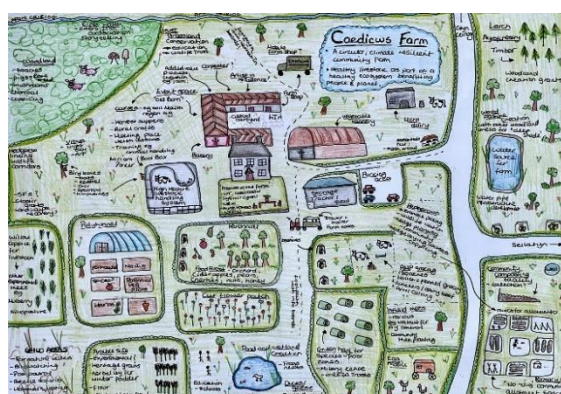
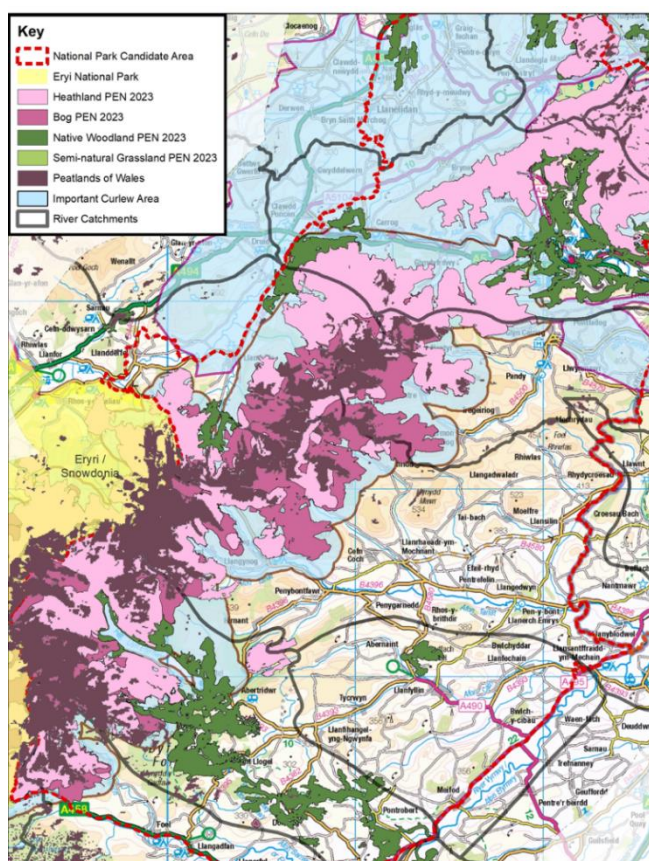


Wales's New National Park Proposal

The Benefits of Nature Report



Report No: 937

Author Name: Natural Resources Wales

About Natural Resources Wales

Natural Resources Wales' purpose is to pursue sustainable management of natural resources. This means looking after air, land, water, wildlife, plants and soil to improve Wales' well-being, and provide a better future for everyone.

Evidence at Natural Resources Wales

Natural Resources Wales is an evidence-based organisation. We seek to ensure that our strategy, decisions, operations and advice to Welsh Government and others are underpinned by sound and quality-assured evidence. We recognise that it is critically important to have a good understanding of our changing environment.

We will realise this vision by:

- Maintaining and developing the technical specialist skills of our staff;
- Securing our data and information;
- Having a well resourced proactive programme of evidence work;
- Continuing to review and add to our evidence to ensure it is fit for the challenges facing us; and
- Communicating our evidence in an open and transparent way.

This Evidence Report series serves as a record of work carried out or commissioned by Natural Resources Wales. It also helps us to share and promote use of our evidence by others and develop future collaborations. However, the views and recommendations presented in this report are not necessarily those of NRW and should, therefore, not be attributed to NRW.

Contents

Crynodeb gweithredol.....	4
Executive summary	7
1. Introduction	10
2. Policy and Legislative Context	13
3. Nature Condition and Trends in Wales	19
4. Forces for change	26
5. Public Consultation Comments.....	27
6. Analysis of natural resources, habitats, species and ecosystems	28
7. Case Studies	44
8. Summary and Conclusions.....	58

List of Figures

Figure 1: A strategic framework for nature recovery

Figure 2: The distribution of Peat within the Berwyn SSSI

Figure 3 Habitats of the National Park Candidate Area and their contribution to pollinators

List of Tables

Table 1: Natural Resource and Habitat trends over the last 11 years

Table 2: A comparison of trends pre 2007 and the last 10 years to 2023

Table 3: Habitats of principle importance (section 7 list) within the National Park Candidate Area

Table 4: Bird species of principle importance (section 7 list) at threat of extinction within the National Park Candidate Area

Crynodeb gweithredol

Diben yr adroddiad hwn yw esbonio sut mae bod yn ystyriol o natur wedi llywio'r broses o ddynodi Parc Cenedlaethol newydd a sut y gallai fframwaith Parc Cenedlaethol gefnogi camau gweithredu o ran adfer natur, gan gyfrannu at wytnwch bioamrywiaeth ac ecosystemau yng Nghymru, o fewn fframwaith cyffredinol Deddf Llesiant Cenedlaethau'r Dyfodol.

Fe'i paratowyd yn dilyn ymgynghoriad cyhoeddus ar yr ardal ymgeisiol hon ar gyfer dynodiad Parc Cenedlaethol ym mis Tachwedd / mis Rhagfyr 2024, ac mae'n ymateb i sylwadau a ddaeth i law bryd hynny. Cynhaliwyd gweminarau gyda chynrychiolwyr o sector yr amgylchedd ym mis Rhagfyr 2024, ac ym mis Ionawr a mis Mawrth 2025, lle codwyd cwestiynau ynghylch yr angen i ddadansoddi natur – fel cofnod o'r hyn sydd yn yr ardal; ei gwerth a'i hanghenion cadwraeth; a sut y gallai Parc Cenedlaethol gefnogi adferiad a gwytnwch, pe bai ardal a maint y Parc Cenedlaethol yn cael eu llunio gyda dealltwriaeth ddigonol o'r hyn sydd gan yr ardal i'w gynnig a'u posibiliadau.

Mae'r adroddiad yn cyflwyno dadansoddiad strategol o fanteision natur, yn tynnu sylw at gyfleoedd i gynnal ei adferiad (manteision i natur), er mwyn cefnogi'r amcan cyffredinol o ddatblygu bioamrywiaeth ac ecosystemau gwydn.

Cynhaliwyd proses gyfochrog o fireinio ffiniau ar ddechrau 2025 i fynd i'r afael ag ymatebion i'r ymgynghoriad cyhoeddus. Mae'r dadansoddiad o adnoddau naturiol, cynefinoedd a rhywogaethau sylfaenol yn yr ardal wedi llywio'r broses o fireinio'r ffiniau ac wedi arwain at wneud newidiadau i'r ffin. Mae'r newidiadau hyn wedi'u nodi mewn adroddiad ar wahân.

Mae ein dadansoddiad o dueddiadau cenedlaethol Cymru ar gyfer amrywiaeth o gynefinoedd ac adnoddau naturiol (Adroddiad Rhaglen Monitro a Modelu'r Amgylchedd a Materion Gwledig 2024 – 105: Tueddiadau Cenedlaethol Cymru 2025) yn dangos dirywiad mewn cynefinoedd, cyfoeth rhywogaethau, rhywogaethau adar, peillwyr, cywasgiad pridd a charbon pridd dros gyfnod o 11 mlynedd hyd at 2021. Adroddir bod nifer o elfennau yn dirywio yn genedlaethol, sy'n bresennol yn nhirweddau yr ardal ymgeisiol hon ar gyfer dynodiad Parc Cenedlaethol neu'n berthnasol iddynt:

- Mae cynefinoedd sy'n gorsydd, corgorsydd, glaswelltir corsiog, craig fewndirol, glaswelltir niwtral heb ei wella, glaswelltir calchaid a glaswelltir sur mewn cyflwr pryderus.
- Mae ffeniau, corsydd a gwernydd wedi dirywio.
- Gostyngiad o 8% yng nghyfoeth rhywogaethau planhigion ar draws pob cynefin a chynnydd o 22% yng nghyfoeth planhigion estron.
- Gostyngiad o 23-75% mewn pryfed peillio.
- Gostyngiad o 13-35% mewn sawl dangosydd adar, yn enwedig ar gyfer rhywogaethau tir â'r glaswelltir.
- Cynnydd o 6-32% mewn cywasgiad pridd.
- Gostyngiad o 8% mewn carbon uwchbridd o dir â'r / defnydd tir garddwriaethol.
- Mae gan 66% o ragnentydd infertebratau goresgynnol.

- Cynnydd bedair gwaith yng nghanran y blaenddyfroedd sych a chynnydd saith gwaith mewn pyllau sych.
- Cynnydd yng nghanran y pyllau sydd mewn cyflwr gwael neu wael iawn.
- Mae 50% o hawliau tramwy cyhoeddus yn parhau i fod wedi'u rhwystro a/neu heb arwyddion.

Nodwyd yn yr Adroddiad ar Sefyllfa Adnoddau Naturiol (SoNaRR 2020) nad oes unrhyw ecosystem yn dangos gwytnwch.

Darparodd ein dadansoddiad o adnoddau naturiol, cynefinoedd a rhywogaethau o fewn yr ardal ymgeisiol y mewnwelediadau canlynol:

Cryfder mewn amrywiaeth

Mae'r ardal ymgeisiol yn cynnwys ystod eang o gynefinoedd daearol a dŵr croyw Cymru. Mae amrywiaeth yn nodwedd bwysig o wytnwch ecolegol, er mwyn gwrthsefyll effeithiau newid hinsawdd, plâu a chlefydau.

Cartref i ganran sylweddol o gynefinoedd Cymru

- 32% o rug Cymru.
- 30% o'i glaswelltir calchaid.
- Mae'r cynefinoedd hyn yn gartref i'r grugiar ddu a'r gylfinir sy'n adar o bryder cadwraethol.
- Mae'r cynefinoedd hyn yn cyfrannu at hunaniaeth a hynodrwydd gweledol tirweddau ucheldirol yr ardal – Bryniau Clwyd, Rhostir Llandegla, Mynydd Llandysilio a Rhiwabon a'r Berwyn; a thirweddau calchfaen – llethrau Prestatyn, Dyserth a Threlawnyd; Bryn Alyn a tharren Eglwyseg.

Cartref i rywogaethau sydd o bryder cadwraethol cenedlaethol

- Mae'r ardal yn cynnal 62% o'r rhywogaethau sydd ar y rhestr goch ar gyfer adar yng Nghymru.
- 27% o'r rhywogaethau sydd ar y rhestr oren ar gyfer adar yng Nghymru.
- Mae Mynydd Rhiwabon yn gartref i 85% o boblogaeth y grugiar ddu yng Nghymru.
- Mae bryniau deheuol Clwyd, Rhostir Llandegla, Mynydd Llandysilio a Rhiwabon, ucheldiroedd dyffryn Ceiriog a'r Berwyn yn ardaloedd pwysig i'r gylfinir. Cofnodwyd 57 o barau nythu yn 2024 ar draws yr ardaloedd pwysig i'r gylfinir, sef 13% o boblogaeth Cymru o bosibl.

Buddion ehangach

- Mae 12% o fawn Cymru yn yr ardal, gyda'r ehangder mwyaf ar y Berwyn (y tu allan i'r tirweddau dynodedig presennol).

- Mae mawndiroedd yn gwneud cyfraniad sylweddol o ran storio carbon ac ansawdd dŵr; yn dal dŵr yn yr ucheldiroedd sydd yn swyddogaeth werthfawr o ran rheoli llifogydd yn y dyffrynnoedd sefydlog islaw.
- Y cynefinoedd y mae'n eu cynnal – mae gorgorsydd, rhosydd sych a chyrff dŵr croyw yn cynnal rhywogaethau sy'n brin, o dan fygythiad neu'n dirywio, gan gynnwys cwtiaid aur, cornchwilog, grugieir du, gylfinirod, gweirlöynnod mawr y waun, gwlithlys, rhosmari'r gors a mwsoglau migwyn.
- Dangoswyd bod ail-wlychu mawndiroedd yn lleihau lledaeniad tanau gwyllt a'r difrod y gallant ei achosi, gan amddiffyn storfeydd carbon pwysig, cynefinoedd, rhywogaethau ac osgoi gwariant cyhoeddus ar reoli tân ac ar adferiad.

Rôl Parc Cenedlaethol

Mae ein cais am astudiaethau achos yn dangos arbenigedd, profiad a bwriad sylweddol i gynnal cadwraeth ac adferiad natur ar draws yr ardal ymgeisiol hon. Mae hyn yn digwydd ar draws sefydliadau cyhoeddus, y trydydd sector, unigolion a grwpiau gwirfoddol. Mae'n dangos bod sawl ffordd o weithio a llawer o fannau a rennir lle ceir cydweithio.

Er mwyn mynd i'r afael ag adferiad natur a thueddiadau cenedlaethol o ddirywiad, mae angen gwneud mwy o hyn ar raddfa fawr, a hynny yn gyflym er mwyn gwireddu dyhead Llywodraeth Cymru ar gyfer 30X30.

- Byddai dynodi Parc Cenedlaethol newydd yn sefydlu fframwaith statudol ar gyfer cynllunio a chyflawni'n strategol ar gyfer cadwraeth natur, adferiad a gwasanaethau ecosystem.
- Gweithio gyda chymunedau ffermio i gefnogi eu hanghenion economaidd a diwylliannol, ochr yn ochr â chyfleoedd i adfer natur.
- Mae hyn yn galluogi cyfleoedd natur lleol i gael eu gwireddu, sy'n cefnogi ac yn datblygu rhwydweithiau ecolegol â blaenoriaeth ar y cyd.
- Mae cynnwys y Berwyn o fewn tirwedd ddynodedig statudol yn gyfle i wireddu ei photensial ar gyfer adferiad natur a manteision ecosystemau.
- Mae nifer o elfennau o bryder cadwraethol a dirywiad ar raddfa genedlaethol yn bresennol. Mae'r Parc Cenedlaethol yn galluogi cynllunio integredig ar raddfa tirwedd er mwyn adfer natur, ochr yn ochr â chefnogi llesiant cenedlaethau'r dyfodol.

