



CARDIFF NATURALISTS' SOCIETY

Founded 1867

NEWSLETTER No. 123

September 2021

Charity No. 1092496

LIST OF OFFICERS 2021

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Position vacant

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Position vacant

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Also on Council

Mary Salter, Gill Barter, Marie Makepeace, Stephen Howe, Patrizia Donovan



<http://www.cardiffnaturalists.org.uk>

www.facebook.com/groups/CardiffNaturalists

Twitter: @CardiffNats

<http://cardiffnaturalists.blogspot.com>

Cover photo: Painted lady by Mary Salter.

Autumn 2021 events

The Cardiff Naturalists' Society have organised a series of online/virtual events for autumn 2021, in collaboration with the Wildlife Trust of South & West Wales (WTSWW), all starting 7.30 pm unless otherwise stated. Look out for links to Zoom (or other platforms) in member emails or via social media.

Tuesday 14 September

'Wildflowers of Gower'

Barry Stewart

(Hosted by Swansea Group of the WTSWW)

Tuesday 21 September

Cardiff Naturalists' Society AGM

Plus talk (speaker tbc)

Monday 4 October

'Sands of Time' (about Kenfig)

Laura Bowen

(Hosted by Bridgend Group of the WTSWW)

Thursday 14 October

'Exploring the River Thaw'

Rob and Linda Nottage

(Hosted by Cardiff Naturalists' Society)

A personal account of the wildlife, scenery and history along this Vale of Glamorgan river. Although only 20 km from source to sea there is a surprising diversity of interest along the way.

Thursday 21 October

Unknown Wales Conference

(Hosted by the WTSWW)

6.30-8.30 pm.

To register for (free) tickets visit:

<https://www.welshwildlife.org/unknown-wales-wildlife-conference/>

Autumn 2021 events

Monday 8 November

An evening with Iolo Williams

(Hosted by mid-Pembrokeshire group of the WTSWW)

Tuesday 23rd November

Butterflies of Wales

Speckled Wood Wildlife, Roo & Nicola Perkins

(Hosted by Cardiff Naturalists' Society).

Thursday 9th December

Marine Mammal Rescue

Speaker tbc

(Hosted by Cardiff Group of the WTSWW)

**For all the latest information and additions to the
CNS Meetings Programme see:**

**[http://cardiffnaturalists.blogspot.co.uk/p/
programme.html](http://cardiffnaturalists.blogspot.co.uk/p/programme.html)**

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**Deadline for submissions to next newsletter: Monday 3
January 2022**

Penarth Head 5 June 2021

Walk led by Rhian Kendall

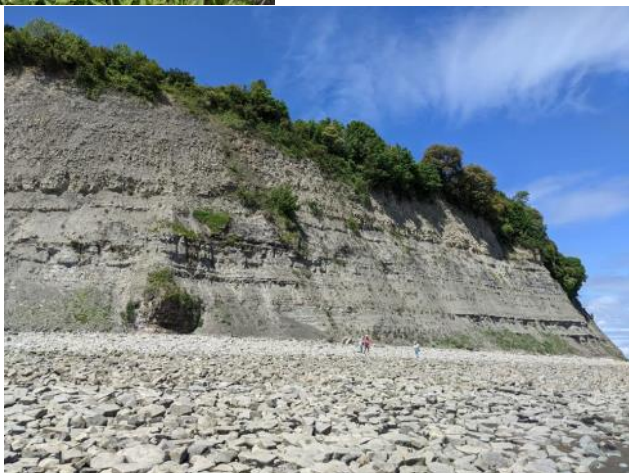
Text and photos by Andy Kendall

This walk was to get us going again after a long lay-off because of COVID-19 restrictions, so you had to book a place to attend. Maybe this kept the numbers low because it certainly wasn't because of the weather which was lovely. Rhian took us around Penarth headland looking at the geological sequence and fossils, starting from the barrage.

