



CARDIFF NATURALISTS' SOCIETY

Founded 1867

NEWSLETTER No. 121 January 2021

Charity No. 1092496

LIST OF OFFICERS 2020/2021 President

Position vacant

Secretary

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Treasurer

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Elizabeth Morgan membership@cardiffnaturalists.org.uk

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Field Meetings Coordinator

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Cover: Blackbird in Roath Park, photo by Phill Blanning.

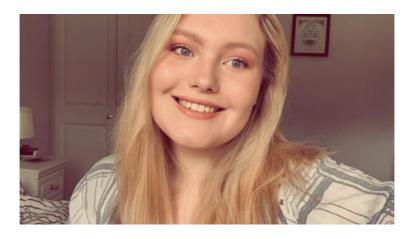
Biosciences Prize

We congratulate Lottie Moreland (below) on winning the 2020 Cardiff Naturalists' Society Bioscience Prize (in memory of Prof Ursula Henriques and Dr Mary Gillham).

She was awarded the prize for her outstanding report for the Cardiff School of Biosciences' Ecology 'field course', entitled: 'The effect of climate on the reproductive success of different passerine birds'.

Due to COVID-19, Cardiff University's field courses in 2020 were delivered virtually, with a series of practical videos and Zoom sessions. Students were divided into topics of their own choosing. Lottie enrolled in the River Ecology field course led by Steve Ormerod and Ian Vaughan. The students wrote reports that were mainly based on a literature review.

Look out for an article by Lottie on climate and bird breeding success in the next Cardiff Naturalists' Society newsletter.



Future Events of the Society

We are living in unprecedented times due to the covid-19. Cardiff Naturalists' Society's first priority is to protect the health of its members and to minimise the risks of exposure to the virus. It will comply with all recommendations issued by the UK Government and the Senedd. Therefore, our 'Indoor Meeting' programme has been cancelled until further notice.

Indoor meetings will restart as soon as we are able to organise them at the University, including our AGM. All indoor meetings begin at 7.30 pm and are held in the Main University Building, Park Place, Cardiff CF10 3AT. Follow signs inside the building for room location (which varies according to room availability, though it is usually in the same area of the building).

However, in the meantime, we are exploring the possibility of virtual meetings during the spring and summer. Due to the changing situation, you can keep up-to-date via the Society's webpage, social media, and e-mails that we will send out to members.

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

http://cardiffnaturalists.blogspot.co.uk/p/programme.html

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Deadline for submissions to next newsletter: Monday 26 April 2021

Wildlife Trust

Cardiff Naturalists' Society members are invited to join the Cardiff, Swansea and Bridgend groups of the Wildlife Trust for a series of virtual talks. These will be streamed via YouTube, so there is no limit to the number of people who can log in.

Tuesday 9th February 2021. 7.30 pm - 9 pm. Online Meeting. **Pembrokeshire's other islands - Ramsey and Grassholm** Pembrokeshire is blessed with stunning offshore islands, internationally important for their seabird populations and seal colonies. We know a lot about Skomer and Skokholm, but what about rugged Ramsey and remote Grassholm? The new Head of Islands and Marine, at the Wildlife Trust, **Lisa Morgan**, has lived and worked on all four islands over the last 20 years. She will share the history and wildlife of these islands with us and take a look at the conservation issues affecting them today.

Thursday 4th March 2021. 7.30 pm - 9 pm. Online Meeting. The (rapidly disappearing) Wildlife of Indonesia.

The Republic of Indonesia is made up of over seventeen.

The Republic of Indonesia is made up of over seventeen thousand tropical islands including Borneo, Bali, Komodo, Sumatra and many, many more. It's home to some of the planet's most enigmatic wildlife but with the world's fourth largest human population... also some of the most threatened. This talk by well-known naturalist and wildlife photographer **Hugh Lansdown** shows a selection of animals from a few of the islands he's visited on both sides of the famous Wallace Line and highlights the issues facing them and their conservation.

