



CARMARTHENSHIRE STATE OF NATURE – SECTION 7 ‘PRIORITY’ FISH




Environment (Wales) Act 2016 – Section 7 - Biodiversity lists and duty to take steps to maintain and enhance biodiversity.


The species listed in this table have been identified by Welsh Government (WG) as part of a list of species and types of habitat found in Wales that they consider are of key significance to maintain and enhance biodiversity in this country. This list (Section7 list) is currently under review by WG and Natural Resources Wales (as of 2024) .

Public authorities (e.g. WG, councils) must take reasonable steps to maintain and enhance the species and types of habitat included in Section 7 and encourage others to take such steps. By safeguarding these species and habitats, improving their management and raising awareness about them it is hoped that a resilient natural environment in Wales will be sustained into the future.

It is the Section 7 species that the Carmarthenshire Nature Partnership consider for priority action, but other species have been identified for local action where there are few records or where Carmarthenshire has populations where specific action can help conserve enhance the species.

| SPECIES | CARMARTHENSHIRE OVERVIEW | Identified priority action in Carmarthenshire |
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| <p><i>Alosa alosa</i> - Allis Shad</p> <p><i>Alosa fallax</i> - Twaite Shad</p>  <p>© Wye and Usk Foundation</p> | <p>Current status:</p> <ul style="list-style-type: none"> • A substantial population of Twaite Shad spawns in the Lower Tywi (one of only a handful of sites in Britain) and uses the ‘Three Rivers’ estuary and Burry Inlet as nursery habitat. It rarely gets above Llandeilo. • Allis Shad are much rarer, but there is genetic evidence that a high proportion of shad in the Tywi are hybrids. <p>•Trends: Both species thought to be present in good and increasing numbers in the Tywi, however this is largely based on anecdotal evidence and further research is needed.</p> <p>•Threats: Loss of spawning gravels through sediment and nutrient inputs into rivers, poor water quality and habitat modification, including straightening which increases the wash-out of eggs and juveniles in high flows. This species is less affected by in-stream barriers as there are no barriers on the Lower Tywi, the river that they inhabit. They are also thought to be one of the few species thought to be more resilient to increasing temperatures from climate change but are much less resilient to the flow extremes that are expected under an El Nino cycle.</p> | <ul style="list-style-type: none"> • Improving the climatic resilience of rivers to extreme low and high flow events – river restoration (re-naturalisation) • Catchment improvements to improve water quality, including reducing sediment inputs, which directly smother gravels and nutrients which result in excessive algae growth and also smother gravels. • Catchment-wide Natural Flood Management measures to minimise peak flows into rivers and therefore reduce egg/juvenile washout. |
| <p><i>Anguilla anguilla</i> - European Eel</p>  <p>© Dave Mee</p> | <p>•Current status: Widespread in rivers, lakes and ponds throughout the county, but much less abundant than in the past.</p> <p>•Trends: Thought to have declined by as much as 95% since the 1970s.</p> <p>•Threats: From a marine perspective, climate change is altering currents and impacting the movement of juveniles to our river systems. From a riverine perspective, weirs are a key issue for upstream migrating juveniles – the removal of weirs or the introduction of elver passes help. Wetlands and floodplains are also a key habitat of eels and these habitat types have severely declined across the UK. The survival of this species is also impacted by disease, parasites and pesticides.</p> <p>Current action:</p> <ul style="list-style-type: none"> • On the Tywi, every Eel that is observed during fish monitoring is measured (12 sites/year). This is fed into the Welsh Eel Assessment. • Flap valves on coastal streams require eel passes to assist the passage of eels. Fourteen fish passes have been installed on rivers in the county since 2010 by NRW that have | <ul style="list-style-type: none"> • More monitoring of eels is needed to help us better understand their distribution and key habitats in the area. • Removal of in-river barriers such as weirs • Reconnection of rivers to their floodplains (floodplains are essential feeding grounds for eels) • In-stream habitat restoration, such as re-meandering and the addition of riparian trees and in-stream large woody material. • Catchment improvements to improve water quality |

