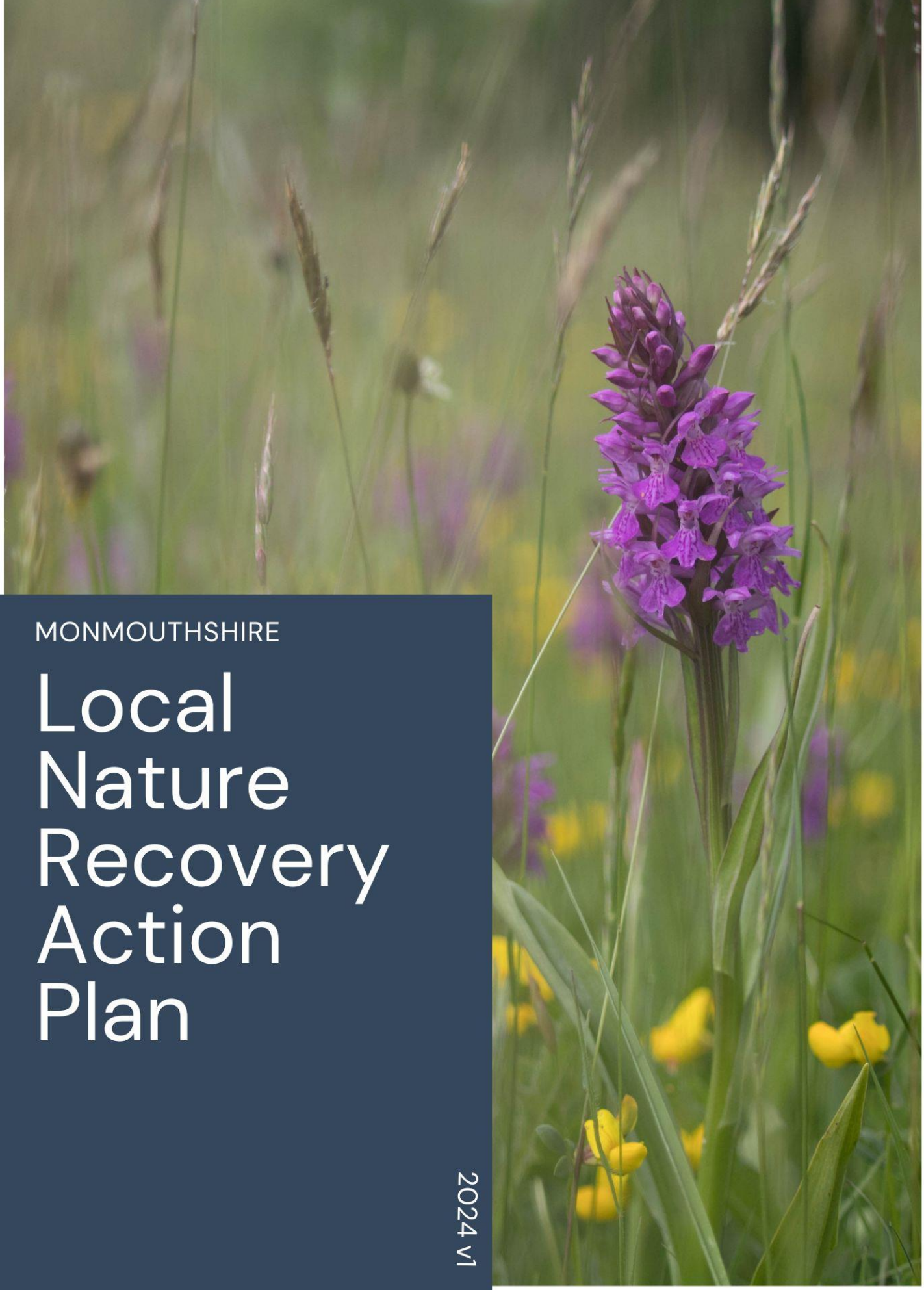

MONMOUTHSHIRE

Local Nature Recovery Action Plan

2024 v1

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Monmouthshire Local Nature Partnership

Partneriaeth Natur Lleol Sir Fynwy

Part 1: Strategy

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1. INTRODUCTION

The Monmouthshire Local **Nature Recovery Action Plan (NRAP)** is a guide to conservation work in Monmouthshire to deliver outcomes to benefit nature recovery. The plan aims to provide practical, achievable actions designed to help reverse the decline in biodiversity and build ecosystem resilience in Monmouthshire. We want to motivate communities to actively contribute to the effective restoration and protection of nature in Monmouthshire.

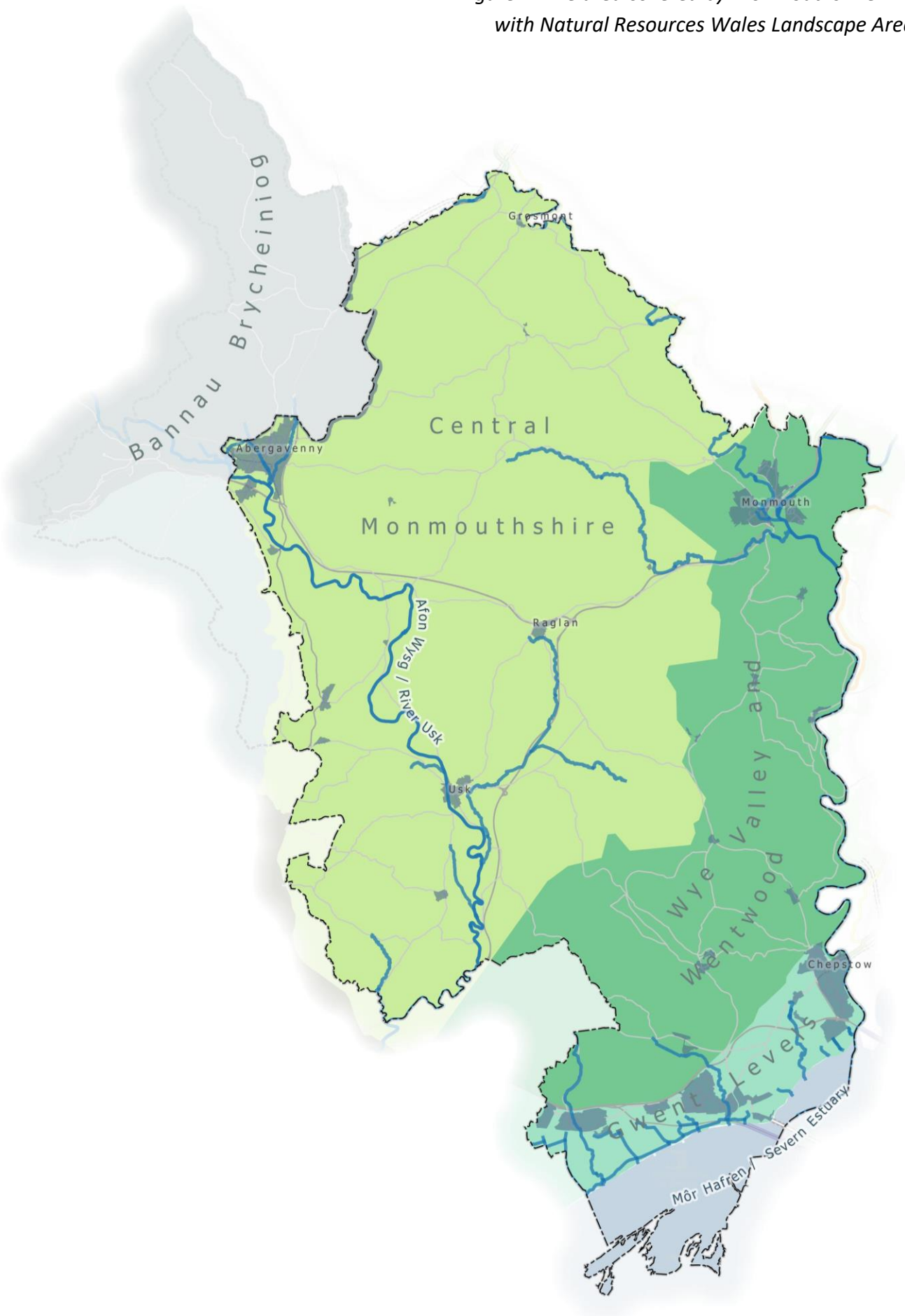
The Monmouthshire Local NRAP has been produced by the Monmouthshire **Local Nature Partnership (LNP)**. The LNP exists to co-ordinate, promote and record conservation actions to promote and enhance nature locally. The Monmouthshire LNP covers the local authority area of Monmouthshire County Council, excluding that in the Bannau Brycheiniog National Park which has a separate Local Nature Partnership and **Local NRAP**. For ease of use we refer to the area covered by the LNP and this NRAP as "Monmouthshire" throughout the document.

The Local NRAP is being collated and edited by LNP coordinators hosted by Monmouthshire County Council in collaboration with key partners with expertise and responsibilities for conservation and nature recovery in Monmouthshire. It is intended to be a "living document" with regular updates to record and expand on the work of the LNP.

Consistent with the NRAP for Wales, this Local NRAP does not include actions for marine habitats.

For actions affecting the Severn Estuary, partners should refer to the Severn Estuary Partnership.

Figure 1: The area covered by Monmouthshire LNP, with Natural Resources Wales Landscape Areas



1.1. RELATIONSHIP TO OTHER PLANS

The Local NRAP is a replacement of the Monmouthshire **Local Biodiversity Action Plan (LBAP)**, published in 2005 by the predecessor to the LNP, Monmouthshire Biodiversity Partnership. The LBAP included action plans for six habitats and 15 species. The Local NRAP will expand on the work started by the LBAP, identify current priorities and threats, and revise the actions to bring them up to date.

The **NRAP for Wales** was launched in 2015 and sets out how Wales will deliver the commitments of the UN Convention on Biological Diversity's Strategic Plan for Biodiversity. The NRAP for Wales is broad, designed to be a guide for all public bodies in Wales that sets out the objectives to support Welsh Government's ambition **"to reverse the decline in biodiversity, for its intrinsic value, and to ensure benefits to society".**

The **Greater Gwent NRAP** was produced by Resilient Greater Gwent and Gwent Green Grid Partnerships and published in 2022. It provides guidance and recommendations on nature recovery actions within the Greater Gwent area, i.e. Caerphilly, Blaenau Gwent, Torfaen, Newport, and Monmouthshire. The Greater Gwent NRAP encourages partnership working between all public bodies and organisations within Greater Gwent and promotes a regional approach to nature recovery at all levels, aligned to national and local priorities.

Monmouthshire County Council published its **Forward Plan** in 2017. The plan was produced to meet the Section 6 Biodiversity and Ecosystem Resilience duty of the Environment (Wales) Act 2016 and to provide a mechanism for delivering the County's requirements under the Well-being of Future Generations (Wales) Act 2015. Monmouthshire County Council have a duty to report every three years on progress made in delivering the plan. The 2023 report has identified the need to refresh the Forward Plan which will include eight objectives and actions for delivery over the next 4 years.

Our Local NRAP will take the objectives established in the regional and national plans and turn them into deliverable actions that we can achieve within the LNP, for our local sites and our local communities.

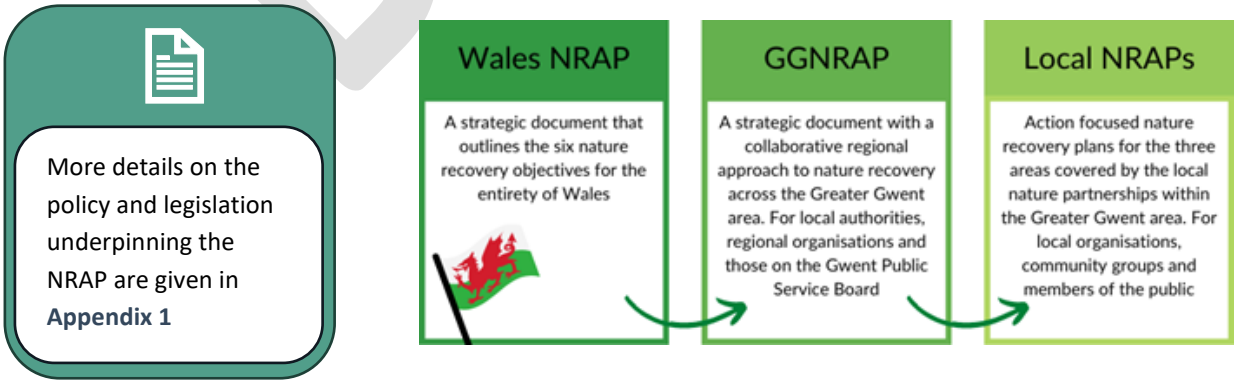


Figure 2: The relationship between plans (from Greater Gwent NRAP)

1.2. WHO IS IT FOR?

The Local NRAP is for anyone undertaking operations, projects or action in Monmouthshire which may affect biodiversity or nature recovery.

- It is for community groups and conservation bodies carrying out boots-on-the-ground conservation activities.
- It is for businesses looking to contribute to effective nature recovery. It is for developers to inform meaningful net benefit for biodiversity as part of their developments in Monmouthshire.
- It is for the county, town, and community councils to aid and guide their functions whilst meeting the Section 6 biodiversity duty.
- It is both a source of activities to be funded and an evidence base for funding applications.