Casgliad

Mae'r tueddiadau presennol ar gyfer natur yn negyddol. O gofio bod yr atebion amgen yn brin, mae model y Parc Cenedlaethol yn cynnig llwyfan pwerus â chefnogaeth gyfreithiol i wrthdroi dirywiad ecolegol, os yw'n integreiddio lleisiau lleol, yn cryfhau llywodraethiant, ac yn denu buddsoddiad cynaliadwy.

Executive summary

The purpose of this report is to explain how consideration of nature has informed the National Park designation process and how the framework of a National Park could support action on nature recovery - contributing to the resilience of biodiversity and ecosystems in Wales, within the overarching framework of the Wellbeing of Future Generations (WFG) Act.

It has been prepared following public consultation on the National Park Candidate Area November/ December 2024 and responds to comments received at that time. Webinars were carried out with representatives of the Environment sector in December 2024, January and March 2025, which raised questions about the need for an analysis of Nature – as a record of what the area held; its conservation value and needs; and how a National Park could support recovery and resilience, if the area and extents of the National Park were drawn with sufficient understanding of what the area holds and its potential.

The report presents a strategic analysis of the benefits of nature, points to opportunities to support its recovery (benefits to nature), to support the overarching objective of developing resilient Biodiversity and Ecosystems.

A parallel boundary refinement process took place in early 2025 to address public consultation responses. The analysis of the area's baseline natural resources, habitats and species has informed the boundary refinement process and guided changes to the boundary. These changes are set out in a separate report.

Our analysis of Wales National Trends for a range of habitats and natural resources (ERAMMP Report -105: Wales National Trends 2025) indicates a decline in habitats, species richness, bird species, pollinators, soil compaction, soil carbon over the 11 years up to 2021. There are a number of elements reported to be in decline at the national level, that are present or relevant to the landscapes within the National Park Candidate Area:

- Bog, blanket bog, marshy grassland, inland rock, unimproved neutral grassland, calcareous grassland and acid grassland habitats are in a state of concern.
- Fen, marsh and swamp have declined.
- 8% decrease in plant species richness across all habitats and 22% increase in non-native plant richness.
- 23 -75% decrease in pollinator insects.
- 13-35% decrease in several bird indicators, particularly for arable and grassland species.
- A 6-32% increase in soil compaction.
- An 8% loss of topsoil carbon from arable land/ horticultural land use.
- 66% of Headwater streams have invasive invertebrates.
- A four-fold increase in the percentage of dry headwaters and a seven-fold increase in dry ponds.
- An increase in the percentage of ponds in poor or very poor condition.
- 50% of Public Rights of Way remain blocked and/or not signed.

The State of Natural Resources Report (SoNaRR 2020) reported that no ecosystems demonstrate resilience.

Our analysis of Natural Resources, Habitats and Species within the National Park Candidate Area provided the following insights:

Strength in diversity

The National Park Candidate Area contains a broad range of Wales's terrestrial and freshwater habitat. Diversity is an important attribute of ecological resilience, for withstanding impacts of climate change, pests and diseases.

Home for a significant percentage of Wales's habitats

- 32% of Wales's heather; and
- 30% of its calcareous grassland
- These habitats are home to Black Grouse and Curlew birds of conservation concern
- These habitats contribute to the identity and visual distinctiveness of the area's upland landscapes - the Clwydian Hills, Llandegla Moor, Llantysilio and Ruabon Mountain and Berwyn; and limestone landscapes - Prestatyn, Dyserth and Trelawnyd hillsides; Bryn Alyn and the Eglwyseg escarpment.

A home for species of national conservation concern

- The area supports 62% of Wales's Red List bird species; and
- 27% of Wales's Amber List bird species.
- Ruabon Mountain is home to 85% of Wales's population of Black Grouse.
- The southern Clwydian Hills, Llandegla Moor, Llantysilio and Ruabon Mountain, Ceiriog valley uplands and the Berwyn are Important Curlew Areas (ICA). 57 breeding pairs were recorded in 2024 across the ICAs, potentially 13% of the Welsh population.

Wider benefits

- The area has 12% of Wales's Peat, with greatest extent in the Berwyn (outside the existing designated landscapes).
- Peatlands make a significant contribution to carbon storage, water quality; holding water in the uplands with a valuable flood management function to the settled valleys below;
- The habitats it supports - blanket bog, dry heath and freshwater water bodies support species that are rare, threatened or declining including - golden plover, lapwings, black grouse, curlew, large heath butterfly, sundews, bog rosemary and sphagnum mosses;

- Rewetting of peatlands has been shown to reduce the spread and damage of wildfires, so protecting important carbon stores, habitats, species and avoiding public expenditure on fire control and restoration.

The role of a National Park

Our request for case studies illustrates considerable expertise, experience and intent to carry out nature conservation and recovery cross the National Park Candidate Area. This is happening across public, 3rd sector organisations, individuals and volunteer groups. It illustrates there are many ways of working and many shared spaces where collaboration takes place.

To address nature recovery and national trends in decline, there is however a need to do more of this at scale and at speed to realise the Welsh Government's aspiration for 30X30.

- Designation of a National Park would establish a statutory framework within which to plan and deliver strategically for nature conservation, recovery and ecosystem services;
- Work with farming communities, to support their economic and cultural needs alongside opportunities for nature recovery;
- This enables local opportunities of nature to be realised that collectively support and grow Priority Ecological Networks;
- The inclusion of the Berwyn within a statutory designated landscape is an opportunity to realise its potential for nature recovery and ecosystem benefits;
- A number of elements of conservation concern and decline at the national scale are present. The National Park enables landscape scale integrated planning for nature recovery alongside support for the Well-being of Future Generations.

Conclusion

The current trend for nature is negative. With limited alternative solutions, the National Park model offers a powerful, legally supported platform to reverse ecological decline if it integrates local voices, strengthens governance, and attracts sustained investment.

1. Introduction

The purpose of this report is to explain how consideration of nature has informed the National Park designation process and how the framework of a National Park could support action on nature recovery - contributing to the resilience of biodiversity and ecosystems in Wales, within the overarching framework of the Wellbeing of Future Generations (WFG) Act.

It has been prepared following public consultation on the National Park Candidate Area November/ December 2024 and responds to comments received at that time. Webinars were carried out with representatives of the Environment sector in December 2024, January and March 2025, which raised questions about the need for an analysis of Nature – as a record of what the area held; its conservation value and needs; and how a National Park could support recovery and resilience, if the area and extents of the National Park were drawn with sufficient understanding of what the area holds and its potential.

The report presents a strategic analysis of the benefits of nature, points to opportunities to support its recovery (benefits to nature), to support the over arching objective of developing resilient Biodiversity and ecosystems.

The report addresses the following legislative framework in Wales:

National Parks and Access to the Countryside Act 1949

Statutory Designation Criteria for National Parks

Environment Act 1995

Establishes National Park as Special Purpose Local Authorities and as the Local Planning Authority for their area.

Places a duty on certain bodies to have regard for National Park purposes and a duty on National Park Authorities themselves to seek to foster the economic and social well-being of local communities within the National Park.

Enshrines the 'Sandford Principle' in law to give primacy to the first purpose of National Parks where there is irreconcilable conflict between the two purposes.

The Wellbeing of Future Generations Act (Wales) 2015

Sustainability is a statutory duty of all public bodies in Wales and includes Economic, Social, Environment and Culture considerations

The Planning Act (Wales) 2015

Section 6 biodiversity and the resilience of ecosystems duty and section 7 habitats and species of principal importance in Wales. The policy framework is applicable to both development planning and land use planning (SMNR).

The Environment Act (Wales) 2016

Requires the sustainable management of natural resources (SMNR) to support the wellbeing of future generations (WFG) - to realise multiple benefits; by working at the appropriate scale; in collaboration; applying adaptive management; for long term outcomes and resilience.

The format of the report

To aid navigation, the report sections include the following information:

1. Introduction

A brief introduction to the purpose and key legislative context the National Park programme is responding to.

2. The policy and legislative framework in Wales

The statutory framework that the National Park Programme is applying within decisions about the extents of the potential National Park and how to maximise on the opportunities to support nature recovery and ecosystem resilience and their benefits to society.

3. Nature condition and trends in Wales

Information has been gathered to explain the current condition and trends across a range of monitored natural resources within Wales. This highlights the need for action.

Some of the existing and evolving frameworks to enable nature recovery and resilient ecosystems.

4. Forces for change

This sets out a range of generic issues that impact upon natural resources and ecosystem function. Some examples from the National Park Candidate Area and Wales are included.

5. Public consultation comments

This sets out the themes that emerged from comments received and discussions raised at webinar meetings – leading to a boundary review.

6. Analysis of natural resource, habitats, species and ecosystems

The 8 broad habitats (UK National Ecosystem Assessment Habitats) provides a strategic overview of land cover within the National Park Candidate Area. The links between habitat type and the range of ecosystem services they provide to society are explained (the benefits of nature).

A closer look at some of the National Park Candidate Area's Natural Resources, habitats and species allows extents to be quantified by area (ha); percentage of Wales's total; features of conservation concern; and natural resources that make important contributions to ecosystem functions and the benefits to the Wellbeing of Future Generations.

Mapping of Priority Ecological Networks (PENs) alongside an understanding of conservation concerns starts to clarify the issues and opportunities that a National Park designation would need to consider within its Nature Recovery Action Plan. In turn, what a National Park Authority could lead and co-ordinate, or contribute to for nature conservation and recovery.

7. Case studies

The examples showcase positive work taking place within the National Park Candidate area and wide areas of Wales, to address the nature and climate emergency.

8. Summary and conclusions

This section brings together the summaries of the previous sections and includes observations to aid a potential future National Park Authority in it's planning with nature to address the climate and nature emergency.

2. Policy and Legislative Context

National Parks and Access to the Countryside Act 1949

National Park purposes are set out in Section 5(1) National Parks and Access to the Countryside Act (NPAC 1949):

- (a) conserving and enhancing its natural beauty, wildlife and cultural heritage, and;
- (b) promoting the understanding and enjoyment of its special qualities by the public.

When NRW is considering the natural beauty of an area for potential National Park designation, account may be taken of its wildlife and cultural heritage (Section 5(2A(a)) NPAC 1949).

Natural beauty legally includes but is not limited to consideration of flora, fauna, geological and physiographical features.

Natural Beauty has been assessed in accordance with NRW's Procedural Guidance: Statutory Landscape Designation GN10 March 2020, by evaluating evidence of the following factors:

- Landscape quality
- Scenic quality
- Relative wildness
- Relative tranquillity
- Natural heritage features
- Cultural heritage

Working beyond boundaries

The priority of a National Park Authority (NPA) would be to first to address the issues and opportunities for climate action, nature recovery and benefits to communities within the designated area - in support of the Wellbeing of Future Generations and the statutory purposes of the National Park.

Nature and ecosystems however work within natural systems and therefore seeing the National Park in a wider context will be important to developing a Nature Recovery Action Plan for the area. NPAs can work beyond their boundaries and have a legal power (Schedule 8 Environment Act 1995) which can be used in certain circumstance to undertake works related to the delivery of their statutory purposes.

The mapping of Priority Ecological Networks (PENs) for Designated Landscapes in Wales, indicates where the opportunities lie to improve the resilience of a range of habitats and support species movement through landscapes. These will extend beyond the National

Park boundary and therefore working in an integrated way brings benefits within and beyond its boundaries.

Having considered examples of how the Clwydian Range and Dee Valley (CR&DV) National Landscape and existing NPAs currently work, the following principles for working beyond boundaries have emerged, subject to capacity, need and value:

The focus of activity for a NPA would be priority areas within the boundaries of the designation, however consideration would also be given to opportunities of working beyond the boundary of the NP to support nationally important areas of conservation interest close to the NP.

Where work beyond the boundary would support Priority Ecological Networks from core sites, to build ecosystems resilience and improve connectivity.

Working beyond the boundary may be in a co-ordinating, supporting, advising, technical role, or as project lead.

The Environment Act (Wales) 2016

Section 3 Part 1 of the Environment (Wales) Act (the Act) sets out the 'sustainable management of natural resources' (SMNR) – an approach to managing Wales' natural resources and ecosystems to ensure that the benefits they provide for our social, economic, environmental and cultural well-being are available now and for future generations.

Natural Resources are our plants, animals and other organisms; air water and soil, minerals, geological features and processes, physiological features and processes and climatic features and processes.

Ecosystems are our living organisms (plants, animals and micro-organisms), in conjunction with non-living natural resources (air, water, minerals and soil), and all the diverse and complex interactions that take place between them.

The Welsh Minister's Natural Resources Policy sets out national priorities for the sustainable management of natural resources. The priorities have been developed to support the 7 Wellbeing Goals to both address the challenges to our natural resources and realise the opportunities from them. The national priorities are:

- Delivering nature-based solutions.
- Increasing resource efficiency and renewable energy.
- Taking a place based approach.

Ways of working and the Sustainable Management of Natural Resources (SMNR)

The Wellbeing of Future Generations Act 5 ways of working: long-term, prevention, collaboration, integration and involvement apply to all public bodies in Wales. They also apply to SMNR.

The principles of SMNR apply when managing natural resources:

- Take account of the short, medium and long term consequences of actions
- Take action to prevent significant damage to ecosystems
- Promote and engage in collaboration and co-operation
- Make appropriate arrangements for public participation in decision-making
- Take account of all relevant evidence and gather evidence in respect of uncertainties
- Manage adaptively, by planning, monitoring, reviewing and, where appropriate, changing action
- Consider the appropriate spatial scale for action
- Take account of the benefits and intrinsic value of natural resources and ecosystems
- Take account of the resilience of ecosystems

The Section 6 duty on National Park Authorities (NPAs) is to maintain and enhance biodiversity and promote resilience of ecosystems. NPAs are required to produce a Nature Recovery Action Plan and S6 Reports on a three-yearly basis.

