

GREEN OPPORTUNITIES

Supporting Wales' COVID-19 *Green Recovery* by identifying opportunities to support population health through sustainable means

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GUEST FOREWORD

Put simply, our health and wellbeing and that of future generations depends completely on the natural environment and the biodiversity it supports.

We literally can't live without it - it provides the air we breathe, the water we drink, the food we eat and our medicines - it provides the raw materials and energy for our industries - it helps protect us against hazards, such as flooding, air pollution and other climate change impacts - it gives us a sense of place and cultural identity - and it connects people with nature supporting our physical and mental health by providing places and spaces for physical exercise, learning, peace and relaxation. About 75% of the new drugs developed since 1981 come from natural products while three out of four crops across the globe depend on pollinators to produce fruit or seeds for human use as food.

However, all too often, we are taking the natural environment and the biodiversity it supports for granted, and human activities are disturbing both the structure and functions of ecosystems. The evidence is stark: without significant changes, 1 million species will be eradicated from the planet. This continuing loss of species and habitats poses as much a danger to life on earth as climate change does and as such, on 30th June 2021 the Senedd declared a nature emergency in Wales, and recognised that the nature and climate crises are inextricably linked. This reinforces the Welsh Government's declaration of a climate emergency in 2019.

The national Nature Recovery Action Plan was first published in 2015 and consists of Part I (Our Strategy for Nature) and Part II (Our Action Plan). It is an all-Wales plan for everybody involved in biodiversity action in Wales. Part II has been refreshed for 2020-21 following input from a range of stakeholders. The Nature Recovery Action Plan sets out how Wales will address the Convention on Biological Diversity's Strategic Plan for Biodiversity and the associated Aichi biodiversity targets in Wales. The Nature Recovery Action Plan identifies actions that can be delivered in the short term and sets a course to deliver longer term commitments beyond 2020.

Everyone has a role to play to protect and celebrate our biodiversity through your activities as an organisation, business or as an individual. **Actions for nature are actions for people.** It is everyone's responsibility to consider and act for our natural environment and the biodiversity which underpins it.

Bronia Bendall (Lead Specialist: Health, Natural Resources Wales)



WALES BIODIVERSITY PARTNERSHIP

The Wales Biodiversity Partnership promotes and monitors biodiversity across Wales, and co-ordinates action on biodiversity in Wales through leadership and expert advice, bringing together key players from the public, private and voluntary sectors.

In 2016, the Environment (Wales) Act introduced a legal duty for public bodies to take action to plan and manage Wales' resources in a more proactive, sustainable and joined up way. Within the Act, the Section 6 Biodiversity Duty requires public bodies to maintain and enhance public land for biodiversity and support the recovery of nature.

Across Wales, this has led to some noticeable, but perhaps subtle, changes to the way land is managed. One of the most visible changes may be the way that roadside verges are being managed. More and more areas are now being mown less frequently, many just once a year once the wildflower seeds have dropped, and then raked to encourage more wildflowers to grow in the following year.

GREEN RECOVERY

A report presented to the United Nations in January 2021 highlighted that governments are not seizing the opportunity to make a green recovery from COVID-19. Data revealed that the 'Group of Twenty' (G20) governments are committing 60% more to fossil fuel-based activities than to sustainable investments.

Dealing with and recovering from COVID-19 is a rehearsal to build a greener and healthier society and protecting biodiversity is vital to manage the risk of future pandemics and zoonotic diseases.

A recent report Build Better explores the role of science and innovation to enable a sustainable, equitable post pandemic recovery. Human activities including excess consumption are directly linked to the climate challenges facing society today. Although 70% of people worldwide recognise the threat posed by climate change, only a minority take action to reduce their impacts. Behaviour change to a more sustainable way of living is essential to achieve environmental prosperity following the pandemic. Governments have legislated to cut emissions to net zero by 2050, but there also needs to be a focus on plastic pollution, deforestation and biodiversity loss, all equally important and interconnected to climate change.

The UK Government opened the second round of its Green Recovery Challenge Fund in March 2021, with £40 million available, welcoming applications for up to £2 million to help England build back greener from the pandemic. In Wales, £5.4 million has been made available for local authorities and national parks to support projects designed to support Wales' green recovery from COVID-19, as part of the Green Recovery Task and Finish Group.

At the 'Group of Seven' (G7) Leaders' Summit in Cornwall, June 2021, the Climate and Environment Ministers agreed commitments to halt and reverse biodiversity loss by 2030, and to tackle climate change, deforestation, marine litter and illegal wildlife trade.