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| | improved eel passage, and a number of other fish passes and weir removals have been carried out by West Wales Rivers Trust (WWRT). | |
| <p><i>Lampetra fluviatilis</i> - River Lamprey</p>  <p>Juvenile river lampreys 'silvering up' to go to sea. © NRW.</p> | <ul style="list-style-type: none"> Juveniles live in sediments for several years. Adults feed on small fish in estuaries and inshore waters. Current status: unknown Trends: unknown Threats: Weirs and barrages are a major issue in preventing this species from reaching habitats essential to its life stages. Poor water quality directly affects the survival of this species and modifications to river form has also led to declines through loss of habitat. | <ul style="list-style-type: none"> Removal of in-river barriers such as weirs In-stream habitat restoration to improve diversity, such as re-meandering. Catchment improvements to improve water quality. |
| <p><i>Petromyzon marinus</i> - Sea Lamprey</p>  | <ul style="list-style-type: none"> Current status: the River Tywi Sea Lamprey population is thought to be healthy. More than 2500 of these impressive lampreys ascend the Tywi in some years, reaching as far as Llandovery on the main river and the Llandovery Bran and Pumsaint on the Cothi. However, numbers are very variable. Juveniles live buried in sediments for 3 years before migrating to sea where they feed parasitically on large fish. Trends: unknown Threats: Weirs and barrages are a major issue in preventing this species from reaching habitats essential to its life stages. Poor water quality directly affects the survival of this species and modifications to river form has also led to declines through loss of habitat. | <ul style="list-style-type: none"> Removal of in-river barriers such as weirs In-stream habitat restoration to improve diversity, such as re-meandering. Catchment improvements to improve water quality. |
| <p><i>Salmo salar</i> - Atlantic Salmon</p>  <p>© Dave Mee</p> | <ul style="list-style-type: none"> Current status: Although they have declined in numbers, they are still widespread in all Carmarthenshire rivers. Trends: Notable declines - A new report by NRW on the status of small salmon populations in Wales has modelled that the River Tâf is one of the worst performing rivers with extinction possible in the next two decades. On the Tywi, although populations are declining, this is to a much lesser extent than other nearby rivers. Threats: The main threats to Salmon and Trout in rivers are poor water quality, channel straightening and over widening, reducing habitat and resilience to climatic flow extremes, and damage to habitat through overgrazing of riverbanks, causing overheating, siltation and removing cover. Poor management of pesticides/slurry, including spillages, also kill the fish and the invertebrates on which the fish feed when they occur. Loss of access to spawning habitat due to dams and barrages is also an issue and in upland areas acidification remains a pressure, which is exacerbated by forestry. Partnership working with landowners, especially the farming and forestry sectors, can help to restore the river habitat. Finally, illegal poaching and by-catch from consented sea trout netting practices on the Tywi are also an issue for this species. | <ul style="list-style-type: none"> Removal of in-river barriers such as weirs In-stream habitat restoration, such as re-meandering and the addition of riparian trees and in-stream large woody material. Reconnection of rivers to their floodplains to reduce water velocities and egg/juvenile washout in high flows. Catchment improvements to improve water quality Catchment-wide Natural Flood Management measures to minimise peak flows into rivers and therefore reduce egg/juvenile washout. |
| <p><i>Salmo trutta</i> - Brown/Sea Trout</p> | <ul style="list-style-type: none"> Current status: Trout occur in virtually all | <ul style="list-style-type: none"> Removal of in-river barriers such as weirs |

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|  <p data-bbox="163 685 294 715">© Dave Mee</p> | <p data-bbox="695 240 1253 670">clean rivers in the county, except above natural barriers to migration. Sea Trout and Brown Trout are actually different forms of the same species. Males tend to stay in the rivers and remain as brown trout, while females tend to go to sea if possible. Although a risky journey, sea trout can grow much larger and produce many more eggs. However, even brown trout migrate up and down river in search of better feeding grounds. The Tywi is famous for its large sea trout.</p> <ul data-bbox="695 691 1253 1614" style="list-style-type: none"> • Trends: Severe declines – for example, the Tywi is classified by NRW as ‘Probably at Risk’ for Sea Trout and designated as having a ‘vulnerable’ Sea Trout stock that is ‘Failing to meet the management target’. • Threats: The main threats to Salmon and Trout in rivers are poor water quality, channel straightening and over widening reducing habitat and resilience to climatic flow extremes, and damage to habitat through overgrazing of riverbanks, causing overheating, siltation and removing cover. Poor management of pesticides/slurry, including spillages, also kill the fish and the invertebrates on which the fish feed when they occur. Loss of access to spawning habitat due to dams and barrages is also an issue and in upland areas acidification remains a pressure, which is exacerbated by forestry. Partnership working with landowners, especially the farming and forestry sectors, can help to restore the river habitat. Finally, illegal poaching and consented Sea Trout netting practices on the Tywi are also an issue for this species. | <ul data-bbox="1283 240 1835 724" style="list-style-type: none"> • In-stream habitat restoration, such as re-meandering and the addition of riparian trees and in-stream large woody material. • Reconnection of rivers to their floodplains to reduce water velocities and egg/juvenile washout in high flows. • Catchment improvements to improve water quality • Catchment-wide Natural Flood Management measures to minimise peak flows into rivers and therefore reduce egg/juvenile washout. |