



## *Llythyr Newyddion Tachwedd 2008/November Newsletter 2008*

### **More red squirrel sightings**

The Mid Wales Red Squirrel Partnership has been interested to receive more sightings of this elusive mammal in recent weeks. Reporting via the project website ([www.wwbic.org.uk/redsquirrelproject](http://www.wwbic.org.uk/redsquirrelproject)) a sighting was noted to the north of Tywi in the Elan Valley. More intriguing were two recent reports from areas where there have not been records for some years. One was from just north of Llandovery and the other near Llandeilo. Does this mean that there are remnant red squirrel populations outside the core areas in the mid Wales forests? This is quite possible – reds could be present in very low densities and only rarely spotted. These records are interesting additions to our sightings database for the county.

Wherever these squirrels are it is virtually certain that they are in close proximity with grey squirrels, which dominate deciduous woodlands. Greys carry the squirrelpox virus, which is deadly to the reds and one of the causes of their decline. However, the BBC website has reported that scientists have found that some red squirrels appear to have developed immunity to the disease. Research at the Institute of Zoology has shown some interesting results when testing fluid samples taken from 500 squirrels that had been brought there for autopsies between 1993 and 2005 to investigate how the pox was spreading. Recently eight squirrels were found that had antibodies to the virus. These must have been exposed at some point to the virus, and either didn't develop the disease or developed the disease and managed to fight it.

This is the first evidence that red squirrels might have some immunity and would be able to counteract the disease. The Institute is now planning to look at how widespread this immunity might be and to investigate why and how the red squirrels have been able to develop this ability to resist the pox.

This may allow the development of a vaccine could help to save red squirrels. Scientists are not sure exactly how the squirrelpox virus kills reds – it may have some sort of effect on the heart or another vital organ because it can kill them very quickly. Reds decline 25 times faster in areas where greys carry the virus.

Any vaccine would take years and a lot of investment so although is a positive sign the red squirrel is by no means out of danger yet.



© Craig Shuttleworth



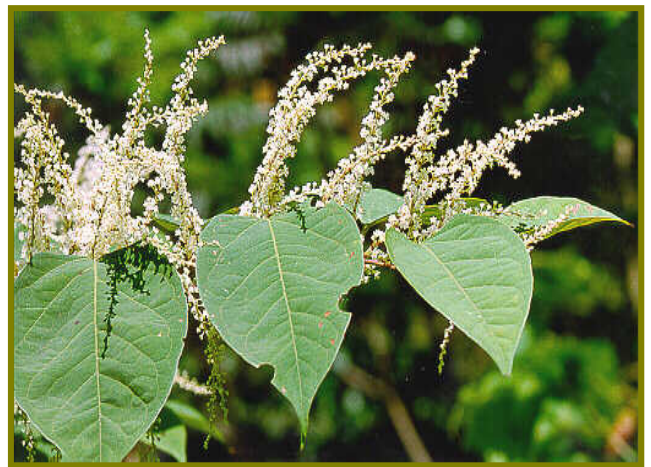
### Predators for Japanese Knotweed found? (from the BBC website)

Further to an item in a recent issue of the biodiversity newsletter it can be reported that plans have now been submitted to the government for approval of the use of biological control (biocontrol) to fight Japanese knotweed.

Whilst knotweed spreads quickly in the UK, in its native Japan the plant is common but it does not rage out of control. Research part-funded by WAG has looked at potential sources of biocontrol that could keep the plant in check.

The sap-sucking psyllid insect (*Aphalara itadori*) and a leaf spot fungus from the genus *Mycosphaerella* came out on top and made a significant impact in the lab, bringing the plant under control.

*Aphalara itadori* have an effect on the plants' height and the treated knotweeds produce tiny curled leaves rather than big light absorbing leaves, which means that less resources will get to their root system.