Thursday 8th April 2021. 7.30 pm - 9 pm. Online Meeting. Pine Martins Dr. Dan Forman.

Links to access the talks will be published on the Wildlife Trust website: www.wtswwCardiff.org.uk

Update from the Wenvoe Wildlife Group

Bruce McDonald

Whilst the Wenvoe Wildlife Group has been unable to organise any group events with the COVID restrictions, we have still managed to make progress with the sites that we manage. In recent years we have organised a number of wildlife walks, including the Poisonous Plants walk in 2019 attended by a number of Cardiff Naturalists' Society members - hopefully 2021 will give us an opportunity to repeat some of these.

The first priority of the group has been to create and maintain habitats that will benefit wildlife. Starting with the Upper Orchid Field, one of the last semi-improved meadows near Cardiff, over the previous 10 years, we have seen the design and planting of 5 community orchards, the maintenance of possibly the only specially-created watercress beds in Wales, another small meadow and our current pre-occupation, the Bee Loud Glade, dedicated to pollinators.

Orchards are a priority habitat for wildlife in local and national biodiversity action plans and, if you can get your hands on the land, are not difficult to create. Our 5 themed orchards now have around 150 fruit trees with over 60 different varieties, most of which are heritage varieties.

Whilst apples predominate, we also have pear, plum, bullace, damson, greengage, cherry plum, medlar, quince, mulberry, fig, cobnut, the chequers tree, and walnut. The newest orchard concentrates on Cider apples and Perry pears, and complements the nearby young orchard at Dyffryn Gardens.

One spin-off of covid-19 has been the significant numbers of residents and visitors who have taken to the countryside, and both discovered and enjoyed the orchards. In our annual apple tasting survey, the variety Cissy came out on top - originating in the Malpas area in the 18th century.



The apple variety Machen

Whilst there have not been any formal scientific surveys of the orchard sites, other than one SEWBReC Biodiversity Blitz, subjective impressions are that wildlife benefits accrue very rapidly. One site surrounded by playing fields revealed after a couple of years a much higher density of earthworms than the plain grassed areas along with significant numbers of field mice and voles. Moles throw up molehills on the site whereas the playing fields were pristine. Literature often emphasises the endangered species that are associated with orchards, such as the noble chafer beetle, wryneck, mistletoe weevil and golden eye lichen, but it is often mature fruit trees that will attract them. However, young orchards will soon host visits from foxes, badgers, grass snakes along with butterflies, hornets and other pollinators.

Remote cameras have picked up regular wildlife visits to ponds on the sites, no matter how small. One pond just two metres by one saw usage for drinking and bathing by thrush, robin, chiffchaff, dunnock, greater spotted and green woodpeckers, wren, blackbird and barn owl amongst others, along with pheasant, fox, field mice, voles, squirrel and rabbit.

Our latest project is the Bee Loud Glade, a small piece of land dedicated to pollinators in an area surrounded by woodland and arable fields. The first element is the planting of trees, shrubs and flowers that are good for pollinators. The second, the provision of 'homes' such as Bee and Bug Hotels, Bumblebee nests and bare soil for solitary wasps and bees that tunnel into the ground. Finally, there is an educational element so that people can transfer some of the ideas back to their own gardens.

As far as choice of plants is concerned, we are not following the much-quoted advice to plant only native flora. If you have seen queen bumblebees early in the season on Mahonia or the range of pollinators enjoying some late summer Himalayan balsam one can only accept that the pollinators will go for what they like rather than what the textbooks say. Consequently we are planting to cover the full extent of the season, both day and night, and the range of different pollinators whether by type or size.



Sapling of Tetradium daniellii

Examples of trees that we have already planted include the bee tree *Tetradium daniellii*. Bees love the flowers and beekeepers appreciate the long-flowering season. Also *Eucryphia nymanensis* - a mature specimen locally is covered in insects in late summer. Naturally natives are part of the mix including purple loosestrife, gypsywort and evening primrose. Measurement will be both of the variety and numbers of pollinator species but there will also be comparison over time as the shrubs and trees in particular mature but also how the records compare with the surrounding arable and pastoral fields and extensive mature woodland.

