

July 2008

Biodiversity News in Carmarthenshire

If you have any questions or would like to find out more about any of the items in this newsletter, then please contact Isabel Macho, Biodiversity Officer on 01267 224653 or IMacho@carmarthenshire.gov.uk

Japanese Knotweed

Japanese knotweed (*Fallopia japonica*) is an increasing problem within the county. The invasive alien plant, which was introduced into the UK as an ornamental plant in the 1800s, is most often found in urban settings and along water courses but increasingly turns up all over the county in rural hedgerows and building plots. It was first noticed in the wild in 1900 and by the early 1960s colonies stretched from Land's End to the northern tip of the Isle of Lewis. Just a tiny piece of the plant's rhizome (root) can be enough to allow the plant to spread. These pieces can easily be carried on a vehicle's wheels. Allowing this spread or intentionally introducing Japanese Knotweed into the wild is illegal under the Wildlife and Countryside Act 1981. Without the plant's proper eradication from a site it can be problematic for many years – reappearing even through concrete and tarmac. Eradication usually involves the use of strong herbicides over a period of years. This can obviously have adverse effects on adjacent vegetation and some persist for some time in the natural environment and enter water courses.

Research carried out by CABI (Commonwealth Agricultural Bureaux International) and funded by a number of organisations, including WAG and the Environment Agency have been undertaking research to look at potential natural control of Japanese Knotweed.

UK and Japanese organisations have worked together on the project. In Japan the plant does not cause the problems it does in this country. There it has natural herbivores and diseases that attack it and keep it in check.

Plants there can be heavily defoliated and suffer stem damage.

In the UK all the plants are thought to be clones of a single original plant. The plant cannot form seeds but spreads through root growth or movement of the rhizome. Imagine how the plant could spread if it had viable seeds!

Because the plant is a clone scientists could establish that the plant originated from Omura area on Kyushu Island. Survey expeditions to Japan were carried out and samples of insects and fungi found on knotweed growing there were collected. Around 50 species of fungi and 186 species of arthropod (insects, spiders, etc.) were found to be associated with Japanese Knotweed. The researchers, after studying and dismissing a number of candidates, narrowed the list down and are focusing on a sap-sucking insect and a leaf-spot fungus. Studies on both of these looks promising and research is continuing this year. Care must be taken as Japanese Knotweed is in *Polygonaceae* family, which also includes native British species such as the bistorts and knotgrass. Introducing a pathogen that starts attacking our native species could have devastating outcomes.

In Japan the young shoots of the plant are used as a vegetable, and Richard Maby's *Flora Britannica* states that 'in parts of Dyfed the young shoots and leaves are cooked like spinach'. Maybe this needs to be further investigated!



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With thanks to **BBC Wildlife Magazine** from which some of this information has been taken.
Visit their website for more wildlife news: www.bbcwildlifemagazine.com

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Morfa Berwig Water Vole Project - path opening

The Llanelli Water Vole Action Group's path project at Morfa Berwig, Llanelli has been completed and is now open for public use. The path has been installed to improve public access on to the site, which is allocated for development. Over the past year the site has been shown to be significant for a range of wildlife in addition to the important water vole population living in the ditches and reedbeds on site. This includes a woodlouse, *Oritoniscus flavus*, a real rarity with the Llanelli area being the only site where it is found in the UK. This species may reflect the industrial past of Llanelli – it may well have arrived from Spain in the ballast of ships using the town's port in previous centuries.

The group's primary aim was improve the management of the site for water voles but also realised that the site was used by local people and that there was an opportunity to improve access. Grant funding was received from WAG and Cwm Environmental and this enabled a path to be constructed through the site linking up existing access at the east and west ends. The path runs through the brownfield habitats and alongside the ditches meandering through the site, so a range of habitats can be seen.

It is hoped that local people and schools will make use of the site and links made with the Wildlife Trust and the Wildfowl and Wetland Trust that will help with the management and education potential on site, respectively.

The site is allocated for development but it is hoped that any future development will seek to integrate the habitats on site and realise the benefits they could bring – the ditches and reedbeds provide perfect surface water drainage systems, especially important given the recent problems highlighted further along the coast.

The site's brownfield habitat at this time year is rich with flowering plants, so vital for a range of insects that feed on them. On August 7th the Llanelli Naturalists have an evening visit to the site – come along and join the group in finding out more about the wildlife on site. Meet at the site entrance at the end of the Berwick Road, Bynea at 6:30 p.m.



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2008 Bat Group Meetings underway!

The Carmarthenshire Bat Group has had two meetings this season. Last year's wet summer led to some disappointing sessions so the group are hoping for better things this year. The first meeting was held at Llanedi church, which has a known brown long-eared bat roost. Unfortunately the weather was not great but everyone had a chance to see the bats roosting amongst the rafters before leaving the church.

Group members used bat detectors to identify the bats flying around the church. Bats use high-frequency calls, normally beyond the range of human hearing, called echolocation to build up a picture of their habitat and detect the insects they hunt. Bat detectors make the bats echolocation sounds audible to humans and as different species echolocate at different frequencies each species can be identified.

During Wales Biodiversity Week in June the Group held a meeting in Betws Park,

Ammanford. Seventeen people attended this evening where, in addition to discovering more about the bats that use the park, a moth trap was also used to attract moths to a halogen light where they were caught and identified. Although dry, the weather was cold and the moon bright, so not as many moths as hoped were caught.