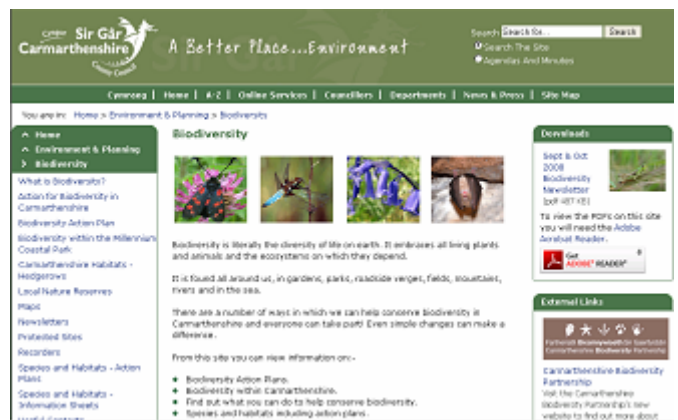
Knotweed can grow incredibly quickly - some have been shown to grow four metres in just four months, they can spread at a tremendous rate, and they can quickly obliterate any other vegetation growing nearby.

It has been estimated that to remove all knotweed from the UK would cost several billion pounds – a natural control could offer a much simpler solution.



### Carmarthenshire Biodiversity Websites revamped!

The council has redesigned its website including the biodiversity pages. Accessed via the Environment and Planning pages the biodiversity pages contain details of the current action plans, other information in the LBAP, what you can do to help wildlife and links to the biodiversity newsletter and the Carmarthenshire Biodiversity website. The latter is also being redesigned with new features being added.



The Carmarthenshire Biodiversity website concentrates on the work of the Partnership and other conservation groups in the county, and provides information on local sightings, the county recorders, downloads of a variety of newsletters and details of wildlife events/work parties in the county. Take a look at: [www.carmarthenshire.gov.uk](http://www.carmarthenshire.gov.uk) and [www.carmarthenshirebiodiversity.co.uk](http://www.carmarthenshirebiodiversity.co.uk). Any ideas for what could go on to the Carmarthenshire Biodiversity would be very welcome.



### **Environment Agency for water voles – Mike Jenkins**

Over the winter period the Environment Agency is planning to undertake habitat work at two important sites in Carmarthenshire for water voles, the UK's fastest declining mammal. Utilising the Agency's Operational Workforce a range of work will be carried out to benefit water vole. At Morfa Berwig on the outskirts of Llanelli, we will continue with targeted scrub clearance alongside the ditches to increase light levels and promote the lush growth of riparian plants that the water vole rely on for food and cover. Woody material arising from the work is chipped on site into piles, which as they decompose provide ideal egg-laying sites for grass snake. An area cleared last year is already vegetating well, and we plan to excavate a pond here to benefit both the water vole and aquatic invertebrates especially dragon and damselfly. It is also planned to excavate a ditch and ponds to link the main drain with a minor ditch in a grazed field adjacent.

At Pendine EAW will be working on the former MoD site managed by Qinetic, to re-excavate a former course of the Railsgate Pill. Water vole are present throughout the levels between Laugharne and Pendine, and the area is designated as an SSSI. However many of the ditches have become in-filled over time or scrubbed over, while the main Railsgate Pill is managed by the EAW to prevent flooding of the Qinetic site. EAW have been working closely with CCW over the years to tweak this management to reduce impact on water vole and enhance the habitat on this stretch, but the work at Qinetic will further enhance the robustness of the population in this area.

### **Rare water vole found at Morfa Berwig...**

Dan Forman and his students from Swansea University had a surprise when trapping at Morfa Berwig water vole project site in October. They have been surveying and monitoring the water vole population here for over a year but were not prepared for the unusual water vole they trapped in their latest survey session. They trapped a rare water vole showing very distinctive colouring. This rare 'morph' had a black backside, brown flanks, ginger face and belly and a huge white patch between the shoulder blades. Many voles do have a small number of white hairs in this location but Dan has never seen anything like this in over 11 years of trapping. Berwick trapping has produced an unusually high diversity of colour forms in the population there. Dan and his students hope to look more into this phenomenon – for a comparatively small site Morfa Berwig is certainly throwing up some surprises!