The Planning Act (Wales) 2015

To support the resilience of ecosystems and to maintain and enhance species and habitats in Wales, the Act includes the section 6 biodiversity and resilience of ecosystems duty and section 7 species and habitats of principal importance for Wales. Section 7 requires Welsh Ministers to take all reasonable steps to maintain and enhance those species and habitats, and encourage others to take such steps.

The duty recognises biodiversity underpins how our ecosystems function – and our biodiversity is in decline. Natural Resources Wales' State of Natural Resources Report and Area Statements provide national and local evidence bases on biodiversity and ecosystem resilience.

Produce Local Development Plan for the National Park area. National Park Authorities produce Supplementary Planning Guidance & other guidance to embed Biodiversity in planning decision-making. E.g. Bannau Brycheiniog National Park Authority Biodiversity enhancement measures¹

¹ [Biodiversity-enhancement-measures-20220509.docx](#)

Nature Recovery Action Plan for Wales (NRAP)

The Nature Recovery Action Plan (NRAP) for Wales was originally published in December 2015 as the Nature Recovery Plan. The Nature Recovery Action Plan 2020-21 responded to the UN Convention on Biological Diversity, the escalating nature emergency and the need to step up action for biodiversity. Wales had also declared a climate emergency.

During the NRAP refresh a series of game-changers were identified, recognising that to recover nature we must:

- build resilient ecological networks and mosaics across our whole land and seascape to safeguard species and habitats and the benefits they provide
- address the root causes of biodiversity loss, not just the symptoms
- understand the role that nature plays in our lives, livelihoods and well-being
- invest in improving our evidence and monitoring for the long term
- recognise and value biodiversity in our accounting and decision making across sectors and portfolios
- demonstrate the value we place on biodiversity through governance, and support for skills and capacity

The Environment (Wales) Act sets out the following attributes of ecosystem resilience:

Diversity – generally speaking, more diverse ecosystems are more resilient to external influences and their impacts. This includes biological, geological and physical diversity

Connectivity within and between ecosystems

Scale and Extent – the bigger the ecosystem extends, without fragmentation, the more resilient it is likely to be

Condition – ecosystems need to be in a healthy condition to function effectively, to deliver a range of important ecosystem services

Adaptability – the ability of ecosystems to adapt to events, understanding that ecosystems are not static and will change over time.

NRW reordered the 5 attributes to produce the DECCA framework - Diversity, Extent, Condition, Connectivity, and Adaptability. This is referenced in Planning Policy Wales 12 section 6, which also requires developers to plan so that overall there is a net benefit for biodiversity and ecosystem resilience.

Biodiversity Deep Dive Wales 2022

The Biodiversity Deep Dive in Wales, is part of the Welsh Government's commitment to the Global Biodiversity Framework (adopted by the conference of parties at COP15).

The 30x30 target was chosen as a strategic focus for the purpose of the deep dive to consider where and how action could be accelerated. 30x30 refers to protecting and effectively managing at least 30% of our land, freshwater and sea for nature by 2030².

The Biodiversity deep dive: recommendations report 2022 sets out 8 objectives:

- Transform the protected sites series so that it is better, bigger, and more effectively connected.
- Create a framework to recognise Nature Recovery Exemplar Areas and Other Effective Area-based Conservation Measures (OECMs) that deliver biodiversity outcomes.
- Unlock the potential of designated landscapes (National Parks and Areas of Outstanding Natural Beauty) to deliver more for nature and 30 by 30.
- Continue to reform land and marine management and planning (including spatial) to deliver more for both protected sites and wider land / seascapes.
- Build a strong foundation for future delivery through capacity building, behaviour change, awareness raising and skills development.
- Unlock public and private finance to deliver for nature at far greater scale and pace.
- Develop and adapt monitoring and evidence frameworks to measure progress towards the 30x30 target and guide prioritisation of action.
- Embed Nature Recovery in policy and strategy in public bodies in Wales.
- The specific actions under objective 3 for the potential new National Park in the immediate term include:
- Support the National Parks and National Landscapes to develop a prioritised action plans for nature restoration embedding these in strategic planning.

In the longer term include:

- Realign Designated Landscapes priorities to enhance and accelerate nature recovery delivery, supported by updated policy, resources and guidance to build capacity and expertise and to target activity.
- Develop the evidence and mapping tools to enable designated landscapes to baseline, target and monitor areas of high nature value that could be secured as their contribution to 30 by 30
- Ensure Designated Landscapes bodies are funded adequately, sustainably and flexibly to deliver nature recovery at a transformational landscape scale.
- Ensure that the potential designation of a new National Park in northeast Wales affords opportunities for climate change mitigation and nature recovery as key delivery priorities for the new Park.
- Consider the need for legislation in the next Senedd to reform the statutory purposes, duties and governance arrangements for designated landscape bodies to equip them better to drive nature's recovery.

² Written Statement: Biodiversity Deep Dive Julie James MS, Minister for Climate Change 3 October 2022

Statutory Management Plan Review

Environment Act 1995 places a legal duty on National Park Authorities to prepare a management plan for their areas and to review these management plans every five years. As part of this management plan process, NPAs produce State of the National Park Reports to provide a baseline and monitor trends. NRW has recently revised the Designated Landscapes Management Plan Guidance to support Designated Landscapes realignment of action and on-ground delivery for nature and climate. E.g. Pembrokeshire Coast National Park Action Plan³

The Welsh Government is currently considering Statutory Biodiversity Targets and production of statutory Local Nature Recovery Action Plans, which are likely to include a requirement for National Park Authorities⁴.

Section Summary

Decisions about the boundary of the national park are guided by the statutory purpose of the designation and NRW's Procedural Guidance: Statutory Landscape Designation GN10 March 2020.

National Park Authorities can work beyond their boundaries and have a legal power (Schedule 8 Environment Act 1995), which can be used in certain circumstance to undertake works related to the delivery of their statutory purposes.

The priority of a National Park Authority (NPA) would be to first seek to address the issues and opportunities for climate action, nature recovery and benefits to communities within the designated area - in support of the Wellbeing of Future Generations and the statutory purposes of the National Park.

Working beyond the boundary could be applied for the purpose of developing a National Park Nature Recovery Action Plan; to support nationally important areas of conservation interest within close proximity of the National Park; and enable the implementation of Priority Ecological Networks from core sites - to build ecosystems resilience and improve connectivity.

Our review of this legislative and policy framework leads us to the following scope for the Benefits of Nature report:

- Identify the natural resources of the area
- Contribute to the baseline record
- Describe the benefits and intrinsic value of natural resources and ecosystems – supporting the Wellbeing of Future Generations
- Climate change mitigation and nature recovery are key delivery priorities for the potential new National Park

³ [Restoring-Nature.pdf](#)

⁴ [Environmental principles, governance and biodiversity targets: White Paper | GOV.WALES](#)

- Put this within a place based context
- Explain some of the strategic opportunities to maintain and enhance species and habitats of principal importance for Wales

3. Nature Condition and Trends in Wales

The State of Natural Resources Report (SoNaRR) is prepared by Natural Resources Wales to assess trends in Wales' Natural Resources and ecosystem resilience.

SoNaRR (2020) tell us that in Wales:

- Most semi-natural habitats have seen a reduction in diversity over the last 100 years, with the rate of decline increasing from the 1970s onwards.
- Only 31% of the country contains semi-natural habitat. At least 40% of Welsh semi-natural habitats are spread out in such small patches that this implies low resilience.
- Very few semi-natural habitats are reported as being in good condition due to several pressures. Freshwater habitats, for example, are mainly affected by nutrient enrichment and physical modifications.
- Connectivity is at its lowest in lowland semi-natural habitats, where the landscape has been simplified by the loss of semi-natural habitats, and intensively managed land dominates.

SoNaRR also tells us that the well-being of humans in Wales, and around the planet, is threatened by ecological and environmental breakdown. Time is running out to respond to this crisis and avoid a catastrophic situation for Wales and the world. Building the resilience of ecosystems needs to form the basis of a swift and immediate response.⁵

Wales National Trends and Glastir Evaluation

Environment and Rural Affairs Monitoring & Modeling Programme (ERAMMP) 2025

Environment and Rural Affairs Monitoring & Modeling Programme (ERAMMP) is funded by the Welsh Government (WG) to provide a range of scientific evidence and analysis to support the development of policies and evaluate programme implementations in the agriculture and land use sector.

The ERAMMP Report -105: Wales National Trends 2025, provides evidence on the status and change for a range of habitats and natural (and some selected cultural) resources analysed between 2010 to 2021. This will support:

- The evidence needs of the next State of Natural Resources Report (SoNaRR) in 2026;
- Update Well-being of Future Generations (Wales) Act 2015 (WFG) indicators
- No.13 Concentration of carbon and organic matter in soil; and

⁵ [Natural Resources Wales / Ecosystem resilience field guide](#)

- No.43 Area of Healthy Ecosystems in Wales;
- Provide a baseline for Sustainable Land Management (SLM) and the Sustainable Farming Scheme (SFS) monitoring and evaluation;
- The method for reporting WFG National indicator No. 44 Status of biological diversity in Wales is now being developed and tested.

National Trends

In 2021, satellite imagery from the UK Centre for Ecology and Hydrology Land Cover Maps family was used to estimate landcover changes. The following table draws together the report's key headline findings of changes over the last 11 years, plus changes within the land use and farming system:

Table 1: Natural Resource and Habitat trends over the last 11 years in Wales

Natural Resource and Habitats	Headlines which indicate stability or improvement	Headlines of concern or decline
Soils	Wales has 82,000ha of peatland, 4% of Wales' land area. There has been 9,000ha of peatland restoration (primarily rewetting and removal of trees and scrub) with most likely since 2010.	<p>6-32% increase in Soil compaction</p> <p>4% of Soils in Wales eroded or disturbed.</p> <p>8% loss in topsoil carbon concentration in Arable and Horticulture habitats</p> <p>A 15% increase in phosphorus levels in Improved Grassland Soils and three-fold increase in the number of Improved Grassland sites exceeding the leaching threshold for water quality.</p> <p>A two-fold increase in the number of sites exceeding the leaching threshold for phosphorus in Arable soils and a 7.7% loss of topsoil carbon.</p>

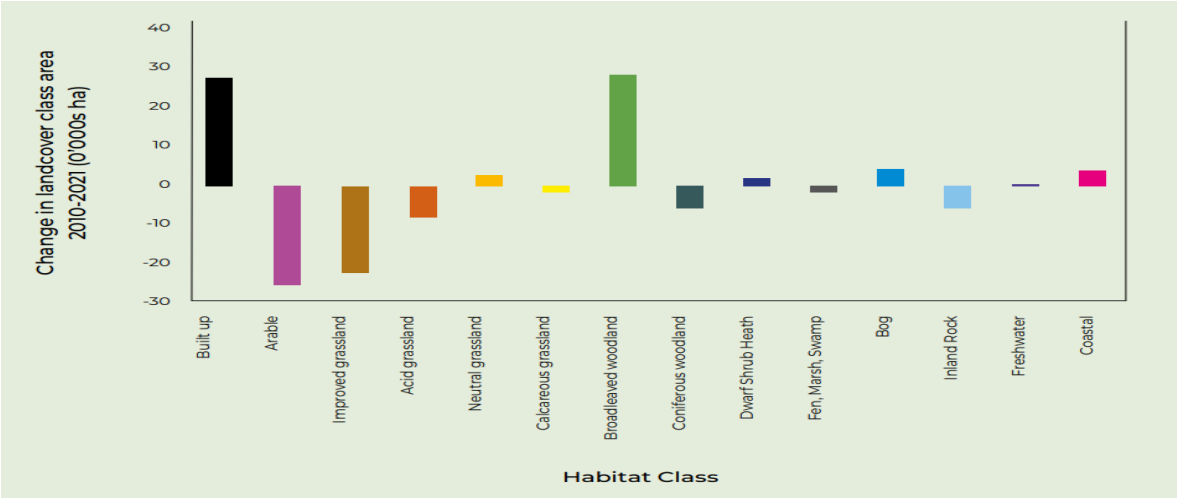
Mountains, Moorlands & Heaths	Stability in the Vegetation condition Dwarf Shrub Heath	
Enclosed Farmland	<p>An increase in positive plant indicator richness for Improved Grassland</p> <p>A decrease in the number of negative plant indicators in Semi-Improved Grassland</p> <p>There are ongoing declines in fertiliser use since data collection started in 1993, with a 25% reduction since 2010. Reductions in use primarily driven by input costs across the agricultural sector.</p>	<p>A 5% decrease (48,900ha) in Arable and Improved Grassland over the 11-year time period - a loss of the most productive agricultural land in Wales.</p> <p>Arable represents just 4% of Wales in 2021</p> <p>A three-fold increase in Improved Grassland sites now exceeding the threshold for phosphorus leaching from 2013-16 to 2021-23. This is an increase from 5% to 17% of all sites.</p> <p>72% of Improved Grassland sites retain Soil acidity levels below the optimum pH for grass growth.</p> <p>There has been a 5% increase in sheep and lamb numbers since 2010; a decrease of 2% in cattle and calves' numbers; pig numbers declined by 8%; and poultry increased by 36%.</p>
Hedgerows	<p>A 2,200km 4% increase in new and restored Hedgerow</p> <p>A 9% increase in both width and height of Hedgerows</p> <p>A new total length of 52,700km in 2021</p> <p>50% of hedgerows are now in favourable condition</p>	