The UN Biodiversity Conference scheduled for October 11th 2021, will convene governments from around the World to agree a new set of goals for nature over the next decade through the Convention on Biological Diversity post 2020 framework process.

DECARBONISATION

Global emissions of greenhouse gases are a key cause of climate change, and pose a range of threats to biodiversity and ecosystems, increasing the risk of species extinctions and affecting vital ecosystem services. 'Warming climates, sea level rise, melting glaciers and increases in the occurrence and severity of wildfires, floods and storms affect wildlife as well as humans.

The effects of global warming have a huge impact on biodiversity, with many species unable to adapt naturally to such dramatic environmental changes. For example, sea turtles use both marine and terrestrial habitats and the effects of climate change is exposing them to greater existential threats. Sea level rises and stronger storms destroy their habitats, rising sea temperatures destroy coral reefs (an important food source), and increasing sand temperatures affect the gender of their offspring during incubation, creating a threat to genetic diversity.

The COVID-19 pandemic has shown how quickly positive behaviour change can be adapted, with an increased appreciation for nature and wildlife benefiting from cleaner air and less disturbance during 'lockdowns', so there is an opportunity to reduce emissions and reduce our negative impacts on climate change as the nations build back greener.



New [research](#) demonstrates that nature-based solutions can provide up to 37% of the emission reductions needed by 2030 to keep global temperature increases under two degrees Celsius. The Centre for Alternative Technology's [Zero Carbon Britain](#) project provides resources and guidance to support action on biodiversity and climate change.

The new [NHS Wales Decarbonisation Strategic Delivery Plan](#), published in March 2021, sets out how NHS Wales will reduce its emissions to contribute to the Welsh Government's ambition for a [carbon neutral public sector](#) by 2030. It identifies the importance of green space, nature and clean air providing therapeutic benefits during the pandemic and the need to ensure they continue to do so.



The [Carbon Community](#), a charity dedicated to creating forests and accelerating carbon removal, is undertaking a world-first study in Glandwr Forest, Carmarthenshire, where more than 25,000 trees have been planted on 28 acres to remove carbon dioxide from the atmosphere, enhance tree survival and restore soil biodiversity.

Protecting existing natural forests is recognised internationally as an effective [nature based solution](#) for removing CO₂ from the atmosphere. Newly planted woodlands take up to 60 years before effective absorption of carbon. The UK government's commitment to plant over 30,000 extra hectares of woodland per year by 2025 offers significant opportunities to mitigate climate change through carbon sequestration, although the full benefits will not be felt before 2050.

SUPPORTING BIODIVERSITY

Biodiversity seemed to benefit during the pandemic's initial lockdowns, allowing us to see what the world could be like if we gave nature more space and respect. However, in some of the poorest and most biodiverse parts of the world, the economic disruptions from lockdowns have caused [disruption to biodiversity conservation projects](#), and resulted in increased poverty and [food insecurity](#), illegal fishing and [poaching](#).

A lack of global eco-tourism has resulted in insufficient funding for national park authorities. Even [conservation work in the UK](#) has suffered from a huge drop in income. Across the UK large numbers of 'new' visitors to the countryside resulted in an [increase in litter](#) causing [loss of wildlife and vitally important habitats](#).

Although bees are one of the [most important pollinators in the world](#), crucial for food production and biodiversity, bee numbers are declining in many parts of the world with recent figures suggesting by as much as [30%](#) per year. Climate change has a profound impact on pollinators; storms damage habitats, invasive species bring disease threats, and changes in seasonal temperatures affect pollinator timings.

The annual [Bees' Needs Week](#), highlights what everyone can do at home to care for pollinators. Wales' [Bee Friendly](#) national scheme aims to make Wales a 'Pollinator – Friendly' country, and encourages action to support all pollinators.

One of the prescriptions of the World Health Organization's [manifesto for a healthy recovery from COVID-19](#) is 'protect and preserve the source of human health: nature', including to incorporate biodiversity values, ecosystem protection and the value of nature in national and regional policies, strategies and programmes, and eliminate or reform incentives that are harmful to biodiversity.

Welsh Government's [Programme for Government](#) for 2021-26 commits to responding to the nature and climate emergency, by delivering a green transformation with a focus on green space, locally grown sustainable food and locally generated renewable energy.