Fortunately the bats were active and those who attended saw a number of species including pipistrelles feeding high around the riverside trees and Daubentons catching insects low over the river.

Bat group meetings are held monthly – contact Isabel Macho on 01267 224653, IMacho@carmarthenshire.gov.uk for more details.



A roosting Daubenton's bat © Tom McOwat

BTO Bird Atlas

With lots of young fledglings about now is a good time to record your sightings and add the blue tits nesting in your garden, the swallows in your garage or the woodpeckers in your local wood to the records that will help form the British Trust of Ornithology's Bird Atlas. You can sign up for the Bird Atlas at this link:

<http://www.bto.org/birdatlas/index.htm>

Once you've signed up and logged in, click on 'Add Roving Records', use the map to navigate to the tetrad (2 x 2 km map square) where you recorded the birds and put in the details, including breed code if you can.

© Richard Pryce

You can go back and use the 'square summaries' option to see your records and what other people have recorded in the tetrad or 10-km square.

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Pine Marten Survey

On June 28th the Vincent Wildlife Trust organized a survey of Brechfa Forest for the rare and elusive pine marten. There have been sporadic records over a number of years for this mammal in Brechfa but very little is known about its presence here.

Pine martens were once persecuted as a pest species by farmers and gamekeepers. The marten's main diet is wide ranging – small mammals, amphibians, birds and insects as well as berries and carrion.



© Tony Braithwaite

Brechfa's forest habitat should be good for pine martens, with areas of mature forest and steep-sided rocky valleys. Excellent climbers, martens make dens in hollow trees, rock faces or squirrel dreys.

Today surveying for elusive mammals like pine martens has been made much easier by the development of DNA technology that enables animals to be identified from samples of their scats (faeces). So by collecting likely samples, the presence of martens in forests can be detected.

Over 20 volunteers turned out on the day to help VWT with their survey. This enabled a large area of forest to be covered by looking for likely scats deposited along the sides of the forest tracks. These were collected for testing and the results will be reported on as soon as possible. Seventy-eight kilometres of track were surveyed and a total of 67 scats collected. Will any of these be pine marten? Surveys of two other forests in Wales this year have drawn a blank so let's hope Brechfa proves successful!

Some volunteers who knew the forest well commented on the general lack of mammal signs found during the day. There were few trails cutting across the tracks, footprints and reduced numbers of scats found. Whether this reflects forest management, increased fox control or another factor is unknown.

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Look out for this month...

This month take a walk along our country lanes after dusk to experience the heady scent of honeysuckle, a common hedgerow climber. Honeysuckle switches on its scent at dusk to attract moth pollinators, such as the elephant hawkmoth. In addition to the plant's scent petal colour may play a role in attracting these insects. Species such as the elephant hawkmoth have sensitive colour vision, capable of distinguishing different hues by starlight. The exposed faces on honeysuckle petals turn from pale cream to yellow after pollination. Maybe this is the way the plant shows the moth not to waste energy visiting a flower that has already been drained of nectar by another pollinator.

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Butterfly Conservation Surveys...

...Small Pearl-bordered Fritillary

Over the last 3 years Butterfly Conservation have been trying to find out more about the small pearl-bordered fritillary (SPBF) butterfly across the county, where it had apparently declined by around 60% in last decade, probably due to some extent to a fall off in recording. Group outings in 2005 and 2006 were not really successful in finding the species, but there are still plenty of areas that would be worth surveying.

This year SPBF has been recorded at Pen-y-Graig Goch Farm (Llandeuddsant), the Plantlife Reserve near Lampeter, Pembrey Forest and Llansteffan.

Although at the end of their season, if the weather stays reasonable, marsh violet sites (their food plant) are likely to be supporting adults for a while, depending on location (higher altitude and further north later). If you fancy keeping a look out, these areas could be targeted:

Meidrim, Felindre; Llansaint; Drefach-Felindre, Cwmdud; Burry Port, Kidwelly, Pontyates; Cwmffrywd, Llangynderyn, Crwbin; Llangennech, Hendy, Llannon; Brechfa, Abergorlech; Talley, Llansawel; Esgairdawe, Ffarmers.

Look out for wet flushed marshy grassland or unimproved wet valley bottoms and bogs. YOU WILL NEED to seek relevant access permissions (unless footpath or access land). Send you records to Richard Smith who is organising the survey: rgsoverton@boltblue.com



©Jim Asher/BC

...White-letter hairstreak survey

Another uncommon species that is being surveyed for this summer in Carmarthenshire is the white-letter hairstreak. This small butterfly lives in the tops of elm trees throughout England and Wales, but is often overlooked. It has an erratic, spiralling flight typical of the hairstreaks. It is distinguished by a strongly defined white 'W' mark across the undersides. The dark uppersides are seen only in flight as the butterflies always settle with their wings closed. Adults are difficult to see because they spend so much time in the tree canopy, although they occasionally come to ground level to nectar on flowers near elm trees or scrub saplings.



©Jim Asher/BC

The species declined during the 1970s when its foodplants were reduced by Dutch Elm Disease, but it seems now to be recovering in some areas. In Carmarthenshire the Tywi valley seems to be a favoured area as there are good numbers of elms here. However elms occur elsewhere in the county and there is much more survey required to find out more about the butterfly in the county.

The following website has information about the butterfly and some interesting articles about the butterfly in Carmarthenshire, and how to survey for it. Again please contact Richard Smith for more information about the survey in Carmarthenshire.

www.hertsmiddx-butterflies.org.uk/w-album/w-album_notes-VC44.php