<p>Woodland</p> <p>16.9% of Wales</p>	<p>Woodland covered 358,400ha (16.9%) of Wales</p> <p>A 7% increase since 2010</p> <p>A halt in the decline of plant species richness in Broadleaved Woodland</p> <p>Stability in the Vegetation condition of Woodland</p>	
<p>Freshwater</p>	<p>80% of Headwaters remain in good ecological condition, however, the remainder are continuing to decline</p> <p>The number of significantly or severely modified Streamsides has reduced from 43% to 30%.</p>	<p>66% of Headwater streams have invasive invertebrates</p> <p>A four-fold increase in the percentage of dry Headwaters and a seven-fold increase in dry Ponds. These now represent 13% and 11% of the populations respectively</p> <p>46% of Ponds now in poor or very poor condition, an increase from 37%</p> <p>An increase in the percentage of Ponds in poor or very poor condition across Wales from 37% in 2013-16 to 46% in 2021-23</p> <p>Two-fold increase in the percentage of Ponds with invasive species from 9% to 19%</p> <p>Consolidation and intensification of dairy and poultry sectors in particular regions across Wales may lead to specific local impacts (e.g. emissions to air and rivers)</p>

Urban 6% of Wales		<p>Urban cover increased by 28,200ha over the same time period</p> <p>This is greater than that for Woodland</p> <p>Urban represented 6% of Wales in 2021.</p>
Broad Habitats and Landscape Features	<p>6 of the Broad Habitats were stable (32%)</p> <p>1 had improved (Hedgerows)</p>	<p>12 (63%) Broad Habitats and Landscape Features were in a state of concern or had declined</p> <p>This represents a doubling of Broad Habitats and Landscape Features which are now of concern or had declined in the last 10 years.</p>
Semi-natural Habitat	No change in area of Semi-Natural Habitat (WFG Indicator No. 43) which covers 42.6% of Wales	
Plant species richness		8% decrease in plant species richness across all habitats and 22% increase in non-native plant richness
Pollinators		23 -75% decrease in pollinator insects
Birds	Bird indicators relating to Woodland and Upland Farmland are stable and there was an increase in Granivorous Bird species of 24%	13-35% decrease in several Bird indicators, particularly for Arable and Grassland species
Historic Environment	No change in the condition of Historic Environment Assets (HEAs) with 54% in excellent or sound condition	

Access to the countryside		50% of Public Rights of Way remain blocked and/or not signed.
---------------------------	--	---

Figure 1: Changes in land cover across Wales (thousands of hectares) from 2010 to 2021



In addition, the report presents trends in the condition of the major broad habitats in Wales and selected priority habitats and landscape features:

Table 2: A comparison of trends pre 2007 and the last 10 years to 2023

Asset Class and Broad Habitat (including 2 Priority Habitats and 3 Landscape point and linear features)	Long-term trend (pre-2007)	Short-term trend (2013-16 to 2021-23)
Woodland		
Broadleaved, Mixed and Yew Woodland	Stable	Stable
Coniferous Woodland	Stable	Stable
Mountain, Moor and Heath		
Dwarf Shrub Heath	Stable	Stable
Bog	Stable	Of concern
Blanket Bog	Improved	Of concern
Bracken	Stable	Stable
Fen, Marsh, Swamp	Declined	Declined
Marshy Grassland	N/A	Of concern
Inland Rock	N/A	Of concern
Semi-Natural Grassland		
Unimproved Neutral Grassland	Stable	Of concern
Calcareous Grassland	N/A	Of concern
Acid Grassland	Stable	Of concern
Enclosed Farmland		
Arable and Horticulture	Declined	Declined
Improved Grassland	Of concern	Of concern
Semi-Improved Grassland	Stable	Of concern
Hedgerows	Declined	Improved
Individual Trees	N/A	Stable
Boundaries	N/A	Stable
Streamsides	N/A	Of concern

In conclusion the report notes:

“This evidence when taken together suggests that whilst nature-positive actions funded by Glastir or other sources have been sufficient to maintain condition of the majority of habitats over the last 10 years, there are now signs which suggest this is starting to change. Further action may be required to increase the resilience and sustainability of our Natural Resources to the ongoing pressures of land management, climate change, chemical pollution and bio-risks.”

Section summary

Action is required within the broad habitats of mountain, heath and moor; semi-natural grasslands; and enclosed farmland, if and where the decline in landcover has a significant bearing on biodiversity/ ecosystem resilience and WFG.

SoNaRR tells us that the well-being of humans in Wales, and around the planet, is threatened by ecological and environmental breakdown. Time is running out to respond to

this crisis and avoid a catastrophic situation for Wales and the world. Building the resilience of ecosystems needs to form the basis of a swift and immediate response. Section 6.0 below starts to list and quantify the key habitats, species and an natural resources of the National Park Candidate Area.

4. Forces for change

Forces for change are the factors that individually and sometimes cumulatively act upon a natural resource, habitat and species ability to function effectively. Achieving a state of ecosystem resilience is seen as an indicator of good healthy with maximum benefits to WFG. SoNaRR lists the main pressures impacting the resilience of our ecosystems. These include:

Climate change, including more frequent and severe storms and heatwaves, resulting in more flooding, coastal and soil erosion and droughts, leading to a decline in the diversity, condition and extent of many of our ecosystems.

Agricultural intensification which has led to a dramatic decrease in the connectivity, diversity and extent of many ecosystems as more land has been brought under production, and as grazing, nutrient and chemical management has intensified.

Air pollution from industry, transport, and certain farming practices which causes enrichment, mainly as a result of nitrogen compound emissions. These pollutants harm soil and water quality, leading to a decline in condition and diversity across a number of ecosystems.

Water pollution which can occur from sewage and waste water discharge, rainwater flushing pollutants from buildings and roads, runoff from poor land management practices and contaminated mine discharge, leading to a decline in the condition and diversity of freshwater ecosystems.

Insufficient management of ecosystems, for example semi-natural grassland and certain semi-natural woodlands, that rely on low intensity or traditional management to maintain their condition and diversity.

Construction of flood defences, river sediment dredging and channel straightening which disconnect rivers from their catchments, limiting their natural, dynamic processes, reducing their condition and diversity.

Human development at our coastlines which artificially alter their natural, dynamic processes and reduces their extent, condition and diversity.

Invasive non-native species, pests and diseases which pose a threat to many ecosystems, reducing their diversity and condition. This is a particular problem in woodlands and freshwater environments.

The Environment and Rural Affairs Monitoring & Modeling Programme 2025 report adds - “There are many other drivers of change (and indeed also at times no change) in the agriculture and land use sector that are too numerous to mention here, including input costs, global markets, the regulatory and enforcement landscape, legal and tax rules, culture, and workforce and skills.”

5. Public Consultation Comments

Wales’s New National Park Proposal 2024 Public Consultation Report – Resources for Change NRW Report No: 926, presents the findings of public consultation on the National Park Candidate Area, that took place between October and December 2024. The questionnaire invited comments on whether people agreed or disagreed with the Candidate Area boundary as drawn, whether they agreed with areas added – over and above the current National Landscape; and areas excluded following the Assessment of Natural Beauty and Recreation by the Evaluation Report October 2024⁶ - excluding Gronant and Talacre Dunes, Halkyn Mountain, Hope Mountain, Clywedog Valley and Mynydd Mynyllod.

In parallel, online consultation with a broad representation of the environment sector in Wales, included discussion about the National Park Candidate Area. NRW used nature conservation habitat mapping in guiding the extents of the initial area of search⁷ and was now in the process of scoping a Benefits of Nature report.

Comments from the environment sector fall within the following themes:

- Information about notable, rare, species and habitats of conservation concern;
- Changes to the National Park Candidate Area boundary to take in additional areas considered to be of notable value for nature. The bigger the area the more that could be done for nature;
- A boundary to follow river basin management catchments, for a more holistic approach to managing terrestrial and fresh water habitats;
- Include the marine environment to maximise the potential of the statutory designation;
- for the Benefits of Nature report in its analysis of the natural environment help guide the location of the NP boundary going forward.

In response:

NRW welcomes additional information about the conservation features within the National Park Candidate Area. The information submitted adds useful local detail to our broader analysis;

⁶ A Proposed National Park for Wales, Evaluation Report - Gillespies, Fiona Fyfe, Countryside October 2024

⁷ Area of Search for a potential National Park in North - East Wales NRW June 2023

The National Park programme is developing evidence and making decisions within the framework and statutory purposes of the National Parks and Access to the Countryside Act 1949. The National Park Candidate Area presented at the end of 2024 is the result of an assessment of Natural Beauty and Recreation. Whilst taking an ecological approach to defining the boundary of the National Park has merits for nature conservation and recovery, it is a departure in how designated landscapes in the UK are conceived under current statutory legislation. Continuity in process is necessary to successfully complete the National Park programme;

National Parks can and do work beyond boundaries – see section 2.0;

National Park legislation is concerned with terrestrial landscape designations. Marine Conservation Areas are applicable to the marine environment. Both designations are drawn around features of conservation importance, not necessarily the place of opportunity for restoration, developing ecological networks and improving resilience;

The mapping of natural resources, habitats, species and ecological networks within the National Park Candidate Area and a 5km context, has helped clarify areas of notable value for wildlife, and has highlighted the link between habits and species that give the landscape within this area of Wales its distinctiveness and identity;

The boundary of the National Park Candidate Area is being refined to take account of the analysis and mapping set out in section 6.0 below, plus other points of detail that emerged from the 2024 public consultation process. The findings of this process and any revisions to the boundary will be set out in Boundary Review Report, due to be finalised early summer 2025.

6. Analysis of natural resources, habitats, species and ecosystems

This section analyses natural environment mapping data, that has been collated to help:

- Explain the benefits that the habitats and ecosystems of the area provide to society (in support of the WFG)
- Identify key headlines about the areas principle habitats, species and natural resources
- Introduce a strategic framework for nature conservation, recovery and ecosystem services, to realise benefits to nature.

Mapping has included:

- The 8 Broad Habitats (UK National Ecosystem Assessment framework);
- Peat;
- Habitats of principal importance (Section 7 Environment (Wales) Act 2016), based on Landcover mapping 2020 and Phase I habitat mapping;

- Species of principal importance (Section 7 Environment (Wales) Act – based on Local Record Centre data 2025;
- SSSI protected sites;
- Priority Ecological Networks (PEN);
- River catchments.

Limitations - The report provides a strategic analysis and not a full baseline record of the areas habitats, species, natural resources and conservation interests. Mapping data is only a snapshot in time. Some of it is quite dated - Phase 1 habitat mapping is based upon field surveys before 1997 and others are an interpretation - Landcover mapping 2020 based upon satellite imagery. Mapping however does allow extents, spatial relationships, diversity and networks to be analysed and for themes to emerge.

Ffridd – an important cultural landscape of Wales has yet to be mapped for GIS purposes. As a mosaic of several habitats, defining its extents would require a combination of Phase I habitat mapping interpretation, aerial photography and field checks. This has been beyond the scope of this report.

To review, quantify and analyse the full range of species of principal importance would require a scale of work beyond the scope of this report. The link between landscape, the habitats and bird species they support has strong visual and cultural resonance and is one that specialists and non-specialists would both grasp. Bird species have therefore been analysed.

Ecosystem functions of the National Park Candidate Area

8 broad habitats (developed for the UK National Ecosystem Assessment and adopted by the Office for National Statistics) provide the high level framework in Wales for understanding the natural environment. The State of Natural Resources Report (SoNaRR) 2020⁸ links the broad habitats to the ecosystem services they support. Below are the key points relevant to the NP.

Mountains, moorlands and heaths

Although they are sparsely populated, upland habitats contribute to the functioning of social and economic systems in many ways. They are cultural distinctive landscapes and part of Wales national identity. They have an important role in:

- storing water, reducing flooding downstream and maintaining river base flows during periods of drought;
- water purification, carbon storage and carbon sequestration;

⁸ The State of Natural Resources Report (SoNaRR): Assessment of the Sustainable Management of Natural Resources. Technical Report. Chapter 5. Well-being in Wales.

- Although characterised by their species-poor habitats, they are known for charismatic species, such as black grouse and curlew;
- people are more likely to identify mountains and moors as the places they would like to visit more often for recreation.

Semi-natural grasslands

Semi-natural grasslands are mostly still within farming systems, but are distinguished from the improved grasslands of enclosed farmland by their history (lack of recent cultivation, re-sowing or heavy fertilisation) and lower-intensity management. Calcareous, neutral and acid grasslands support rare and declining species.

- their high floral diversity is essential for conserving pollinators - vital for both crop and wild plant reproduction;
- they contribute to climate regulation through sequestration and storage of carbon and other greenhouse gases;
- they contribute to the purification of pollutants; and storing seasonal floodwaters – i.e. water meadows.

Enclosed Farmland

Enclosed farmland is largely managed to produce food. It also supports functioning of social and economic systems in a number of ways, being a focal point for relationships within and between rural communities. It supports:

- food production – with a bearing on UK resilience
- supports farming communities on land with challenging physical conditions – 79% of land in Wales is designated as Less Favoured Area (LFA), ⁹
- the Welsh language - the agricultural industry has the highest proportion of Welsh speakers of any sector¹⁰
- Positive land management helps safeguard against soil loss; reduce impacts on water quality from pollution; siltation and localised flooding; reduces emissions of greenhouse gases.

Woodlands

Woodlands contribute to the functioning of social and economic systems and wellbeing in many ways. They are:

- important for carbon sequestration and climate mitigation;
- have a major role in pollination, water cycling and oxygen production;
- contribute to flood and low river flow risk management;
- safeguard soils, contribute to soil formation and nutrient cycling;
- improve air quality and reduce noise pollution;
- help regulate pests and diseases.

⁹ The Farming Sector in Wales Research Briefing July 2022

¹⁰ Farming – Bringing Wales together NFU Cymru May 2017

Freshwater

Rivers, streams, lakes and wetlands are fundamentally important for our survival. They are critically important in supporting the functioning of social and economic systems and our ability to adapt to climate change. They provide:

- Drinking water
- Leisure and the appreciation of water in the landscape - contributing to wellbeing and enjoyment of life
- Are an important ecosystem for biodiversity
- They help to control runoff from the land to rivers, floodplain inundation, groundwater recharge, and water quality
- regulation and supply of water, nutrients, energy flows, solutes, sediments and migratory organisms to ecosystems.

Coastal Margins

Coastal margin habitats make an important contribution to coastal erosion control, species diversity and carbon sequestration.