Before we even started the walk properly, we were treated to the wonderful display of the red valerian. The Woodland Trust notes that it was "Introduced into gardens before the 1600s, this plant from the Mediterranean soon escaped and became naturalised in the wild. Despite its non-native status, it is a good source of nectar from May to October for bees, butterflies and moths like the hummingbird hawk-moth." And who am I to disagree..

We started by learning about the overall geological setting. Rhian explained that during Triassic times Wales lay in the interior of the supercontinent of Pangaea, to the north of the Variscan mountain chain (a product of continental collision during the late Carboniferous), and that the sediments which give the red rocks at the bottom of the cliffs (the Mercia Mudstone Group) mostly accumulated in lakes which periodically evaporated under the hot desert sun. Gypsum, the hydrated form of calcium sulphate, was precipitated as a sediment when the shallow lagoons, which contained calcium sulphate, partially evaporated in the hot climates.

These gypsum deposits are known as Penarth Alabaster and have been used for hundreds of years as a decorative building stone. They look fabulous on the beach so the best thing is to leave them there to be admired by others!



Towards the top of the cliff, the grey coloured rocks record a gradual change from a terrestrial lacustrine (lake) environment to marine conditions. These rocks are known as the Penarth Group which comprise beds of mudstone and limestone. Of special interest amongst the formations which make up the Penarth Group is the Westbury Formation which contains a 'bone bed' in which fragments of fish bone and tiny black shiny teeth can be found.

We also looked at the beach pebbles and were able to find plenty of fossils, including ammonites, bivalves and oysters (actually another form of bivalve).

As well as the geology, we had a fabulous view of three peregrine falcons about to fledge from a high cliff position nesting ledge. Sadly, none of us had taken a long lens with us so you will have to believe me that there are two of the three chicks visible in this picture (below). They are on the ledge with the third hidden behind the plants to the left of the ledge.





The young peregrines were flexing their wing muscles in a vigorous manner so we expected they would not be stuck on the ledge for a lot longer. As well as the chicks, we had excellent views of one of the parent birds flying high above the cliff top, presumably looking for a pigeon or two to feed the chicks.

As I walked back, I noted just how far the cliffs have eroded since I first came down here in the 1980s. The concrete groynes which used to be connected to the cliff base are now a few feet from it. I think the quote from Jurassic Park “Nature will find a way” is quite apt. I am sure that the headland will outlast all of us, but one day it will no doubt succumb to geological processes.

If you want to download a leaflet written by Rhian, giving you a guided walk around the headland and some more information, you can get it at: <http://swga.org.uk/geological-walk-at-penarth-head>



Postscript (the ripple marks and mud cracks in the photos)

This rock is between 201 and 209 million years old, but records just a moment in time or more accurately a few things leading up to that moment in time. First the ripples were laid down as sand with the sea lapping close to the coast in a warm sea (Britain was only around 15° to 20° north of the Equator). We know it was a shallow sea because the ripples are small (you get bigger ones in deeper water and the coast must have been close because of what follows).

Then, without disturbing them a layer of finer sediment with mud was laid down on top of those ripples and that dried and cracked.

Then ... all of a sudden (and it must have been quick so as not to really wet the muddy layer and lose all the cracks) a layer of sand was washed in (OK it may not have been Tuesday, but you get the picture). Finally of course, and over a much longer timescale, this was all solidified to rock and then the slab fell out of the cliff and the muddy layer was eroded away (because it's weaker) and we get the filled mud cracks standing proud on a Welsh beach

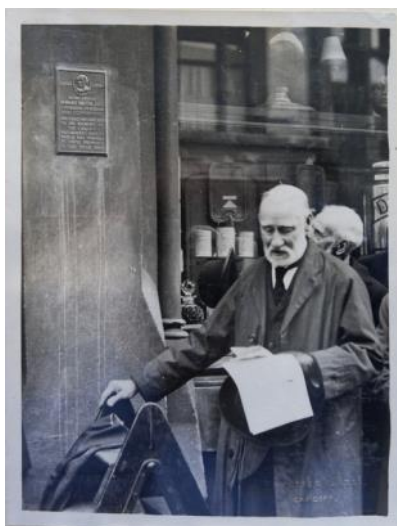


Robert Drane and his pharmacy in Cardiff

The recently-published book '100 Years (1919-2019): Cardiff University School of Pharmacy and Pharmaceutical Sciences', by Briony Hudson, highlights a link to Cardiff Naturalists' Society. The Society was founded in 1867 by Robert Drane (1833-1914), according to many documented sources, in his pharmacy shop at 16 Queen Street, one of Cardiff's earliest pharmacies.