Covid-19 also prompted a greater awareness of wildlife both in people's gardens and in the surrounding countryside. A family of very energetic stoats around Burdon's Hill provided plenty of entertainment and one video clip was obtained. A fine bee orchid turned up on a lawn in the centre of the village followed by a broad-leaved helleborine in a nearby flowerbed. The Cardiff area seemed to do well for the latter this year turning up in all sorts of unlikely places.

Members are encouraged to record other wildlife of interest outside the parish and these are reported to SEWBReC. Amongst the more noteworthy were the remains of a basking shark, corn spurrey and the small-flowered buttercup. The patchwork leafcutter bee is not common but *Gorytes laticinctus (below)* has very few records in Wales. though it took an extra photo of the face of the insect to convince the experts (p. 10).





Gorytes laticinctus - view of face

Finally, encouraging members to note unusual versions of even the commonest plants throws up examples like this naturallyoccurring double form of buttercup (below) on a cliff-top several miles from the nearest habitation, so unlikely to have been influenced by the double forms obtained from nurseries.



Note: Facebook users will find regular updates of photos of species - see 'Wenvoe Wildlife Group'.

Bruce McDonald, Wenvoe Wildlife Group



Basking shark skeleton



Corn spurrey



Patchwork leafcutter Bee

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Weather Summary for North Cardiff

Note: This weather summary for North Cardiff has been compiled from figures recorded in Thornhill, a location with observations going back to 1986.

Weather extremes were noted with alarming frequency during the early part of 2020 due to the strength of the North Atlantic Jetstream. It steered a series of named storms across the UK bringing high winds and floods. Its unusually erratic displacement north around the 20th January allowed extremely high pressure to build over the UK between storms. Mumbles near Swansea recorded a surface pressure of 1050.3 millibars, the highest anywhere in the UK since 1957. However, it was the heavy rainfall and resulting flooding which will be remembered longest. A waving cold front associated with Storm Dennis moved slowly across Wales during the weekend 15th and 16th February causing serious flooding along the River Taff and highest ever river levels along much of the Wye, Severn and others. A fortnight later Storm Jorge generated another bout of heavy rain and gave North Cardiff its wettest day for 30 years on the 28th, 77.5 mm (3 inches) in Thornhill. Unsurprising February turned out to have been the wettest across the UK since modern records began, with North Cardiff getting its full share, 311.2 mm (12.25 inches). On the plus side temperatures remained well above normal with little snow or frost (see pp. 16-17).

The unsettled weather continued well into March but during the last 10 days things improved, temperatures rose and it became much drier. In fact there was no measurable rainfall in N. Cardiff between the 19th March and 5th April, and April turned out to be the sunniest on record over most of the UK. May was very dry, only 13.7 mm recorded in Thornhill during the month and temperatures exceeded 20°C on 16 days. However, it was not all plain sailing and there were brief unsettled spells during May and June. Thunderstorms caused flash floods in Gorseinon on 9th May and Mumbles recorded 68 mm of rain on the 10th June. Further flooding occurred in Pentre and Maerdy on 17th June.

Some very high temperatures were recorded in July, August and September and although often sunny and dry, brief very wet, thundery episodes were also noted, resulting in a wetter than average summer. A marked change of type occurred around the time of autumn equinox and Storm Alex gave a spell of strong winds and heavy rain during the first few days of October. In fact the Met Office, after collating data from all over the UK, declared the 3rd October the wettest UK day since 1891 with an average rainfall figure (0900 – 0900) of 31 mm over the whole of Great Britain. That is a lot of water! Further storms in the last 10 days of October caused further disruption due to flooding and wind damage, but by way of compensation it became very mild, daytime temperatures exceeded 10°C every day till the 24th. The mild often wet weather continued throughout November and for most of December although after Christmas temperatures began to fall. December was also a very wet month; 292.7 mm fell in North Cardiff, the wettest December since 2012. Over the year, as a whole, rainfall totalled 1775.8 mm, again wettest since 2012 and some 330 mm above the long-term average.