- dune systems provide coastal flood protection in the face of sea level rise
- this habitat is the setting for many protected sites because of their importance for seabirds, wildfowl and waders;
- an integral element of coastal landscapes and seascapes in Wales which attract a significant number of tourists and provide recreation activities;
- salt marsh captures carbon 40 times faster than woodland;
- salt marsh lamb is a speciality food – markets linked to landscapes.

Urban Environments

Urban environments have their own spatial organisation and distinctive patterns influencing species' behaviour patterns, population dynamics and the formation of communities.

- Green infrastructure - parks, amenity trees and community woodlands, rivers and ponds - can support communities (our social systems), providing opportunities for interaction and engagement;
- this helps to build social cohesion along with improved mental wellbeing and increased physical activity;
- local parks are the most commonly visited places for informal recreation and therefore recognised as important sources of cultural services.

The parallels for communities within the National Park Candidate Area :

- Communities within the rural towns, villages and scattered settlement have the same wellbeing needs as those within urban environments;

- The ease of access to the countryside and the special qualities of the NP, offers potential - the public right of way network, clear signposting, information about walks and sites, visitor management and promotion of responsible access.

Marine Environment

The National Park study area borders the marine environment at Gronant and Talacre Dunes. The statutory legislation behind National Park designations, precludes the marine environment. Marine Conservation Areas and Marine Conservation Plans are the statutory mechanisms within UK by which marine species and habitats of national importance are safeguarded. The Marine environment beyond Low Mean Water therefore lies outside the scope of this report.

The relationship between the National Park Candidate Area's Natural Resources and the Special Qualities

A number of themes emerged as part of the Special Qualities work in early 2024¹¹. The Special Qualities are a way of capturing the essence and different meanings that the National Park Candidate Area landscape holds and are valued, by a range of interests and communities within the area. This helps frame the development of a National Park Authority management plan, which sets out objectives, action and monitoring around specific themes, that support the statutory duties of the designation, and are agreed through a process of local governance and decision making.

The six Special Qualities of the National Park Candidate Area are:

- An inspiring space that promotes mental, physical and spiritual health and wellbeing
- A place with cohesive communities and distinctive settlement patterns
- A story of human interaction with the landscape over millennia
- A home to internationally and locally important species and habitats
- A distinctive, complementary and contrasting landscape
- A landscape providing benefits beyond its borders
















Natural Resource headlines

The table below illustrates the relationship between the 8 Broad Habitats and the habitats of principle importance (Section 7 list habitats) that lie within the National Park Candidate Area.

Habitats of principle importance, are the specific habitat types that are deemed critical for biodiversity conservation in Wales and are set out in Environment (Wales) Act Section 7 (section 7 list). Peat is included.

¹¹ Identification of the special qualities of the area of search for a potential new National Park in North East Wales Craggatak Consulting 11th March 2024

Table 3: Habitats of principle importance (section 7 list) within the National Park Candidate Area

Broad Habitats	Section 7 list habitats within the NP (Hectares)	% of Wales's resource	
Mountains, moorland, heath	Heather (16,252)	32%	
	Peat (10,720)	12%	
	Bog (66)	0.5%	
	Inland rock (55)	1%	
Woodlands	Coniferous Woodland (10,891)	7%	
	Broadleaved woodland (8,260)	2%	
Seminatural grasslands	Calcareous Grasslands (381)	30%	
	Acid Grassland (37,554)	8%	
	Neutral grasslands (251)	0.3%	
Enclosed farmland	Improved grassland (40,691)	3%	
	Arable and Horticulture (915)	0.2%	
Open water, & wetlands	Freshwater (667)	3%	
	Saltmarsh (178)	0.6%	
Coastal margins	Supralittoral Sediment (197)	1.1%	
	Littoral sediment (554)	1.0%	
Urban/not habitat	Urban (103 ha)	0.1%	
	Rural settlement (888 ha)	0.3%	
The National Park Candidate Area has an area of 117,562 ha (1,176km ²)			

Bird species

Within Wales there are 60 bird species currently on the Red List (of high conservation concern), and 91 species on the Amber List (of moderate conservation concern).¹² The red and amber categories are used to monitor threat of extinction. Species on the green list are considered to be have healthy populations, are stable, with no major threats.

Local Record Centre data indicates the National Park Candidate Area supports bird species at threat of extinction:

37 bird species, 62% of Wales's species on the Red List; and

¹² Birds of Conservation Concern - British Trust for Ornithology 2021

26 bird species, 27% of Wales's species on the Amber List.

The table below lists the species recorded in the National Park Candidate Area and relates them to the habitat they are commonly associated with. Some species require a range of habitats for nesting, shelter and foraging and are recorded against more than one habitat.

Table 4: Bird species of principle importance (section 7 list) at threat of extinction within the National Park Candidate Area

Broad Habitats	Threat of extinction	Bird species
Mountains, moorland, heath (Total 10)	Red list (4)	Black Grouse, Black Redstart, Curlew, Grasshopper Warbler,
	Amber list (6)	Golden Plover, Hen Harrier, Kestrel, Merlin, Red Grouse, Tree Pipit
Ffridd ⁵ (Total 7)	Red list (5)	Linnet, Ring Ouzel, Skylark, Tree Pipit, Yellowhammer
	Amber list (2)	Sparrowhawk, Twite
Woodlands (Total 12)	Red list (7)	Cuckoo, Honey-buzzard, Lesser Spotted Woodpecker, Spotted Flycatcher, Tree Pipit, Turtle Dove, Wood Warbler
	Amber list (5)	Bullfinch, Dunnock, Hawfinch, Marsh Tit, Sparrowhawk
Wet woodland ⁵ (Total 3)	Red list (3)	Lesser Spotted Woodpecker, Marsh Tit, Willow Tit
	Amber list (0)	-
Hedgerows ⁵ (Total 4)	Red list (2)	Grasshopper Warbler, Yellowhammer
	Amber list (2)	Bullfinch, Dunnock
Enclosed farmland / Semi natural grassland (Total 16)	Red list (10)	Cuckoo, Grasshopper Warbler, Grey Partridge, Lapwing, Linnet, Starling, Tree Sparrow, Turtle Dove, Yellowhammer, Yellow Wagtail
	Amber list (6)	House Sparrow, Marsh Harrier, Quail, Skylark, Snow Bunting, Wryneck
Open water, & wetlands (Total 8)	Red list (5)	Bittern, Grasshopper Warbler, Lapwing, Linnet, Yellow Wagtail
	Amber list (3)	Black-tailed Godwit, Green Sandpiper, Marsh Harrier

Coastal margins (Total 17)	Red list (8)	Bar-tailed Godwit, Black-headed Gull, Herring Gull, Linnet, Little Tern, Long-tailed Duck, Ringed Plover, Roseate Tern
	Amber list (9)	Chough, Common Scoter, Lapland Bunting, Little Gull, Mediterranean Gull, Red-throated Diver, Skylark, Snow Bunting, Twite
Urban/not habitat	-	Not assessed

Species on the Green List have not been recorded for analysis. This will explain the absence of notable raptors from the table and those becoming more familiar in north Wales - such as the Red Kite.

Ruabon Mountain is home to 85% of Wales's population of Black Grouse.

3 Important Areas of Curlew (ICA) lie within the southern Clwydian Hills, Llandegla Moor, Llantysilio and Ruabon Mountain, Ceiriog valley uplands and the Berwyn. 57 breeding pairs were recorded in 2024 across the 3 ICAs, potentially 13% of the Welsh population.

Conservation and Nature Recovery frameworks at play in the National Park Candidate Area

Protected Sites

There is considerable overlap between SSSI UK designations and SPA and SAC European designations within the NP, with some minor differences in extents and boundaries. The analysis of SSSIs below illustrates the proportion of the NP that has statutory protected sites rather than an absolute figure. If all 3 designations were merged the area of NP with protected sites would slightly increase.

There are 16 SSSI designations covering an area of 32,498ha. This is 14% of Wales SSSI, compared to the average of 12% for the country. 72% of the NP is not within an SSSI.

Site name	ha
Gronant Dunes and Talacre Warren	519
Prestatyn Hillside	24
Graig Fawr	25
Moel Hiraddug a Bryn Gop	51
Alyn Valley Woods and Alyn Gorge Caves	191
Cambrian Quarry, Gwernymynydd	23

Bryn Alyn	43
Eryrys Grasslands	73
Graig, Llanarmon-yn-Ial	22
Craig Adwy-wynt a Chowed Eyarth House	67
Llandegla Moor	565
Ruabon / Llantysilio Mountains and Minera	4,769
Dinas Bran	40
River Dee	1487
Berwyn	24,192
Chirk Castle and Parkland	307

There are a number of public bodies, 3rd sector bodies, voluntary groups and land managers carrying out conservation work within the National Park Candidate Area study area (see section 7.0 Case Studies):

- Clwydian Range and Dee Valley National Landscape
- Natural Resources Wales – Protected sites, LIFE Dee River project and forest parks
- Local Authority Countryside Services
- National Trust - Graig Fawr and Chirk Castle
- North Wales Wildlife Trust – Nature Reserves
- RSPB – Llyn Vyrnwy, Berwyn, Ruabon Mountain and Gronant Dunes
- Woodland Trust
- Groundwork
- Game and Wildlife Conservation Trust

Collaboration and partnership working takes place across all groups – for capacity building, making the most of resources, local knowledge and expertise.

Agriculture

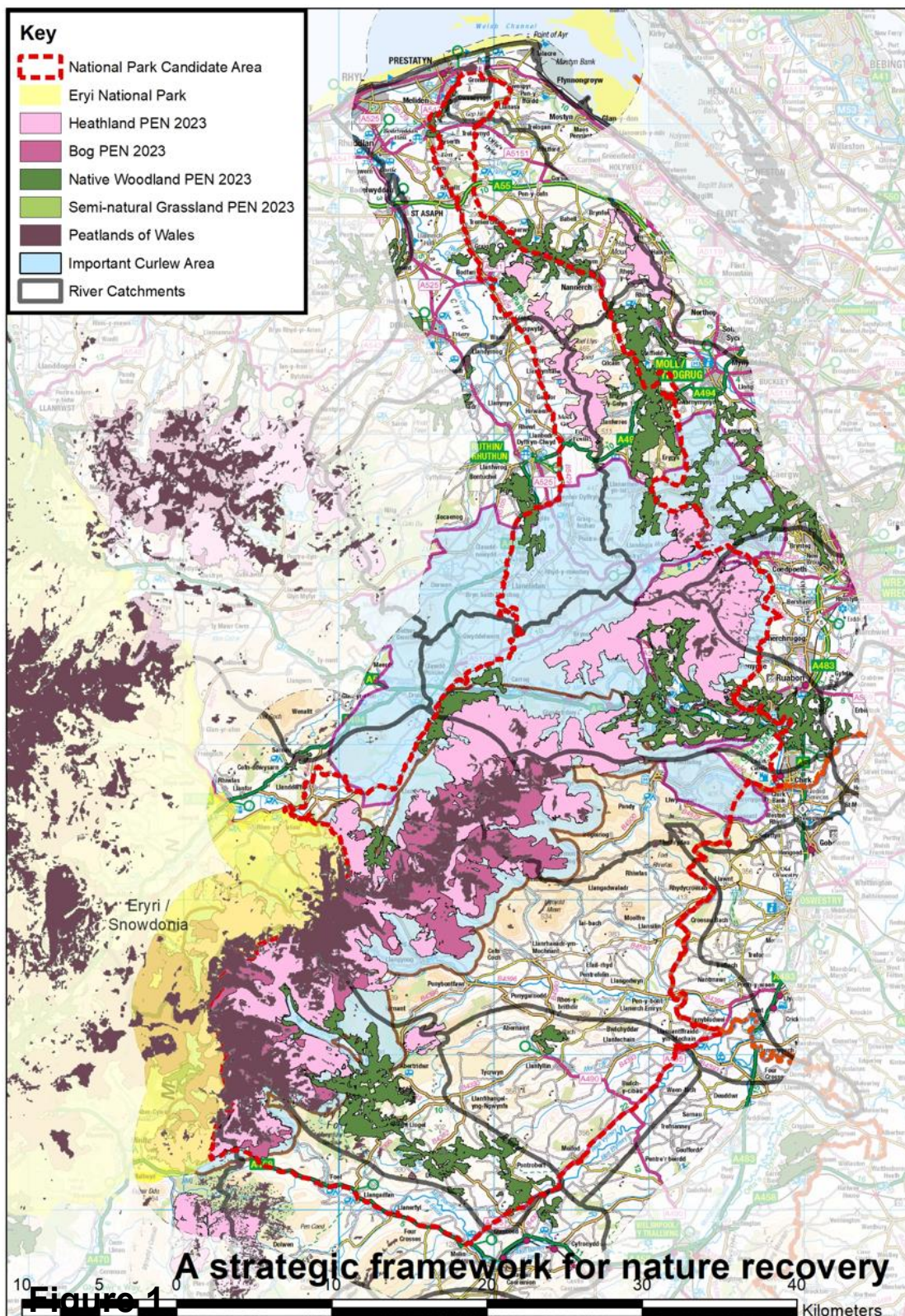
Enclosed farmland makes up 10,3313 ha 86% of the National Park Candidate Area. Add to this moorlands, which are part of farm and estate lands - much of the landscape is under private ownership and managed for food production, forestry and some shooting.

- Best and Most Versatile agricultural land (grade 1, 2 and 3a) makes up 9848 ha - 8.4 % of the National Park Candidate Area
- Least Favourable Agricultural land makes up 107,120ha - 92 % of the National Park Candidate Area

- Not surprisingly Arable and Horticulture land use is very limited within the National Park Candidate Area

A strategic framework for nature conservation, recovery and ecosystem services

Figure 1 below illustrates the pattern and extents of some headline natural features of the area, to explain some of the functional links between habitats, natural resources and ecosystem services the National Park Candidate Area supports. It in turn presents a strategic framework for nature recovery.



