet in PYB Reception



PLAS Y BRENIN





'SUSTAINABLE OUTDOOR RECREATION' CONFERENCE DAY 2



PLAS Y BRENIN

PYB Wifi password: LlwynogGoch!

AGENDA – Day 2

**09:35-10:05: Environmental Sustainability
Presentation by Dr Christian Dunn**

10:05-11:05: Seminar Session 1

11:05 – 11:20: Comfort Break

11:20 -12:20: Seminar Session 2

12:20-13:20: Plenary Wrap-up and speed project/idea swapping

13:20 – 14:00: Lunch and Departure



ENVIRONMENTAL SUSTAINABILITY

Dr Christian Dunn,

Associate Pro-Vice Chancellor (Sustainability),
Bangor University



PRIFYSGOL
BANGOR
UNIVERSITY





#SustainableBangor



ENVIRONMENTAL SUSTAINABILITY



**School of Natural Sciences
(SNS)**

**School of Ocean Sciences
(SNS)**



REF Research
2021 Excellence
Framework

Earth Systems and Environmental Sciences:
1st in the UK for the impact of our research



“How can outdoor recreation not be detrimental to conservation?”

1

EDUCATION AND INSPIRATION

Exploring the Relations Between Childhood Experiences in Nature and Young Adults' Environmental Attitudes and Behaviours

Catherine Broom

University of British Columbia, Okanagan, Kelowna, British Columbia, Canada

Abstract

This article presents the findings of a research study with young adults who explored the connections between their early childhood experiences in nature and their attitudes and actions towards the environment in adulthood. Drawing on E. Wilson's (1984) work, environmental or ecological consciousness is theorised to connect to ecological identity and relates to an individual's deep reflection on, connection to, and engagement with the natural environment. The study's survey tool invited young adults to select various options that described their experiences in nature as children and their views of, and actions towards, the environment in the present. The findings illustrated connections between childhood experiences in nature and later views of, and actions towards, the environment. The correlations between expressed views about caring for the environment and environmentally friendly actions were surprising, however, as actions did not necessarily align with beliefs. The article concludes with recommendations based on the findings, outlining how positive attitudes and actions towards the environment may be fostered in childhood.

2

CITIZEN SCIENCE

**Robert Marsham recorded phenological events
1736-1797, family carried it on for 223 years.**



NEWS

Plastic pollution: Snowdon research is a 'wake-up call'

By Matt Lloyd
BBC News

1 March 2020



GETTY IMAGES

The lake is said to have once contained King Arthur's sword Excalibur - but now harbours plastic

The discovery of microplastic pollution near the top of the highest mountain in Wales is a "scary wake-up call", environmentalists have said.

Traces of plastic have been found in samples collected from Llyn Glaslyn - a remote lake near the summit of Snowdon.

The tiny particles are "most likely" to have been deposited by rain, wetland science

Top Stories

Tighter England Covid measures likely next week

Closing pubs and restaurants and banning overnight stays in the worst-affected areas are being discussed.

1 hour ago

Pence and Harris spar over pandemic in debate

55 minutes ago

Germany warns: Covid could spread 'uncontrollably'

3 hours ago

NEWS

Plastic pollution: Bangor University researchers get samples in wine bottles

By Catherine Evans
BBC News

3 January



WE SWIM WILD

"Waterloggers" across the UK are helping to collect enough samples for the study

The clinking of wine bottles in Welsh waters is signalling a fresh fight against plastic pollution.

Covid travel restrictions had threatened to stop swimmer Laura Sanderson's microplastics monitoring.