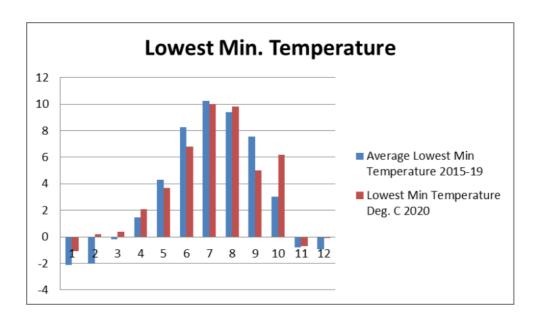
When I was studying for my 'O' level in Geography, I was distinctly remember being told that Britain had a temperate climate with reliable moderate amounts of rain throughout the year with no violent storms or extreme temperatures. That was 60 years ago! What will students be being taught in another 60 years?

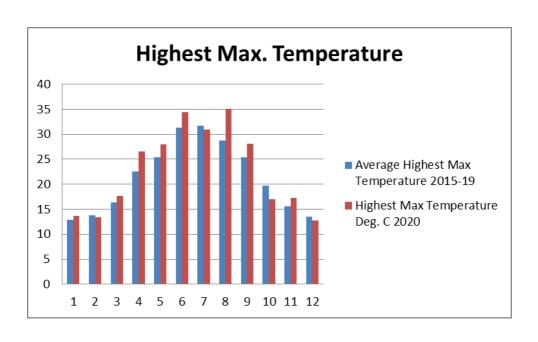
Report from a friend of the Society

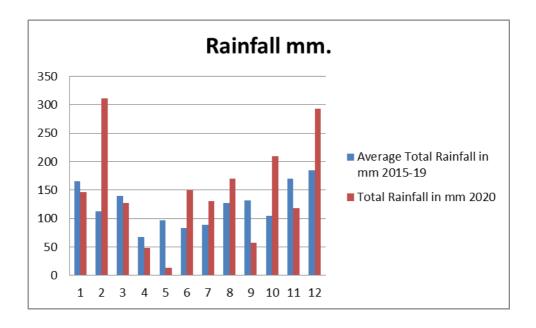
Weather Summary for North Cardiff 2020

Annual Weather for North Cardiff 2020					\vdash
	Jan.	Feb.	March	April	
	1	2	3	4	
Total Rainfall in mm	146.5	311.2	127.8	48.3	
Highest in one day in mm	23.8	77.5	37.9	14.0	
Date of Highest Rainfall	11th	28th	9th	29th	
Highest Maximum Temperature Deg. C	13.6	13.4	17.7	26.6	1
Date of Highest Temperature	14th	9th	24th	11th	
Lowest Minimum Temperature Deg. C	-1.1	0.2	0.4	2.1	
Date of Lowest Temperature	20th	6th	6th	1st	
A lthough exposures for both rainfall & ten	peratures are	e not Met. O	ffice standar	d	
the above figures are reasonably represen	tative of the u	urban condit	ions.		
Note: Exposures for both rainfall & temper	ratures are no	t to Met. Of	fice Standard	s	