The book on the history of pharmacy in Cardiff can be read online: <https://archive.org/details/cu-pharmacy-centenary/page/n3/mode/2up>

Robert Drane died on 14 July 1914, and on 16 February 1927 the Society's then President, Robert William Atkinson, unveiled a memorial plaque outside the pharmacy (below).



You can also still find a copy of the Cardiff Naturalists' Society plaque outside 16 Queen Street. Further Information on Robert Drane can be found on the presidents' pages that Andy Kendall has compiled on the CNS website: <https://cardiffnaturalists.org.uk/htmlfiles/150th-01.htm>

Visit to Pencoed, Bridgend, 10 July 2021

by Gillian Barter (tour guide)

A swathe of land along the M4 corridor, known to some as the Border Vale, still holds a rich resource of species-rich grassland, which was once more frequent in Glamorgan. This area includes Bryngarn Common and Cefn Hirgoed, and further to the East, Llantrisant Common. A group of enclosed fields to the north east of Pencoed has Site of Special Scientific Interest (SSSI) status for its grassland, some of which is classic damp Rhos pasture, characterised by purple moor-grass, rushes and small sedges. It is typical of the Welsh coalfield, although not confined to it.

A group of eight Cardiff Naturalists' Society members met on 10 July to explore a few of these privately-owned fields and part of Bryngarn Common. Since the weather had been unsettled in the previous weeks, we were very pleased that it did not rain, but we would have welcomed some sunshine to draw out more of the insects that were certainly there.

Each field held a slightly different grassland flora, resulting from differences in past management, soil type and groundwater flow, but many of the same plants occurred in all of them. The first field we visited was dominated by a white haze of whorled caraway (*Trocdaris verticillata*) in full bloom. This small umbellifer is common in south-west Wales but is not often found this far east. Here it was growing with greater birds-foot trefoil (*Lotus pedunculatus*), devil's-bit scabious (*Succisa pratensis*) and tormentil (*Potentilla erecta*).

Although invertebrates were not conspicuous, almost the first to be seen on entering this field was a bumblebee-mimic hoverfly, *Volucella bombylans*. The mimicry was so good that we were briefly misled until we were able to examine it more closely.

Meadow brown, ringlet and small skipper butterflies were also seen in this field as well as in most of the others. Two species of grasshopper were seen during the morning: common green grasshopper (*Omocestus viridulus*) and the meadow grasshopper (*Chorthippus parallelus*).



View of one of the fields with whorled caraway, sedges, etc.

Common green grasshopper



The vegetation of the next field was more heathy, reflecting its peaty soil. Here we found *Sphagnum* moss with cross-leaved heath (*Erica tetralix*), heather (*Calluna vulgaris*) and saw-wort (*Serratula tinctoria*). Saw-wort is named for the saw-like teeth of its leaf-edges, although they are not actually sharp.

Another plant flourishing here was the petty whin (*Genista anglica*), a tiny relative of gorse and broom, which has yellow flowers in May. Only around 20 cm high, it had sharp spines and surprisingly large seed pods. Petty whin is strongly associated with this type of grassland habitat and so is not common, although it is widespread in Wales. Before leaving this field we spotted an impressive caterpillar, later determined as being the larva of a moth, the red sword-grass (*Xylena vetusta*).

Another caterpillar seen in the next field was that of the brimstone butterfly, feeding on alder buckthorn (*Frangula alnus*). This shrub is one of the brimstone's only two food plants and the only one to be normally found in the Valleys. The other, purging buckthorn (*Rhamnus cathartica*), was not present here but replaces its relative in areas where the soils are less acid, such as in the Vale of Glamorgan.