Top Stories

Man held on suspicion of Sabina Nessa murder

A 38-year-old man has been arrested on suspicion of the murder of Sabina Nessa in south-east London, Metropolitan Police say

1 minute ago

Ministers prepare for worst in gas price crisis

2 hours ago

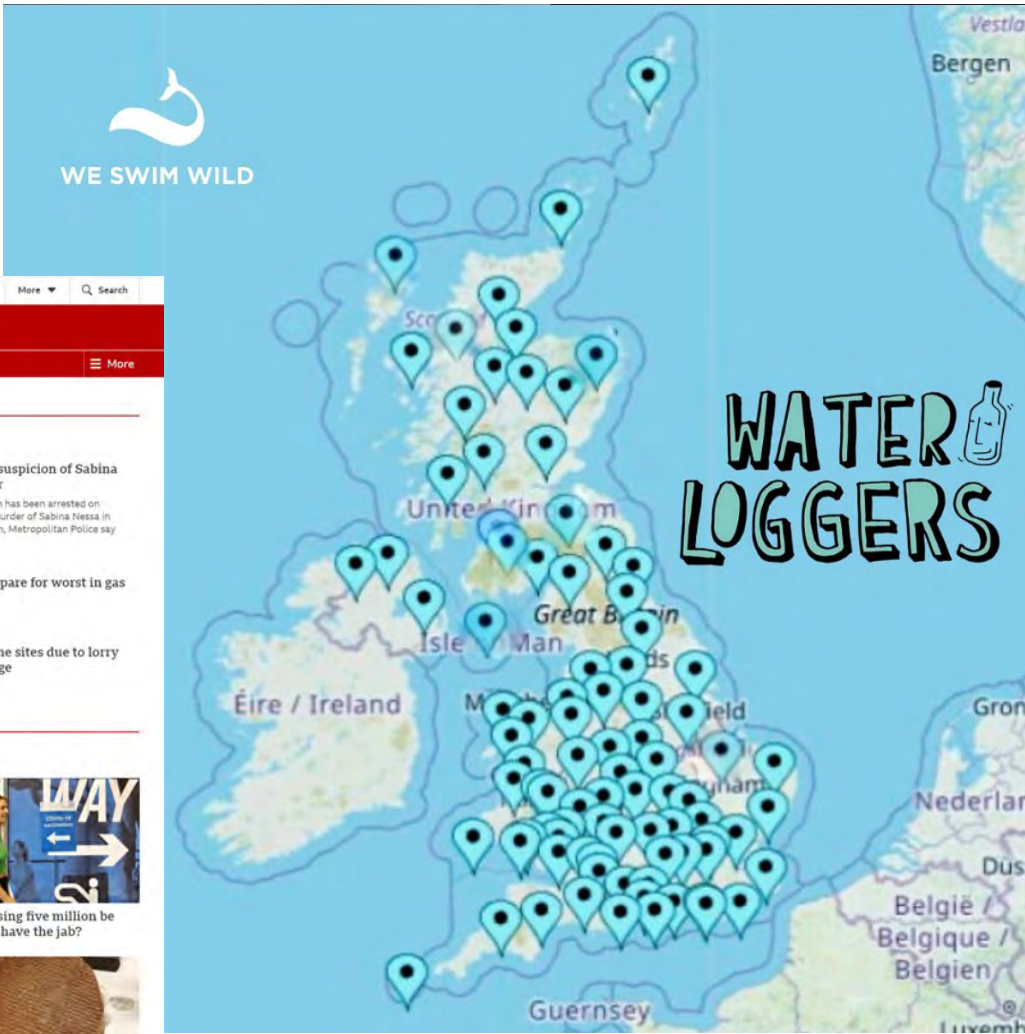
BP closes some sites due to lorry driver shortage

2 hours ago

Features



How can missing five million be persuaded to have the job?