<u>June</u>	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	7	8	9	10	11	12
150.3	130.9	169.7	57.1	209.4	118.2	292.7
26.8	39.0	40.2	20.4	22.7	14.8	46.5
17th	3rd	27th	30th	7th	2nd	23rd
34.4	30.9	35.0	28.1	17.0	17.3	12.8
25th	31st	12th	14th	20th	1st	18th & 21st
6.8	10.0	9.8	5.0	6.2	-0.7	-0.1
6th	20th	31st	27th	18th	27th	31st
			Total Rainfal	1775.8	mm	
					69.9	inches
		Long Term Average			1447.0	mm
			Ī		57.0	
	6 150.3 26.8 17th 34.4 25th	6 7 150.3 130.9 26.8 39.0 17th 3rd 34.4 30.9 25th 31st	6 7 8 150.3 130.9 169.7 26.8 39.0 40.2 17th 3rd 27th 34.4 30.9 35.0 25th 31st 12th 6.8 10.0 9.8 6th 20th 31st	6 7 8 9 150.3 130.9 169.7 57.1 26.8 39.0 40.2 20.4 17th 3rd 27th 30th 34.4 30.9 35.0 28.1 25th 31st 12th 14th 6.8 10.0 9.8 5.0 6th 20th 31st 27th Total Rainfal	6 7 8 9 10 150.3 130.9 169.7 57.1 209.4 26.8 39.0 40.2 20.4 22.7 17th 3rd 27th 30th 7th 34.4 30.9 35.0 28.1 17.0 25th 31st 12th 14th 20th 6.8 10.0 9.8 5.0 6.2	6 7 8 9 10 11 150.3 130.9 169.7 57.1 209.4 118.2 26.8 39.0 40.2 20.4 22.7 14.8 17th 3rd 27th 30th 7th 2nd 34.4 30.9 35.0 28.1 17.0 17.3 25th 31st 12th 14th 20th 1st 6.8 10.0 9.8 5.0 6.2 -0.7 6th 20th 31st 27th 18th 27th Total Rainfall 1775.8 69.9 Long Term Average 1447.0







Exploring the River Thaw

Rob Nottage

A couple of years ago Linda and I were invited to join a project started by an enthusiastic group of local historians and geographers. Their inspired idea was to follow the course of the River Thaw "from source to sea" through the heart of the Vale of Glamorgan. This took the form of an exploration, undertaken in stages, down the river valley and of the places, landscape, features and wildlife along the way, talking to land and property owners, farmers and residents, and carrying out background research

This project has now come to fruition in the form of a book entitled "A Journey down the Thaw Valley". After introductory chapters on the geology and pre-Norman history, the book is divided into sections that make the journey in short excursions that can each easily be covered in a day's exploration. It is generously illustrated with colour and historical photographs and with hand-drawn maps and diagrams.

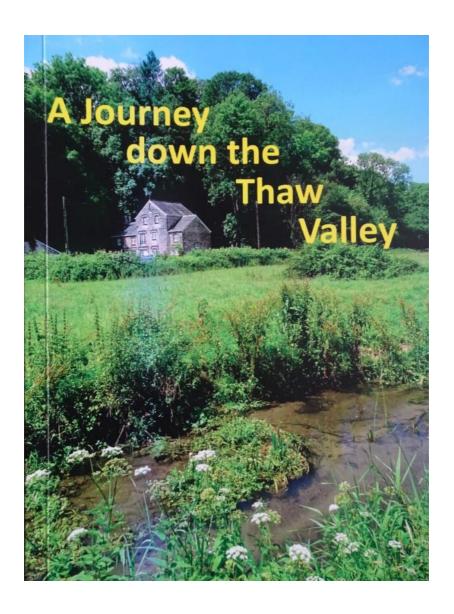
The intention is to inform and provoke the reader's curiosity, and to make their own explorations. You may feel you are familiar with this part of the Vale of Glamorgan, but do you know, for example:

- where the river starts
- where this scene is



- that Aberthaw was a port and traded with the West Indies for tobacco and sugar
- how pebbles from the beach at Aberthaw ended up in the Crimea
- John Wesley preached locally in the mid-1700s and was well-received in one town but stoned in another
- Tom Jones, in his early days, sang at the White Star dance and night club on the coast.

The answers are all in this book!



