

Nature in Carmarthenshire

PART 4

References & Appendices

May 2020



4.1 References

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Appendix 1 - Summary of 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. In order to do this public bodies are required to work towards the following seven well-being goals:

- A globally responsible Wales
- A prosperous Wales
- A resilient Wales, referring in particular to ecological resilience
- A healthier Wales
- A more equal Wales
- A Wales of cohesive communities
- A Wales of vibrant culture and thriving Welsh language

All public bodies listed in the Act must set up and publish well-being objectives with an accompanying statement and take all reasonable steps to meet those 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. This legislation applies to several members of the Carmarthenshire Local Nature Partnership, but not all of them. However, the principles of the Act, apply to all that we are trying to achieve through a local plan for action.

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.

Part 1 (there are six other parts) focuses on the sustainable management of natural resources (SMNR) approach and the associated enhanced biodiversity and ecosystem resilience duty.

(i) 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**. This is a profound shift that considers not only species and habitats but how ecosystems function. It reinforces the message that helping nature to thrive will require concerted action by a range of organisations in Wales, including Welsh Government, Natural Resources Wales and other government agencies, as well as regulated businesses.

(ii) Sustainable Management of Natural Resources (SMNR) Framework

<http://www.assembly.wales/research%20documents/19-002%20-%20smnr/19-002%20-%20web%20-%20english.pdf>

This sets out Wales' approach to planning and managing natural

resources at a national and local level with a general purpose linked to the principles of Sustainable Management of Natural Resources (SMNR): 'using natural resources* in a way, and at a rate, that maintains and enhances the resilience of ecosystems and the benefits they provide.'

Section 4 of the Environment Act introduces nine principles to help guide and underpin the way SMNR should be interpreted to ensure a consistent approach for SMNR across Wales:

- **Adaptable** – a need to plan, monitor, review and change future work in light of new evidence and understanding;
- **Scale** – decisions and actions will need to be taken at national, regional or local levels to deliver the best outcomes;
- **Working together** – everyone in Wales is a stakeholder in the natural environment and hence, to ensure best management of natural resources, all views need to be considered;
- **Engaging with the public** – ensure that the public has opportunity to give its opinion on how natural resources are managed, at all stages of the decision-making process;
- **Evidence** – an improved evidence base is needed to understand Wales' natural resources to allow for better management;
- **Understanding all of the benefits received from natural resources** – the whole of Wales needs to understand the economic, social, cultural and environmental value of natural resources, including how

*[*includes (but not limited to) – animals, plants and other organisms; air, water and soil; minerals; geological features and processes; physiographical features; climatic features and processes.]*

- they can benefit future generations;
- **Long term** – impacts of decisions need to be considered not only in the short term but also in the long term;
 - **Prevention** – take steps to prevent damage to Welsh ecosystems; and
 - **Resilience** – to be able to deal with increased demands and pressures, such as climate change, Welsh ecosystems need to be healthy. Decisions need to be considered in terms of providing long term benefits.

There are three main components to the associated SMNR framework:

Part 1: The State of Natural Resources Report (SoNaRR) 2016

<https://naturalresources.wales/evidence-and-data/research-and-reports/the-state-of-natural-resources-report-assessment-of-the-sustainable-management-of-natural-resources/?lang=en>

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: WG Natural Resources Policy (NRP) 2017

<https://gov.wales/sites/default/files/publications/2019-06/natural-resources-policy.pdf>

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 Act**. 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

<https://naturalresources.wales/about-us/area-statements/?lang=en>

The Environment (Wales) Act 2016 made it a duty for Natural Resources Wales to produce Area statements.

Area statements will help coordinate NRW's work and the work of others, to build the resilience of our ecosystems and enhance the benefits they provide us.

They will bring together data, information and ways of engaging others to help better understand the state and trends of natural resources in an area, the pressures on them and their benefits.

Area Statements will set out evidence on the natural resources in a place, the benefits they can provide, and from this, identify the opportunities for implementing the Natural Resources Policy, so they can continue to deliver benefits now and in the future.

