# Rivers & Streams

## Species Assemblage



#### **Mammals**

**Otter** Lutra Lutra Otters are semi-aquatic carnivorous mammals. Between the 1950s and 1970s, they underwent a rapid decline in numbers. In recent years the decline in numbers appears to have been halted, and the species is now making a recovery, moving into some of its previous habitats.

#### **Invertebrates**

A broad invertebrate assemblage is an important indicator of a healthy river habitat, all of which are susceptible to disturbance, or stabilisation of shingle.

Yellow Mayfly Potamanthus luteus is a nationally rare species. Despite historic records, recent surveys have failed to find this species in the River Usk and show a dramatic decline in the River Wye population. Larvae have been found in mobile sections of shingle, with the highest densities being found at sites with deeper, slower-flowing water. Adults can be found in bankside vegetation and nearby trees.

**Riffle beetle** *Normandia nitens* is a IUCN red data book species which has a strong hold in the Wye catchment, particularly the Kinnersley Brook. The presence of such a strong population indicates excellent riffle habitat.

**Five spot ladybird** Coccinella 5-punctata is found in river shingle habitat. It is an endangered species, generally confined to the west of Britain with the Wye Catchment a stronghold.

**Northern Bear Spider** *Arctosa cinerea* inhabits shingle beds of fast flowing rivers and lakeshores where it constructs a silken burrow. It was recently recorded in the English Wye.

**Ground beetle** *Perileptus areolatus* most recent records are from Wales and Welsh borders.

Depressed River mussell Pseudanodonta complanata is endangered throughout its range. It is threatened by pollution and is also said to be "easily overlooked". Data from the Wye has extended the range of the species by over 300%.

#### Fish

**Atlantic salmon** Salmo salar. Recent collaborative efforts (EA and WUF) have addressed some of the major obstructions allowing passage for migrating salmonids. However, smothering of spawning gravels by sediment is still reducing suitability for salmonids, which require clean gravels and cobbles to spawn in, and for egg survival.

Key fish species in the county include:

- Brown trout Salmo trutta
- Twaite shad Alosa fallax
- **Allis shad** Alosa Alosa
- Bullhead Cottus gobio
- **Eel** Anguilla Anguilla
- Sea lamprey Petromyzon marinus
- River lamprey Lampetra fluviatilis
- Brook lamprey Lampetra planeri

## Flora

Water-crowfoot Ranunculus fluitans and pseudofluitans have finely divided submerged leaves and large white flowers. Crowfoot typically occurs in large, lowland mesotrophic to eutrophic rivers with stable, often gravel substrates. Ranunculus beds are an important habitat for invertebrates and the Rive Wye SAC is designated as such for being a 'watercourse of plain to montane levels with Ranunculus fluitantis and Callitricho-Batrachion vegetation'. It is threatened by livestock grazing, eutrophication and pollution.

## **Birds**

**Dipper** Cinclus cinclus feed almost exclusively on larvae that live on the stony beds of shallow fast flowing streams, usually at rapids. As they are restricted to, and dependent on, food from the river, they are relatively easy to monitor and a good indicator of the water quality.

**Sandmartin** Riparia riparia is found nesting in exposed sandy rivers, river banks and man-made gravel pits such as Lugg Bridge Quarry where artificial nesting banks are sometimes provided.