Two further fields were explored, the first of which contained more of the heathy vegetation that we had already seen, here including cotton-grass (*Eriophorum angustifolium*) and bog asphodel (*Narthecium ossifragum*). Around the edges of these fields were patches of scrub with various shrubs including guelder rose (*Viburnum opulus*). Some wild honeysuckle in full bloom was much admired.



Ragged robin

Whorled caraway



Red sword-grass caterpillar

After a break for lunch, during which a kite flew overhead, we visited a corner of Bryngarn Common. Here there is a small peat bog with distinctive vegetation including several plants that we had not seen during the morning. The first of these was cranberry (*Vaccinium oxycoccus*), with fine trailing stems and tiny leaves.

Further searching revealed small quantities of round-leaved sundew (*Drosera rotundifolia*), bogbean (*Menyanthes trifoliata*), marsh St. John's-wort (*Hypericum elodes*) and marsh cinquefoil (*Potentilla palustris*). At least two common lizards were spotted as they disappeared into the grass.

Bryngarn Common is closely grazed by sheep and horses for much of the year. The enclosed fields, in contrast, are grazed by a small herd of beef cattle during the summer and early autumn; their unselective grazing benefits the wide range of plants.

Despite the lack of sunshine, it was generally agreed to have been a successful and enjoyable day.

Text by Gillian Barter

Photos (pp 12-17) by Andy Kendall

Andy Kendall adds (on the blog):

Many members may not be aware, but some years ago our very own Gill Barter purchased a number of fields near Pencoed in order to ensure that they were conserved in line with their SSSI status. Members of the Society were treated to a guided tour of the highlights of the fields with Gill acting as tour guide. We had a wonderful trip and here are some of the highlights with identifications from me. if any of them are incorrect please leave a comment or send a message via the contact us form.



Common lizard



Dog rose



Sundew

Saw-wort

Nuthatch nesting hole



Rob and Linda Nottage's invertebrate species list for the 10 July 2021 visit to the SSSI fields:

<i>Pholidoptera griseoaptera</i>	Dark Bush Cricket
<i>Omocestus viridulus</i>	Common Green Grasshopper
<i>Chorthippus parallelus</i>	Meadow Grasshopper
<i>Himacerus major</i>	Grey Damsel Bug
<i>Cicadella viridis</i>	a leafhopper
<i>Panorpa communis</i>	a scorpionfly
<i>Thymelicus sylvestris</i>	Small Skipper
<i>Ochlodes sylvanus</i> L	arge Skipper
<i>Gonepteryx rhamni</i>	Brimstone
<i>Maniola jurtina</i>	Meadow Brown
<i>Aphantopus hyperantus</i>	Ringlet
<i>Pararge aegeria</i>	Speckled Wood
<i>Celypha lacunana</i>	a moth
<i>Crambus pascuella</i>	a moth
<i>Chrysoteuchia culmella</i>	Garden Grass-veneer
<i>Autographa gamma</i>	Silver Y
<i>Acronicta rumicis</i>	Knot Grass
<i>Xylena vetusta</i>	Red Sword-grass (larva)
<i>Episyrphus balteatus</i>	a hoverfly
<i>Scaeva pyrastris</i>	a hoverfly
<i>Eristalis pertinax</i>	a hoverfly
<i>Helophilus pendulus</i>	a hoverfly
<i>Volucella bombylans</i>	a hoverfly
<i>Chirosia grossicauda</i>	a hoverfly
<i>Tipula maxima</i>	Great Crane fly
<i>Phytomyza ilicis</i>	a leaf-miner fly (mine on Holly leaf)
<i>Apis mellifera</i>	Western Honey Bee
<i>Bombus lucorum/terrestris</i>	White-tailed/Buff-tailed Bumblebee
<i>Araniella cucurbitina</i> sens. lat.	Cucumber Spider
<i>Pisaura mirabilis</i>	Nurseryweb spider
<i>Agelena labyrinthica</i>	Labyrinth Spider
Also:	
<i>Taphrina tosquinetii</i>	fungus causing blisters on Alder leaves
<i>Rana temporaria</i>	Common Frog

Garden Moths

Words and photos by Phill Blanning

We've only been moth trapping since late July 2021. We'd often thought our location could be good for moths as we have a variety of habitats on our doorstep. A friend offered to lend us his trap whilst he was on holiday in July, and after a couple of sessions with it we were hooked and took the plunge and bought our own trap.