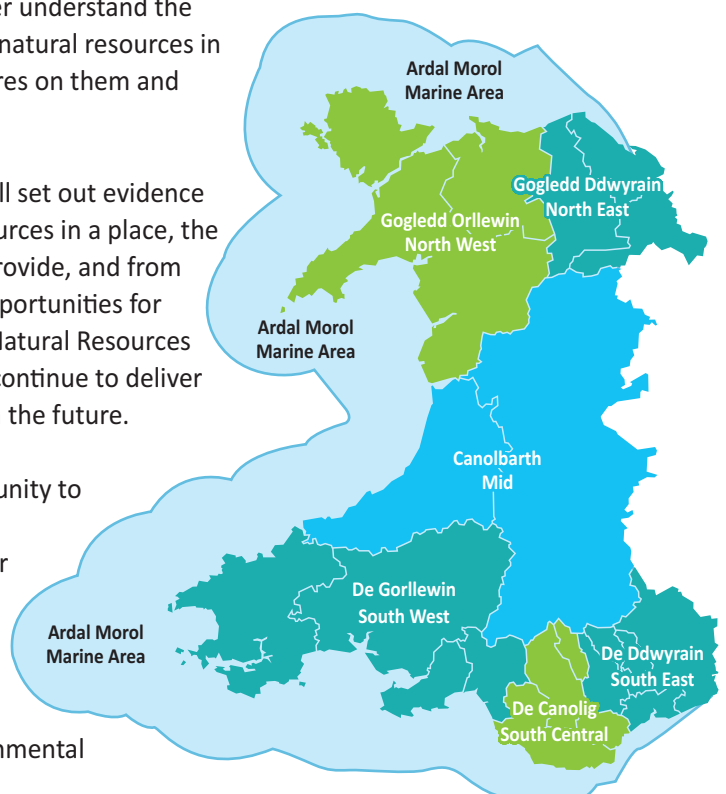
They are an opportunity to rethink the way we manage and use our natural resources, and collaboratively design new solutions to the big societal and environmental challenges we face.

Area Statements will translate the high level strategic priorities while taking account of local need, opportunities and pressures. An area profile will identify potential opportunities and priorities at a local level and possible collaboration opportunities for different bodies to work.

NRW have identified health inequalities, rural land management, declining biodiversity and a changing climate as the issues of particular concern in the south west area.

Carmarthenshire is within the South West Wales Area Statement along with Pembrokeshire, Swansea and Neath Port Talbot. Any plan for biodiversity action for Carmarthenshire should inform and be informed by the local Area Statement.

Area Statements in Wales:



Appendix 2 - Section 7 priority habitats and species recorded in Carmarthenshire

BROAD HABITAT	PRIORITY HABITAT
Coastal	<ul style="list-style-type: none"> • Coastal vegetated shingle • Coastal saltmarsh • Coastal sand dunes • Maritime cliff and slope
Brownfield, Gardens and Urban open spaces	<ul style="list-style-type: none"> • Open mosaic habitats on previously developed land (brownfield) • Gardens and allotments • Urban open space
Farmland habitats	<ul style="list-style-type: none"> • Hedgerows • Arable field margins • Traditional orchards
Freshwater habitats	<ul style="list-style-type: none"> • Rivers • Oligotrophic and dystrophic lakes • Mesotrophic lakes • Aquifer-fed naturally fluctuating water bodies • Ponds
Lowland grassland and heathland	<ul style="list-style-type: none"> • Lowland heathland • Lowland meadows • Purple moor-grass and rush pasture • Lowland dry acid grassland • Roadside verges* • Church and chapel burial grounds and cemeteries*
Uplands	<ul style="list-style-type: none"> • Upland heathland • Blanket bog • Inland rock outcrop and scree habitats • Upland flushes, fens and swamps
Wetlands	<ul style="list-style-type: none"> • Lowland raised bog • Coastal and floodplain grazing marsh • Reedbeds
Woodlands	<ul style="list-style-type: none"> • Wood-pasture and parkland • Upland oakwood • Upland mixed ash woodland • Wet woodland • Lowland mixed deciduous woodlands
Marine	<ul style="list-style-type: none"> • Intertidal mudflats • Seagrass beds • Coastal saltmarsh • Peat and clay exposures • Subtidal sands and gravels • Saline lagoons • Blue mussel beds? • Intertidal boulder communities? • Sheltered muddy gravels?