Size of Wales' ['Making Wales a Deforestation Free Nation'](#) campaign includes aims to support organisations to eliminate imported deforestation from their procurement, to work with partners to strengthen teaching on climate change, nature and deforestation, and introduce deforestation free targets in procurement policy in Wales.

[Save Our Magnificent Meadows](#) is the UK's largest partnership project transforming vanishing wildflower meadows, grasslands and wildlife.

DID YOU KNOW?

Nature and wildlife in Wales is undergoing a 'mass extinction event' with a recent [report](#) highlighting one in six species in Wales is at risk of extinction, a total of 666 species, with another 73 species already having been lost, through a loss of habitat due to farming and climate change.

Wales' meadows are in serious decline with [97% of species-rich meadow lost](#) since the 1930s. Wales is home to 40% of the UK's semi-natural grassland and even these remaining fragments are under threat of being destroyed, also resulting in a decrease in green spaces.

WHAT CAN WE DO?

We don't have to be biodiversity experts to get involved with nature. [Volunteering](#) with a local nature reserve, [creating a wildlife garden](#), taking part in a [bird](#) or [butterfly](#) survey, [reducing our plastic waste](#), reducing emissions from driving, or going for a walk in our local area are all ways we can support nature. The new countryside code requires users to [respect the wildlife that lives there](#), keep to marked paths and be considerate and share the space.

HEALTH AND WELL-BEING

Nature is declining at an [unprecedented rate](#) with [species extinction accelerating](#). COVID-19 is a reminder of the intimate and delicate relationship [between biodiversity and human health](#). Biodiversity loss, ecosystem degradation and other human-driven disturbances are increasingly making us ill too. Humans are part of biodiversity, we must not think we are separate. Over exploitation and habitat destruction are linked to the occurrence, risk and spread of [zoonotic diseases](#); diseases spread between animals and humans (e.g. COVID-19).

A recent [report](#) published by the World Health Organization identifies the importance of biodiversity for nutrition and health and is intended to help guide decision makers to consider the vital role of biodiversity in food systems, to strengthen the resilience of food systems and focus investments for more comprehensive public health nutrition projects. [About 75%](#) of the new drugs to fight bacterial infections, viruses and parasites developed since 1981 come from natural products, while [three out of four crops](#) across the globe depend on pollinators to produce fruit or seeds for our food.

Over the past year, many people have discovered (or rediscovered) nature on their doorstep. Spending time outdoors and in nature benefits [physical, mental and emotional health and well-being](#), and [research](#) has shown that the biggest benefits are gained when we consciously pay attention to the nature around us.

[Coed Lleol/ Small Woods Wales](#) helps to improve the health and well-being of people across Wales through woodland and nature based activities. Current projects include 'Actif Woods Wales', offering a wide range of activities from bush craft to woodland walks, and 'Connecting People and Nature', supporting local people to access green spaces with the aims of benefiting the health of the landscape, community and individuals.

The [Parkrun Practice Initiative](#) enables GPs and practice staff to socially prescribe physical activity, referring patients to take part in a free weekly Parkrun to improve health and well-being and maximise the value of open green space. The [initiative turned three](#) in June 2021, with around 1,500 practices signed up to the initiative, representing around 17% of all GP practices across the UK. This [blog](#) provides up-dates on the restarting of Parkruns as Coronavirus measures ease.



GREEN AND FAIR ECONOMY / EMPLOYMENT

The COVID-19 pandemic has resulted in a major economic and jobs crisis, alongside a major public health crisis. The UK unemployment rate was estimated at 4.7% in the three months to the end of June 2021, representing more than 1.6 million people.

Welsh Government's [Programme for Government](#) commits to provide decent jobs, relevant skills and new training opportunities, and investment in the sustainable green industries of tomorrow.

Welsh Government's [Nature Networks Fund](#) will provide £9.8 million to protect Wales' natural sites and vital habitats to strengthen resilience and support a green recovery for nature and communities. Grants from £50,000 to £500,000 will fund projects that improve the conditions and connectivity of Wales' land and marine sites.

Groundwork Wales' [Routes2Life](#) and [Green Teams](#) projects give disadvantaged and vulnerable adults and young people the opportunity to access green space to learn key practical environmental skills and gain qualifications to enhance employment opportunities.



SUPPORTING VULNERABLE GROUPS

A recent [report](#) highlights the inequalities certain groups and communities face when accessing green space, including the barriers and impacts from COVID-19. The pandemic has adversely affected vulnerable communities around the world. In the UK, people living in [deprived areas](#) have the least access to green space and the least opportunities to learn about it.