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seek



by iNaturalist

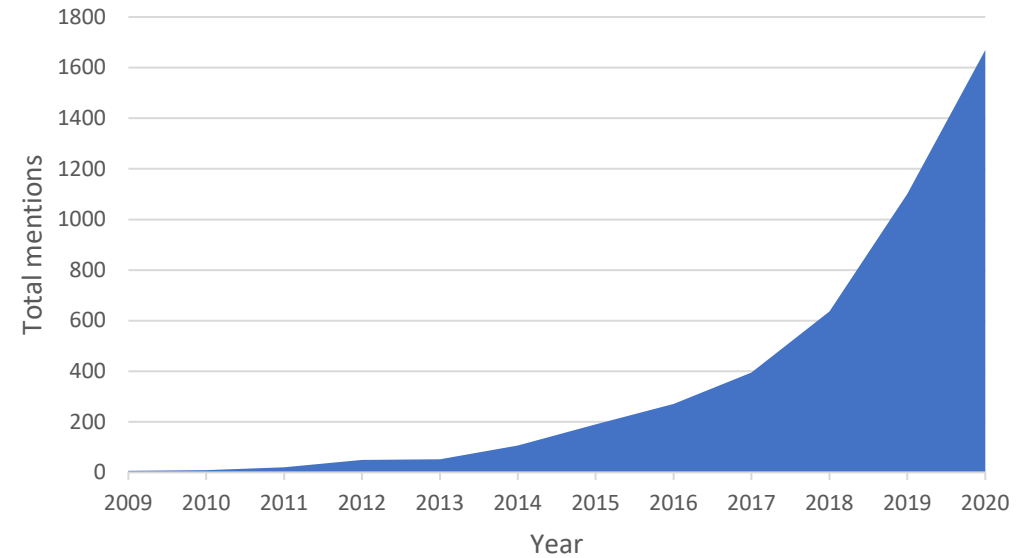
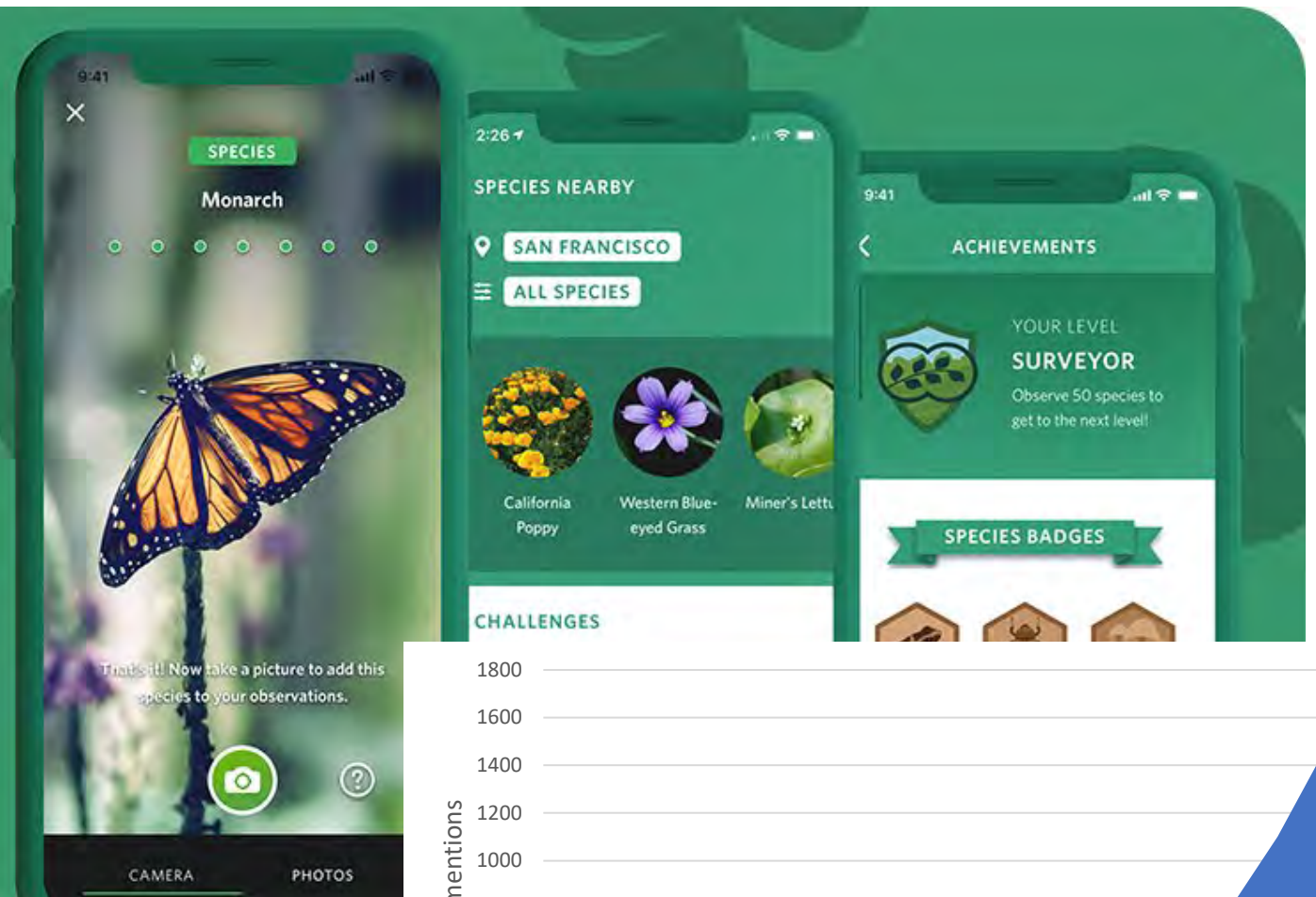
Get outside, explore, and learn about the nature all around you!