So far we have recorded 47 different species and each session brings us new ones. The downside is getting up early to check the trap and then trying to identify from photos what you have. We use Chris Manley's excellent book, and also advice from more experienced 'mothers' on the Butterfly Conservation Facebook page.



Elephant hawk-moth



Heart and dart



Scalloped oak



Iron prominent



Peppered moth



Rosy footman



Black arches

The Wonders of Nature exhibition

The Wonders of Nature, an exhibition of Andy Kendall's photographs is currently at Jacobs Market in Cardiff. It runs throughout September 2021 and beyond (dependent on demand for gallery space).

The exhibition features photographs taken on Cardiff Naturalists' Society outdoor meetings, and is accompanied by information about the Society.

The Wonders of Nature

From the 26th of August. Showcasing the variety of talks that you can come to about the Plants, Animals and Landscapes of the world

West Wharf gallery - 3rd Floor Jacobs Market, Cardiff CF10 5DB



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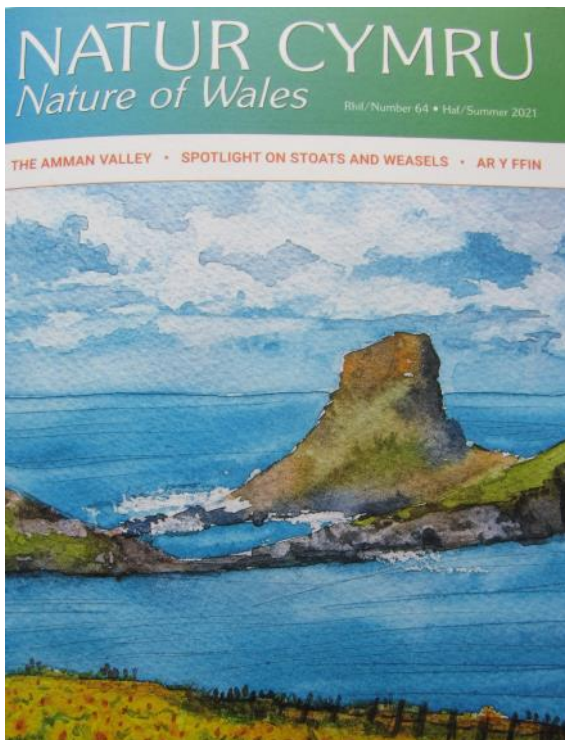


Natur Cymru relaunched

At the start of this year, the Initiative for Nature Conservation (INCC) relaunched the Welsh wildlife magazine *Natur Cymru / Nature of Wales*. Each 68-page edition will continue to showcase Welsh wildlife, landscapes, projects and people, and be illustrated with original artworks and photographs.

Natur Cymru was first launched by First Minister Rhodri Morgan in 2001, as an initiative of the Wales Biodiversity Partnership, led by the Welsh Government. In its original format, it ran as a quarterly publication until 2017. In 2021 it was relaunched from issue 62 and will be published twice a year.

Subscriptions are available for £30 annually, from the INCC website: <https://www.natureconservation.wales/>



Joan Andrew's farewell garden party

Dr Joan Andrews, the 116th President of the Cardiff Naturalists' Society, the Society's Treasurer for many years, and a long-standing member of the Society has moved from her home in Dinas Powys. We wish her all the best in her new home in Norfolk. These photos, taken by Linda Nottage are from Joan's farewell CNS garden party at Rothbury Cottage.







Fossil bivalve, Geology Ramble (pp. 5-11). Photo by Andy Kendall.

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