* Local priority habitat

Section 7 species in Carmarthenshire

NB. This is a list based upon species records for Carmarthenshire (post 1990) cross-referenced to the Section 7 list. Absence of records does not necessarily indicate absence of the species in the county (It was produced with the help of the West Wales Biodiversity Information Centre and local county recorders). Full lists of species and habitats listed under S7 of the Environment (Wales) Act (2016) can be accessed here: <https://www.biodiversitywales.org.uk/Environment-Wales-Bill>

Amphibian	
Common Toad	<i>Bufo bufo</i>
Birds	
Bar-tailed Godwit	<i>Limosa lapponica</i>
Bewick's Swan	<i>Cygnus columbianus</i>
Bittern	<i>Botaurus stellaris</i>
Black-headed Gull	<i>Chroicocephalus ridibundus</i>
Bullfinch	<i>Pyrrhula pyrrhula</i>
Chough	<i>Pyrrhocorax pyrrhocorax</i>
Common Scoter	<i>Melanitta nigra</i>
Cuckoo	<i>Cuculus canorus</i>
Curlew	<i>Numenius arquata</i>
Dark-bellied Brent Goose	<i>Branta bernicla subsp. bernicla</i>
Dunnock	<i>Prunella modularis</i>
Golden Plover	<i>Pluvialis apricaria</i>
Grasshopper Warbler	<i>Locustella naevia</i>
Hawfinch	<i>Coccothraustes coccothraustes</i>
Hen Harrier	<i>Circus cyaneus</i>
Herring Gull	<i>Larus argentatus</i>
House Sparrow	<i>Passer domesticus</i>
Kestrel	<i>Falco tinnunculus</i>
Lapwing	<i>Vanellus vanellus</i>
Lesser Redpoll	<i>Carduelis cabaret</i>
Lesser Spotted Woodpecker	<i>Dendrocopos minor</i>
Linnet	<i>Linaria cannabina</i>
Marsh Tit	<i>Poecile palustris</i>
Nightjar	<i>Caprimulgus europaeus</i>

Pied Flycatcher	<i>Ficedula hypoleuca</i>
Reed Bunting	<i>Emberiza schoeniclus</i>
Ring Ouzel	<i>Turdus torquatus</i>
Ringed Plover	<i>Charadrius hiaticula</i>
Roseate Tern	<i>Sterna dougallii</i>
Skylark	<i>Alauda arvensis</i>
Song Thrush	<i>Turdus philomelos</i>
Spotted Flycatcher	<i>Muscicapa striata</i>
Starling	<i>Sturnus vulgaris</i>
Tree Pipit	<i>Anthus trivialis</i>
Tree Sparrow	<i>Passer montanus</i>
Turtle Dove	<i>Streptopelia turtur</i>
Willow Tit	<i>Poecile montana</i>
Wood Warbler	<i>Phylloscopus sibilatrix</i>
Yellow Wagtail	<i>Motacilla flava</i>
Yellowhammer	<i>Emberiza citrinella</i>
Barn owl*	<i>Tyto alba</i>
Little-ringed plover*	<i>Charadrius dubius</i>
Plants	
Annual Knawel	<i>Scleranthus annuus</i>
Bastard Balm	<i>Melittis melissophyllum</i>
Deptford Pink	<i>Dianthus armeria</i>
Dune Gentian	<i>Gentianella amarella ssp. occidentalis (uliginosa)</i>
Eyebright	<i>Euphrasia rivularis</i>
Frog Orchid	<i>Coeloglossum viride</i>
Globeflower	<i>Trollius europaeus</i>
Heath Fragrant-orchid	<i>Gymnadenia borealis</i>
Lesser Butterfly-orchid	<i>Platanthera bifolia</i>