CALIFORNIA ACADEMY OF SCIENCES



NATIONAL GEOGRAPHIC



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3

PIONEERING LAND MANAGEMENT

The climate is changing.

Can we continue with current conservation strategies and management practises of natural systems?

Do we need to reconsider what is an area's "typical" species and habitat?



Contribution to CR Special 24 'Climate change and the British Uplands'

Bioclimatic envelope model of climate change impacts on blanket peatland distribution in Great Britain

Angela V. Gallego-Sala^{1,10,*}, Joanna M. Clark^{2,3,11}, Joanna I. House¹, Harriet G. Orr⁴,
I. Colin Prentice^{1,5,6}, Pete Smith⁷, Timothy Farewell⁸, Stephen J. Chapman⁹

¹QUEST, Department of Earth Sciences, University of Bristol, Wills Memorial Building, Queens Road, Bristol BS8 1RJ, UK
²Wolson Carbon Capture Laboratory, School of Biological Sciences, Bangor University, Deiniol Road, Bangor, Gwynedd LL57 2UW, UK

³Grantham Institute for Climate Change Fellow, Civil and Environmental Engineering, Imperial College London, Skempton Building, South Kensington, London SW7 2AZ, UK
⁴Research and Innovation (Climate Change), Environment Agency, Environment Centre Wales, Deiniol Road, Bangor LL57 2UW, UK

⁵Division of Biology, Macquarie University, North Ryde, NSW 2109, Australia
⁶Grantham Institute for Climate Change, Division of Life Sciences, Imperial College London, Silwood Park, Ascot, Berkshire SL5 7PY, UK

