

Valley Mires

The centre of Cannock Chase is a high flat-topped ridge running north-south from Milford towards Broadhurst Green. Either side of the high ground are two parallel valleys, the Sherbrook Valley and Oldacre Valley. These are two very characteristic "mires". A mire is essentially an acidic, wet open area dominated by sedges and other wet and-loving plants.

These two valley mires are noted for containing populations of one of the county's rarest butterflies, the small pearl-bordered fritillary. This spring butterfly is only found in a few locations in Staffordshire and is regarded as being in serious decline across its national range. It has been a UK Biodiversity Action Plan (BAP) species for many years to help target projects to protect the species into the future.

In Staffordshire, Cannock Chase is a stronghold for this species and work on its habitat is on-going to help provide the highest quality breeding areas for the butterfly. It is also subject to annual counts to keep in touch with its status and distribution.



Water shrew (C) D. Crawley

Woodland Streams

Other areas of wetland on Cannock Chase include the woodland streams. Again the Sher Brook has high quality streamside woodland, known as "Car". Alder trees and greater tussock-sedge dominate the Sherbrook Valley. Shaded sections of the watercourse are important as they provide cooler water conditions. This is important for native brown trout, brook lamprey, native crayfish as well as many aquatic invertebrates such as caddisflies, stoneflies and mayflies.



Broad-bodied chaser. (C) A. Jukes



Stony Brook mire (C) A. Jukes



Bog bush-cricket (C) A. Jukes



Blue-tailed damselfly (C) A. Jukes

Large Woody Debris

Branches, large limbs, root plates or entire trees that have fallen in to watercourses are commonly referred to as Large Woody Debris (LWD). LWD often accumulates into 'debris dams'. These larger pieces of wood have a profound influence on physical structure and flows in watercourses.

Cannock Chase streams, due to the high number of trees around the watercourses, contain lots of this debris. To many people, this looks unsightly and may lead them to think that the authorities are being casual in their approach to management but this is in fact a sign of good management. The debris encourages a wide range of wildlife including native white-clawed crayfish and helps the formation of stream features such as pools and shingle bars.

If you see LWD in a stream you can be assured it is there for a reason and streams without this feature, are often of much poorer quality.

For more information on this topic visit the Staffordshire Biodiversity Action Plan (SBAP) website:

