







**CYNLLUN GWEITHREDU BIOAMRYWIAETH LLEOL SIR GAERFYRDDIN – PYSGOD  
CARMARTHENSHIRE S42/BAP – FISH**

**OVERALL OBJECTIVES**

- To positively manage freshwater habitats in Carmarthenshire, their water quality and riparian/marginal habitats.
- Encourage interest in the range of fish in our freshwater habitats.
- To use key species as a focus for public/school engagement.
- To raise awareness of these species and the issues affecting them.

ENW GWYDDONOL/ SCIENTIFIC NAME COMMON NAME/ ENW CYFFREDIN	PHOTO	CARMS RECORDS	ISSUES/ACTIONS
<p><i>Alosa alosa</i> Allis shad Herlyn</p> <p><i>Alosa fallax</i> Twaite shad Gwangen</p> <p>© Wye and Usk Foundation</p>		<ul style="list-style-type: none"> <li>• 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. Rarely gets above Llandeilo.</li> <li>• Allis shad are much rarer, but there is genetic evidence that a high proportion of shad in the Tywi are hybrids.</li> </ul>	
<p><i>Anguilla anguilla</i> European eel Llysywen</p> <p>© Dave Mee</p>		<ul style="list-style-type: none"> <li>• Widespread in rivers, lakes and ponds throughout the county, but much less abundant than formerly.</li> </ul>	<ul style="list-style-type: none"> <li>• More monitoring of eels is needed to help us better understand their distribution and key habitats in the area.</li> <li>• Weirs are a key issue for returning elvers – the introduction of elver passes help.</li> <li>• Flap valves on coastal streams require eel passes to assist the passage of eels. Eight passes have been installed on rivers in the county since 2010 by EAW/NRW with another planned for 2014.</li> </ul>
<p><i>Lampetra fluviatilis</i> River lamprey Llysywen bendoll yr afon</p> <p>Juvenile river lampreys 'silvering up' to go to sea. © NRW.</p>		<ul style="list-style-type: none"> <li>• Juveniles live in sediments for several years. Adults feed on small fish in estuaries and inshore waters.</li> </ul>	<ul style="list-style-type: none"> <li>• Weirs and barrages are the main problem. Poor water quality and river engineering may also kill juveniles or cause loss of habitat.</li> </ul>
<p><i>Petromyzon marinus</i> Sea lamprey Llysywen bendoll y môr</p>		<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Weirs and barrages are the main problem. Poor water quality and river engineering may also kill juveniles or cause loss of habitat. However, the Tywi sea lamprey population is thought to be healthy.</li> </ul>
<p><i>Salmo salar</i> Atlantic salmon Eog</p> <p>© Dave Mee</p>		<ul style="list-style-type: none"> <li>• Although they have declined in numbers, they are still widespread in all Carmarthenshire rivers.</li> </ul>	<ul style="list-style-type: none"> <li>• The main threats to salmon and trout in rivers are poor water quality and damage to habitat through overgrazing of river banks, causing overheating, siltation and removing cover. Poor management of pesticides, including spillages, may kill the invertebrates on which these fish feed. Loss of access to spawning habitat due to dams and barrages is also an issue and in upland areas acidification remains a pressure. Partnership working with landowners, especially the farming</li> </ul>

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			and forestry sectors, can help to restore the river habitat.
<p><i>Salmo trutta</i> Brown/sea trout Brithyll / Sewin</p> <p>© Dave Mee</p>		<ul style="list-style-type: none"> <li>• Trout occur in virtually all 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.</li> </ul>	<p>The main threats to salmon and trout in rivers are poor water quality and damage to habitat through overgrazing of river banks, causing overheating, siltation and removing cover. Poor management of pesticides, including spillages, may kill the invertebrates on which these fish feed. Loss of access to spawning habitat due to dams and barrages is also an issue and in upland areas acidification remains a pressure.</p>