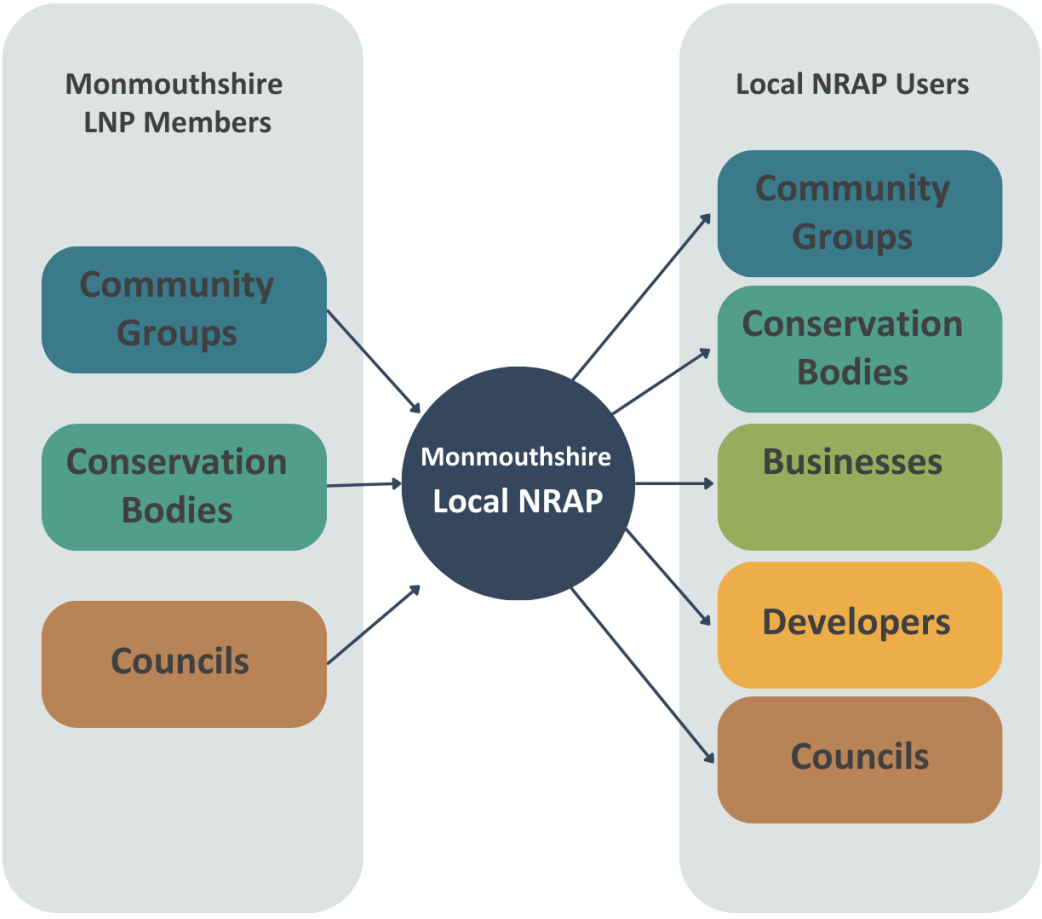


Figure 3: Contributors and users of the Local NRAP

Box 1: The Local NRAP and Monmouthshire Local Nature Partnership

The LNP is a key mechanism for delivering a Local NRAP for Monmouthshire, but the NRAP is also fundamental in delivering the aims of the LNP to: **Co-ordinate, promote and record existing and new actions to conserve, promote and enhance nature in Monmouthshire…taking account of local and national priorities.**

The Local NRAP meets the purposes of the LNP set out in the Terms of Reference through:

- Enabling partnership working between key organisations and individuals that protect and enhance nature in Monmouthshire.
- Supporting the development of projects undertaken by individual organisations to address local priorities.
- Identifying opportunities for integrating the conservation, promotion, and enhancement of nature into other policy areas, plans and projects throughout Monmouthshire.
- Supporting and encouraging new and existing action groups to take forward the implementation of actions identified in the plans.
- Raising awareness of nature conservation related issues and priorities in Monmouthshire

Box 2: The Local NRAP and Monmouthshire County Council

Section 6 of the Environment (Wales) Act 2016 places a duty on public authorities to seek to **maintain and enhance biodiversity where it is within the proper exercise of their functions**. In doing so, public authorities must seek to promote the resilience of ecosystems. This means that Monmouthshire County Council must take a pro-active approach to improve and not reduce biodiversity when carrying out its functions. The legislation also requires Public Bodies to prepare a 'Forward Plan' to outline how they shall meet the duty and report on that plan every three years from the first reporting round in 2019.

Monmouthshire County Council declared a **Climate Emergency** in 2019. The first Climate Emergency Action Plan identified the importance of managing green spaces to reduce energy use, absorb carbon and be resilient. However, when it was updated in 2021, the emphasis on nature recovery was strengthened and an action on addressing water quality was added to improve protection of our rivers and coasts.

In March 2022, a **Motion for Rivers and Ocean** was passed by elected members, taking the Motion for the Ocean model developed by the Local Government Association Coastal Special Interest Group, and adapting it to recognise the importance of taking a catchment to coast approach to protecting water quality. Monmouthshire County Council produced a report containing recommendations for how the council should act to realise clean, healthy and productive rivers and oceans, alongside the commitment to tackle the climate emergency.

In April 2023, Monmouthshire County Council published the **Community and Corporate Plan** 2022-2028, which aims to take Monmouthshire forward, working together for a fairer, greener, more successful county. The objectives of the plan include making Monmouthshire a "green place" to live work, with reduced carbon emissions, and making a positive contribution to addressing the climate and nature emergency.

Following two rounds of statutory reporting and a rapidly changing landscape for nature recovery in Monmouthshire and Wales, Monmouthshire County Council are publishing revised Biodiversity and Ecosystem Resilience Forward Plan, which will be available mid 2024.

The Local NRAP is a key element to effective delivery of these plans and strategies by providing practical actions that meet the objectives of strategic plans, as well as promoting collaborative working with communities and other stakeholders to achieve common goals.

1.3. WHY DO WE NEED A LOCAL NRAP?

1.3.1. UNDERSTANDING BIODIVERSITY

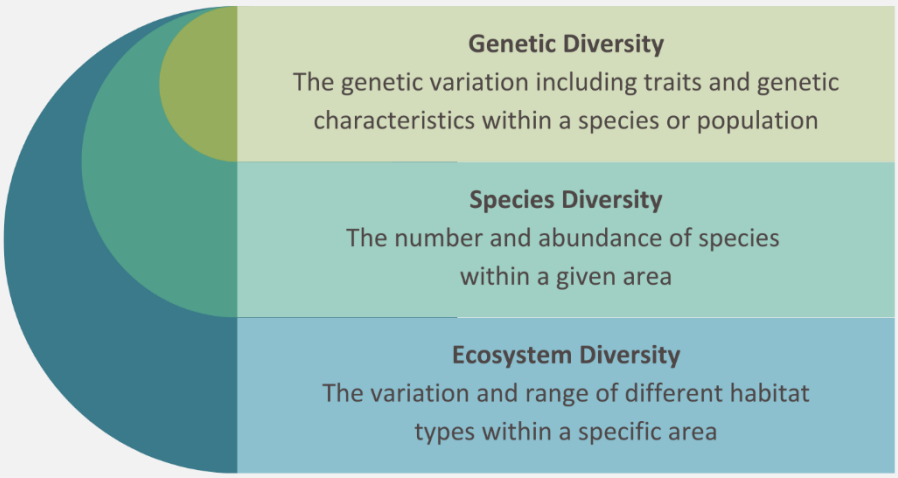
Biodiversity is short for biological diversity and simply means the variety of life. It includes all the living things that occur in the natural world and the variation between them. Biodiversity is not just about the number of species that occur in a place, it also includes the genetic variation between and within species, and the interactions between species and individuals.

Biodiversity is not just restricted to rare or threatened species, although Monmouthshire has plenty of both, it encompasses all living things in the natural world, from those that are common to those that are critically endangered.

Nature, although more commonly understood, is perhaps more difficult to define. Nature is broader than biodiversity, encompassing not only species and habitats but all the physical processes on Earth that create and support life. An ecosystem is a dynamic and interconnected system of living organisms and physical environment contained within specific geographical area. When we talk of **"nature recovery"** we talk of restoring species populations, habitat condition, natural processes and all the things in between that make up a healthy and resilient ecosystem.

Nature Recovery is essential because nature plays a critical role in all aspects of our lives, and there is substantial evidence for the negative impacts of degraded ecosystem services on life as we know it.

Figure 4: Definition of Biodiversity



"Biological diversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems."

The Convention on Biological Diversity (1993)

1.3.2. Ecosystem Services

Ecosystem Services are the natural systems which create an environment in which we can live and thrive, ranging from providing resources, temperature and flood regulation and mitigation, to cultural benefits including recreation and well-being. Biodiversity underpins most, if not all, essential ecosystem services including provision of food, materials, flood defences and carbon sequestration.

The most vital ecosystem services provided by biodiversity are provision of oxygen and carbon sequestration through photosynthesis; the process by which carbon dioxide is removed from the atmosphere by plants, broken down into carbon for growth and oxygen released back into the air for us to breathe. As plants grow, they store carbon in their leaves, twigs, and trunks, and importantly in their roots and the soil around them.

Ecosystem services help society adapt to a changing climate and provide mitigation for flooding. Trees and woodlands play a crucial role in mitigating air pollution, minimising noise, and providing cooling and shade. Green spaces and access to nature provides opportunities for healthy and active lifestyles. Evidence supports associations between access to nature and increased mental well-being.

The concept of ecosystem services is proven to be successful in demonstrating the necessity of taking action for nature recovery. It also provides us with criteria to measure impacts and demonstrate success, but our use of the term does not mean we consider the intrinsic value of nature and biodiversity any less.

Figure 5: Ecosystems services (NRW)

1.3.3. Ecosystem Resilience

Ecosystem resilience refers to the ability of an ecosystem to withstand disturbances, adapt to changes, and recover its structure and function after being exposed to various stresses or shocks. This concept is a fundamental aspect of ecology and its importance in the fields of conservation and nature recovery has been recognised in recent years.

Natural Resources Wales (NRW) developed the **DECCA** framework (sometimes also the DECC framework) which describes the attributes which contribute to a resilient ecosystem; **Diversity, Extent, Condition and Connectivity**. The first iteration of the framework included Adaptability which is now replaced by "other **Aspects**" to recognise that adaptability is a function of the four key attributes. The speed and success of nature recovery and species climate-change adaptation will mainly depend on actions that maintain or enhance all four attributes of resilience (see Figure 6).

Welsh Government **National Natural Resources Policy** recommends the maintenance and restoration of **Resilient Ecological Networks (RENs)** at a landscape-scale level to build ecosystem resilience. Effective Resilient Ecological Networks are defined as connected landscape features that:

- have networks of habitat in good ecological condition that link protected sites and other biodiversity hotspots across the wider landscape.
- enable the movement of species across landscapes to fulfil their life cycle or respond to climate change.
- provide important ecosystem services and maximum benefit for well-being.

In 2010, Defra published "**Making Space for Nature**", known as The Lawton Report, which provides the most succinct conclusion on what is required; "*the essence of what needs to be done to enhance the resilience and coherence of [an] ecological network can be summarised in four words:* ***more, bigger, better and joined***". Small, isolated sites do not contain enough food, shelter or genetic diversity required to support sustainable populations. We need **more** sites that are rich in biodiversity. We need **bigger** sites to allow for larger, more stable, populations and greater diversity of habitats and species composition. We need **better** quality sites and to manage sites better, to ensure protected sites are not degraded by neglect, inappropriate management, or development. And we need to **join** our nature sites to allow movement between populations, allow species to move away from sites where they can no longer thrive, or repopulate an area.

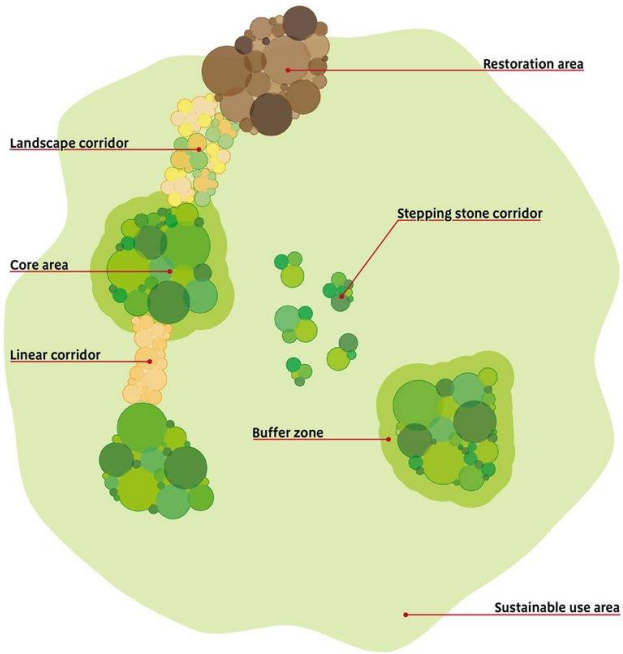
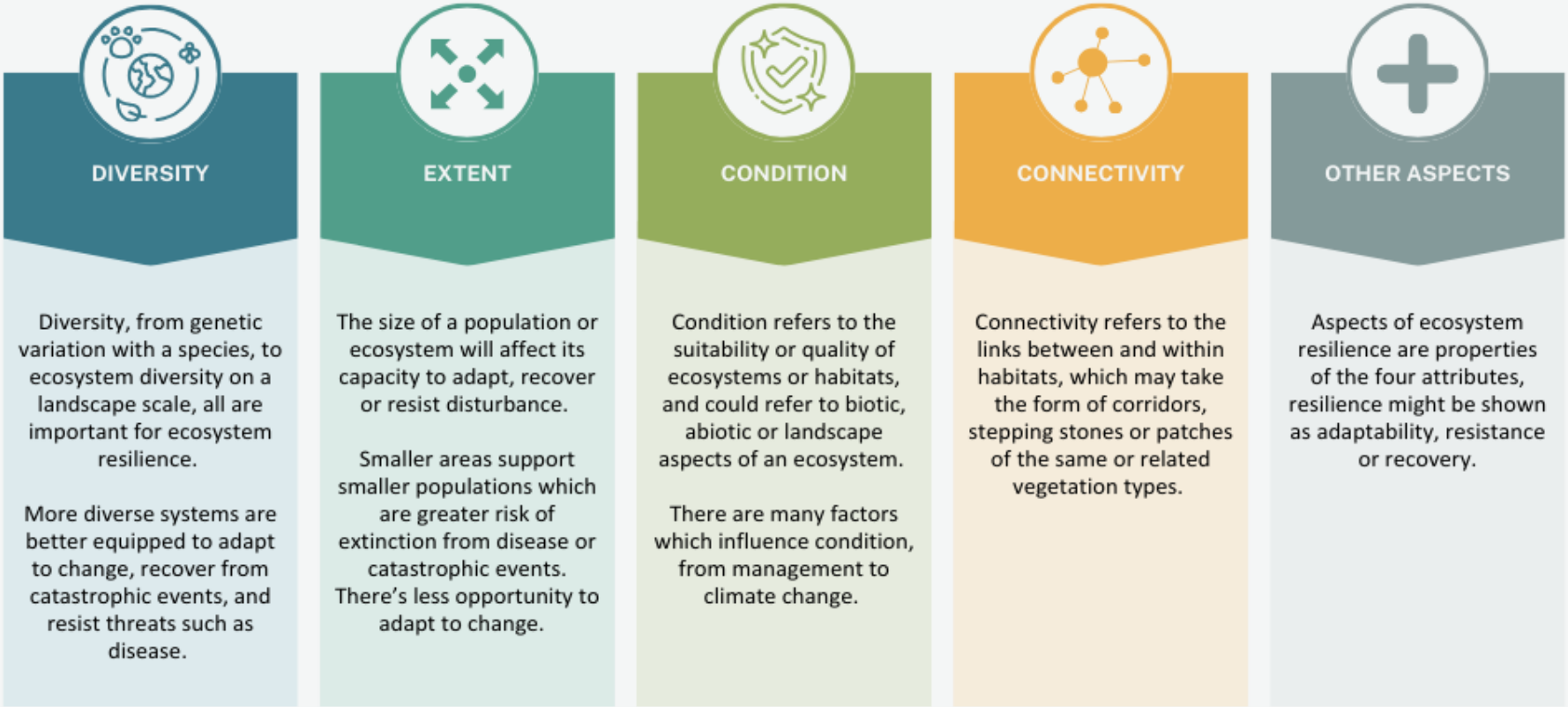