* Local priority species

Marsh Fragrant-orchid	<i>Gymnadenia densiflora</i>
Pennyroyal	<i>Mentha pulegium</i>
Prickly Saltwort	<i>Salsola kali subsp. kali</i>
Sea Stock	<i>Matthiola sinuata</i>
Small-flowered Catchfly	<i>Silene gallica</i>
Stag's-horn Clubmoss	<i>Lycopodium clavatum</i>
Tubular Water-dropwort	<i>Oenanthe fistulosa</i>
Wood Bitter-vetch	<i>Vicia orobus</i>
Yellow Bird's-nest	<i>Monotropa hypopitys</i>
Fungus	
Golden Gilled Bolete	<i>Phylloporus pelletieri</i>
Hazel Gloves	<i>Hypocreopsis rhododendri</i>
Marram Oyster	<i>Hohenbuehelia culmicola</i>
Marsh Honey Fungus	<i>Armillaria ectypa</i>
Olive Earth Tongue	<i>Microglossum olivaceum</i>
Violet Coral fungus	<i>Clavaria zollingeri</i>
Woolly tooth	<i>Phellodon tomentosus</i>
Insect - beetle (Coleoptera)	
Cliff Tiger Beetle	<i>Cylindera germanica</i>
Crucifix Ground Beetle	<i>Panagaeus cruxmajor</i>
Minutest Diving Beetle	<i>Bidessus minutissimus</i>
Newbery's Rove Beetle	<i>Thinobius newberyi</i>
Oxbow Diving Beetle	<i>Hydroporus rufifrons</i>
Scarce Four-dot Pin-palp	<i>Bembidion</i>
Violet Oil-beetle	<i>Meloe violaceus</i>
Strandline beetle*	<i>Eurynebria complanata</i>
Insect - butterfly	
Brown Hairstreak	<i>Thecla betulae</i>
Dingy Skipper	<i>Erynnis tages</i>
Grayling	<i>Hipparchia semele</i>
Grizzled Skipper	<i>Pyrgus malvae</i>
Marsh Fritillary	<i>Euphydryas aurinia</i>
Small Blue	<i>Cupido minimus</i>
Small Heath	<i>Coenonympha pamphilus</i>
Small Pearl-bordered	<i>Boloria selene</i>

Wall	<i>Lasiommata megera</i>
White-letter Hairstreak	<i>Satyrion w-album</i>
Insect - hymenopteran	
Brown-banded Carder-bee	<i>Bombus humilis</i>
Long-horned bee	<i>Eucera longicornis</i>
Moss Carder-bee	<i>Bombus muscorum</i>
Red-shanked Carder-bee	<i>Bombus ruderarius</i>
Ruby-tailed wasp	<i>Chrysis fulgida</i>
Shrill Carder-bee	<i>Bombus sylvarum</i>
Insect - mayfly (Ephemeroptera)	
Iron Blue	<i>Baetis niger</i>
Insect - moth	
Anomalous	<i>Stilbia anomala</i>
August Thorn	<i>Ennomos quercinaria</i>
Autumnal Rustic	<i>Eugnorisma glareosa</i>
Beaded Chestnut	<i>Agrochola lychnidis</i>
Blood-Vein	<i>Timandra comae</i>
Brindled Beauty	<i>Lycia hirtaria</i>
Broom Moth	<i>Ceramica pisi</i>
Brown-spot Pinion	<i>Agrochola litura</i>
Buff Ermine	<i>Spilosoma lutea</i>
Centre-barred Sallow	<i>Atethmia centrago</i>
Cinnabar	<i>Tyria jacobaeae</i>
Crescent	<i>Celaena leucostigma</i>
Dark Brocade	<i>Mniotype adusta</i>
Dark Spinach	<i>Pelurga comitata</i>
Dark-barred Twin-spot Carpet	<i>Xanthorhoe ferrugata</i>
Dot Moth	<i>Melanchra persicariae</i>
Double Dart	<i>Graphiphora augur</i>
Dusky Brocade	<i>Apamea remissa</i>
Dusky Thorn	<i>Ennomos fuscantaria</i>
Ear Moth	<i>Amphipoea oculea</i>
Feathered Gothic	<i>Tholera decimalis</i>
Flounced Chestnut	<i>Agrochola helvola</i>
Forester	<i>Adscita statices</i>