<http://sbap.org.uk/library/index.php?page=Habitats>



Chalcosyrphus eunotus
(stream-living hoverfly) (C) A. Jukes



Woody debris (C) N. Mott

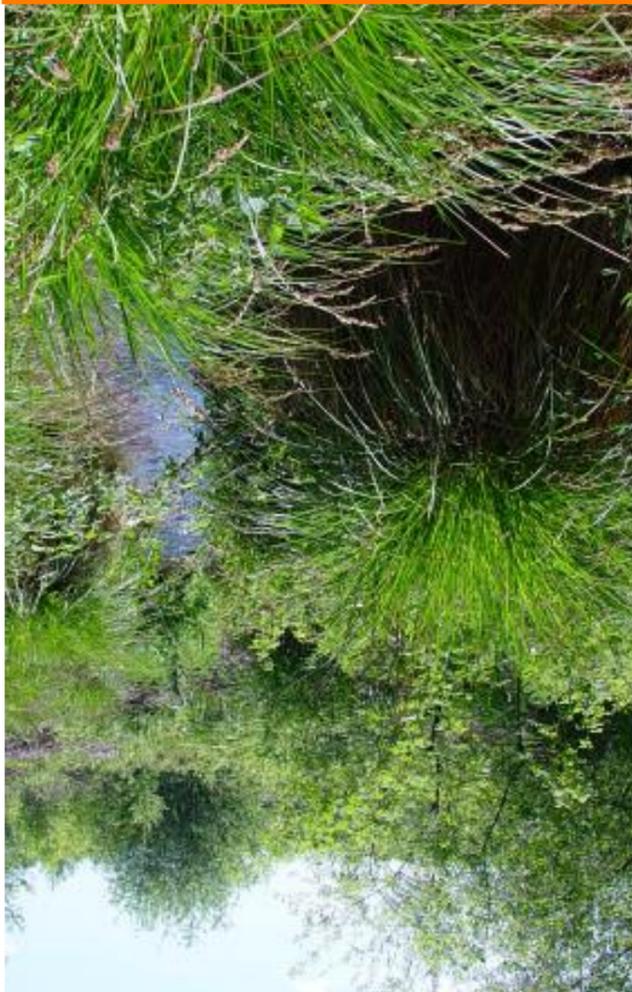


Grass snake (C) N. Mott



The Old Brook (C) A. Jukes





Cannock Chase Wetlands

Staffordshire Wildlife Trust

About the AONB

There is a huge variety of beautiful scenery and landscape in the British Isles. Those landscapes considered most valuable are protected as National Parks or Areas of Outstanding Natural Beauty (AONBs). These landscapes are protected and managed by law to maintain their special character for now and the future.

Cannock Chase AONB was designated in 1958 under the National Parks and Access to the Countryside Act 1949. Important both locally and nationally, Cannock Chase is part of a family of 49 AONBs in England, Wales and Northern Ireland. It is the smallest mainland AONB at 6800ha (26 square miles). Cannock Chase is designated as an AONB because of its beautiful landscape, its history and its wildlife.



The Sher Brook (C) A. Jukes

The water that shapes the Chase

Cannock Chase is an area of high plateau sandstone, dominated by heathland and woodlands. Surprisingly, Cannock Chase is also an area of wetlands. Sandstone is porous and allows rainwater to flow quickly off the high plateau into gullies and percolating through the rock to streams and nearby wetlands. The water, as it runs through the rock, picks up the character of the mineral and on Cannock Chase, this is acidic. This acidity affects both the flora and fauna creating a unique set of habitats on which special wildlife exists.



Night-time crayfish surveys (C) A. Jukes

What is a good wetland?

A high quality wetland, like many other habitats, depends on a number of factors. Purity of inputs is especially important to wetland habitats. In this case, water. Since the streams on Cannock Chase are spring and rainwater fed, the quality of the water is generally quite high, but there are instances of iron leaching out of the sandstone and into some streams.

Vegetation is also an important feature of wetlands. Streamside vegetation helps protect the stream from runoff water of surrounding land and slows the flow of this water into the stream reducing the impact of flooding down stream.



Iron leachate trapped by stream vegetation. (C) A. Jukes

Acid mires are habitats that contain unusual plants such as the round-leaved sundew, a carnivorous plant. Unfortunately this is now very rare and has not been seen on Cannock Chase for several years. The acid mire is rich in flowers and in the height of summer is an important place for butterflies, bees and hoverflies, all coming in to the mire to feed on the wide range of nectar sources.

In the acid mires there are added issues from invasion of bracken and scrub. In dry summers bracken can dominate and shade out the natural flora of the mire and scrub. If it is not managed, it will grow and turn the mire into woodland. In turn, this will reduce the range of flowers and insects on Cannock Chase.

A two-year survey (2006-07) of streams using invertebrates as indicators of quality and health has recently been completed and the outcome for Cannock Chase is very good.

Results included:

- Good populations of brook lamprey (a primitive eel-like fish) and bullhead
- The Red Data Book hoverfly *Chalcosyrphus eunotus* (a very rare stream-living hoverfly)
- Evidence of otters
- Encouraging signs of breeding populations of the globally threatened native white-clawed crayfish.

This evidence of rare and threatened species highlights the good health of the streams and the need to protect this resource and identify ways to keep them healthy and increase the features that make them so good for wildlife.



A broad-bodied chaser (C) A. Jukes

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Useful Websites and Links

- www.staffs-wildlife.org.uk
- www.ses-gb.co.uk
- www.cannock-chase.co.uk
- www.sbabp.org.uk
- www.staffs-ecology.org.uk



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