Figure 6: The Lawton Principles

(from Making Space for Nature, Lawton 2020)

Figure 6: The DECCA Framework



1.4. BIODIVERSITY IN MONMOUTHSHIRE

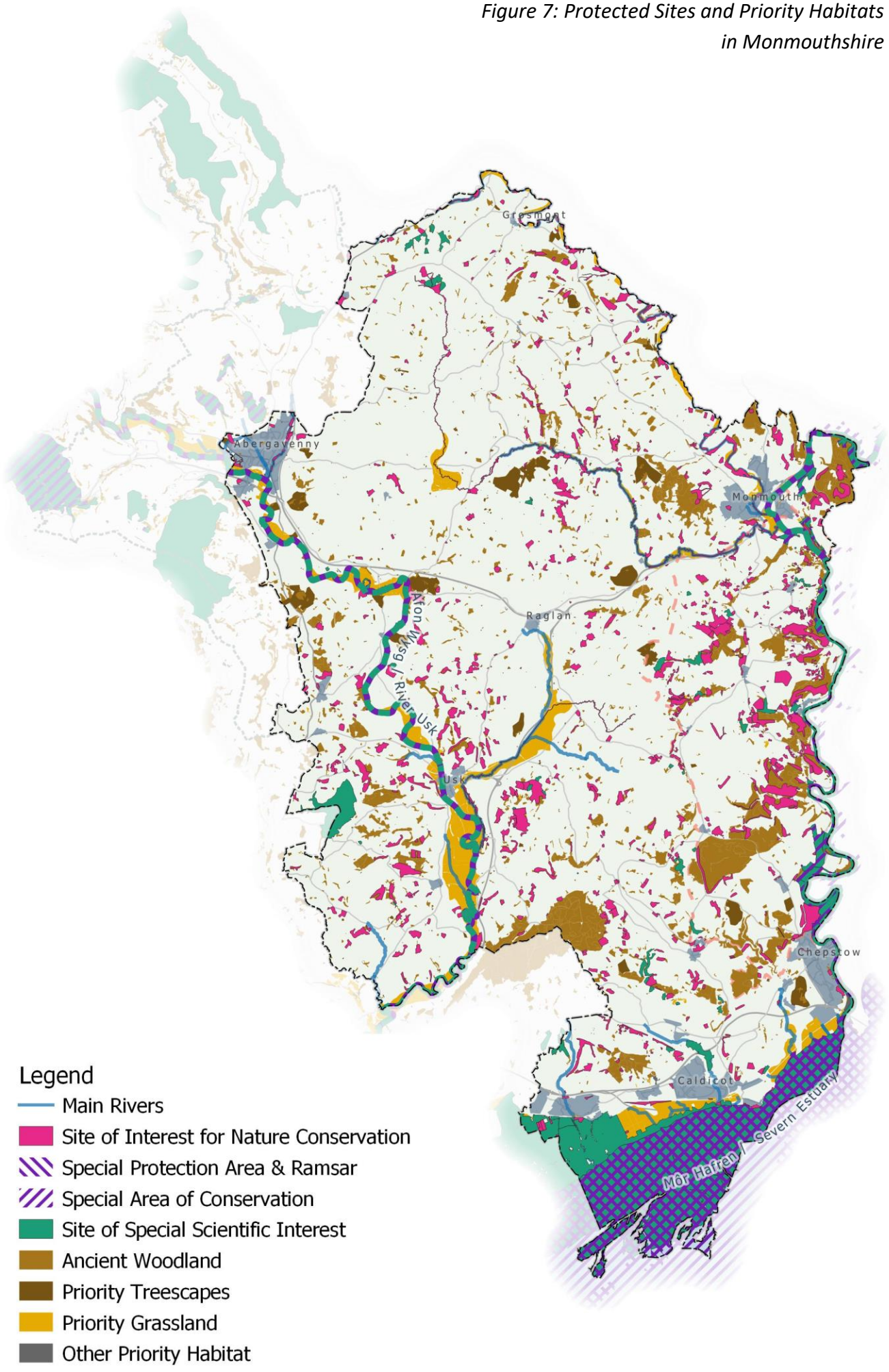
Monmouthshire is a large and varied county, with distinct differences between north and south, east and west. It is a coastal county, but its estuary location means that it is often not viewed as such. The **South East Wales Area Statement** identified three landscape profiles in Monmouthshire which are useful to illustrate the differences across the county: **Central Monmouthshire, Wye Valley and Wentwood,** and the **Gwent Levels**. The landscape profiles primarily share the same natural habitats but with clear differences which give them their distinctive character. The areas covered by each profile are shown on Figure 1.

Central Monmouthshire is noted for its undulating lowlands comprising pasture and arable farmland with isolated pockets of woodland. It is a valuable farming area with agriculturally improved pasture and arable fields. Hedgerows provide important links between small, isolated, ancient woodlands, often on hilltops and steep valley sides where farming is difficult. Parcels of unimproved grassland remain, and considered in the context of massive historical decline are of significant ecological importance.

Wye Valley and Wentwood is predominantly a wooded and riverine landscape. The steep sides of the Wye Valley are clothed in extensive blocks of internationally important woodlands, designated as the Wye Valley Woodlands **Special Area of Conservation (SAC)**. The Wye Valley is home to internationally important bat species including greater horseshoe bats and lesser horseshoe bats, with many of their roosts included in the Wye Valley and Forest of Dean Bat Sites SAC. Parts of the Wye Valley are known to be used by at least 15 different species of bats including the rare Barbastelle bat and Bechstein's bat. The Wye Valley is also a stronghold for dormouse, and polecats reintroduced in England have been observed on this side of the river on more than one occasion.

In the south, the unique **Gwent Levels** form an extensive coastal habitat along the Severn Estuary comprising reclaimed agricultural land drained by a network of ditches known as reens. The reens support a particularly diverse community of insects and other invertebrates (for example water beetles) and are designated as a **Site of Special Scientific Interest (SSSI)**. Following a successful reintroduction program at Magor Marsh SSSI in 2012, water voles have spread across the Gwent Levels with the furthest record 16 km from the original release site.

Figure 7: Protected Sites and Priority Habitats in Monmouthshire



The two major rivers in Monmouthshire are the River Usk and River Wye. Both are designated as Special Areas of Conservation and together with their tributaries provide important wildlife corridors and migratory routes for key species such as salmon, otters, shad and white clawed crayfish. Another important freshwater habitat in Monmouthshire is the Llandegfedd Reservoir, designated as a SSSI for supporting overwintering wildfowl. The breakdown of protected sites is shown in Figure 8 and more information on the legislation behind protected sites is given in Appendix 2.

Despite having a wealth of protected and priority species, Monmouthshire's ecosystems are currently facing significant challenges. Grassland sites are at risk from poor management and development pressures. The Wye Valley is our most ecologically rich area, but the quality of the woodland is under threat from lack of management and the spread of ash dieback. A large proportion of reens and ditches on the Gwent Levels are degraded. Freshwater habitats are under threat from water abstraction, pollution, and siltation. Monmouthshire, like the rest of the world, is facing a Nature Emergency.

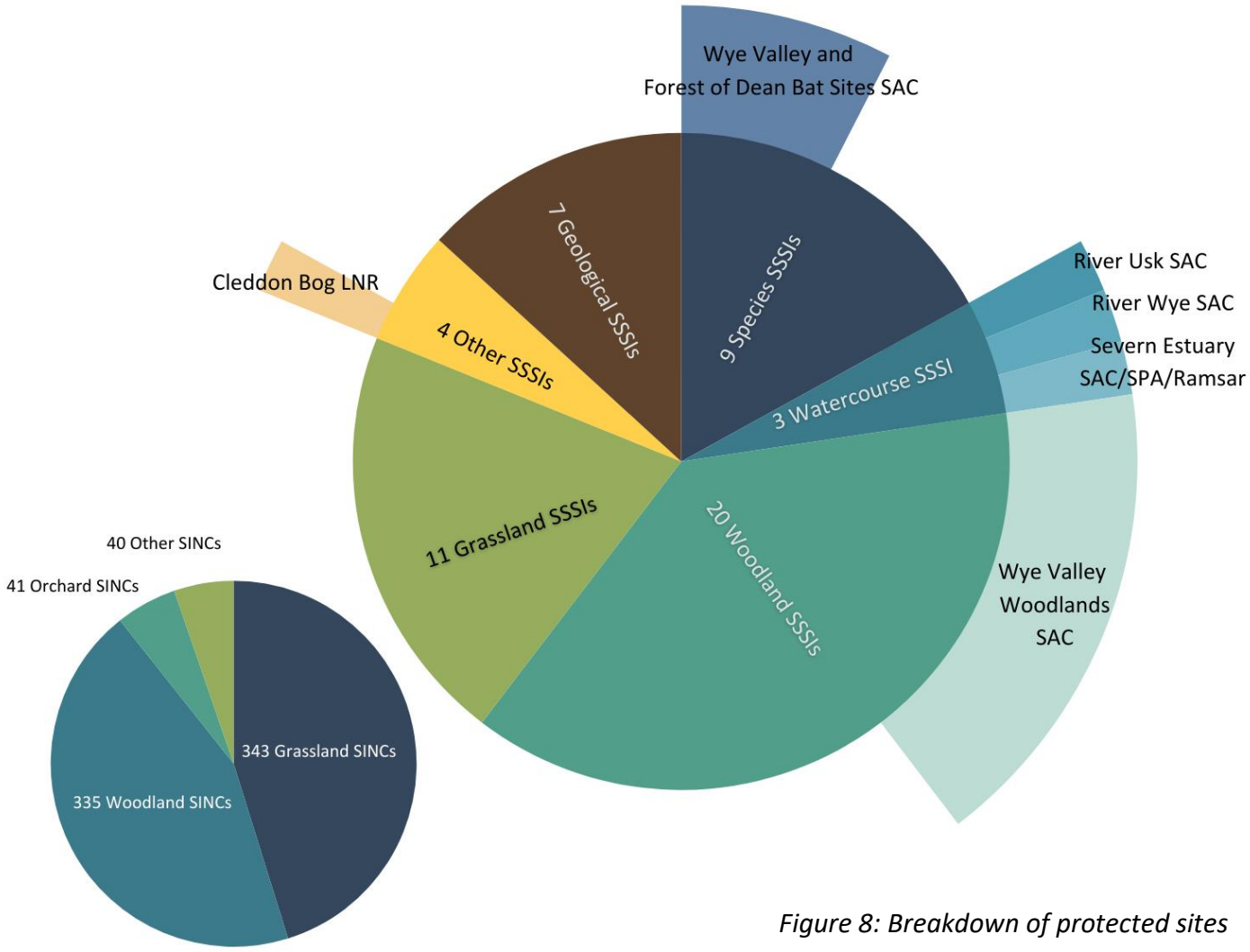


Figure 8: Breakdown of protected sites in Monmouthshire

2. NATURE EMERGENCY

We are in the midst of a global nature crisis. The planet is changing as a result of human activity and biodiversity loss is the clearest warning sign that we are facing a planetary emergency. In June 2021, the Senedd declared a **nature emergency** recognising that continued and drastic biodiversity loss is a clear sign of a global crisis. The **Wales Summary** for the **State of Nature** 2023 makes the stark statement that **Wales is now one of the most nature depleted countries on Earth.**

The first **UK State of Nature** report was published in 2013 and although the last decade has seen continued research and nature recovery action, the most recent report continues to show substantial declines in biodiversity. The headlines from the 2023 summary include 18% of species assessed in Wales are threatened with extinction. That's over 600 species. There has been an average decline of 20% in species abundance since 1994, and the distribution of species and composition of our flora and fauna is changing.

We have local evidence of the nature emergency. The **Greater Gwent State of Nature** was published in 2021, and used existing data to analyse the status and trends of species within the Greater Gwent area. The report analysed individual species and groups of species representing over 500 individual species, presented as 100 different stories of these species and species groups. Of all the species and species groups analysed, 34% of species showed a decline in their numbers or are predicted to continue to decline. Only 12% showed stable populations. Twenty-one percent showed a welcome increase in their numbers, but the remaining 21% did not have enough data to describe the population trends.