In Wales, Europe and globally, [vulnerable people are most at risk from the increasing effects of climate change](#), pollution and loss of natural ecosystems. Many people in developing countries use all of their land to grow crops for export to developed nations. The [amazon rainforest is being cleared at an alarming rate](#) to grow cheap soya or palm oil, exploiting people as cheap labour and with no rights. Many poorer people live in areas which are often badly polluted, with limited sanitation and adequate shelter, which will flood if sea levels rise. [Size of Wales](#) provides funding and expertise to local and indigenous communities in tropical regions to help secure sustainable livelihoods.

Residents of Bron Afon Housing Association in Cwmbran have turned a patch of land into an eco-friendly, biodiversity friendly [community garden](#), which has brought the community together, giving the younger families and older residents something to contribute to and brighten their day.

[Community groups in England](#) received funding to transform run down urban areas into green spaces to increase biodiversity, encourage community integration and tackle loneliness.

MENTAL WELL-BEING

Connecting with nature has many benefits for our [mental well-being and physical health](#), including reducing stress and anxiety, whether it's walking through the woods, watching the birds, or listening to the rustle of leaves in the wind.

Many people are very worried about the dangers and uncertain future which will result from climate change, the global extinction and pollution crises, and the COVID-19 pandemic. [Research](#) shows that there will be further pandemics unless we live in a way that respects the earth and its natural processes. All this has made things worse. Psychologists have given this health condition a name, Climate Anxiety, [Eco -anxiety](#) or [Solastalgia](#).

Magnificent Meadows Cymru, a project funded by the Welsh Government, aims to restore over 300 hectares of species-rich grassland in Wales, and create and support at least 35 accessible community meadows in schools, parks, housing estates and hospitals. The first Meadows Health and Wellbeing Route is a fantastic resource to help patients and local residents discover the wonderful benefits of spending time in nature.

Innovate Trust's Boosting Nature and Porthkerry Park projects support adults with learning disabilities and mental health problems to take part in outdoor activities to improve the biodiversity of green spaces around Cardiff and the Vale of Glamorgan.

YOUNG PEOPLE

Young people's knowledge of biodiversity is declining, with four out of five UK children not connected with nature. Many children have no understanding of the countryside or the earth's natural processes. There are many benefits to children spending time outdoors including better physical and mental health, positive impacts on education, improved personal and social skills, and becoming environmentally responsible citizens.

Around the world, young people have begun to fight back and campaign to demand greater action against climate change. Greta Thunberg, who began her protest in 2018, is now a global role model and inspiration for many young people through Fridays for Future. UNICEF's Youth for climate action, provides a platform to help young people take action on the climate crisis and raises their environmental concerns with decision makers. Reports written by young people to celebrate International Biodiversity Day 2020 provide an insightful overview of the conservation and sustainable use of biodiversity.

Swansea based social enterprise, Down to Earth provides outdoor experiences including creating buildings with natural materials, to tackle inequality and support young people to bring about positive change in their lives.

Play Wales Chwarae Cymru has several funding opportunities that support young people and the environment. The 'Mind Our Future Fund' aims to support partnership projects to create a more resilient and mentally healthy future for young people in Wales. The 'Postcode Community Trust Fund' supports projects that improve mental well-being, biodiversity and green spaces while responding to the climate emergency and promoting sustainability.

DEVELOPMENTS FROM THE FUTURE GENERATIONS COMMISSIONER FOR WALES

Public green spaces have been a lifeline for many during lockdown and the Future Generations Commissioner has called for all homes in Wales to have access to green space. Creating a National Nature Service has been identified as one of the key priorities to stimulate the economy, create jobs and address the lack of diversity in green industries. The Commissioner's 'Art of the Possible' programme highlights a range of actions, from simple changes to big steps, which organisations can take to support nature as part of their core functions in contribution to the 'resilient Wales' well-being goal.

REMEMBER...

We are part of nature and cannot live without it. If we look after it, it will look after us.

'BE THE CHANGE' FOR WALES' WELL-BEING GOALS

'Be the Change' is a campaign and movement to encourage and support staff to take sustainable steps in the workplace, individually and within teams, to contribute towards Wales' seven well-being goals (in the Well-being of Future Generations Act). The Be the Change 'Helping Nature to Flourish' e-guide highlights practical steps to support biodiversity, and will also be of interest to organisations with biodiversity plans.