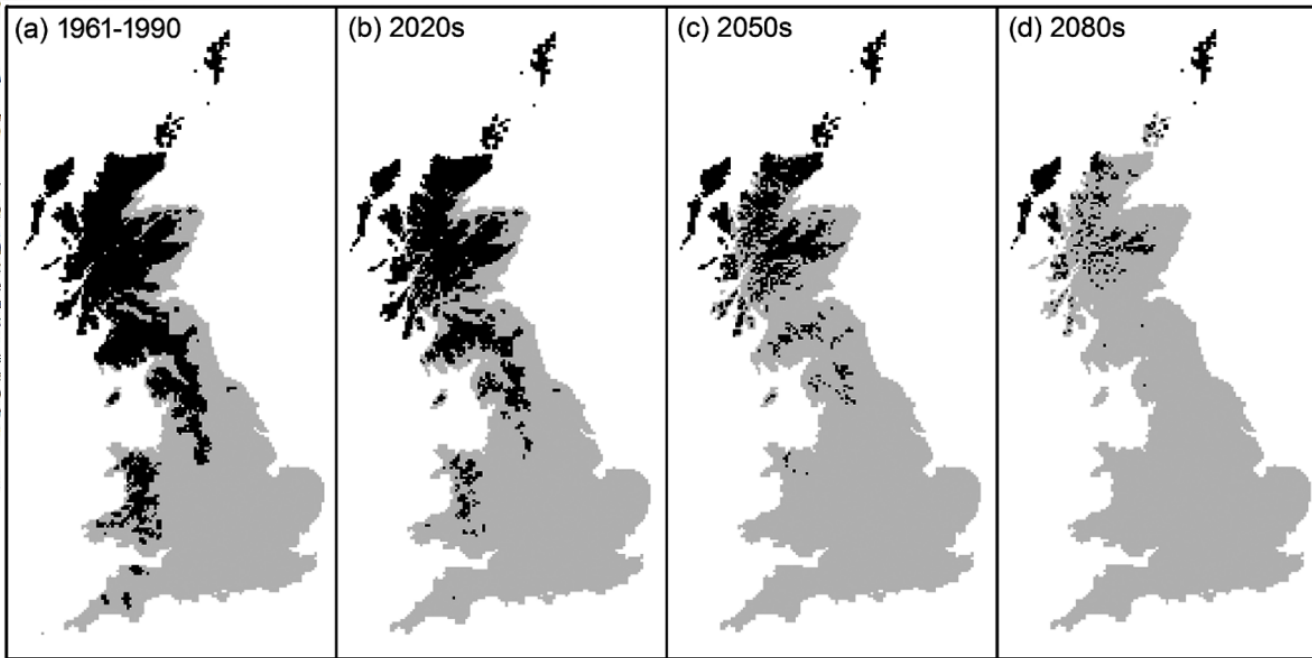
⁷Institute of Biological and Environmental Science, School of Biological Sciences, University of Aberdeen, Cruickshank Building, 23 St. Machar Drive, Aberdeen AB24 3UU, UK
⁸National Soil Resources Institute, Cranfield University, Cranfield, Bedfordshire MK43 0AL, UK

⁹Macaulay Land Use Research Institute, Craigiebuckler, Aberdeen AB15 8QH, UK
¹⁰Present address: Department of Earth and Ecosystem Sciences, Division of Physical Geography and Ecosystem Science, School of Human and Environmental Sciences, University of Reading, Whiteknights, Reading RG6 2AA, UK

¹¹Present address: Walker Institute for Climate Systems Research and Soils Research Centre, Geography and Earth Science, School of Human and Environmental Sciences, University of Reading, Whiteknights, Reading RG6 2AA, UK

ABSTRACT: Blanket peatlands are rain-fed mires that cover the landscape almost regardless of raphy. The geographical extent of this type of peatland is highly sensitive to climate. We applied process-based bioclimatic envelope model, PeatStash, to predict the distribution of British blanket peatlands. The model captures the present areal extent (Kappa = 0.77) and is highly sensitive to temperature and precipitation changes. When the model is run using the UKCIP02 climate projections for the time periods 2011–2040, 2041–2070 and 2071–2100, the geographical distribution of blanket peatlands gradually retreats towards the north and the west. In the UKCIP02 high emissions scenario 2071–2100, the blanket peatland bioclimatic space is ~84% smaller than contemporary (1961–1990); only parts of the west of Scotland remain inside this space. Increasing summer temperature is the main driver of the projected changes in areal extent. Simulations using 7 climate puts resulted in generally similar patterns of declining areal extent of the bioclimatic space, differing in degree. The results presented in this study should be viewed as a first step towards understanding the trends likely to affect the blanket peatland distribution in Great Britain. The of existing blanket peatlands left outside their bioclimatic space remains uncertain.