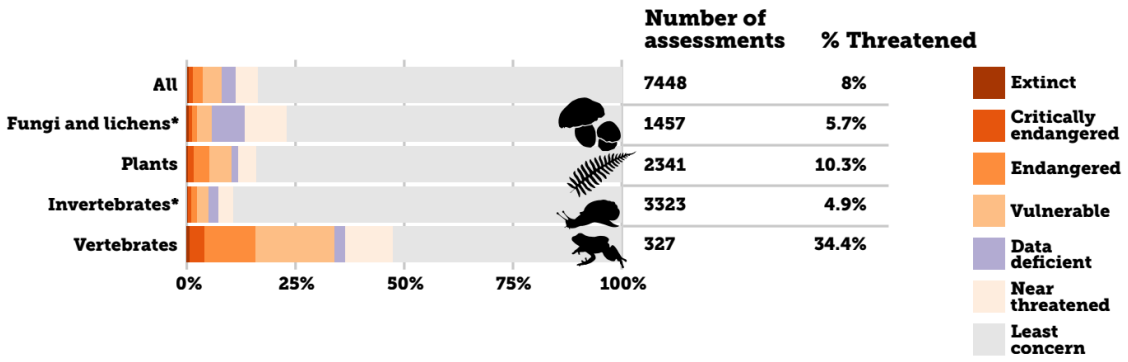


Figure 9: Summary of Great Britain National Red Lists for species present in Wales, showing the proportion of assessed species in each Red List category, by broad taxonomic group. (from State of Nature Wales Summary Report 2023)

2.1. DRIVERS OF CHANGE

The **State of Nature** report published in 2019 focused on major drivers of ecological change in the UK over the past 50 years. The report identified that the two biggest impacts are from agricultural land management and climate change. Other drivers are, in no particular order of importance: freshwater management, invasive non-native species, fisheries, woodland management, pollution and urbanisation. The impact of some of these drivers in Monmouthshire is discussed below. This is not a comprehensive list and we will aim to add to, update and review the threats as part of monitoring the Local NRAP and as new evidence becomes available.

2.1.1. AGRICULTURAL MANAGEMENT

Farmland ecosystems are hugely important for food production, but the drive for increasing yields has led to the loss of habitat, degradation of remaining habitat and loss of many species associated with the traditional farmed landscape. Our ecology and landscapes were created by farming; our most species-rich hay meadows developed because of traditional farming techniques. The Gwent Levels were created by draining marsh land for use as farmland. But the industrialisation of farming has resulted in loss of space for wildlife and degradation of remaining habitats.

Studies show that between the 1930s and 1990s, 97% of the UKs species-rich grassland was lost to intensive agriculture, either improved grassland or arable. The areas of species-rich grassland that remain are often small and isolated, although almost half of the over 700 **Sites of Importance for Nature Conservation (SINCs)** in Monmouthshire are designated for species-rich grasslands. Nevertheless, these are often under threat from lack of management or development. Some larger unimproved grassland areas are statutorily protected as **Sites of Special Scientific Interest (SSSI)**; however, protected sites baseline assessments undertaken by NRW in 2020 shows that of the 11 grassland SSSIs in Monmouthshire, three are in unfavourable condition and the condition of the others is unknown due to insufficient information.

Some of the clearest evidence for how farmland management continues to affect biodiversity is the trend in farmland birds. Birds have always been the best recorded taxonomic group in the UK therefore we have a good data set to assess trends. Across the UK the farmland bird indicator[1] has shown a fall of more than 54% since 1970. **The Greater Gwent State of Nature** uses a similar indicator suitable for lowland farmland birds in Gwent. The index follows the same general decline since 1994 but with greater variation and the overall average is lower than the rest of UK. The Gwent Levels should be ideal habitat for breeding lapwing but there are no recent successful breeding records in the Monmouthshire area. Known attempted breeding efforts in the last few years have been interrupted by grass cutting for silage, which is carried out earlier and more frequently than traditional hay meadow management.

As well as loss of habitat and connectivity for species, agricultural intensification has resulted in negative impacts on the environment. Degraded soils store less carbon and disturbing carbon in soils releases it to the atmosphere, contributing to climate change. Use of fertilisers negatively impacts water quality in our rivers and streams and has negative impacts for recreation and businesses, as well as the wildlife which call them home.

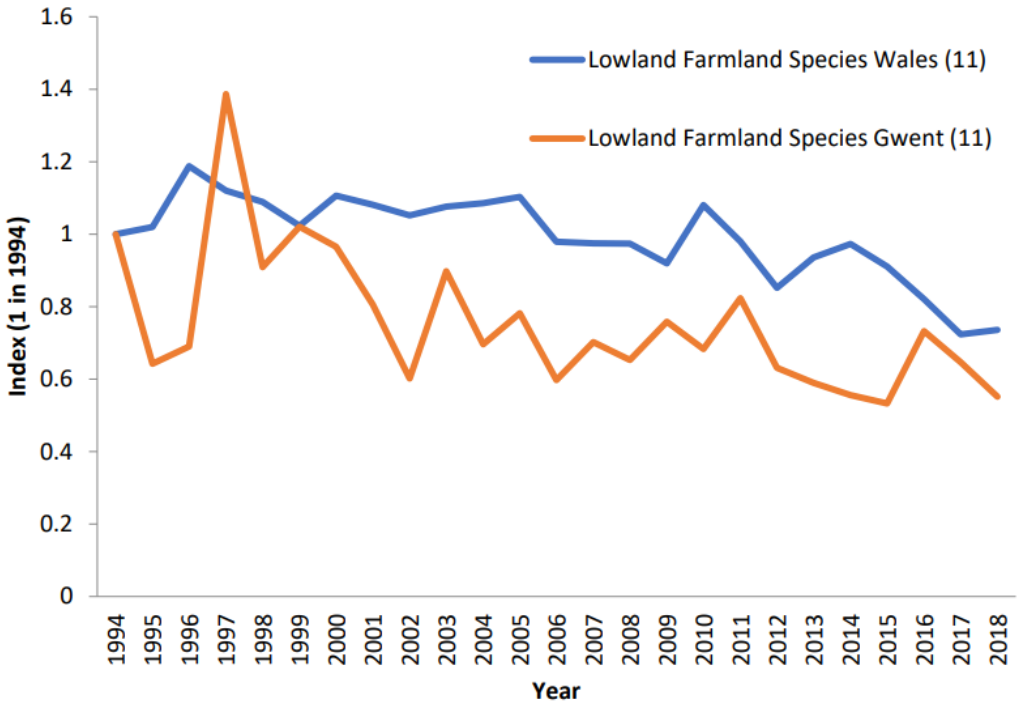


Figure 10: Multi-species lowland farmland bird indicators for Wales and the Greater Gwent region from 1994 to 2018 for the same 11 indicator bird species.

(from the Greater Gwent State of Nature)

[1] A composite index that measures the rate of change in the relative abundance of common bird species.

Monmouthshire County Council declared a Climate Emergency in May 2019. In the Climate Emergency Action Plan published in 2021, the strategy included an emphasis on nature recovery.

2.1.2. Climate Change

Changes in temperature, rainfall and other climatic factors that caused by climate change affect the abundance and distribution of species. Seasonal weather variation disrupts species phenology (timing of seasonal events such as egg laying) and increased extreme weather events can cause catastrophic disruption to populations more frequently. Summer drought can have a significant impact on the growth and survival of tree species, leading to major changes in the composition and structure of woodland. At present climate change is the second biggest pressure, and its impacts are expected to increase as the climate emergency intensifies.

There is widespread evidence that climate change has affected species populations globally and in the UK. On a local scale, comparable declines can also likely be attributed to climate change but further analysis of data is required.

The **Gwent Wildlife Trust "Bugs Matter"** study published in 2022 records a 64% decrease in abundance and availability of insects in Gwent since 2004. This is a significant change from 40% decrease recorded in 2021. It is likely that decreases can be at least partly attributed to climate change, but other influences such as land management will also be a contributory factor.

The Gwent Nest Box Monitoring Scheme has also seen impacts in recent years, taking just one example of Priory Wood SSSI, where 29 occupied boxes were recorded in the 2009 breeding season compared to just 12 in the most recent season. Recorder observations of brood failures following unseasonably cold or wet weather would suggest at least part of the decline is due to climate change.

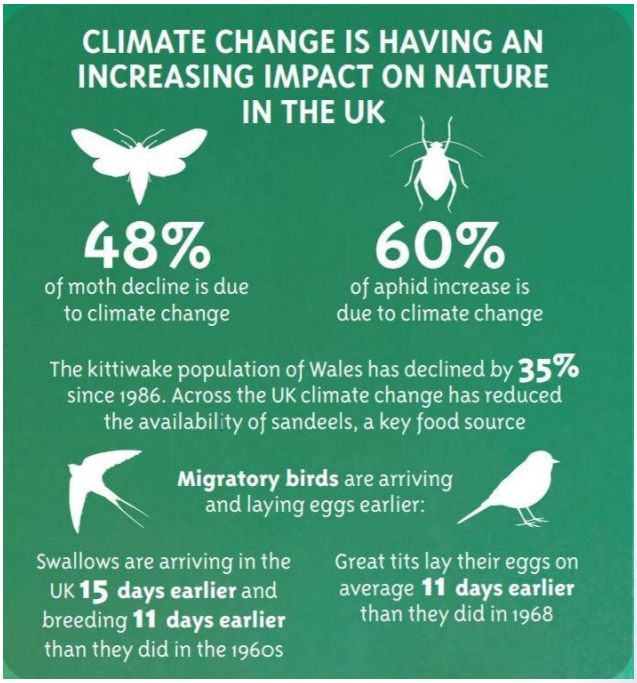


Figure 11: Impacts of Climate Change (from State of Nature 2019)

2.1.3. River Pollution

The Rivers Wye and Usk are both designated as **Special Areas of Conservation (SACs)** for their water quality, but in recent years the water quality has deteriorated significantly. This is due to a complex range of issues, including sewage releases into the rivers and phosphates and nitrates entering the rivers as a result of agricultural activity. Excess nutrients in rivers cause a process called eutrophication, where algal blooms reduce light and oxygen levels, killing fish and other species.

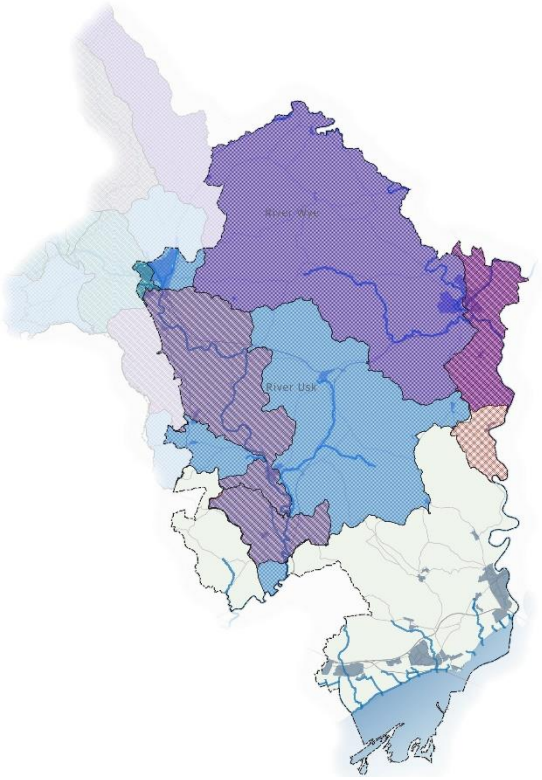


Figure 12: SAC river catchment areas and failing phosphorus areas

NRW are responsible for monitoring the condition of SAC sites in Wales, including nutrients in rivers. The targets were tightened in 2020 as a result of evidence that nutrients had a negative impact on riverine ecology at much lower levels than originally thought. Additionally, the impact of climate change on rivers (warmer water temperatures and lower water levels) is similar to nutrient enrichment, so the tighter targets were also necessary to counteract the impacts of climate change.

The Rivers Usk and Wye are failing monitoring targets; data shows high phosphorous levels in absolute terms with widespread failures of large magnitude in both rivers. NRW and Dŵr Cymru Welsh Water have undertaken modelling of Welsh catchments to identify sources of phosphorus in rivers. The Usk modelling data shows effluent from sewage treatment works accounts for 21% of the average daily load (kg/d), with rural land use contributing 67%, storm overflows contributing 1% and a further 11% from other sources including septic tanks and urban run-off.

2.1.4. Invasive Non-Native Species and Plant Health

There are over 2000 non-native species in Great Britain which can sustain wild populations and are therefore considered established. Most of these are not a problem, but when species have negative impacts on native ecology or are detrimental to human health or economy, they are considered to be **Invasive Non-Native Species (INNS)**. INNS can have adverse impacts on native ecosystems by:

- outcompeting or predating native species
- introducing diseases which native populations have no tolerance to, and
- hybridisation with native species.

The **Wales Biodiversity Partnership** has produced a list of 45 priority species for action. The list includes 16 species to prevent arrival in Wales, 11 more recent introductions to manage before they take hold (of which two have been recorded in Monmouthshire, ruddy duck and sika deer), and 18 species which are well established and require long-term management, all but two of which are found in Monmouthshire. Most of our river systems in Monmouthshire are affected by Himalayan balsam: a garden escapee which is valued by some as a forage resource for bees, but actually has multiple significantly detrimental impacts such as outcompeting native plant species for space, light, nutrients and pollinators. It also leaves riverbanks exposed when it dies back in winter leaving them more liable to erosion.

There is a clear link between plants pests and diseases and INNS, although they are covered by a separate strategy nationally. There are over 1200 plant pests and pathogens on the UK **Plant Health Risk Register,** but far and away the biggest current threat from plant pathogens is ash dieback caused by *Hymenoscyphus fraxineus* (previously known as *Chalara fraxinea*).

Although the 2019 data available to the Greater Gwent State of Nature reported only eight records in the whole of Gwent, we know it had taken hold across the county by then and is now ubiquitous in towns and woodlands alike.

Loss of ash from our landscape is not only a tragic loss but it will have a consequent negative impact on ash dependent species of fungi and invertebrates. Management of the problem will result in the release of carbon into the atmosphere as diseased trees are removed for health and safety reasons.