Contains OS data © Crown copyright and database right. All rights reserved. Ordnance Survey Licence number AC0000849444. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number AC0000849444. Crown Copyright and Database Right. © RSPB 2023. © Denbighshire County Council. © Copyright Brecon Beacons National Park. © 2023 Game & Wildlife Conservation Trust © Copyright 2023 Elan Valley Trust. © Welsh Ornithological Society. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number AC0000849444. Crown Copyright and Database Right. © Welsh Government. © Cranfield University. © OS. © NRW. © BGS

Priority Ecological Networks mapping (PEN) for heath, bog, woodland and semi natural grassland illustrate the spatial extents to target ‘better, bigger, more connected land management - to help address nature decline and improve the resilience of biodiversity and ecosystems.

Mapping shows the importance of the Clwydian Hills, Llantysilio Mountain – Ruabon Mountain, the uplands of the Ceiriog Valley and the Berwyn are for Curlew habitat. The upland moors within these areas are similarly important for Grouse.

The mapping of peat illustrates its extensive cover in the Berwyn and Ruabon Mountain. This underpins the heathland and bog habitats that in turn support curlew and grouse.

The mapping of river catchments illustrates how peat in the Berwyn and Ruabon Mountain capture and hold rainfall in the upland catchments of 6 rivers – the Clwyd, Alyn, Clywedog, Ceiriog, Seven and Dee and how the other PEN habitats contribute to water capture and slowing the flow. Communities within the river valleys below benefit from flood prevention and the process of ground water recharge / water quality is supported.

Beyond the Boundary

There are a some notable areas of habitat and species beyond the boundary of the National Park Candidate Area. Figure 1 shows features within 5km of the National Park Candidate Area. This distance allows habitat networks to be identified - taking in the full extents of the Vale of Clwyd to the west, the coastal margins and maritime habitats to the north and Halkyn mountain to the east.

To the north, the coastal margin is only a narrow strip of land, but mapping of habitats of principle importance, bird species and SSSI designation, point to a landscape of significant conservation value and presence of Natural Beauty – an experience of wildlife and distinctive semi-natural coastal landscape. Salt marsh also sequesters carbon and the dunes provide coastal protection.

PEN mapping, shows woodland corridors along valley systems and some higher ground. There are a number of locations where the priority ecological network relies upon linking core sites within National Park Candidate Area to those outside.

In the southern Berwyn, the upland ridge forms the boundary between Eyrir National Park and the National Park Candidate Area. The conservation and restoration of peat, heathland, bog, black grouse and curlew habitat are shared interests.

The National Park Candidate Area includes major extents of 3 important curlew areas. There are areas to the west of the National Park Candidate Area within the Upper Dee Valley and to east, south of Mold that require targeted management for this endangered species.

Looking at more place specific examples of what a National Park Authority could support, we include 2 examples below:

Peatland

The designation of a National Park has the potential to manage a significant area of upland peat, moor and heath within the Berwyn for nature recovery, ecological resilience and benefits to WFG.

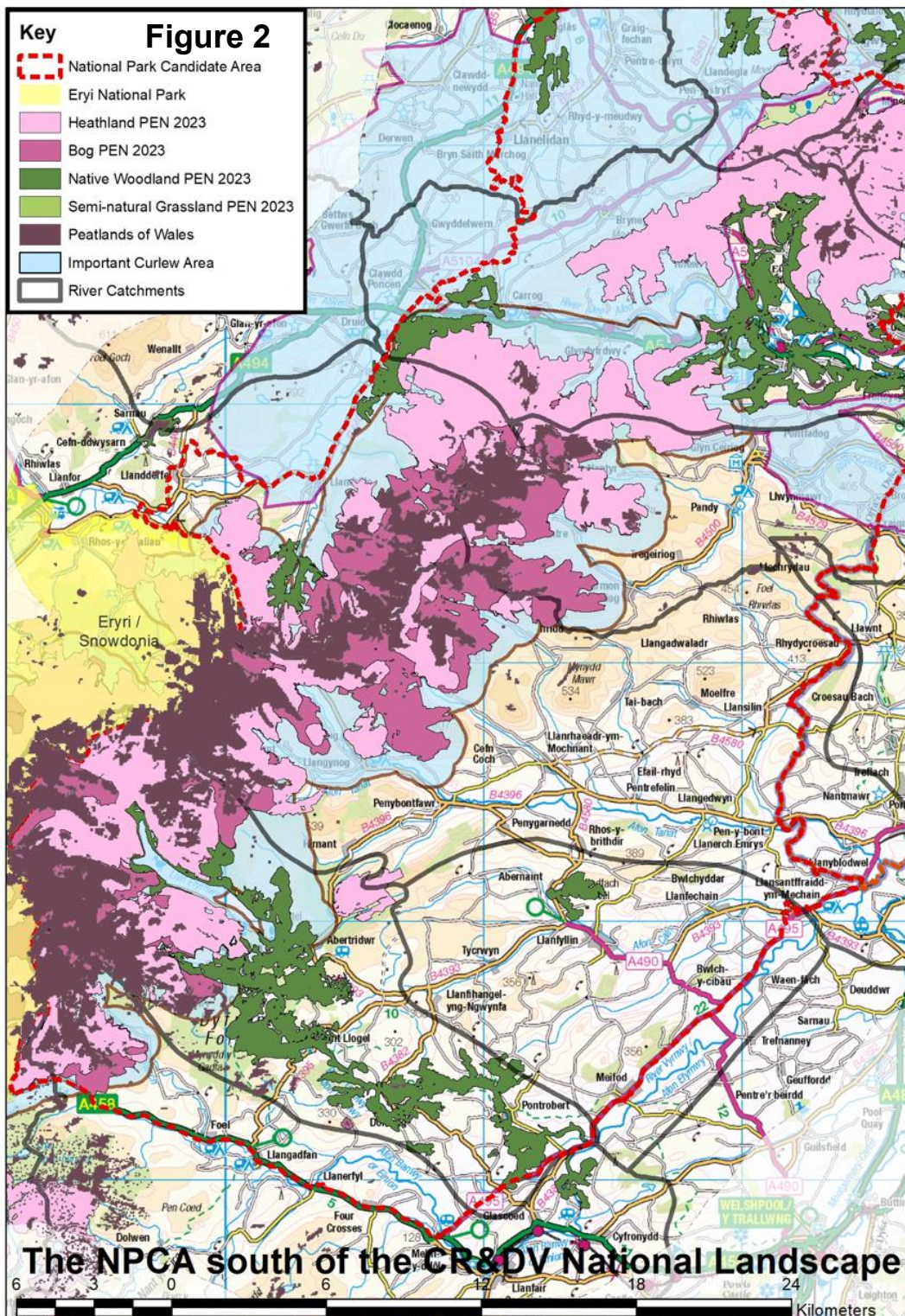


Figure 2: The distribution of Peat within the Berwyn SSSI, lying outside of existing designated landscapes the Clwydian Range and Dee Valley National Landscape to the north and Eryri National Park to the west.

Peat provides essential ecosystem services:

- It is our largest carbon store of terrestrial resources;
- it filters water providing clean water;
- it absorbs and holds water in the uplands controlling water released into tributaries and rivers – with a valuable flood management function to the settled valleys below;
- It supports a range of habitats of principle importance – blanket bog, dry heath and freshwater water bodies; which in turn support species that are rare, threatened or declining¹³ - golden plover, lapwings, black grouse, curlew, large heath butterfly, sundews, bog rosemary and sphagnum mosses.



Bog rosemary, heather, cottongrass and sphagnum moss at Moel Sych in the Berwyn.
Source: National Peat Action Programme

¹³ IUCN Peatland Programme [Peatland Benefits | IUCN UK Peatland Programme](#)



Recent wildfires in mid Wales have shown the significant benefits of peatland restoration, with rewetted peatland at Llyn Gorsat acting as an effective firebreak.

Source: National Peat Action Programme

Peatland management and restoration projects are underway in the Berwyn, but given the scale of the landscape are scattered and currently limited in extent:

- Clwydian Range and Dee Valley (CR&DV) National Landscape is at work in the northern Berwyn – the upper slopes of the Vale of Llangollen within the National Landscape.
- NRW protected sites officer are developing measures within the Berwyn SSSI to control off road vehicle erosion of peatland habitats along the Wayfarers track above the Ceiriog Valley, remove self-seeded conifers, carry out rewetting and restoring bog and heath habitats.
- RSBP are working in the uplands of Ruabon Mountain and above Llyn Vyrnwy to rewet and restore peatland habitats and improve habitat for Black Grouse (see section 7.0 case study).
- The National Peat Action Programme (NPAP) has a strategic national role to support the local Wales Peatland Action projects across the country, some managed by us and others by external partners. NPAP is funding peatland projects developed by NRW, RSPB and the CR&DV.

The inclusion of the Berwyn within a designated National Park would create the opportunity to take a landscape scale approach to nature recovery and improving the resilience of ecosystems:

- An integrated approach to development of a statutory management plan, nature recovery plan and practical management of the issues and opportunities.
- Longterm funding bring capacity (officers, funding and long term statutory remit);
- a co-ordinating role to work with existing initiatives and bring together new partnerships; manage the production of the Nature Recovery Action Plan with all interests;
- Work with the National Peat Action Programme to draw funding and deliver peat conservation and restoration;
- National Park farm advisors - to encourage benefits for nature alongside continued farm economics; to help farmers navigate and realise funding opportunities through Ffermio Bro and Sustainable Farming Scheme through farm clusters projects.

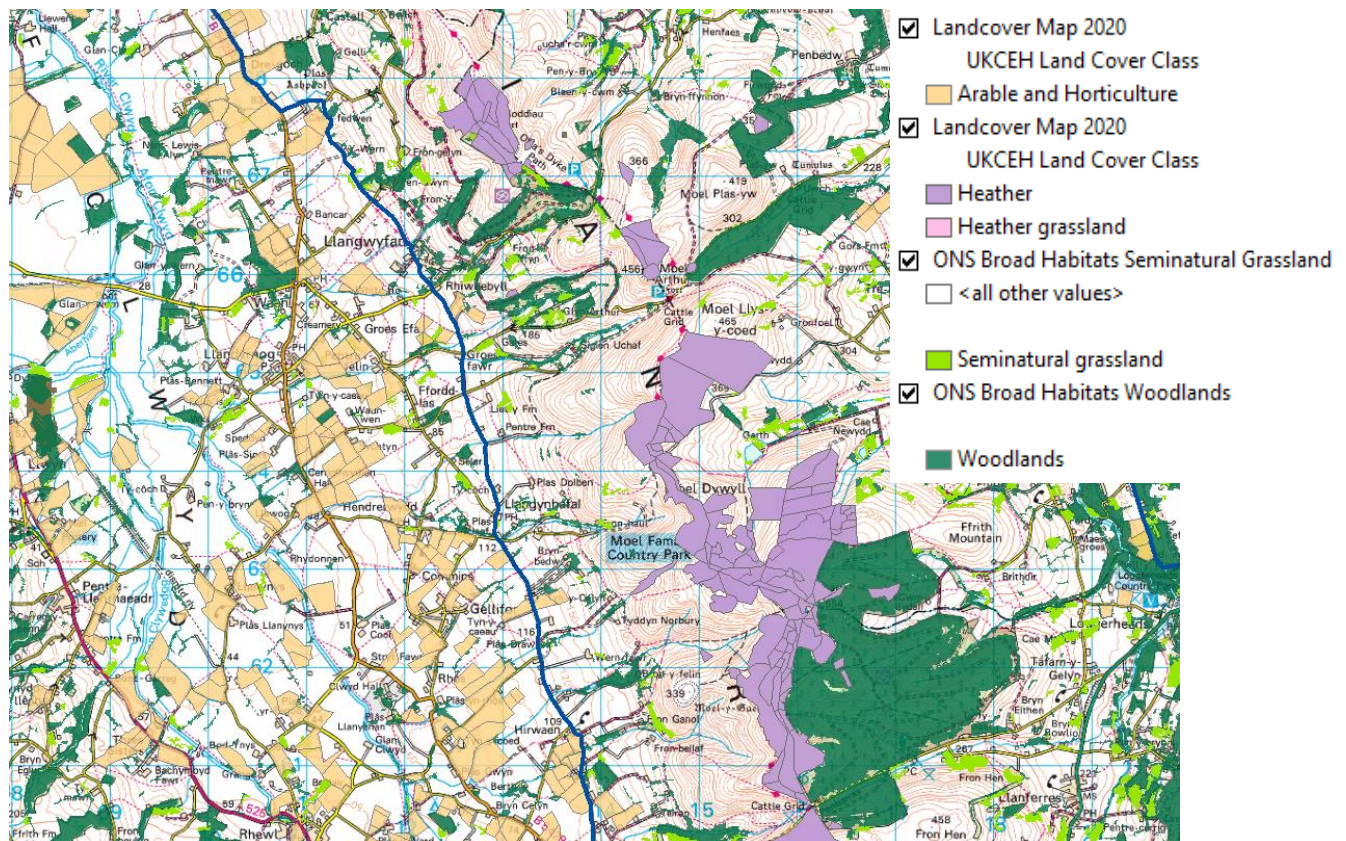
Rewetting of peatlands not only benefits it's carbon storage function and the range of rare habitats and species it supports, but also helps safeguard against wildfires, that are becoming more frequent with climate change.

- Rewetting and management of the uplands becomes a preventative measure to protect nationally important carbon stores and avoid carbon release.
- Water storage in the uplands through peat rewetting, new ponds, leaky dams in headwater tributaries, plus new hedgerows and tree belts below Mountain Moor and Heathlands within enclosed farmland – all contribute to holding and slowing the flow of rainfall.
- The communities of the Ceiriog Valley, Dee Valley, Tanat Valley and Vyrnwy Valley (to a lesser extent due to the dam and straining tower at Llyn Vyrnwy) benefit from reduced peak flows and flash floods along rivers.

Pollinators

The soils of the Vale of Clywd are best and most versatile agricultural land grade 1, 2 and 3a, and support far more arable farming than the uplands of the National Landscape to its east. The National Landscape does however contain a range of habitats (heather, semi-natural grasslands, hedgerows, fresh water and woodland edges) that provide a home for insects within close enough proximity to the vale to help pollinate its crops.