Galium Carpet	<i>Epirrhoe galiata</i>
Garden Tiger	<i>Arctia caja</i>
Ghost Moth	<i>Hepialus humuli</i>
Grass Rivulet	<i>Perizoma albulata</i>
Green-brindled Crescent	<i>Allophyes oxyacanthae</i>
Grey Dagger	<i>Acronicta psi</i>
Grey Mountain Carpet	<i>Entephria caesiata</i>
Heath Rustic	<i>Xestia agathina</i>
Hedge Rustic	<i>Tholera cespitis</i>
Knot Grass	<i>Acronicta rumicis</i>
Lackey	<i>Malacosoma neustria</i>
Large Wainscot	<i>Rhizedra lutosa</i>
Latticed Heath	<i>Chiasmia clathrata</i>
Minor Shoulder-knot	<i>Brachylomia viminalis</i>
Mottled Rustic	<i>Caradrina morpheus</i>
Mouse Moth	<i>Amphipyra tragopoginis</i>
Mullein Wave	<i>Scopula marginepunctata</i>
Narrow-bordered Bee Hawk-moth	<i>Hemaris tityus</i>
Neglected Rustic	<i>Xestia castanea</i>
Oak Hook-tip	<i>Watsonalla binaria</i>
Oak Lutestring	<i>Cymatophorina diluta</i>
Oblique Carpet	<i>Orthonama vittata</i>
Pale Eggar	<i>Trichiura crataegi</i>
Powdered Quaker	<i>Orthosia gracilis</i>
Pretty Chalk Carpet	<i>Melanthia procellata</i>
Rosy Minor	<i>Litoligia literosa</i>
Rosy Rustic	<i>Hydraecia micacea</i>
Rustic	<i>Hoplodrina blanda</i>
Sallow	<i>Cirrhia icteritia</i>
September Thorn	<i>Ennomos erosaria</i>
Shaded Broad-bar	<i>Scotopteryx chenopodiata</i>
Shoulder-striped Wainscot	<i>Leucania comma</i>
Small Phoenix	<i>Ecliptopera silaceata</i>
Small Square-spot	<i>Diarsia rubi</i>
Sprawler	<i>Asteroscopus sphinx</i>

Streak	<i>Chesias legatella</i>
V-moth	<i>Macaria wauaria</i>
White Ermine	<i>Spilosoma lubricipeda</i>
White-spotted Sable	<i>Anania funebris</i>
Insect - true fly (Diptera)	
Hornet Robberfly	<i>Asilus crabroniformis</i>
Northern Silver-stiletto fly	<i>Spiriverpa lunulata</i>
Southern Yellow Splinter	<i>Lipsothrix nervosa</i>
Spider (Araneae)	
Silky Gallows-spider	<i>Phycosoma inornatum</i>
Lichen	
Bacidia incompta	<i>Bacidia incompta</i>
Buellia hyperbolica	<i>Buellia hyperbolica</i>
Caloplaca herbidella	<i>Caloplaca herbidella</i>
Collema fragile	<i>Collema fragile</i>
Collema fragrans	<i>Collema fragrans</i>
Graphina pauciloculata	<i>Graphina pauciloculata</i>
Lecanographa amylacea	<i>Lecanographa amylacea</i>
Lecanora sublivescens	<i>Lecanora sublivescens</i>
Lobarian assemblages	<i>Lobaria</i>
Metallophyte assemblages	
Parmelinopsis horrescens	<i>Parmelinopsis horrescens</i>
Rinodina isidioides	<i>Rinodina isidioides</i>
Speckled script-lichen	<i>Schismatomma graphidioides</i>
Usnea articulata	<i>Usnea articulata</i>
Witches' Whiskers Lichen	<i>Usnea florida</i>
Liverwort	
Petalwort	<i>Petalophyllum ralfsii</i>
Veilwort	<i>Pallavicinia lyellii</i>
Marine mammal	
Bottle-Nosed Dolphin	<i>Tursiops truncatus</i>
Common Dolphin	<i>Delphinus delphis</i>
Harbour Porpoise	<i>Phocoena phocoena</i>
Risso's dolphin	<i>Grampus griseus</i>

Long-finned pilot whale	<i>Globicephala melas (melaena)</i>
Mollusc	
Freshwater Pearl Mussel	<i>Margaritifera margaritifera</i>
Narrow-mouthed Whorl Snail	<i>Vertigo angustior</i>
Moss (Bryophytes)	
Awl-leaved Ditrichum	<i>Ditrichum subulatum</i>
Baltic Bryum	<i>Bryum marratii</i>
Irish Daltonia	<i>Daltonia splachnoides</i>
Lead-moss	<i>Ditrichum plumbicola</i>
Lesser Squirrel-tail Moss	<i>Habrodon perpusillus</i>
Multi-fruited river moss	<i>Cryphaea lamyana</i>
Portuguese Pocket-moss	<i>Fissidens curvatus</i>
Spreading-leaved Beardless-moss	<i>Weissia squarrosa</i>
Tongue-leaf Copper-moss	<i>Scopelophila cataractae</i>
Reptile	
Adder	<i>Vipera berus</i>
Common Lizard	<i>Zootoca vivipara</i>
Grass Snake	<i>Natrix natrix</i>
Slow-worm	<i>Anguis fragilis</i>
Terrestrial mammal	
Brown Hare	<i>Lepus europaeus</i>
Brown Long-eared Bat	<i>Plecotus auritus</i>
Eurasian Red Squirrel	<i>Sciurus vulgaris</i>
European Otter	<i>Lutra lutra</i>
European Water Vole	<i>Arvicola amphibius</i>
Greater Horseshoe Bat	<i>Rhinolophus ferrumequinum</i>
Harvest Mouse	<i>Micromys minutus</i>
Hazel Dormouse	<i>Muscardinus avellanarius</i>
Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>
Noctule Bat	<i>Nyctalus noctula</i>
Pine Marten	<i>Martes martes</i>