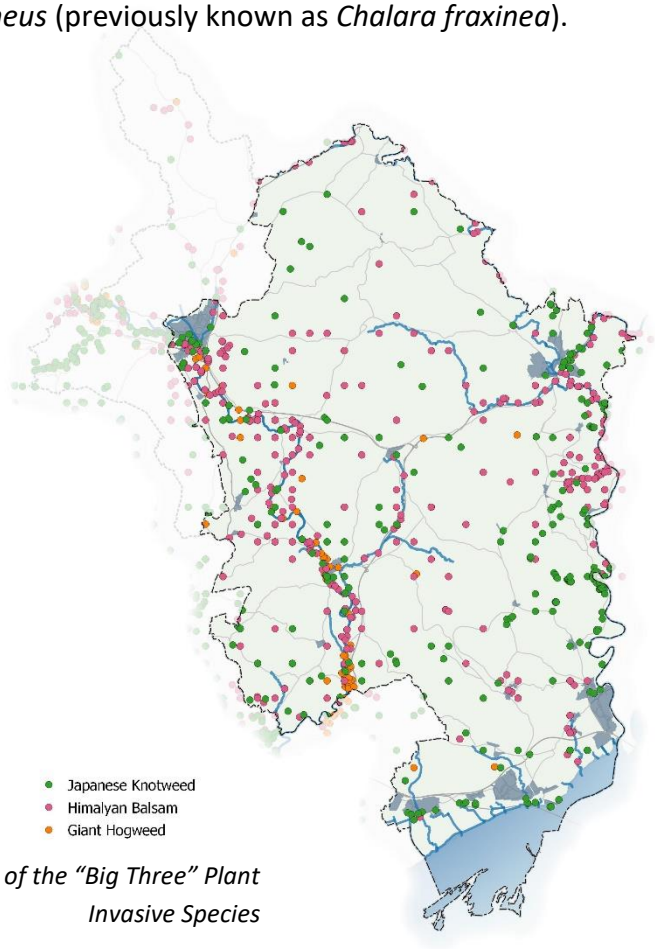


Figure 13: Records of the "Big Three" Plant Invasive Species

2.2. POSITIVE CHANGE

Although the situation is grave, there is reason to be hopeful for recovery. The climate crisis has been part of our vernacular for many years, yet it seems like the nature emergency has not received as much mainstream attention. That is now changing, with highly publicised ecological disasters such as the condition of the River Wye capturing the public's attention.

Nature recovery is embedded into **Future Wales National Plan**, and Welsh Government have been clear that the nature crisis should be given parity with the climate emergency. We still have work to do to make this a reality, but the basis for action is clear.

Resilient ecological networks are vital for nature recovery and are networks of habitat in good ecological condition linking protected sites and other biodiversity hotspots across the wider landscape, providing maximum benefit for biodiversity and well-being

Future Wales, Policy 9

The following section provides details of just some of the nature recovery concepts currently being implemented in Monmouthshire.

2.2.1. REGENERATIVE FARMING

There is a growing interest and uptake in regenerative farming practices nationally and locally. Regenerative farming, or regenerative agriculture, can apply to any farming methods which aim to improve the environment whilst producing crops or livestock. The primary goal is to improve soil health, to not only facilitate crop production but also recognising the role of healthy soils in water quality, climate change and human health. The primary themes of regenerative farming are: keeping the soil covered, keeping living roots in the soil, minimising soil disturbance, growing a wide variety of crops, and including livestock in the system. Changing from arable or high intensity pasture to low-input semi-natural grassland allows for carbon to be stored in depleted soils, creating a carbon sink, as well as having benefits for biodiversity.

In Monmouthshire, a mentoring scheme has been established in partnership with **Action for Climate Emergency (ACE) Monmouth**, Monmouthshire Food Partnership, and world-renowned Herefordshire-based regenerative agriculture consultant Ben Taylor-Davies. At present the scheme includes three Monmouthshire farm businesses; key themes of the mentoring are increasing soil health, reducing chemical inputs, and seeking alternatives to soya and palm in livestock feed. There is also a regenerative agriculture discussion group (Talk Farm Regen Monmouthshire), led by a local farmer with support from Monmouthshire County Council Sustainable Food Development officers.

2.2.2. Natural Flood Management

A key priority of Welsh Government's **National Strategy for Flood and Coastal Erosion Risk Management in Wales** is to deliver more natural interventions and catchment approaches to help improve environmental, social, and economic resilience. This includes working with natural processes and green infrastructure to "reduce flood and coastal erosion risk by implementing measures that help to protect, restore and emulate the natural functions of catchments, floodplains, rivers and the coast", defined as **Natural Flood Management (NFM)**. Examples of NFM include interventions such as tree planting, in-stream obstructions, soil and land management, and creation of new wetlands.

Since 2020 Monmouthshire County Council has been working to identify NFM opportunities in Monmouthshire, including identification of priority catchments, landowner engagement, hydraulic modelling, site surveys and multi-agency collaboration. One of the largest barriers has been identifying landowners willing to engage with the process, but a number of sites within the River Wye catchment have progressed to detailed design stage, with construction anticipated in 2024/25.

2.2.3. Ecological Network Mapping

Natural Resources Wales and Gwent Green Grid Partnership are undertaking mapping **Resilient Ecological Networks (RENs)** and **Priority Ecological Networks (PENs)** across South East Wales; the process interrogates how different stakeholders could co-operate to achieve multiple environmental and socio-economic benefits.

The Gwent Green Grid Partnership is also developing Nature Recovery Opportunity Mapping, to highlight key connectivity opportunities. The maps will build on PENs mapping and incorporate local environmental data to focus nature recovery actions where they will be most effective in building ecosystem resilience. The resulting maps will be publicly available on purpose-built portal and will enable users to develop impactful local projects.

3. DELIVERY OF THE LOCAL NRAP

The success of the Monmouthshire Local NRAP will depend on collaboration and long-term commitment of the Monmouthshire LNP. By working together our efforts can be maximised, making the most of our collective knowledge, skills, and experience and allowing us to respond any opportunities for partnership working as and when they arise.

The way actions are delivered will vary. Some actions may be delivered by one partner and others by partners working collaboratively. All partners can contribute to delivery of the Local NRAP whether they are a large organisation, small community group, or an individual.

3.1. CONTENT OF THE LOCAL NRAP

The Monmouthshire Local NRAP will comprise four parts described in Figure 14 and will focus on habitats and species that national priorities for conservation and are locally important. Priority habitats and species recorded in Monmouthshire are provided in Appendix 3.

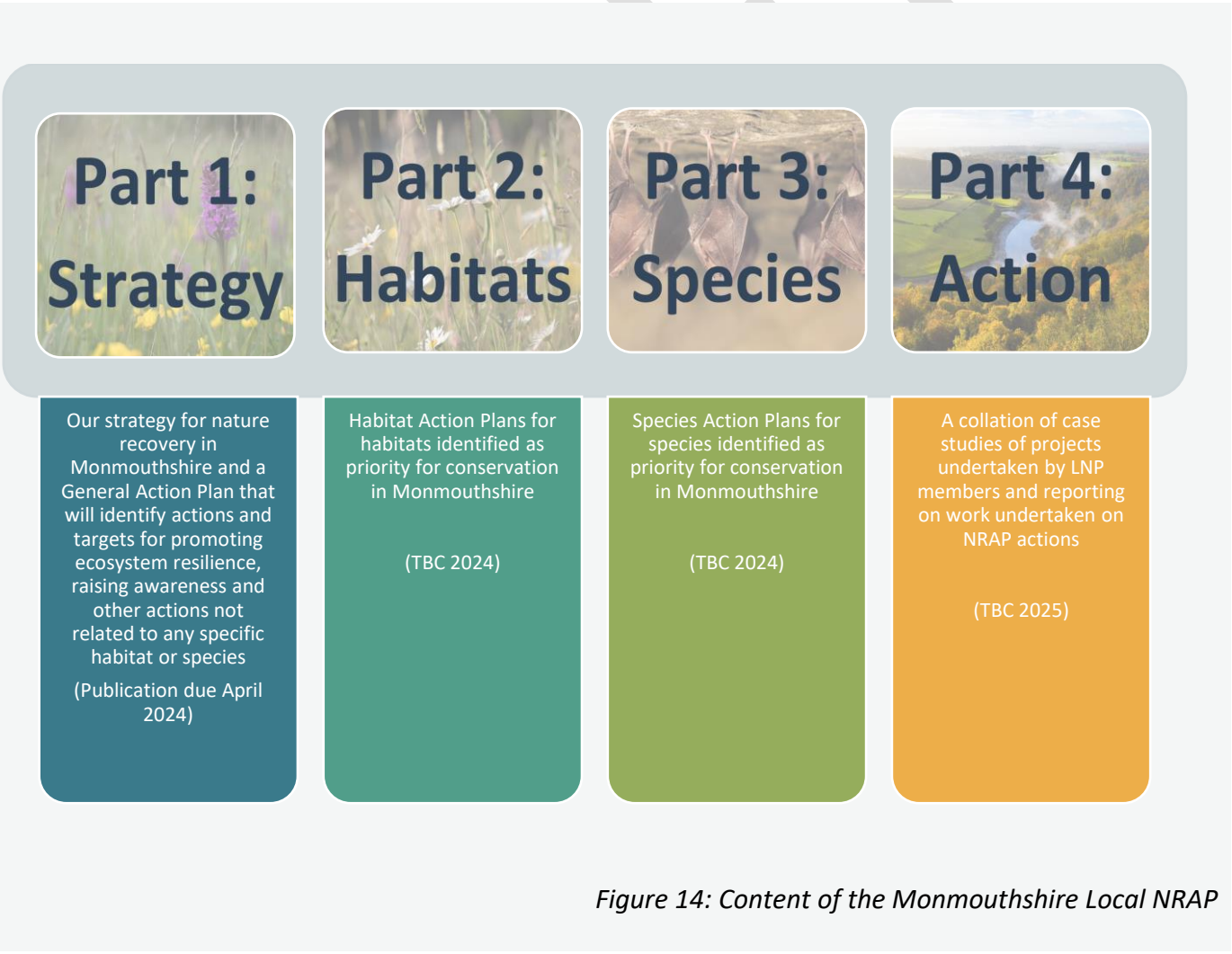


Figure 14: Content of the Monmouthshire Local NRAP

As lead partner, LNP coordinators hosted by Monmouthshire County Council are responsible for editing and collating the content of the Monmouthshire Local NRAP. Partners are encouraged to contribute and develop action plans for species or habitats within their field of interest. Action Plans will be reviewed and approved by a working group of LNP members before being published.

3.2. MONITORING AND REVIEW

A key feature of the Monmouthshire Local NRAP is that it is flexible and adaptable. The actions plans are published separately to enable continual additions, review, and updates.

The number of Habitat and Species Action Plans will be added to depending on the availability of funding and the level of contributions from our partners. Existing plans will be reviewed annually by the Local NRAP working group so actions can be added to or removed in response to updates in local species and habitat information. The working group will report back to LNP following the annual review.

The **General Action Plan** will be part of the annual review. The supporting text of this Part of the Local NRAP will be updated with regards to resources, policy, legislation at minimum once every five years.

4. GENERAL ACTION PLAN

The General Action Plan provides a set of actions not related to a specific habitat or species that have been identified as local priorities to deliver nature recovery in Monmouthshire. The plan identifies which of the NRAP for Wales objectives each action meets, see Appendix 4 for the full objectives. Actions are numbered for reference only; numbers do not relate to their priority level or the order in which actions will be delivered.

	Action	Lead Partner	1	2	3	4	5	6
Polices, Plans and Procedures								
G1.1	Ensure that measures to protect, maintain and enhance biodiversity and the resilience of ecosystems are embedded into MCC plans, strategies and policies	MCC, MLNP Coordinator	✓	✓				
G1.2	Ensure MCC Highways and sub-contractors manage habitats with biodiversity interest sympathetically through following Codes of Best Practice and Llwybr Newydd i Natur – the Nature Recovery Action Plan for our Strategic Road Network where appropriate	MCC, MLNP Coordinator		✓		✓		
G1.3	Ensure that partnership organisations' management, plans and agreements (including tenancy agreements where appropriate) address nature recovery and maximise biodiversity opportunities.	MLNP	✓	✓				
G1.4	Ensure land in public ownership (including lease land e.g. county farms) to be managed appropriately to maintain and enhance biodiversity	MCC, MLNP		✓	✓	✓		
G1.5	Produce and distribute clear practical advice to developers about how they can contribute to nature recovery and minimise the impacts on ecosystem resilience	MCC, MLNP		✓	✓	✓	✓	
Education and Awareness								
G2.1	Develop a website/other web-based presence for the LNP to promote nature recovery activities and key messages, as well as celebrating and informing about nature in Monmouthshire and provide signposts for those seeking further information on nature recovery	MCC	✓				✓	
G2.2	Engage with local communities to raise awareness of the nature crisis and promote community involvement and engagement in nature recovery efforts	MCC, MLNP	✓					
G2.3	Provide support and advice for landowners and land managers on best practice management for biodiversity including understanding their current resource and function in the landscape; improving soil quality and soil biodiversity; and promoting collaboration and sharing best practice.	MCC, MLNP	✓	✓	✓	✓		

	Action	Lead Partner	1	2	3	4	5	6
G2.4	Encourage tourism businesses to see biodiversity and ecosystem services as an asset that can assist in the development of environmentally sensitive local tourism initiatives	MCC	✓					
G2.5	Provide Town and Community Councils with the means (training, information, support and funding opportunities) to initiate local Biodiversity projects involving the local community, or to get involved in monitoring (e.g. roadside verges).	MCC	✓	✓	✓	✓		
G2.6	Compile a list of existing biodiversity information resources, identify gaps that require new material, and promote use of resources in educational and community settings.	MCC, MLNP					✓	
Evidence and Understanding								
G3.1	Compile and maintain an inventory of previous, current and planned nature recovery action projects and data, to identify potential overlaps and opportunities for collaboration.	MCC					✓	
G3.2	Ensure all survey and monitoring data captured by Monmouthshire LNP members is submitted to SEWBReC	MLNP					✓	
G3.3	Create a list of locally important species and habitats for Monmouthshire and a programme for recording and monitoring their status	MLNP, SEWBReC					✓	
G3.4	Support the mapping and surveying of priority habitats and species in Monmouthshire	MCC, GGG, MLNP					✓	
G3.5	Develop a suite of resilient ecological network maps to establish a baseline for ecosystem resilience planning and identify opportunities for nature recovery	MCC, GGG					✓	
G3.6	Support volunteer survey efforts by providing training courses and access to advice, equipment, and promoting national recording schemes and citizen science projects.	MLNP, SEWBReC					✓	
G3.7	Develop a programme with SEWBReC for supporting recording, training and recruiting the next generation of biological recorders and taxonomists.	MLNP, SEWBReC					✓	
G3.8	Identify specific threats and opportunities to address nature recovery in Monmouthshire, on physical, political and climatic scales, including investigated future predicted trends	MLNP					✓	
G3.9	Improve monitoring of INNS and encourage citizen scientists to submit records, to help target efforts for INNS management.	MLNP					✓	