Re-vegetating habitat after scrub clearance at Morfa Berwig © Isabel Macho



Unusual form of water vole with white spot! © Dan Forman



### The Wood Ants – survivor of the ancient wildwood – Ian Morgan

The wood ant (*Formica rufa*) is rare in Carmarthenshire and is known from only three areas (as well as another locality where it became extinct in the late 1970s) – Abergorlech, Crychan Forest and near Forest Farm, Whitland. Whilst it may be overlooked, it is a large, very distinctive species and, of course, the substantial, mound-like nests are unmistakable. Readers may have seen these nest mounds on their holidays to the Continent and wood ants play an important part in the ecology of woodlands.

All the known Carmarthenshire are in areas of ancient woodland, where there has been continuous tree cover since the times of the wildwood that covered much of Britain. These ancient woodland sites may at times have had trees cut and timber removed, but they remained essentially woodland sites, with scrub and trees allowed to re-grow. Indeed, wood ants actually require sunny woodland edges or rides for areas in which to forage for their food and to make their nests, so coppicing or other cutting may have favoured this ant in the past. Recent management work by the Forestry Commission in the Abergorlech woodlands has addressed this need, with limited, cyclical clearance of some of the overhanging shading trees and bushes along the main track (which is also used by cycling enthusiasts!).

The Brechfa–Abergorlech and Crychan areas have always been well-wooded, with many areas of natural oak woodland surviving within the forestry areas. Likewise, the Whitland site abuts a substantial area of woodland on the other side of the Afon Taf to the south (note the nearby `Great Pale` place-name which referred to woodland surrounded by a wooden palisade). The wood ant can certainly be regarded as a species of conservation concern in Carmarthenshire (although it is not a UK BAP species), it has a fascinating ecology and it provides a living but threatened link with the vast oak forests that once covered the county.

If you have records for this species please contact the West Wales Biodiversity Information Centre. Next time you are walking in Abergorlech and Crychan Forests look out for this species and their distinctive nests. When the Local Biodiversity partnership met at Abergorlech in October the group were fortunate to see a nest of the side of the track on their site visit in the afternoon.



Mountain bike track through forest  
©Isabel Macho



Wood ants' nest ©Isabel Macho



### Pine Marten Scat Survey Results, Brechfa Forest, 28th June 2008

The results of the Brechfa pine marten survey organised by the Vincent Wildlife Trust have been released. Volunteers helped the Trust survey the tracks of Brechfa forest to look for possible scats of the rare and elusive pine marten. There have been sightings on the past but unfortunately none recently. VWT carried out surveys throughout England and Wales at sites where pine marten had been recorded. Worryingly none of the DNA analyses showed any of the scats found from any site were from pine martens. Maybe the changing use of the forests and increasing recreation is changing the way pine martens use the forest meaning they are staying away from the tracks. The results from the scats collected at Brechfa are as follows:

**Total scats collected: 67;** Fox 47 (70%); *Homo sapien* 3; Toad 2; Bird 2; Sheep 1; Dog 1; Newt 1; Dog/bird 1; Not determined 9 (13%).

### PlantNetwork Target 8 project

A meeting was held at the National Botanic Garden Wales in October on the PlantNetwork Target 8 project, which is looking how horticulture can support the conservation of the flora of Britain and Ireland by linking *in situ* (i.e. in its natural habitat), and *ex situ* (i.e. removed from its natural habitat and conserved elsewhere) conservation. The plan is to use member gardens to grow the threatened plants of Britain and Ireland *ex situ* and to link them to conservation work *in situ*.

Two short presentations were given to explain the background to the project and then a general discussion took place on ways to promote and develop the project. The intention is that all botanic gardens in Britain and Ireland should adopt a couple of endangered native species, so that an understanding could be built up of what it takes to germinate their seed, grow them on and get them to seed again, in order to ensure their long-term survival. Representatives from a number of Welsh botanic gardens, conservation agencies and other organisations attended.

This project is part of the UK's first response to the Global Strategy for Plant Conservation. A report, *Plant Diversity Challenge*, has been compiled on behalf of the Government by a partnership between the Joint Nature Conservation Committee, Plantlife International and the Royal Botanic Gardens, Kew.