"A Journey down the Thaw Valley" -160 pages, softback A5 £10 (+£2.50 p&p). To find out how to get your copy, and the options for payment, please contact Linda and Rob Nottage: rob.nottage@btinternet.com

The "Lock Down" Allotment

Mike Dean

Soon after I retired in 2000 I took over an allotment plot at the South Rise Leisure Gardeners' Society's site adjacent to the Lisvane & Llanishen Reservoirs. At the end of last year I was on the point of giving it up but in the end decided to give it one more year. As things turned out, it was one of my better decisions, because when "Lock Down" came in March people were allowed to tend their allotments provided "social distancing" was maintained. Cardiff Council followed this guidance and kept all their allotment sites open, with rules to ensure the risks of spreading covid-19 were minimised. This gave a place to go for exercise and social interaction, as plot holders were very sensible and kept to their plots while we were calling to each other. The communal cabin, which is a place to shelter if it rains and a place to meet for a chat was put out of bounds.

The site is an enclosed gated area with over 100 plots of varying sizes, but given its size it also provided somewhere to walk round for exercise in relative safety. It is a self-managed site which means that while the site belongs to Cardiff Council it is managed by the Committee to strict guidelines from the Council. Water is available in troughs for the watering of the plants but hoses are banned and all water has to be carried, which is a way of self-regulating the water usage.



The site has many trees on its perimeter and a few located on the site. Of particular note are four semi-mature hornbeam trees (*Carpinus betulus*) in the centre of the site together with a variety of other trees including rowan (*Sorbus aucuparia*). There are numerous very mature fruit trees e.g. apple, pear and plum. Some are harvested but others are left and they provide a source of food for the wildlife. Two of the plots have beehives, which is a relatively recent innovation. At one time Cardiff Council did not allow beehives because of Health and Safety issues, but now the hives are enclosed in open-topped netted areas to prevent accidental close contact and hence the potential for being stung.

An allotment is obviously a hobby for the plot holders but with a potential of a reward in terms of produce for the table. With the large number of plots, there are different attitudes to the control of pests. A large number of plot holders strive to achieve a high degree of organic cultivation. Some achieve total organic cultivation but most like me strive for it but do not achieve it! This applies in particular to the control of slugs, especially when new tender plants have been planted. Equally there is a potential conflict between wildlife and plot holders but in general most plot holders are very tolerant of the local wildlife and control its access by netting the growing produce.



The wildlife on the site has changed through the years. When I first took over a plot rabbits were a major problem to the extent that a rabbit fence was installed around most of the site (i.e. wire netting about a metre wide was partially sunk into the ground). This had the desired effect but soon after that there was an outbreak of *Myxomatosis* and numbers have never recovered. At that time Llanishen Reservoir was full of water and a breeding ground for toads. In July and August there were so many baby toads it was difficult to avoid treading on them. They provided a source of food for grass snakes (photo p. 21) which were very common. When the Reservoir was drained by Western Power toads and grass snakes were not seen but now the reservoir is filling up, it is encouraging that young toads are being seen again plus the odd grass snake.

To date we have a resident pair of foxes who regard the allotment as their property and we, as plot holders, are allowed in occasionally. They raised a pair of cubs who acted like typical teenagers, running round knocking plants over and digging holes in inappropriate places. However, the vixen is particularly proficient at catching the field mice (*Apodemus sylvaticus*) which are a major problem on the site because they eat so much of the produce. In particular they can eat a beetroot from below so it looks normal until you harvest it and find it is hollow! They dig a network of tunnels just a few centimetre's below ground which can be very extensive covering a large part of the plot.





Over the last few years Dwr Cymru have been a lot of civil engineering work at the reservoirs and this has disturbed the resident badger population who decided to explore the allotments and found they had a "supermarket" on their doorstep. They have a particular taste for sweetcorn and they have developed a technique of rolling against the plants to bring them to the ground before eating the cobs. Most people have netted their sweetcorn in the past to keep off the grey squirrels but a bit of plastic netting is nothing but a minor irritation to a badger. A strong metal cage is the only possible deterrent but many like me have given up growing sweetcorn.