Pipistrelle	<i>Pipistrellus pipistrellus</i>
Polecat	<i>Mustela putorius</i>
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>
West European Hedgehog	<i>Erinaceus europaeus</i>
Western Barbastelle	<i>Barbastella barbastellus</i>
Fish	
Allis Shad	<i>Alosa alosa</i>
Atlantic Salmon	<i>Salmo salar</i>
Brown/Sea Trout	<i>Salmo trutta</i>
European Eel	<i>Anguilla anguilla</i>
River Lamprey	<i>Lampetra fluviatilis</i>
Sea Lamprey	<i>Petromyzon marinus</i>
Marine species	
Basking shark?	<i>Cetorhinus maximus</i>
Cod	<i>Gadus morhua</i>
European Hake	<i>Merluccius merluccius</i>
Fan Mussel	<i>Atrina fragilis</i>
Herring	<i>Clupea harengus</i>
Horse Mackerel	<i>Trachurus trachurus</i>
Leatherback turtle	<i>Dermochelys coriacea</i>
Lesser sandeel	<i>Ammodytes marinus</i>
Ling	<i>Molva molva</i>
Loggerhead turtle	<i>Caretta caretta</i>
Mackerel	<i>Scomber scombrus</i>
Plaice	<i>Pleuronectes platessa</i>
Porbeagle shark	<i>Lamna nasus</i>
Sea monkfish	<i>Lophius piscatorius</i>
Tope shark	<i>Galeorhinus galeus</i>
Whiting	<i>Merlangius merlangus</i>

Appendix 3 - Partner projects (2020)

Project	Funder	Lead Organisation	Habitat / Species Focus
Millennium Wetlands Biodiversity Project	DC/WW Biodiversity Fund	Wildfowl and Wetlands Trust	Improve sustainable habitat management. INNS control - <i>Crassula helmsii</i> using microscopic mite called <i>Acculus Crassulae</i>
Connecting the Dragons:	HLF	Amphibian and Reptile Conservation Trust)	Restoring reptile and amphibian populations and habitats in South Wales
Healthy Reds	HLF	WTSSW	Red squirrels in mid Wales
Celtic Rainforests Project	EU LIFE fund.	Snowdonia NPA (RSPB and NT in Carmarthenshire)	Upland oak woodlands.
Dynamic Dunescapes	EU LIFE and HLF funding	Plantlife, NRW	Sand dunes including Carmarthen Bay dunes
Sands of LIFE project	EU LIFE funding	NRW	Sand dunes - includes Carmarthen Bay dunes
New LIFE for Welsh Raised Bogs	EU LIFE funding	NRW	Lowland raised bogs Carmel NNR in Carmarthenshire.
Welsh Peatland Sustainable Management Scheme	WG Sustainable Management Scheme (EU funding)	Snowdonia NPA	Lowland raised bogs Llyn Llech Owain country park/Carms Bogs Project
Local LAND project	WG Sustainable Management Scheme (EU funding)	Talley Community Association	Local improving habitat management and biodiversity
Working together to create resilient rhôs pastures	WG/EU funded	Butterfly Conservation	Marsh fritillary butterfly and marshy grassland
Green Health and Access West Wales	WG/EU funded	Smallwoods Association	Partnership project to investigate 'greenspace provision