Figure 3 Habitats of the National Park Candidate Area and their contribution to pollination



© UKCEH. © CNC/NRW. Contains Office for National Statistics information © ONS. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number AC0000849444. Crown Copyright and Database Right. Contains OS data © Crown copyright and database right. All

7. Case Studies

We requested case studies to highlight some of the positive work being carried out within the National Park Candidate Area and wider areas of Wales. There is considerable expertise and experience evident, held by different public, 3rd sector organisations, individuals and volunteer groups. It illustrates there are many ways of working and many shared spaces where collaboration takes place. To address nature recovery and national trends in decline, there is however a need to do more of this at scale and at speed.

1. Curlew Connections Wales - CR&DV National
2. Dark Ecological Networks - CR&DV National
3. Sustaining the uplands of Northeast Wales for Black Grouse - RSPB
4. Brynau Farm woodland creation - Woodland Trust
5. Caedicws Farm - Nature friendly farming
6. Ffermwyr yr Wnion - Eryri National Park
7. Llanfair Fyw volunteers

Case study 1: Curlew Connections Wales

David Sheil – Area Manager Clwydian Range and Dee Valley National Landscape

<https://www.gwct.wales/curlew-connections/>

Curlew Connections Wales is a partnership of Clwydian Range and Dee Valley National Landscape, Game and Wildlife Conservation Trust and Bannau Brycheiniog NPA, working across 3 Important Curlew Areas across Wales. It is funded through the Nature Networks programme for a 3 year period – 2023 to 2026.



The Clwydian Range and Dee Valley has been working in Important Curlew Area ICA5 - South Clwyd Mountains and Dee Valley, which includes areas of the National Landscape and areas beyond the boundaries - into the Ceiriog Valley, Upper Dee valley and Ederynion.



The project aims to work with farmers and local communities to tackle the key issues driving the low breeding success of curlew in Wales, monitoring and understanding curlew populations within these Important Curlew Areas, implementing nest protection, predator management as well as habitat works.

Key work has been to survey across the project areas to locate curlew during the breeding season (March – August), to understand potential breeding sites and breeding status. Working with landowners electric fences have been installed around the nest to reduce potential predation and disturbance from livestock

The project has also supported and funded farmers to carry out positive habitat works including:

Delay cutting/grazing – payments for delaying agricultural activities where nests or chicks are present.

Manage and improve suitable habitat including scrub, bracken and rush cutting – maintaining open grasslands or moorland habitat.

Scrape creation and maintenance – creating wet features in the landscape to provide food sources for chicks and adults.

Predator management – targeted control of crows and foxes within curlew breeding territories.

In ICA 5 – South Clwyd Mountains and Dee Valley - the project has engaged with 41 individual farms and identified around 38 different curlew breeding territories.

It has carried out habitat improvement works including rush cutting across 140 acres on 13 individual farms.

A key part of the project has been to engage with and involve communities in the issues affecting curlew. In ICA the team are working with the help of 22 volunteers supporting survey work and nest finding. More widely the project has engaged 11,836 people in a range of events to promote curlew conservation and issues affecting their survival.

Case study 2: Dark Ecological Networks

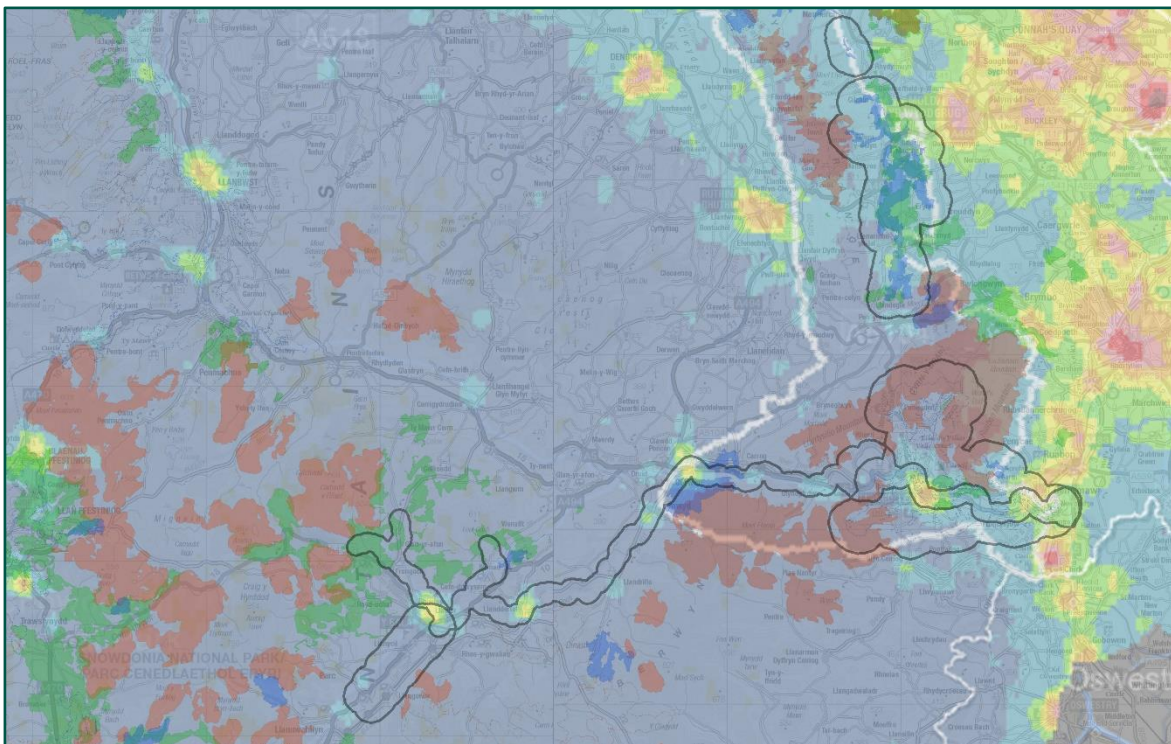
David Sheil – Area Manager Clwydian Range and Dee Valley National Landscape

Funded through Welsh Government Sustainable Landscapes Sustainable Places Programme, the Clwydian Range and Dee Valley National Landscape (Lead Partner) has worked with all other Designated Landscapes in Wales.

Background

Light pollution is a significant threat to a variety of species in the UK, affecting their behaviour, reproduction, and survival. The project is working to improve the condition and resilience of Dark Ecological Networks (DEN), focussing on nighttime connectivity of protected sites in and around the four Designated Landscapes.

The project has brought together Priority Ecological Network mapping and light pollution mapping to identify areas of most concern and to prioritise interventions.



Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Earth Observation Group information © Earth Observation Group, Payne Institute for Public Policy. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number AC0000849444 . Crown Copyright and Database Right. Contains OS data © Crown copyright and database right. All rights reserved. Ordnance Survey Licence number AC0000849444.

The project has focussed on replacing lights that are having detrimental impact on ecological connectivity and causing light pollution more widely. Working with lighting specialists the project has developed solutions to specific lighting needs across a range of sites, including school grounds, sports fields and commercial premises where lighting from these areas presented blocks to night-time connectivity.

Ruthin Sport Ground is an example of the project working beyond the boundary of the designation to address issues that affect the Special Qualities of the National Landscape. The Sports grounds include a number of Tennis Courts, Rugby fields and a golf driving range. The project brought together lighting specialists, the local community sports clubs as well as the sports governing bodies, LTA and WRFU to find solutions to delivering appropriate lighting standards within ecological and dark sky friendly limits.

The Rugby Club pitch lighting was changed to achieve fully shaded, fully controllable lighting at the right colour temperature and achieved a 45% reduction in energy.

The Ruthin Tennis club replaced lights over 6 courts – fully shaded, fully controllable with appropriate colour temperature for biodiversity and achieved a 62% reduction on energy and carbon costs.



Existing lighting - showing glare, light trespass and cool white lighting



Replacement lighting - fully shaded with 3000K colour temperature

Case study 3: Sustaining the Uplands of Northeast Wales for Black Grouse

Anya Wicikowski - RSPB Conservation Officer North Wales Moors Priority Landscape



Source: Andy Hay

Black Grouse were once resident breeders in all Welsh counties except Anglesey, Pembrokeshire, Glamorgan and Monmouthshire, as recorded in the Welsh Bird Report in 1976. In 1968-72 they occupied 7,210km squares in Wales. Between 2020-24 it was just 13 kms.

Today Black Grouse are found almost exclusively in designated areas including just a handful of Sites of Special Scientific Interest and one National Landscape. Working alongside our partners, landowners and farmers, RSPB is implementing a project to help reverse this downward trajectory. Now in its second year, this two-year initiative is funded through the Nature Networks Fund, a Welsh Government fund administered by National Heritage Lottery Fund.

The project aims to demonstrate how managing land for Black Grouse delivers multiple benefits including biodiversity enhancement, carbon sequestration, water quality improvement, flood mitigation, wildfire prevention and cultural heritage preservation.

Highlights so far include:

Delivering a contract alongside Natural Resources Wales (NRW) to remove invasive Sitka Spruce from almost 400 hectares of Blanket Bog and Dry Heath;

Working with the National Peatland Action Programme to restore over 20 hectares Blanket Bog, and facilitating the grazing of uplands with landowners by using innovative no-fence collar technology on cattle;



We are conducting a comprehensive monitoring programme to evaluate the project's success on the North Berwyn SSSI (SPA, SAC) where habitat management and restoration are creating the mosaic environment that Black Grouse and other priority species require;

We will continue engaging stakeholders in developing sustainable upland management approaches and documenting the multiple environmental and economic benefits of these conservation efforts.

Key achievements

Successfully tested a new approach to block peat pipes, which had been draining the Blanket Bog.

Creating a partnership vision for the uplands of Northeast Wales.

Challenges

The process of cultivating broad stakeholder commitment revealed valuable insights about effective collaboration across different organisational cultures and values.

The extended timeline for the Sustainable Farming Scheme rollout has meant land managers have been unwilling to commit to changes while uncertainty remains about the direction of policy.

Case study 4: Brynau Farm woodland creation – Coed Cadw / Woodland Trust

Vanessa Burton – Conservation Advisor woodland Trust

VanessaBurton@woodlandtrust.org.uk

Brynau Farm is Coed Cadw's largest woodland creation project to date. It is near Neath in the south Wales valleys and has seen around 150,000 trees planted, on 42 ha, as part of Welsh Government's PLANT! Scheme, which aims to plant a tree for every child born in Wales. Planting took place in 2020 and 2023.

Brynau links ancient woodland sites and includes orchard, parkland, avenue and hedgerow trees.

A diverse range of native tree and shrubs species were planted to suit acid soils and wet woodland communities.

The new native woodland is expected to provide multiple benefits to the community of Neath including - natural flood management, biodiversity enhancement, carbon capture and accessible greenspace.

Case study 5: Caedicws Farm - Ceiriog Valley

Claire Whittle – Working Farm Manager

Claire - a practising Farm Animal Veterinary surgeon and consultant advising farms transitioning towards agroecological practices, took over the management of the farm in October 2024, with the aim make Caedicws a blueprint for livestock farming in the uplands of Northeast Wales.



The overarching ethos is to build a nature-friendly, climate resilient farm, without the use of chemicals, artificial fertilisers, herbicides on grassland and chemical antiparasitic products on livestock.

Regenerative grazing practices for longer sward structure means that there is a large population of voles feeding Kestrel, Red Kite, barn owls and both short- and long-eared owls. Spiders and other insects are already making use of the tussocky grass formations.

Goldfinch are often spotted feeding on thistle seedheads in the fields and other small birds seen at the farm include Stonechat, Redstart, spotted flycatcher, redwing and skylarks to name a few.

The longer sward, means that the biomass above the ground is the same as the biomass below, both breaking up compaction and also allowing slower infiltration of water. A fully covered soil means there is less risk of run-off to waterways, less risk of drought and that soil at the base of the grass plants remains cooler, meaning livestock will be better able to dissipate their heat when they lie down on it. Grazing will be managed rotationally to allow grasses to develop to full maturity and reseed naturally.

Hedgerows on the farm currently require both replanting and restoration. Hedgelaying began in earnest this year and three hedgerows have been replanted with funding from the Woodland Trust.



Claire's vision for the farm

Another aim of the farm is to include the community as much as possible and we ran several volunteer hedge planting days throughout January and February, with an orchard planting day on the horizon.

The new hedges contain a mixture of species including haw and blackthorn, wild cherry, crab apple, hazel, dog and guelder rose. This is to attract more wildlife than the single-species hawthorn around most of the farm. This orchard will consist of cider, perry and eating apple trees and will, in the future, be used for poultry which, as jungle fowl, will benefit from the cover of trees. An important welfare consideration for free-ranging birds.

There is an area of Ffridd on the farm comprising approximately 10 acres which has some natural regeneration of trees including Rowan, willow and hawthorn. There is also a lot of bracken in here, which again, we hope to manage with both pigs and cattle, although there is a significant amount of fencing which needs to be undertaken prior to this. Small patches of gorse and rush abound with yellow meadow anthills found in the bottom of this area.



Areas of wetland are suitable for curlew, which nest in this area of the valley and the plan is to extend these wetland areas by creating more scrapes and ponds.

This will benefit not only the wildlife and birds but also ensure we can hold more water on the land to future-proof against drought and reduce the risk of flooding downstream. A problem which is only getting worse in the Ceiriog Valley. The planting of more hedgerows and trees will further mitigate this.



The long term vision is that Caedicws Farm is a patchwork of hedgerow wildlife corridors, recreating messy woodland edge for a variety of wildlife, which will also provide a diverse range of fodder for livestock and both shelter and shade in a changing climate.

This will all hopefully link up to an area of about 40 acres of steep woodland that runs directly down to the Ceiriog river. This woodland comprises a mix of broad-leaved trees which is not currently grazed and a mixed array of epiphytic species of lichen, moss and fungi and a wide variety of flowers/shrub and ferns. Marsh woundwort, wood sorrel, scarlet elf cup fungi and polypody fern are amongst them.