Hedgehogs are very welcome on site as a means of controlling slugs and snails but not so many have been seen of late. There is some evidence that they are being predated by the badgers as twice I have seen a hedgehog skin complete with spines on the ground. This I believe is evidence of badger predation. We get problems from moles who obviously do not eat any of the produce but can disturb growing plants to the point that they die.

Grey squirrels are numerous and will eat all fruit even under ripe gooseberries. However, suitable netting controls the problem except for larger fruit trees such as cherry and pear which are impossible to net effectively.

There are about a dozen nest boxes on the site which are heavily used by blue tits and great tits. There are several Bat Boxes as well but it is impossible to establish their usage although bats are seen on summer evenings so it is hoped that they are being used. There are also the usual garden birds, e.g. robins and blackbirds, the latter being particularly partial to summer raspberries and red currants! The one bird that is a persistent problem is the wood pigeon as they feast on growing young peas and also brassicas in particular. Netting of the plants is the only effective answer.

There are of course the usual garden pests present such as aphids. They can usually be controlled by an aggressive spray of slightly soapy water, but equally there are numerous ladybirds and their larva which are very effective in controlling the aphid population. Plus of course there are problems cabbage white butterfly (*Pieris brassicae*) and the small white butterfly (*Pieris rapae*). Other pests are the carrot root fly (*Chamaepsila rosae*) which can be deterred by surround the carrots with a fine mesh fence or disguising the smell of the carrots by inter-planting onions or strong smelling herds. Our site suffers in particular from leek moth (*Acrolepiopsis assectella*). This is a relatively recent problem as when I first took over the plot leeks were one of the easiest things to grow but now, without netting the leeks, infestation is almost certain!

In spite of all the challenges, most plot holders manage to produce a reasonable amount of produce for the table although there is always a degree of "Feast or Famine" but at least friends can benefit in times of plenty! Also I often wish that nature understood the concept of "sharing" as most plot holders would willingly sacrifice some of the produce if the remaining plants were left untouched!

Lockdown Highlights Part 2

Linda Nottage

During the early weeks of lockdown it was a pleasure to walk beside traffic-free roads. However, a similar opportunity has arisen close to home following the upgrading of 'Five Mile Lane', which links Barry with Bonvilston. For the most part (and after months of frustrating roadworks) this is a new road, leaving the old sections as quiet country lanes allowing easy access to 1 km squares we avoided previously. At a slow amble and peering into the hedgerows we often discover species previously overlooked.

Circular rambles are possible, including a footpath between sections of a solar farm south of Moulton. This proved a flowery haven for butterflies, including brown argus, small skippers and 6-spot burnet moths. Along the lanes we found a wide variety of bugs including the distinctive *Heterotoma planicornis* and parasitic wasps such as *Ichneumon sarcitorius* and *Gasteruption jaculator* with an impossibly long ovipositor. Whitethroats, lesser whitethroats and yellowhammers were breeding.

Moth-trapping at home produced a box tree moth and a superb scarlet tiger presumably emerged from caterpillars we saw nearby in the spring.

Other thrills were provided by new-for-us species during our wanderings within East Glamorgan this summer. Locally, we discovered the tiny bug *Pseudoloxops coccineus* at Coed Garnllwyd, while in Hensol Forest giant alder sawfly and eyed ladybird turned up, and at Talygarn Lake the conipid fly *Leopoldius signatus* was a surprise.

Further afield we found a bee chafer and the hoverfly *Eriozona* syrphoides near Hirwaun, and shrill carder bees along the Rhymney coast. All these excitements occurred during wildlife recording explorations. You never know what you will find!



Shrill carder bee duo on bristly ox-tongue



Bee chafer and common soldier beetle



Leopoldinus signatus (female)



Box tree moth



Gasteruption jaculator



Scarlet tiger

Photos pp. 26-27: Linda Nottage.



Photo: Eyed ladybird on burdock, by Linda Nottage (see pp. 25-27).

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