	Action	Lead Partner	1	2	3	4	5	6
Promoting Ecosystem Resilience								
G4.1	Develop collaborative projects to increase resilience of species, habitats, and ecosystems to address climate change and biodiversity loss	MCC, GGG, MLNP		✓	✓	✓		
G4.2	Support any collaborative projects on common land which involve action to maintain and enhance biodiversity e.g., by providing advice	MCC, GGG, MLNP		✓	✓	✓		
G4.3	Use nature-based solutions (such as restoring wetlands to slow the flow of water and alleviate flooding) wherever possible, to help create sustainable environments for future generations.	MCC, GGG, MLNP		✓	✓	✓		
G4.5	Support delivery of Wales Resilient Ecological Networks (WaREN) INNS project and INNS management programmes developed by GGG Partnership	MCC, GGG		✓	✓	✓		
LNP Governance and Monitoring								
G5.1	Provide a strong and functioning Local Nature Partnership to act as an interface between local and national delivery partners and Welsh Government.	MCC; LNP coordinator						✓
G5.2	Promote engagement and collaboration between LNP members and increase membership	MCC; LNP coordinator						✓
G5.3	Hold biannual LNP meetings and produce a biannual newsletter to keep members up to date with partnership activities	MCC; LNP coordinator						✓
G5.4	Develop appropriate indicators to monitor the Local NRAP's progress and stakeholder engagement	MCC; LNP coordinator					✓	✓
G5.5	Collaborate with other Local Nature Partnerships to develop and deliver projects to maximise the impact of the Local NRAP	MCC; LNP coordinator						✓

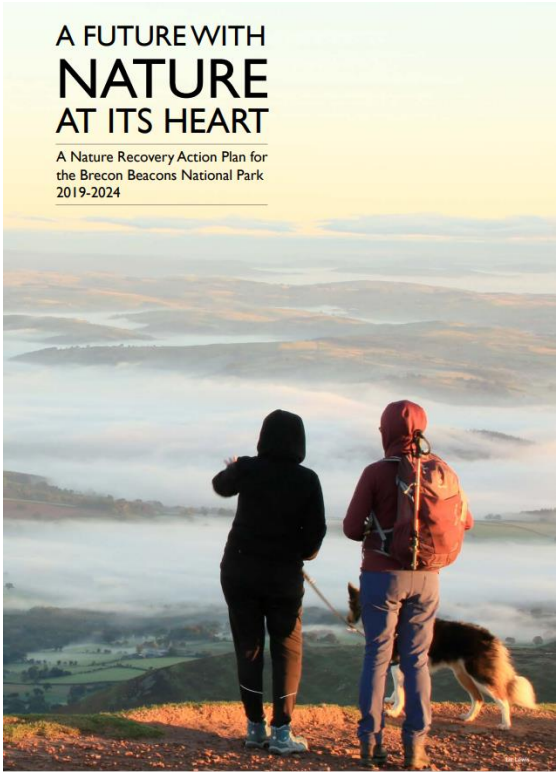
5. SIGNPOSTING

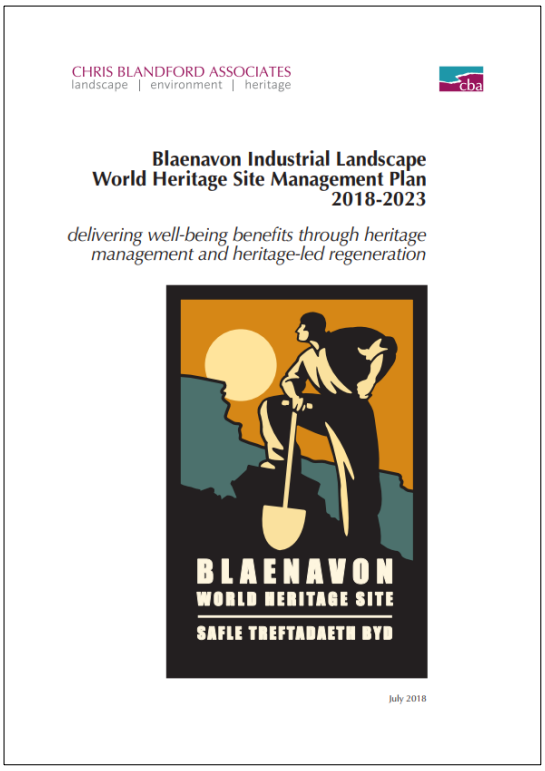
We don't want to duplicate efforts where we don't need to, so for some habitats and species we direct people towards actions plans created by partners working locally or wider afield but still applicable in our area. Where habitats and species have been identified as priorities in the Monmouthshire LNP area, we will aim to review partners action plans and identify local actions which can contribute to them as appropriate.

5.1. BANNAU BRYCHEINIOG NATIONAL PARK

The Bannau Brycheiniog National Park has its own Local Nature Partnership which produced a Local NRAP published in 2019 and is currently reviewing the actions for next issue, forecast to be published in 2024. The BBNP Local NRAP is intended to guide nature recovery efforts within the National Park, as one part of the jigsaw to deliver an Ecosystem Approach. The Monmouthshire Local NRAP will identify actions that enable cross border working and collaboration with the Bannau Brycheiniog LNP but activities within the park area should be guided by their Local NRAP.

Partners working in the BBNP should also be aware of the Blaenavon Industrial Landscape World Heritage Site Management Plan. Many of the actions in the plan which are designed to protect the features of the WHS will also have positive impacts for biodiversity and nature recovery, such as reducing damaging activities like off-roading.





Images in this section are linked to the relevant plans and websites.

5.2. GWENT WILDLIFE TRUST'S TEN VULNERABLE SPECIES

Gwent Wildlife Trust set their 2030 goal to recover ten vulnerable species in Gwent, reasoning that by spotlighting a small number of species action can be targeted and the impact better measured. The species were chosen as they are threatened in Gwent and also action for the chosen species would benefit other species in the varied counties across Gwent. Action plans were created for the following species:

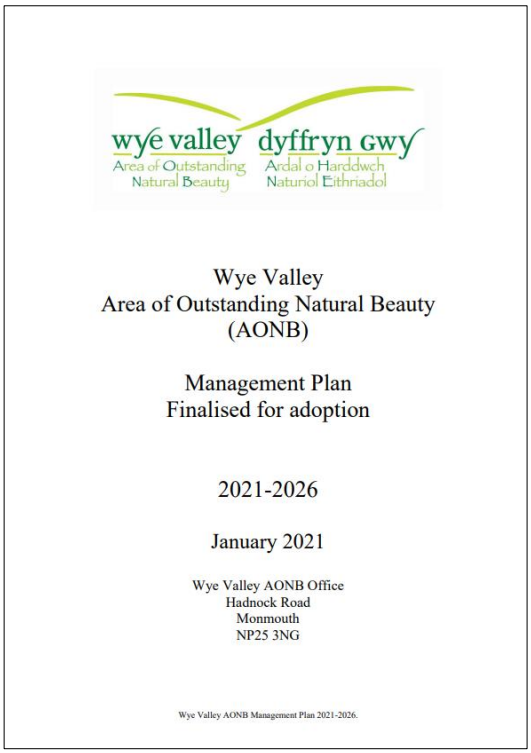
- **Adder**
- Barn owl
- Dipper
- Grayling
- Hedgehog
- Nightjar
- Pine marten
- Pink waxcap
- **Shrill carder bee**
- **Water vole**

All the species have been recorded in Monmouthshire, although for some species the records are historic or unconfirmed. Species in bold were also identified as priorities in Monmouthshire by LNP members.

5.3. WYE VALLEY NATIONAL LANDSCAPE

The Wye Valley National Landscape is an Area of Outstanding Natural Beauty (AONB) which covers parts of Herefordshire, Gloucestershire and Monmouthshire. The AONB Management Plan sets out the vision for the designated Area of Outstanding Natural Beauty and the priorities for its management. The Wye Valley National Landscape's Nature Recovery Plan will focus on habitats identified as Special Qualities of the protected landscape, their current extent, condition and aims and objective for nature recovery in each. Accompanying Species Action Plans for five species or assemblage of species related to key habitats will also be produced. The plans will cover:

- Woodland and assemblage of woodland butterflies, with particular interest in wood white and pearl bordered fritillary
- Species rich grassland and assemblage of bumblebees, with a particular interest in shrill carder bee, brown banded carder bee, redshank carder bee and long-horned bee
- Orchards and the noble chafer beetle
- Watercourses (i.e. the River Wye and its tributaries) and water crowfoot
- Boundary habitat features (e.g. hedgerows and dry-stone walls) and hedgehogs
- Veteran trees



This link provides further information on Priority Species chosen and will be updated when the Nature Recovery Plan is published.

Images in this section are linked to the relevant plans and websites.

APPENDIX 1: POLICY AND LEGISLATION

WELL-BEING OF FUTURE GENERATIONS (WALES) ACT 2015

The Well-being of Future Generations (Wales) Act 2015 is concerned with improving the social, economic, environmental and cultural well-being of Wales. The Act places a duty on public bodies listed in the Act to carry out sustainable development. To do this public bodies are required to work towards the following seven well-being goals:

All public bodies listed in the Act must set up and publish well-being objectives. The Act has also established Public Services Boards (PSBs) for each local authority area in Wales. Their role is to improve the economic, social, environmental and cultural well-being in its area by strengthening joint working across all public services in Wales.

An annual Well-being of Wales report The Future Generations commissioner publishes an annual report which summarises progress with reference to a set of 46 national indicator, including (43) area of healthy ecosystem and (44) the status of biodiversity in Wales.

THE ENVIRONMENT (WALES) ACT 2016

The Environment (Wales) Act 2016 puts in place the legislation needed to plan and manage Wales' natural resources in a more proactive, sustainable and joined-up way.

BIODIVERSITY AND RESILIENCE OF ECOSYSTEMS DUTY

Section 6 under Part 1 of the Environment (Wales) Act 2016 introduced an enhanced biodiversity and resilience of ecosystems duty (Section 6 Duty) for public bodies. The duty requires that public bodies must seek to maintain and enhance biodiversity so far as

consistent with the proper exercise of their functions and in doing so promote the resilience of ecosystems.

Sustainable Management of Natural Resources (SMNR) Framework

Part 1 of the Environment (Wales) Act 2016 sets out Wales' approach to planning and managing natural resources at a national and local level with a general purpose linked to statutory Principles of Sustainable Management of Natural Resources (SMNR) defined within the Act.

There are three main components to the associated SMNR framework:

Part 1: The State of Natural Resources Report (SoNaRR)

The Report (produced by Natural Resources Wales, NRW) sets out the state of Wales' natural resources. It assesses the extent to which natural resources in Wales are being sustainably managed, and recommends a proactive approach to building resilience. For the first time the Report links the resilience of Welsh natural resources to the well-being of the people of Wales.

Part 2: Natural Resources Policy (NRP)

Produced by Welsh Government, it sets out the priorities, risks and opportunities for managing natural resources sustainably. The Policy takes into account the findings of the State of Natural Resources Report. The focus of the NRP is the sustainable management of Wales' natural resources, to maximise their contribution to achieving goals within the Well-being of Future Generations (Wales) Act 2015. The policy sets out the following three National Priorities:

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

Part 3: Area Statements

Area Statements will translate the high level strategic priorities while taking account of local need, opportunities and pressures, such as listed in this NRAP. An area profile will identify potential opportunities and priorities at a local level and possible collaboration opportunities for different bodies to work. Monmouthshire is in the South East Wales Area Statement area which takes a landscape approach to working, recognising the special and distinct landscape profiles of the area.

APPENDIX 2: PROTECTED SITES

Type of Designation	Details
Ramsar Site *The Convention on Wetlands 1971*	Ramsar sites are wetlands of international importance, designated following the Convention on Wetlands signed in Ramsar, Iran, in 1971. All are designated as SSSI as well and through that are legally protected against damaging activities. The Severn Estuary is designated as a Ramsar site for estuarine habitat, assemblages of migratory fish species and internationally important populations of waterfowl.
Special Protection Area (SPA) *Conservation of Habitats and Species Regulations 2019*	Internationally important sites for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds are designated as Special Protection Areas (SPAs). There is a legal duty to manage and monitor SPA sites. All are designated as SSSI as well and through that are legally protected against damaging activities. The Severn Estuary SPA is one of the most important estuaries in the UK for overwintering wildfowl and waders, especially when severe weather conditions affect sites further north and east. The Estuary regularly supports over 20,000 wintering wildfowl, with over 80,000 individual waterfowls recorded in the winter seasons.
Special Area of Conservation (SAC) *Conservation of Habitats and Species Regulations 2019*	Sites which support internationally important habitats or species populations are designated as Special Areas of Conservation (SACs). There is a legal duty to manage and monitor SAC sites. All are designated as SSSI as well and through that are legally protected against damaging activities. There are five SACs in Monmouthshire. The Severn Estuary is designated as one of the largest coastal plain estuaries in Europe, with a classic funnel shaper and one of the highest tidal ranges in the world. Together with the Ramsar and SPA designations the site is known as the Severn Estuary European Marine Site. The Rivers Usk and Wye SACs are both designated as watercourses which support migratory and non-migratory fish, as well as otter and water crowfoot habitat. The Wye Valley Woodlands SAC comprises over 900 ha of mixed ash, beech and yew woodlands, on both Welsh and English representing the western-most range of most of the woodland types recorded. The Wye Valley and Forest of Dean Bat Sites SAC is another cross border SAC the protects an internationally important network of lesser and greater horseshoe bat roosts. In Monmouthshire there are four roosts which include the only known greater horseshoe maternity roost in Wales.
Site of Special Scientific Interest (SSSI) *Wildlife and Countryside Act 1981, Countryside and Rights of Way Act 2000*	Sites which support habitats or species population of national importance. Some sites are also designated for geological reasons. Activities which are likely to damage a SSSI require consent from the relevant nature conservation body. There are 67 Sites of Special Scientific Interest (SSSIs) including nine sites designated for the species they support, 20 woodland SSSIs and 11 designated for species-rich or ancient grassland. The full breakdown of SSSI types is given in Figure 8.