KEY WORDS: Bioclimatic envelope · Model · Blanket peatlands · Peat · Climate change



NATURE-BASED SOLUTIONS (NBS)

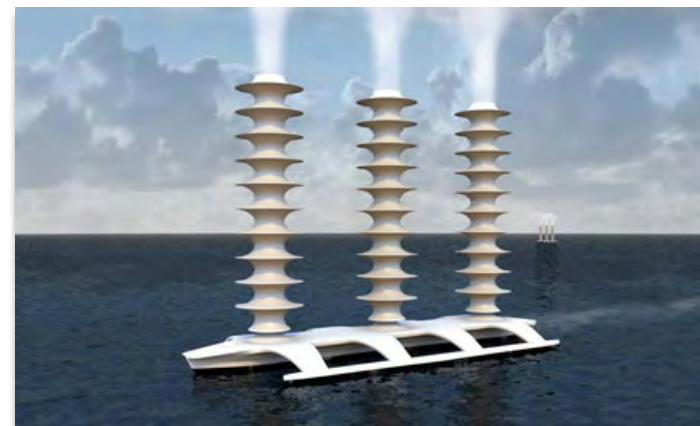
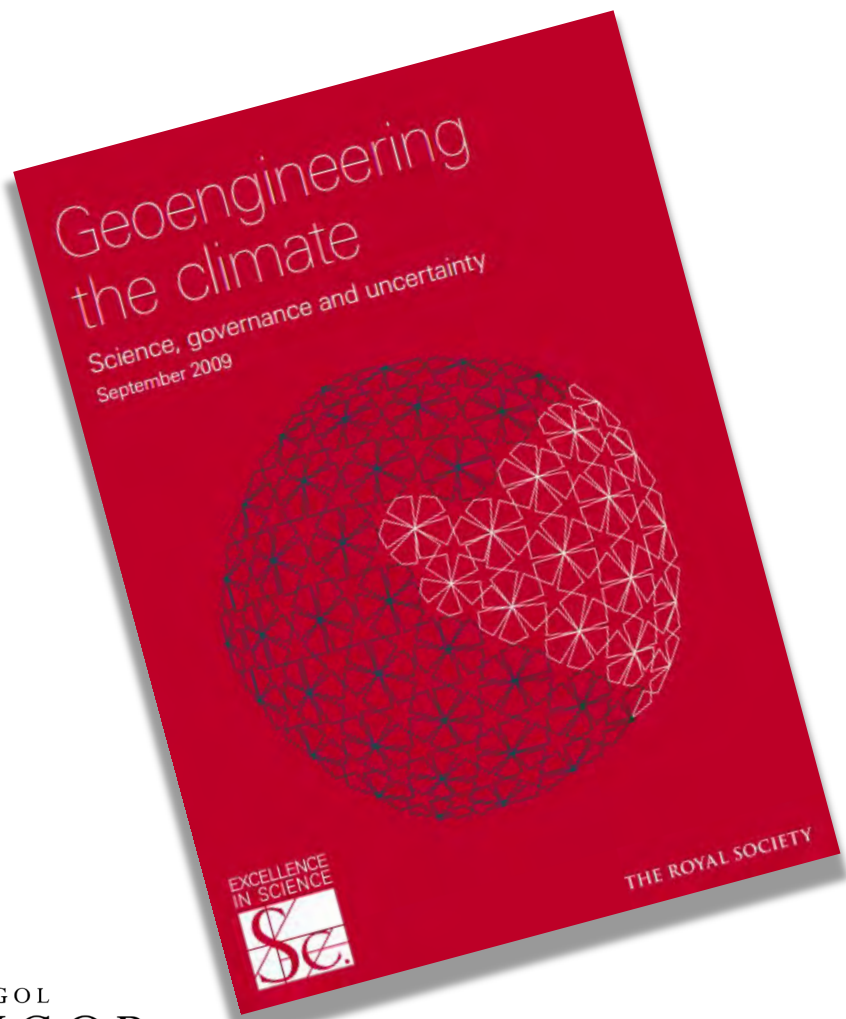




Should we incorporate 'enzymic latch' treatment into pristine peat habitats?