Project	Funder	Lead Organisation	Habitat / Species Focus
Magnificent Meadows/Gweir gloddiau Gwych	WG/Plantlife/ NT funded	Plantlife Cymru	Partnership and community engagement project to restore meadows
Voice of the Woodlands/Llais y Goedwig	WG/EU funded	Llais y Goedwig	Forging new links between woodland groups and landowners in public and private sectors across Wales whilst consolidating existing links
Local Nature Partnerships Cymru	WG/EU funded	WCVA	Partnership project which aims to make a long-term, sustainable difference to nature recovery through co-ordinated and collaborative action
Pollinators and Freshwaters	WG/EU funded	Buglife Cymru	This aims to develop new projects and partnerships to deliver two strategic themes in Wales: pollinators and freshwater invertebrates
Back from the Brink Cymru	WG/EU funded	led by Plantlife on behalf of a partnership of species NGOs	A project to establish and develop a partnership project to recover a number of threatened species across Wales.
Wales Resilient Ecological Network	WG/EU funded	WTSWW	Looking at the management of Invasive Non-Native Species across Wales
Biophilic Wales	WG/EU funded	NBGW	Pan-Wales project using public engagement to help people connect to their natural environment, improving 'green infrastructure' where people can benefit from it most.
Connecting Green Infrastructure – South West	WG/EU funded	led by NPT but includes CCS and CCC and Cwmaman	Partnership project to deliver 'green infrastructure' for the benefit of local communities and their natural environment
Caru Cymru	WG/EU funded	KWT	pan Wales project to look at local environmental quality, engaging local people to enhance their local environment and help wildlife
The Great Meadow, Bishop's Park, Abergwili	WG/EU and Landfill Tax funded Landfill Tax funding	Tywi Gateway Trust	includes improved management of its 9 acres of Tywi valley floodplain meadow habitat
Conserving Carmel's Communities		WTSWW	To enhance and make more resilient Carmel National Nature Reserve. To improve habitat condition, enabling wildlife communities to thrive, whilst allowing local communities opportunities for enjoyment and participation

Glossary

Abundance: Number of individuals in a given area.

Biodiversity: The variety of life found on Earth. It includes all species of plants and animals, their abundance and genetic diversity.

Distribution: Geographic area where individuals of a species occur.

Ecosystem: A functioning unit made up of our living organisms (plants, animals and micro-organisms) in conjunction with their non-living environment (air, water, minerals and soil) and all the diverse and complex interactions that take place between them. They can function at many different scales.

Ecosystem services/benefits: The benefits that people obtain from ecosystems. They can be divided into 4 categories:

- Supporting services necessary for the production of all other ecosystem services, such as soil formation, nutrients cycling and primary production.
- Provisioning services such as crops; fish; timber and genetic material.
- Regulating services such as water purification; flood control; carbon sequestration and pollination.
- Cultural services providing a source of aesthetic, spiritual, religious, recreational or scientific enrichment.

Genetic material: Any material of plant, animal, microbial or other origin containing functional units of heredity.

Genetic diversity: The variety of genetic material within a species. Greater genetic diversity allows a species to be more adaptable to environmental change and therefore have a greater chance of survival.

Green infrastructure: A network of green space in both urban and rural areas such as private gardens, allotments, street trees, road verges and hedgerows that provide ecosystem benefits and contribute to the well-being of people.

Habitat: The place or type of site where an organism or population naturally occurs.

Habitat connectivity: How patches of habitat are linked together to form a connected habitat network that allows the movement of species.

Habitat fragmentation: Habitats are separated into smaller patches as a result of land use change and development.

Intrinsic value: Value of natural resources e.g. ecosystems, habitats and species, for their own sake.

Invasive Non-native Species (INNS): An organism (plant, animal, fungus, or bacterium) that is not native and has negative effects on our economy, environment, or health.

Natural resources: All living organisms (excluding people) and the non-living components and materials of the natural environment; our geological resources, air, water, soil, tide, wind and solar.

Nature: Our species and their habitats, its variety and abundance.

Nature-based solutions: solutions that are inspired or supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience.

Population: Group of interacting individuals of the same species living in a particular area.

Resilient ecosystem/ecosystem resilience: An ecosystem that is healthy and functions in a way that is able to address pressures and demands placed on it, and is able to deliver benefits over the long term to meet current social, economic and environmental needs. There are four attributes of resilience: increasing diversity; increasing ecosystem extent through reducing fragmentation; increasing connectivity within and between ecosystems; improved condition. Biodiversity underpins this resilience.

Species: A group of organisms that can successfully breed with each other producing healthy offspring which are capable of interbreeding.