Type of Designation	Details
National Nature Reserve (NNR) *Wildlife and Countryside Act 1981*	NNRs are designated by the relevant nature conservation body. They are all nationally important sites designated as SSSIs which are also open to the public (with some exceptions). There are two National Nature Reserves in Monmouthshire; Fiddlers Elbow and Upper Wye Gorge, both of which are part of Wye Valley Woodlands SAC
Local Nature Reserve (LNR) *National Parks and Access to the Countryside Act 1949*	LNR sites are designated by the council. There is no legal protection as a result of the LNR designation but they are usually protected by management agreements and local plans. Cleddon Bog SSSI is designated as Local Nature Reserve in Monmouthshire.
Local Wildlife Site (LWS) or Site of Importance for Nature Conservation (SINC) *Not a statutory designation*	LWS or SINCs have substantive nature conservation value and play a critical role in conservation, but have no legal protection. National and local planning policy provides some protection against development, and recent updates to Planning Policy Wales have strengthened the commitment to protect locally designated sites and irreplaceable habitats. At time of publication there are 759 sites designated as SINCs identified in Monmouthshire LPA predominantly in relation to grassland and ancient and semi-natural woodland. Gwent Wildlife Trust identify new sites each year so this number is subject to change.

APPENDIX 3: PRIORITY HABITATS AND SPECIES

PRIORITY HABITATS RECORDED IN MONMOUTHSHIRE

The habitats in the following table are habitats listed on Section 7 of the Environment (Wales) Act 2016 that are known to occur within Monmouthshire. We have used data sets available on Data Map Wales and designated site citations to inform the list.

Habitats	Cynefin	Priority Habitats	Cynefin sy'n Flaenoriaeth
Broadleaved, mixed and yew woodland	Coedwig lydanddail, gymysgac ywen	Traditional orchards	Perllannau traddodiadol
		Wood pasture & parkland	Porfa goediog a pharcdir
		Lowland beech and yew woodland	Coedwig ffawydd ac ywenar dir isel
		Wet woodland	Coedwig wlyb
		Lowland mixed deciduous woodland	Coedwig gollddail gymysgar dir isel
Boundary and linear features	Coedwig lydanddail, gymysgac ywen	Hedgerows	Gwrychoedd
Improved grassland	Glaswelltir wedi ei wella	Coastal and floodplain grazing marsh	Tir pori corslyd ar forfaarfordirol a gorlifdir
Neutral grassland	Glaswelltir niwtral	Lowland meadows	Gweirgloddiau yr iseldir
Calcareous grassland	Glaswelltir calchaidd	Lowland calcareous grassland	Glaswelltir calchaidd yriseldir
Acid grassland	Glaswelltir asidaidd	Lowland dry acid grassland	Glaswelltir asidaidd sychiseldir
Dwarf shrub heath	Gweundir o gorlwyni	Lowland heathland	Gweundir yr iseldir
Fen, marsh and swamp	Ffen, cors a chors siglennaidd	Lowland fens	Ffeniau ar dir isel
	Ffen, cors a chors siglennaidd	Reedbeds	Gwelyau cyrs
Bogs	Corsydd	Lowland raised bog	Cyforgors ar dir isel
Rivers and Streams	Afonydd a nentydd	Rivers	Afonydd
Standing open waters and canals	Dŵr llonydd agored a chamlesi	Ponds	Pyllau dŵr
Inland rock	Craig fewndirol	Open mosaic habitats on previously developed land	Brithwaith o gynefinoeddagored ar dir a oedd cynt wedi ei ddatblygu
Supralittoral rock	Craig uwch-lanw	Maritime cliff and slopes	Clogwyni a llethrau arforol

PRIORITY SPECIES IN MONMOUTHSHIRE

The species in the following table have all been recorded in Monmouthshire and are listed as priority species on Section 7 of the Environment (Wales) Act 2016. The list and number of records is from data provided by SEWBReC in May 2022.

Species Group	Scientific Name	English Name	Welsh Name	Earliest Year	Latest Year
Mammals	*Arvicola amphibius*	European Water Vole	Llygod Pengrwn y Dwr	1959	2021
	Barbastella barbastellus	Western Barbastelle	Ystlum Du	2010	2020
	Erinaceus europaeus	West European Hedgehog	Draenog	1964	2021
	Lepus europaeus	Brown Hare	Ysgyfarnog	1959	2021
	Lutra lutra	European Otter	Dyfrgi	1958	2022
	Martes martes	Pine Marten	Bele	1873	2021
	Micromys minutus	Harvest Mouse	Llygod yr Yd	1968	2021
	Muscardinus avellanarius	Hazel Dormouse	Pathew	1905	2022
	Mustela putorius	Polecat	Ffwlbart	1900	2021
	Mustela putorius subsp. furo	Ferret	Ffuret	1995	2006
	Myotis bechsteinii	Bechstein's Bat	Ystlum Bechstein	2011	2020
	Nyctalus noctula	Noctule Bat	Ystlum Mawr	1959	2021
	Phocoena phocoena	Common Porpoise	Ilamidyddion	2013	2020
	Pipistrellus pipistrellus	Common Pipistrelle		1986	2021
	Pipistrellus pygmaeus	Soprano Pipistrelle		1996	2021
	Plecotus auritus	Brown Long-eared Bat	Ystlum Hirglust	1969	2021
	Rhinolophus ferrumequinum	Greater Horseshoe Bat	Ystlum Pedol Mwyaf	1961	2020
	Rhinolophus hipposideros	Lesser Horseshoe Bat	Ystlum Pedol Lleiaf	1959	2022
	Tursiops truncatus	Bottle-Nosed Dolphin	Dolffin Trwyn Potel	1988	1988
Birds	*Acanthis cabaret*	Lesser Redpoll		1960	2022
	Alauda arvensis	Eurasian Skylark	Ehedydd	1961	2022
	Anser albifrons	White-fronted Goose	Gwydd Dalcen-Wen	1891	1983
	Anthus trivialis	Tree Pipit	Corhedydd y Coed	1961	2021

Species Group	Scientific Name	English Name	Welsh Name	Earliest Year	Latest Year
	Botaurus stellaris	Eurasian Bittern	Adar y Bwn	1985	2016
	Branta bernicla bernicla	Dark-bellied Brent Goose		2011	2016
	Caprimulgus europaeus	Nightjar	Troellwr Mawr	1959	2021
	Charadrius hiaticula	Common Ringed Plover	Cwtiad Torchog	1972	2020
	Chroicocephalus ridibundus	Black-headed Gull		1971	2021
	Circus cyaneus	Hen Harrier	Boda Tinwyn	1994	2020
	Coccothraustes coccothraustes	Hawfinch	Gylfinbraff	1961	2022
	Crex crex	Corncrake	Rhegen yr Yd	1973	1981
	Cuculus canorus	Cuckoo	Cog	1959	2022
	Cygnus columbianus bewickii	Bewick's Swan	Alarch Bewick	1966	2019
	Dryobates minor	Lesser Spotted Woodpecker	Cnocell Fraith Leiaf	1959	2022
	Emberiza calandra	Corn Bunting	Bras yr Yd	1973	2009
	Emberiza citrinella	Yellowhammer	Bras Melyn	1961	2021
	Emberiza schoeniclus	Common Reed Bunting	Bras y Cyrs	1965	2021
	Falco tinnunculus	Kestrel	Cudyll Coch	1961	2021
	Ficedula hypoleuca	European Pied Flycatcher	Gwybedog Brith	1959	2021
	Lagopus lagopus	Red Grouse		1964	2022
	Lagopus lagopus scotica	Red Grouse (scotica)	Grugiar Goch	1964	2018
	Larus argentatus	European Herring Gull	Gwylan y Penwaig	1961	2022
	Limosa lapponica	Bar-tailed Godwit		1971	2020
	Linaria cannabina	Linnet	Llinos	1966	2021
	Locustella naevia	Grasshopper Warbler	Troellwr Bach	1959	2019
	Lullula arborea	Woodlark	Ehedydd y Coed	1985	2019
	Melanitta nigra	Common Scoter	Mor-Hwyaden Ddu	1971	2020
	Motacilla flava	Western Yellow Wagtail	Siglen Felen	1960	2020
	Muscicapa striata	Spotted Flycatcher	Gwybedog Mannog	1961	2021

Species Group	Scientific Name	English Name	Welsh Name	Earliest Year	Latest Year
	Numenius arquata	Curlew	Gylfinir	1960	2022
	Passer domesticus	House Sparrow	Adar y To	1965	2022
	Passer montanus	Tree Sparrow	Golfan y Mynydd	1961	2020
	Perdix perdix	Grey Partridge	Petris	1959	2017
	Phylloscopus sibilatrix	Wood Warbler	Telor y Coed	1961	2020
	Pluvialis apricaria	Golden Plover	Cwtiad Aur	1901	2020
	Poecile montanus	Willow Tit	Titw'r Helyg	1981	2021
	Poecile palustris	Marsh Tit	Titw'r Wern	1961	2020
	Prunella modularis	Dunnock	Llwyd y Gwrych	1961	2022
	Pyrrhula pyrrhula	Eurasian Bullfinch	Coch y Berllan	1961	2022
	Streptopelia turtur	Turtle Dove	Turtur	1959	2020
	Sturnus vulgaris	Starling	Drudwen	1961	2021
	Turdus philomelos	Song Thrush	Bronfraith	1959	2022
	Turdus torquatus	Ring Ouzel	Mwyalchen y Mynydd	1960	2020
	Vanellus vanellus	Lapwing	Cornchwiglen	1959	2022
Reptiles and Amphibians	*Anguis fragilis*	Slow-worm	Nadroedd Defaid	1883	2021
	Bufo bufo	Common Toad	Llyffant Dafadennog	1833	2021
	Natrix helvetica	Grass Snake	Nadroedd y Gwair	1958	2022
	Triturus cristatus	Great Crested Newt	Madfall Ddwr Gribog	1833	2021
	Vipera berus	Adder	Gwiber	1963	2021
	Zootoca vivipara	Common Lizard	Madfall	1956	2021
Fish	*Alosa alosa*	Allis Shad	Herlod	1964	1964
	Alosa fallax	Twaite Shad	Gwangen	1980	2013
	Anguilla anguilla	European Eel	Llysywen	1967	2021
	Gadus morhua	Atlantic Cod	Penfras	1981	1981
	Lampetra fluviatilis	Lampern	Llysywen Bendoll yr Afon	1975	2011
	Petromyzon marinus	Sea Lamprey		1963	2011

Species Group	Scientific Name	English Name	Welsh Name	Earliest Year	Latest Year
	Raja clavata	Roker	Morgath Styds	2017	2017
	Salmo salar	Atlantic Salmon	Eog	1976	2014
	Salmo trutta	Brown/Sea Trout	Brithyll	1964	2014
Butterflies and Moths	*Acronicta psi*	Grey Dagger	Bidog Llwyd	1912	2021
	Acronicta rumicis	Knot Grass	Bidog Tafol	1966	2021
	Adscita statices	Forester	Coediwr	1982	2015
	Agonopterix atomella	Greenweed Flat-body		1977	1977
	Agrochola helvola	Flounced Chestnut	Castan Grech	1965	2017
	Agrochola litura	Brown-spot Pinion	Castan Smotyn Brown	1966	2017
	Agrochola lychnidis	Beaded Chestnut	Castan Leiniog	1912	2016
	Allophyes oxyacanthae	Green-brindled Crescent	Cilgant Brych	1962	2017
	Amphipoea oculea	Ear Moth	Clustwyfyn Llygeidiog	1973	2015
	Amphipyra tragopoginis	Mouse Moth		1966	2016
	Anania funebris	White-spotted Sable		1966	1974
	Apamea remissa	Dusky Brocade	Brithion Llwydolau	1961	2017
	Arctia caja	Garden Tiger	Teigr yr Ardd	1964	2016
	Argynnis adippe	High Brown Fritillary	Britheg Frown	1905	1989
	Asteroscopus sphinx	Sprawler	Cwcwll Bwaog	1965	2021
	Atethmia centrago	Centre-barred Sallow	Melyn yr Ynn	1935	2016
	Boloria euphrosyne	Pearl-bordered Fritillary	Britheg Berlog	1890	2019
	Boloria selene	Small Pearl-bordered Fritillary	Britheg Berlog Fach	1906	2021
	Brachylomia viminalis	Minor Shoulder-knot	Gwarglymau Bach	1967	2015
	Caradrina morpheus	Mottled Rustic	Gwladwr Brith	1966	2017
	Celaena haworthii	Haworth's Minor	Gwyfyn Plu'r Gweunydd	2013	2013
	Ceramica pisi	Broom Moth	Gwyfyn Banadl	1966	2020
	Chesias legatella	Streak	Rhesen y Banadl	1962	2016