From a business perspective, the aim is to establish a herd of native cattle, which are conducive to this environment. These will be sold for meat. In order to diversify both from a grazing and business perspective, we hope, in the future to collaborate with new entrant farmers to introduce different livestock classes, i.e. pigs, sheep and poultry, but also to develop a market garden on site with the possibility of allotments for the local community.

Footpaths run through the farm and encouraging use of these is paramount to foster a link between the public and a positive farming culture. We also hope to be able to run wildlife events in the future.

The buildings at Caedicws require some renovation to turn them into the events space we hope for and collaboration and support from external funding providers will be critical here.

Case study 6 : Ffermwyr yr Wnion - Eryri National Park

<https://www.nffn.org.uk/farmer-stories/ffermwyr-yr-wnion-climate-action-group-project>



The Eryri National Park nature friendly farming network project officer worked closely with the farmers to facilitate this WG funded project, that brought about the planting of 7,725 metres of hedgerow across 10 farms between 2021 and 2022.

This project delivers climate action through nature-based solutions that also benefit biodiversity recovery. Hedgerows provide necessary corridors of food, shelter and travel for wildlife, while flood pools support aquatic wildlife. Controlling non-native invasive species, such as Japanese Knotweed, allows important riparian species to re-establish, whilst blocking man-made drains on upland peatland helps restore an extremely valuable habitat.

Case study 7: Llanfair Fyw Volunteers

Phill Benett-Lloyd – Volunteer, fund raiser and environmental conservationist

The Llanfair Fyw group of volunteers, supported through North Wales Wildlife Trust (NWWT) is a well-established group, undertaking tasks on the NWWT Nature Reserves at Cilygroeslwyd Woods, Eyarth Woods & Rocks & Craig Adwy-wynt SSSI (all within the National Park Candidate Area) and a range of eco-connectivity initiatives across the Vale of Clwyd, including school projects, fencing, hedge-laying and planting and building connections with Llysfasi Agriculture College.



The view from Graig Wyllt over the Vale of Clwyd towards Lanfair Dyffryn Clwyd and Coed Cilygroeslwyd



Recent woodland planting – part of developing ‘stepping’ stones and ‘joining the dots’ for nature across the vale, through conversations with landowners



Blue bells, wood anemone and hazel coppice - ancient semi-natural woodland along the hills slopes of Graig Wylt

Lessons learnt

Nature reserves cannot flourish in isolation and need connectivity between sites at a landscape scale. Some resources from the Welsh Govt/Lottery funded (TWIG – The Woodland Investment Grant) project at Graig Wylt were available to enhance adjoining and nearby land. Other opportunities (such as through KWT) were taken to engage with local schools, including tree and hedge planting and site trips, all supported by volunteers from the Llanfair Fyw group and NWWT staff. Achieving progress at a more strategic scale is, however a much longer term ambition, requiring both policy support and co-ordination of more sustained and carefully targeted resourcing, enabling the grass-roots initiatives that tap into local knowledge, skills and enthusiasm to bring about more impact / effectiveness / longevity and sustainability.

Opportunities

The Llanfair Fyw group has a strong core of volunteers who undertake a wide range of work on the reserves and beyond, from practical tasks to preparing interpretation material and supporting visitor days and school trips. Several other funding streams have been used to enable wider initiatives to be delivered, including Welsh Govts NFM accelerator fund, Woodland Trust Morehedges support. Hopefully more can be done through the forthcoming Sustainable Farming Scheme, especially within the collaborative layer, where the local connections and insights could greatly assist with the targeting of these funds. Several of the Llanfair Fyw volunteers have also supported work through the Ramblers to re-open overgrown public rights of way and improve access for all, replacing stiles with kissing gates etc.

Challenges to the group

Keeping the momentum going requires a strong core of individuals, but also maintaining direction, good will and motivation. The NWWT officers have been instrumental in laying the foundations for the group, but there remains the constant risk that, without sustainable support from multiple avenues, that its capacity and effectiveness may wane. Strategic policy-level support will also enable the group to “push on open doors” and spend more effort on delivery than persuasion.

8. Summary and Conclusions

The purpose of this report is to explain how consideration of nature has informed the National Park designation process and identify some of the key nature and climate issues evident within the landscapes of the National Park Candidate Area, that could benefit from targeted action through a statutory landscape designation.

The National Park programme is developing evidence and making decisions within the framework and statutory purposes of the National Parks and Access to the Countryside Act 1949. The National Park Candidate Area presented at the end of 2024 is the result of

an assessment of Natural Beauty and Recreation¹⁴. Continuity in process is necessary to successfully complete the National Park programme.

Comments received during public consultation on the National Park Candidate Area at the end of 2024 included submissions for excluding some areas and including others. Evidence and substantive points have been reviewed by NRW. A refinement of the boundary is underway, and will be informed by the benefits of nature mapping and analysis.

The findings of this process and any revisions to the boundary will be set out in Boundary Review Report, due to be finalised early summer 2025.

The Environment and Rural Affairs Monitoring & Modeling Programme (ERAMMP) 2025 and SoNaRR 2020 both identified that Wales has a number of habitats in decline or concern. SoNaRR 2020 reported that no ecosystems demonstrate resilience.

The Welsh Government is aware of the urgent need to act in response to the climate emergency and nature emergencies and has strong legislative and policy framework for seeking to address this through the section 6 biodiversity and ecosystem resilience duty and developing resilient ecological networks through the concept of better, bigger more connected – set out in the Biodiversity Deep Dive (BDD) October 2022. The BDD has clear requirements in how designated landscapes are to contribute to 30x30 - protecting and effectively managing at least 30% of our land, freshwater and sea for nature by 2030 (see section 2.0).

The forces for change at play in the area are a complex range of natural and cultural factors. The Climate and Nature emergencies are perhaps the most pressing issues, given the effects of a more unstable environment and declines in the quality of nature and natural resources have upon the Wellbeing of Future Generations.

A range of evidence has been analysed to report on the benefits of nature. This included the 8 broad habitats, below which nest the Section 7 list of habitats, and the Section 7 list¹⁵ species, and natural resources that the National Park Candidate Area are home to.

Mapping indicates the National Park Candidate Area (NPAC) is home to some notable areas of Habitats, Species and Natural Resources of national importance, with a number of species at risk of extinction.

¹⁴ A Proposed National Park for Wales, Evaluation Report - Gillespies, Fiona Fyfe, Countryside October 2024

¹⁵ Environment (Wales) Act section 7 list of principle habitats; and principle species

Strength in diversity

The landscapes of the National Park Candidate Area contain a broad range of Wales's terrestrial and freshwater habitat. Diversity is an important attribute of ecological resilience, for withstanding impacts of climate change, pests and diseases.

Home for a significant percentage of Wales's habitats

The National Park Candidate Area has notable percentages of Wales's heather (32%) and calcareous grassland (30%) habitats. These semi-natural habitats are the home to birds of conservation concern with Black Grouse and Curlew the most iconic of heathland.

These habitats also contribute to the identity and visual distinctiveness of the National Park Candidate Area uplands - the Clwydian Hills, Llandegla Moor, Llantysilio and Ruabon Mountain and Berwyn; and limestone landscapes - Prestatyn, Dyserth and Trelawnyd hillsides; Bryn Alyn and the Eglwyseg escarpment. Their importance for biodiversity recognized by SSSI designation.

A home for species of national conservation concern

The National Park Candidate Area habitats provide a home to birds at threat of extinction, supporting 62% of Wales's Red List bird species; and 27% of Wales's Amber List bird species.

Ruabon Mountain is home to 85% of Wales's population of Black Grouse.

The southern Clwydian Hills, Llandegla Moor, Llantysilio and Ruabon Mountain, Ceiriog valley uplands and the Berwyn are Important Curlew Areas (ICA). 57 breeding pairs were recorded in 2024 across the 3 ICAs, potentially 13% of the Welsh population.

Wider benefits

The National Park Candidate Area contains notable percentages of Wales's Peat (12%). Some of this is on Ruabon Mountain and Moel Fferna (within the existing National Landscape), with greatest extents along the spine of the Berwyn outside the National Landscape. The Berwyn and South Clwyd Mountains SAC has the largest area of blanket bog and European dry heath in Wales¹⁶. Peat occupies 4% of Wales, accounts for 30% of its terrestrial carbon store, but 90% is damaged releasing green house gasses¹⁷. Heathland habitat of the NP also supports 10 bird species at threat of extinction in Wales.

The potential for farming communities and nature recovery to be supported

¹⁶ Core management plan including conservation objectives for Berwyn & South Clwyd Mountains SAC CCW 2008

¹⁷ National Peak Action Programme

Improved grassland and Acid grassland collectively cover 67 % (78,245 ha) of the NP area. The diversity of grassland species is limited in such habitats. Hedgerows, woodland edges, field margins and less intensively managed areas support 16 bird species of conservation concern (10 at risk of extinction) with Skylark and Cuckoo readily recognisable. The continued sustainability of farm economics, rural communities and culture are wrapped up in these habitats. They are also the space within which nature friendly farming and farm collaborative projects can work to help support nature recovery.

The significance of areas on the boundary of the National Park Candidate Area

The coastal margins at Gronant and Talacre Dunes (929 ha) contain several habitats, supporting bird and terrestrial species of national importance and considerable contribution to biodiversity, ecosystem resilience and climate mitigation.

The close proximity of intertidal mud flats, sand dunes, dune slacks, dry heath, marsh, saltmarsh and coastal views, are the reason for the areas wildness, distinctiveness and biodiversity. The habitats support 17 birds of conservation concern, 8 of which are at threat of extinction.

This is the only site in Wales to support Little Tern colony (over 10% of the UK's entire breeding population). This area has the only significant remnant of what was once an extensive dune system along the north coast of Wales. It provides natural coastal flood protection. Saltmarsh also captures carbon 40 times faster than woodland. The dunes and saltmarsh are protected by SSSI.

In conclusion, Designated Landscapes provide opportunities to support nature recovery that differ from other designations, due to statutory remit and funding which allows for long term planning, monitoring, adaptive approaches and continuity:

- Governance and democratic accountability.
- Participatory engagement through the management plan process and education to influence behaviour.
- Strong cultural identities and heritage that can be mobilised to foster a sense of stewardship.
- Statutory planning function (NPAs are the Local Planning Authority for there areas)
- Statutory management plans which are based on a state of area report and reviewed on a five yearly basis.
- Section 6 reporting.
- Nature Recovery Action Plans (NPAs and NLs through their constituent Local Authorities)
- Ffermio Bro bespoke and targeted Designated Landscapes collaborative agri-environment scheme.
- Delivery across multiple, integrated goals, tackling nature recovery from a systemic perspective.

- Access to different funding streams e.g. National Heritage Lottery Fund - Landscape Connections and National Grid Landscape Enhancement Initiative.
- Opportunities for developing ecosystems resilience, greater connectivity, and delivery at a landscape-scale.

The Designated Landscapes provide a different but complementary opportunity as a vehicle for delivery on 30x30, landscape-scale nature recovery and connectivity.

Designated Landscapes are uniquely defined by the dynamic interaction between people, wildlife, and natural systems over time. They differ from protected sites, as lived-in, working landscapes which offer powerful opportunities to deliver nature recovery through inclusive, place-based approaches.

Their strength lies in their ability to integrate ecological goals with cultural heritage, local knowledge, and socio-economic activity enabling collaborative governance, adaptive management, and deeper public engagement. This makes them particularly well suited to drive systemic, landscape-scale change that reflects the values and aspirations of the communities within them.

The Designated Landscapes are closely involved in working with Welsh Government and a wider collaboration of partners to implement and deliver the recommendations of the Biodiversity Deep Dive to deliver on 30x30.

Conclusion

The current trend for nature is negative. With limited alternative solutions, the National Park model offers a powerful, legally supported platform to reverse ecological decline if it integrates local voices, strengthens governance, and attracts sustained investment.

Addendum to Benefits of Nature report July 2025

Addendum date September 2025

This addendum explains where the Benefits of Nature report sits within the timeline of work that progressed to the Proposed National Park boundary for statutory consultation Autumn 2025.

The Benefits of Nature report includes an analysis of natural resources, species, habitats and ecosystems within the project area at the time - the National Park Candidate Area 2024. A 5km buffer around the Candidate Area was included to consider the wider context.

Public consultation feedback on the Candidate Area 2004 provided NRW with a range of points to consider in early 2025.

The environment sector feedback is recorded in the Benefits of Nature Report Section 5. Feedback from wider stakeholder interests are set out in Wales's New National Park Proposal 2024 Public Consultation Report – Resources for Change NRW Report No: 926.

In response to the feedback received during the public consultation, NRW reviewed Gillespie's Landscape Assessment (Natural Beauty and Recreation), the findings of the Benefits of Nature report and undertook a series of site visits.

The Benefits of Nature report Figure 1 - A strategic framework for nature recovery, illustrates an extensive area of heathland habitats and peatlands within the Berwyn uplands. We found that habitats of principle importance were more fragmented and scattered within the adjacent lowlands. The review of evidence concluded that the overall coherence of natural beauty in the lowland areas was not as strong, which resulted in an amendment to the boundary bringing it closer to Y Berwyn.

The Benefits of Nature report records strong evidence of the wildlife and natural heritage value of Gronant and Talacre Dunes (section 8). This gave us reason to revisit this area.

As a result of this process the proposed National Park boundary:

- now includes Gronant and Talacre Dunes.
- has been refined to better capture a coherent area of natural beauty within the area's uplands, intersecting valleys and coastal edge.
- excludes a large area of settled lowlands within Powys.

The 2025 proposed National Park boundary represents a higher bar for meeting the statutory criteria. We consider that the revisions improve the coherence and defensibility of the proposed boundary and enhance alignment with statutory designation requirements.

The extents of the 2025 proposed National Park (927km²) are less than the Candidate Area (1,176km²). The figures recorded in Table 3: Habitats of principle importance (section 7 list) and Table 4: Bird species of principle importance (section 7 list) are therefore higher than would be for the proposed National Park boundary.

The themes set out in section 8 Summary and Conclusions, however remain the same, given they relate to habitats associated with the area's uplands, intersecting valleys and coastal edge components within the proposed National Park boundary.