Target 8 of the strategy is to have 60% of threatened plant species in accessible *ex situ* collections, preferably in the country of origin, and 10% of them included in recovery and restoration programmes.

For more information on the meeting go to:

[www.plantnetwork.org/forums/nbgwalest8/summary.htm](http://www.plantnetwork.org/forums/nbgwalest8/summary.htm)



Deptford Pink © Isabel Macho



Small flowered catchfly  
©Richard Pryce



Fen orchid ©Richard Pryce

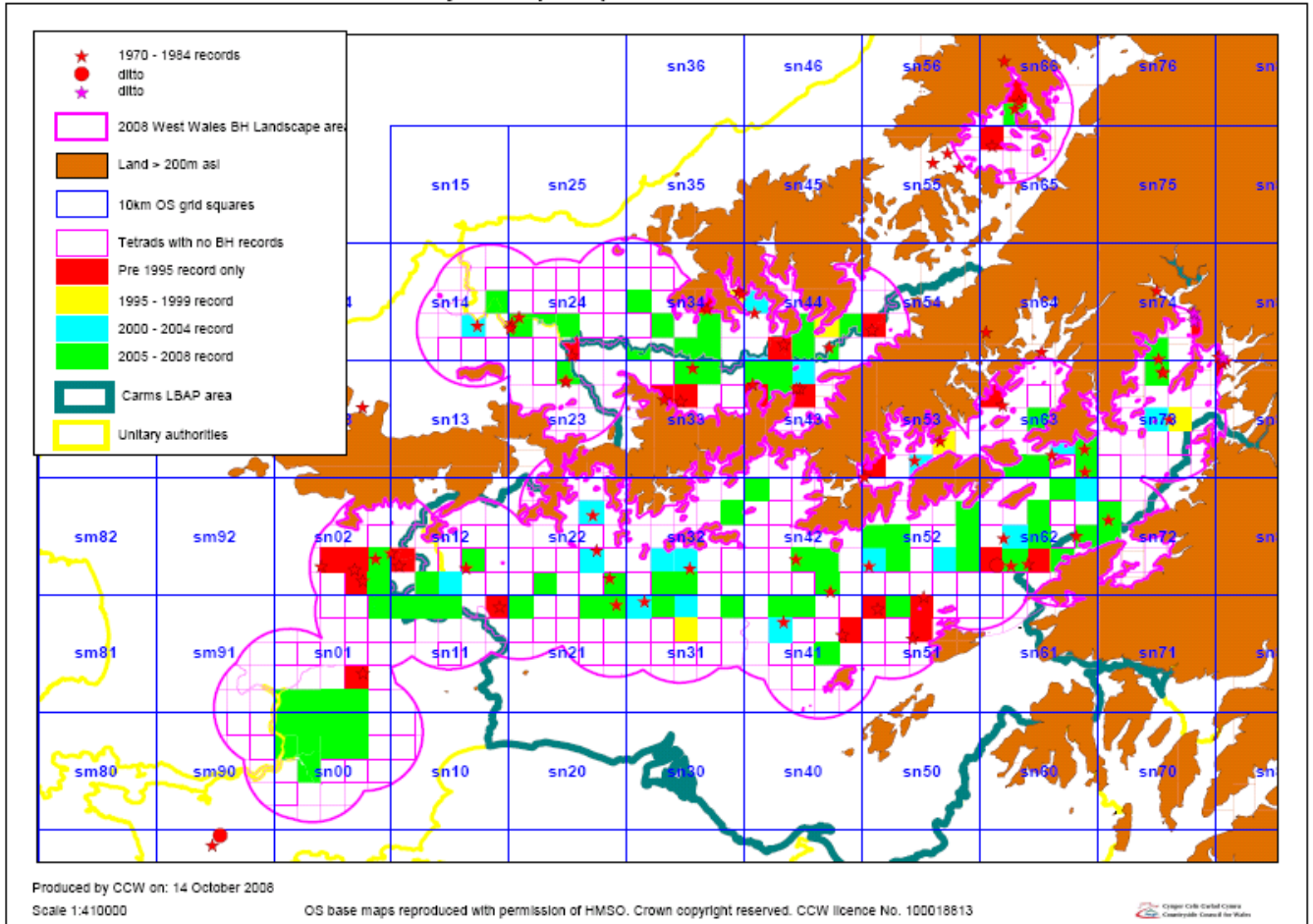


**Filling in the brown hairstreak survey gaps: hedges near you!**

Butterfly Conservation, with LBAP support, is continuing the successful and vibrant volunteer team survey days midweek for brown hairstreak eggs and habitat in targeted areas. In addition, BC are now launching a parallel initiative, hoping to encourage any individuals interested in just looking for eggs on young blackthorn between autumn and early spring. BC have produced a map of tetrads (2 km by 2 km grid squares) without any recent brown hairstreak egg records, in those areas where the species might nonetheless be expected, e.g. close to known sites and sufficiently "lowland" in nature. So, if like many of us, you've only limited time available, how about fitting in searches of young blackthorn growth, at your convenience, in your local area? If you walk regularly either for pleasure or to exercise a dog (or yourself!), why not combine it with quick searches of any young blackthorn you come across in sheltered situations either in hedgerows or free growing "scrub" saplings. The eggs occur only on blackthorn (preferring young growth), between September and April

**What to do: are there tetrads convenient for you?**

**BROWN HAIRSTREAK in West Wales by tetrad, pre & post 1995**



E	J	P	U	Z
D	I	N	T	Y
C	G	M	S	X
B	G	L	R	W
A	F	K	Q	V