GEOENGINEERING



WATER CONTROL



Water quality

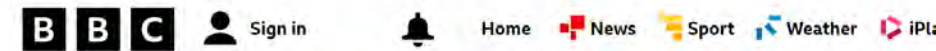


Glastonbury Festival: Levels of illegal drugs high enough to harm wildlife found in river running through site

During the festival levels of MDMA and cocaine in the water were so high they could affect the lifecycles of certain protected species of wildlife further downstream, researchers discovered.

Samuel Osborne
News reporter @samuelosborne28

Tuesday 28 September 2021 00:48 UK



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Sewage regularly dumped illegally in England and Wales rivers

By Zoe Conway
BBC News Correspondent



Article

Wetlands for Wellbeing: Piloting a Nature-Based Health Intervention for the Management of Anxiety and Depression

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Abstract: Nature-based health interventions (NBIs) for the treatment of poor mental health are becoming increasingly common, yet evidence to support their effectiveness is lacking. We conduct a pilot study of a six-week intervention, aiming to engage individuals with wetland nature for the treatment of anxiety and/or depression. We employed a mixed methods design, using questionnaires, focus groups and semi-structured interviews to evaluate the intervention from the perspective of participants (n = 16) and healthcare professionals (n = 2). Results demonstrate significant improvements in mental health across a range of indicators, including mental wellbeing (Warwick and Edinburgh Mental Wellbeing Scale), anxiety (Generalised Anxiety Disorder-7), stress (Perceived Stress Scale) and emotional wellbeing (Positive and Negative Affect Schedule). Participants and healthcare professionals cited additional outcomes including improved physical health and reduced social isolation. The wetland site provided a sense of escape from participants' everyday environments, facilitating relaxation and reductions in stress. Wetland staff knowledge of the natural world, transportation and group organisation also played a considerable role in the intervention's success. These aspects should be considered in future and existing NBIs to maximise benefits to participants. We propose NBIs based in wetlands are an effective therapy option for individuals diagnosed with anxiety and/or depression.

Should the Snowdonia National Park be turned into a pioneering Climate Change Mitigation Park?



Christian Dunn | c.dunn@bangor.ac.uk

Without the outdoor recreation sector's engagement the effects of climate change will be more damaging to UK society, and the country will not reach its emission reduction targets.



SEMINARS

SEMINAR SESSION 1

Room 1 –

Outdoor Recreation and Biosecurity

Dr Sara MacBride

Cromlech

Room 2 –

National Outdoor Recreation
Strategy for Ireland

Daithi de Forge

Gwynant

Room 3 –

Creating a culture shift to active travel
(Walk & Talk)

Kevin Lafferty

Lecture Room

Room 4 –

A sustainable business model for
outdoor recreation sites

Jonathan Woods

Staff Room



SEMINARS

SEMINAR SESSION 2

Room 1 –

Inspiring Ethical outdoor recreation

[Leave No Trace Ireland](#)

[Lecture Room](#)

Room 2 –

How outdoor professionals are at the front
Line in the quest for more sustainable
use of the outdoors

[Mike Raine](#)

[Gwynant](#)

Room 3 –

Helping people fall so in love with nature
that it changes the way that they live
(Walk & Talk)

[TYF – Ryan and Chris](#)

[Meet on Lawn below picnic area](#)

Room 4 –

Supporting rural tourism economies
with off-road cycle routes

[Sophie Gordon](#)

[Staff Room](#)



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