Species Group	Scientific Name	English Name	Welsh Name	Earliest Year	Latest Year
	Chesias rufata	Broom-tip	Rhesen Gam	1967	2016
	Chiasmia clathrata	Latticed Heath	Seffyr Delltog	1968	2014
	Cirrhia gilvago	Dusky-lemon Sallow	Melyn y Llwyf	1966	2005
	Cirrhia icteritia	Sallow	Melyn Penfelyn	1966	2017
	Coenonympha pamphilus	Small Heath		1906	2021
	Cossus cossus	Goat Moth	Gwyfyn Drewllyd	1971	1971
	Cupido minimus	Small Blue	Gleision Bach	2007	2020
	Cymatophorina diluta	Oak Lutestring	Tannau'r Deri	1971	2012
	Diarsia rubi	Small Square-spot	Smotiau Sgwar Bach	1912	2017
	Diloba caeruleocephala	Figure of Eight	Crwbach Ffigwr Wyth	1963	2016
	Ecliptopera silaceata	Small Phoenix	Ffenics Bach	1912	2022
	Ennomos erosaria	September Thorn	Carpiog Medi	1969	2017
	Ennomos fuscantaria	Dusky Thorn	Carpiog Tywyll	1966	2017
	Ennomos quercinaria	August Thorn	Carpiog Awst	1966	2017
	Entephria caesiata	Grey Mountain Carpet	Brychan Llwyd y Mynydd	1984	1999
	Epirrhoe galiata	Galium Carpet	Brychan y Friwydd	1984	2010
	Eriopygodes imbecilla	Silurian	Gwyfyn Gwent	1999	2019
	Erynnis tages	Dingy Skipper	Gwibiwr Llwyd	1906	2020
	Eugnorisma glareosa	Autumnal Rustic	Gwladwr yr Hydref	1966	2017
	Eulithis mellinata	Spinach	Brychan Cwrens	1967	2015
	Euphydryas aurinia	Marsh Fritillary	Britheg y Gors	1890	1994
	Euxoa nigricans	Garden Dart	Dart y Gerddi	1972	2004
	Graphiphora augur	Double Dart	Dart Deunod	1967	2015
	Helotropha leucostigma	Crescent	Clustwyfyn Cilgantog	1974	2016
	Hemaris tityus	Narrow-bordered Bee Hawk-moth	Gwalch-Wyfyn Gwenynaidd Ymyl Gul	1933	1933
	Hemistola chrysoprasaria	Small Emerald	Emrallt Barf yr Hen Wr	1967	2017

Species Group	Scientific Name	English Name	Welsh Name	Earliest Year	Latest Year
	Hepialus humuli	Ghost Moth	Chwimwyfyn Rhithiol	1963	2017
	Hipparchia semele	Grayling		1941	2016
	Hoplodrina blanda	Rustic	Llwyd Llyfn	1966	2021
	Hydraecia micacea	Rosy Rustic	Gwladwr Gwridog	1966	2016
	Lasiommata megera	Wall		1906	2021
	Leptidea sinapis	Wood White	Gwyn y Coed	1935	2018
	Leucania comma	Shoulder-striped Wainscot	Gwensgod Gwar Rhesog	1966	2020
	Limenitis camilla	White Admiral	Mantell Wen	1952	2021
	Litoligia literosa	Rosy Minor	Corachod Gwridog	1967	2015
	Lycia hirtaria	Brindled Beauty	Rhisgl Brith	1965	2022
	Macaria wauaria	V-Moth	Seffyr y Ffyrch	1966	1990
	Malacosoma neustria	Lackey	Gwaswyfyn	1966	2016
	Melanchra persicariae	Dot Moth	Gwyfyn Dotiog	1963	2017
	Melanthia procellata	Pretty Chalk Carpet	Brychan Hardd y Calch	1966	2017
	Minoa murinata	Drab Looper	Dolennwr Llwydfelyn	1911	2019
	Mniotype adusta	Dark Brocade	Pali Tywyll	1970	2013
	Noctua orbona	Lunar Yellow Underwing	Isadain Felen Loerol	2019	2019
	Orthonama vittata	Oblique Carpet	Brychan Lletraws	1966	2016
	Orthosia gracilis	Powdered Quaker	Crynwr Llychlyd	1967	2022
	Perizoma albulata	Grass Rivulet	Gwregys y Gwair	1967	2016
	Plebejus argus	Silver-studded Blue	Gleision Serennog	2015	2015
	Pyrgus malvae	Grizzled Skipper	Gwibiwr Brith	1906	2021
	Rheumaptera hastata	Argent & Sable	Brychan Pennau Saethau	1988	2004
	Rhizedra lutosa	Large Wainscot	Gwelltwyfyn Mawr	1967	2016
	Sabra harpagula	Scarce Hook-tip	Bachadain Brin	1961	2016
	Satyrium w-album	White-letter Hairstreak	Brithribin W Wen	1876	2018

Species Group	Scientific Name	English Name	Welsh Name	Earliest Year	Latest Year
	Scopula marginepunctata	Mullein Wave	Ton Arfor	2005	2016
	Scotopteryx chenopodiata	Shaded Broad-bar	Rhesen Lydan Dywyll	1967	2019
	Sideridis reticulata	Bordered Gothic	Rhwyll Ymylog	1892	1892
	Spilosoma lubricipeda	White Ermine	Ermin Gwyn	1935	2021
	Spilosoma lutea	Buff Ermine	Ermin Llwydfelyn	1935	2020
	Stilbia anomala	Anomalous	Llwyd Gloyw	1968	2014
	Synanthedon scoliaeformis	Welsh Clearwing	Cliradain Gymreig	2015	2021
	Thecla betulae	Brown Hairstreak	Brithribin Brown	1983	2000
	Tholera cespitis	Hedge Rustic	Rhwyll y Crawcwellt	1912	2014
	Tholera decimalis	Feathered Gothic	Rhwyll Bluog	1966	2021
	Timandra comae	Blood-vein		1966	2021
	Trichiura crataegi	Pale Eggar	Wylun Gwelw	1966	2016
	Tyria jacobaeae	Cinnabar	Teigr y Benfelen	1968	2021
	Watsonalla binaria	Oak Hook-tip	Bachadain y Deri	1937	2018
	Xanthorhoe ferrugata	Dark-barred Twin-spot Carpet	Brychan Deusmotiog Tywyll	1966	2016
	Xestia agathina	Heath Rustic	Clai'r Rhos	1986	1986
	Xestia castanea	Neglected Rustic	Clai'r Waun	1973	2014
	Xylena exsoleta	Sword-grass	Cleddwyfyn Cyffredin	1892	1892
Bees, Wasps, Ants and Sawflies	*Bombus humilis*	Brown-banded Carder-bee		1997	2022
	Bombus muscorum	Moss Carder-bee		1956	2019
	Bombus ruderarius	Red-shanked Carder-bee		1997	2010
	Bombus sylvarum	Shrill Carder Bee		2003	2017
	Chrysis fulgida	Shimmering Ruby-tail		2020	2020
	Eucera longicornis	Long-horned Bee		1922	2021
	Formicoxenus nitidulus	Shining Guest Ant		1995	1995
Other Invertebrates	*Asilus crabroniformis*	Hornet robberfly		1959	2019
	Austropotamobius pallipes	Freshwater Crayfish		1900	2021

Species Group	Scientific Name	English Name	Welsh Name	Earliest Year	Latest Year
	Baetis niger	Southern Iron Blue		1977	2014
	Bembidion quadripustulatum	Scarce Four-dot Pin-palp		1997	2012
	Bembidion testaceum	Pale Pin-palp		1977	2015
	Brachyptera putata	Northern February Red		1983	2001
	Calosoma inquisitor	Caterpillar-hunter		2002	2002
	Carabus monilis	Necklace Ground Beetle		1985	2013
	Cliorismia rustica	Southern Silver Stiletto-fly		1969	2005
	Empis limata	English Assassin Fly		2000	2002
	Lipsothrix nervosa	Southern Yellow Splinter		1968	2007
	Lipsothrix nobilis	Scarce Yellow Splinter		2005	2005
	Lucanus cervus	Stag Beetle		1961	2012
	Meloe proscarabaeus	Black Oil-beetle		1971	2022
	Meloe rugosus	Rugged Oil-beetle		2006	2021
	Meloe violaceus	Violet Oil-beetle		2015	2021
	Meotica anglica	Shingle Rove Beetle		1998	1998
	Monocephalus castaneipes	Broad Groove-head Spider		1991	1998
	Pisidium tenuilineatum	Fine-lined Pea Mussel		1973	2003
	Potamanthus luteus	Yellow Mayfly		1954	2020
	Pseudanodonta complanata	Depressed River Mussel		1955	2010
	Rhabdomastix japonica	River-shore Cranefly		1972	1997
	Saaristoa firma	Triangle Hammock-spider		2000	2000
	Synaptus filiformis	Hairy Click Beetle		1852	2003
Plants	*Anomodon longifolius*	Long-leaved Tail-moss		1911	2012
	Asplenium trichomanes subsp. pachyrachis	Lobed Maidenhair Spleenwort	Duegredynen Gwallt y Forwyn	1988	2019
	Bupleurum tenuissimum	Slender Hare's-ear	Paladr Trwyddo Eiddilddail	1972	2011

Species Group	Scientific Name	English Name	Welsh Name	Earliest Year	Latest Year
	Campanula patula	Spreading Bellflower	Clychlys Lledaenol	1944	2018
	Centaurea cyanus	Cornflower	Glas yr Yd	1991	2020
	Cephalanthera longifolia	Narrow-leaved Helleborine	Caldrist Culddail	1879	2019
	Clinopodium acinos	Basil Thyme	Brenhinllys	2011	2011
	Dianthus armeria	Deptford Pink	Penigan y Porfeydd	1980	1980
	Didymodon tomaculosus	Sausage Beard-moss		2004	2004
	Euphrasia officinalis subsp. anglica	Glandular Eyebright	Effros Chwareog Gwalltog	1985	2021
	Euphrasia officinalis subsp. monticola	Eyebright		1997	1997
	Euphrasia officinalis subsp. pratensis	Eyebright	Effros Blodau Bach Gludiog	1971	2021
	Euphrasia pseudokerneri	Eyebright	Effros y Calch	2003	2017
	Fumaria purpurea	Purple Ramping-fumitory	Mwg y Ddaear Glasgoch	1984	2014
	Galeopsis angustifolia	Red Hemp-nettle	Penboeth Culddail	1983	1983
	Hordeum marinum	Sea Barley	Haidd y Morfa	1972	1972
	Hypopitys monotropa	Yellow Bird's-nest	Cyd-Dwf	1845	2021
	Hypopitys monotropa subsp. hypophegea	Bird's-nest		1969	2010
	Lycopodium clavatum	Stag's-horn Clubmoss	Cnwbfwsogl Corn Carw	1980	2016
	Melittis melissophyllum	Bastard Balm	Gwenynog	1977	1977
	Mentha pulegium	Pennyroyal	Brefai	1964	1964
	Oenanthe fistulosa	Tubular Water-dropwort	Cegid Pibellaidd	1965	2019
	Ophrys insectifera	Fly Orchid	Caineirian yr Ednogyn	1878	1979
	Orthotrichum pumilum	Dwarf Bristle-moss		2011	2011
	Platanthera bifolia	Lesser Butterfly-orchid	Baladr Dwyddeiliog	1878	2011
	Ranunculus arvensis	Corn Buttercup	Blodyn-Ymenyn yr Yd	1973	1981
	Scleranthus annuus	Annual Knawel	Dinodd Blynyddol	2005	2005

Species Group	Scientific Name	English Name	Welsh Name	Earliest Year	Latest Year
	Sorbus eminens	Round-leaved Whitebeam	Cerddinen Mynwy	1903	2005
	Sorbus leptophylla	Thin-leaved Whitebeam	Cerddinen Gymreig	1988	1988
	Stellaria palustris	Marsh Stitchwort	Serenllys Llwydlas	1982	1983
	Trollius europaeus	Globeflower	Blodeuyn y Gronnell	2011	2011
	Weissia multicapsularis	Many-fruited Beardless-moss		1980	2010
	Weissia squarrosa	Spreading-leaved Beardless-moss		2003	2011
Fungi, Lichen and Slime Moulds	*Clavaria zollingeri*	Violaceous Fairy Club	Cwrel Fioled	2000	2021
	Entoloma bloxamii	Big Blue Pinkgill	Tagell Binc Fawr Las	2006	2016
	Microglossum olivaceum	Earth Tongue	Tafod Daear Melynwyrdd	1998	2016
	Parmelia ernstiae			2016	2016
	Phylloporus pelletieri	Gilled Bolete	Boled Tagell Aur	2017	2017
	Piptoporus quercinus	Oak polypore		2006	2006
	Punctelia jeckeri			1986	2009
	Punctelia reddenda			1975	1975
	Pyrenula nitida			1982	1982
	Usnea articulata			2016	2016
	Usnea florida	Witches' Whiskers Lichen		2005	2005

APPENDIX 4: NRAP FOR WALES OBJECTIVES

The following table gives the NRAP for Wales objectives, which are also the Greater Gwent NRAP objectives. We have also included the outcomes of the Greater Gwent NRAP.

NRAP for Wales Objectives		GGNRAP Outcomes	
1	Engage and support participation and understanding to embed biodiversity throughout decision making at all levels	**1.1**	Nature is valued with biodiversity enhancements embedded in decision making. Our habitats and species are thriving, biodiversity is maximised and wildlife is abundant
		1.2	Peoples, communities and services are connected with nature having a clear understanding of the value of biodiversity and nature for society
2	Safeguard species and habitats of principal importance and improve their management	**2.1**	Priority species and habitats are at the forefront of nature recovery actions
		2.2	Our most important sites are safeguarded, enhanced and connected. Species and habitats are healthy functioning and resilient.
3	Increase the resilience of our natural environment by restoring degrading habitats and habitat creation	**3.1**	Priorities for habitat restoration are identified outside of the protected site network
		3.2	Our broad habitats and ecosystems are safeguarded, restored and are resilient
		3.3	Nature based solutions are at the forefront of habitat restoration and creation, reducing effectively and efficiently the pressures impacting the natural environment and well-being
4	Tackle key pressures on species and habitats	**4.1**	Increased capacity of habitats and ecosystems to respond, resist and recover from climate change risk.
		4.2	Natural resources are managed and used more sustainably and equitably, supporting more resilient services that maximises well-being.
		4.3	The pressures of pollution driving biodiversity loss is reduced and prevented
		4.4	Land-use and land-use change is incrementally maximising biodiversity and other ecosystem

			services for well-being whilst maintaining or enhancing productivity.
		4.5	INNS is being prevented, frequency and distribution is declining
5	Improve our evidence, understanding and monitoring	**5.1**	Regular monitoring and data collection is used to evidence future nature recovery actions
6	Put in place a framework of governance and support for delivery	**6.1**	The Greater Gwent Nature Recovery Action Plan is reviewed and updated over a suitable timescale, outlining the intended legacy of the GGNRAP
		6.2	The GGSON is updated over a suitable timescale
		6.3	Creation and use of Local Nature Recovery Action Plans at a local level within Greater Gwent