If you're not sure exactly where you are in relation to the tetrads, it is not too difficult to work it out. Each 10km x 10km OS grid square is divided into 25 2km x 2km tetrads. These are lettered from A to Z, starting in bottom left hand corner (extreme south-west) ascending upwards (northwards) to complete first column (A–E), then starting at bottom of second column from left, ascending upwards (F–J) etc. This is also explained very concisely on the British Trust for Ornithology website and will be familiar to anyone carrying out BTO surveys.

There are **twenty-four** 10km OS grid squares in Carmarthenshire which have some whole tetrads within the brown hairstreak distribution area or range. The 10km squares and the **tetrads** for searching are listed below:

10km square	Target search tetrads (red = records pre 1995)	10km square	Target search tetrads (red = records pre 1995)
SN11	U,Y,Z	SN43	N
SN12	A,B,C,G,I,L,N,Q,S,T,V,W,X	SN44	F,V
SN21	C,D,H,I,J,M,N,P,S,T,X,Y	SN51	C,D,E,H,I,N,P,Z
SN22	A,B,C,G,H,K,L,M,N,Q,S,W	SN52	F,K,L,M,Q,S,T,V
SN23	U	SN53	F,R
SN24	K,Q,V	SN54	B,C,G
SN31	C,D,H,I,M,S,T,U,X,Y	SN61	E,J
SN32	A,Q,R,V,W	SN62	A,B,C,D,F,L,S,T,Y
SN33	J,N,T,Y	SN63	N
SN34	F	SN72	E,J,I
SN41	C,D,E,H,M,N,T,U,Y,Z	SN73	A,B,F,G,K,L
SN42	A,B,C,F,G,H,I,K,V,W	SN74	Q,R

### What to do: if there are tetrads convenient for you?

If you're willing to have a go, simply let Richard Smith (who co-ordinates the project for BC) know, which ones you fancy. If you find eggs, you'll not only get your name in the record books but also be helping to conserve this superb Carmarthenshire special butterfly. Unless you have access permission from the farmer/landowner, you'll need to stick to public footpaths or tracks or open access land. Roadside hedges tend to get trimmed annually, so you are less likely to find eggs (unless you get to them before trimming!).

A hand lens may be useful and a coloured clothes peg, to mark locations. If you'd like the confidence boost of being shown an egg before you start, let Richard or myself (Isabel Macho – IMacho@carmarthenshire.gov.uk) know and we may be able to arrange to show you an egg at a convenient site or put you in touch with someone locally who can.

Contact Richard Smith on 01446 793229 or by e-mail at: [rgsoverton@boltblue.com](mailto:rgsoverton@boltblue.com)

