



CARDIFF NATURALISTS' SOCIETY

Founded 1867

NEWSLETTER No. 124

January 2022

Charity No. 1092496

LIST OF OFFICERS 2022

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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: Cosmeston Lakes Country Park. Photo: Stephen Nottingham.

Bioscience Prize

We congratulate **Cerys Vick** on winning the 2021 Cardiff Naturalists' Society Bioscience Prize, which is awarded in memory of Prof Ursula Henriques and Dr Mary Gillham.

She was awarded the prize for her field course work and report on the topic of Urban Ecology. Her report was entitled: 'Does *Impatiens glandulifera* (Himalayan balsam) have an effect on the biodiversity in its surrounding areas along the urban waterways in Cardiff?'.

Look out for an article by Cerys in a later edition of the Cardiff Naturalists' Society newsletter.



Spring 2022 events

Until the time when indoor meetings restart in meeting rooms at Cardiff University, Cardiff Naturalists' Society and the Cardiff Group of the Wildlife Trust of South & West Wales (WTSWW) have joined forces to organise online/virtual events. These all start 7.30 pm (to around 9 pm) unless otherwise stated. Look out for links to Zoom (or other platforms) in members' emails or on the website.

Monday 31 January 2022,

Trees and Climate Change: Can we plant our way out of trouble?

Professor **Mary Gagen** of Swansea University will consider the role of trees in combating climate change.

This online meeting is available via the following link:

<https://youtu.be/IWakLFu7MzM>

(Hosted by the Bridgend Local Group of the Wildlife Trust)

Look out for details of further online talks in emails, via social media or on our website/blog:

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

Outdoor meetings

Cardiff Naturalists' Society will be organising a series of outdoor meetings in 2022.

Howardian Local Nature Reserve, Cardiff.

Provisional dates: Sat 21 May, 11 June or 18 June 2022 (tbc)

Howardian Local Nature Reserve, located on a former landfill site, is a 13 hectare (32 acre) wildlife oasis in the lower Rhymney Valley in Cardiff. The site comprises woodland, wildflower meadow, ponds and reed beds. Among the plants we will be looking at are orchids, and if possible an orchid expert will join us on our tour of the nature reserve.

www.howardianlnr.org.uk

Howardian Local Nature Reserve, Ipswich Way, Penylan, Cardiff CF23 9AQ.

**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 2 May 2022**

CARDIFF BIRDWATCH 9th January 2022

Linda Nottage

How fortunate we had chosen the one sunny day in a wet and gloomy start to the new year! Well over 30 members of CNS, WTSWW and friends assembled at 10am by Channel View Leisure Centre beside the River Taff. Mute swans, Canada geese, tufted ducks, coot and gulls (mainly black-headed) were admired from the car park. Little and great crested grebes proved more elusive as they dived between the moored boats. Grey heron and cormorant posed on the opposite bank.

After pausing to enjoy the sweet-scented honeysuckle hedge and spot a solitary tree-top goldfinch (which turned out to be the only finch of the day) we were entertained by a lively mixed flock of tits comprising, long-tailed, blue and great, with an accompanying goldcrest as we made our leisurely way towards the Clarence Road bridge. We proceeded to Hamadryad Park where the ever-present magpies totalled at least 15, a Cetti's warbler called and 8 pied wagtails flitted over the playing field.

Although birds were scarce in the trees and bushes, when we reached the zig-zag boardwalk there were plenty of mallard plus a family of swans with 8 cygnets and the usual motley collection of feral pigeons. From here a lucky few glimpsed a kingfisher and a pair of shovelers while others lingered to identify the hidden bird calling persistently from dense cover. It eventually revealed itself as a handsome water rail.

Water rail was heard again as we strolled past the Cardiff Bay Wetland Reserve to the St. David's Hotel viewpoint. Finding few birds to see we retraced our steps to the car park where most dispersed, and others enjoyed their picnic lunches.

Eight stalwarts reconvened in the Penarth car park off Marconi Avenue to walk alongside the River Ely towards the barrage. Two grey and one pied wagtail showed well and a small party of turnstones was reported but the unexpected highlight was a wintering common sandpiper feeding at the water's edge. By now the sky had clouded over, so we returned to our cars through Penarth Marina, pausing to admire cormorants fishing there.

A grand total of 38 bird species was noted on the day, although with such a large, socially-distanced and strung-out group it was inevitable that no one could see all. It was a pleasure to enjoy the sunshine, meet friends and chat face-to-face again.



CARDIFF BIRDWATCH 9th January 2022



Grey wagtail



Cormorant

Birdwatch text and photos: Linda and Rob Nottage

Online talks Autumn 2021

Due to COVID-19 restrictions, the Cardiff Naturalists' Society indoor meetings in Autumn 2021 were again held remotely, on Zoom and YouTube, in collaboration with the Cardiff Group of the Wildlife Trust of South and West Wales (WTSWW).

Butterflies of Wales: On 23 November, we heard about the 42 species of butterflies that currently live in Wales. Roo and Nicola Perkins, of Speckled Wood Wildlife, showed photos of them all, taken on their travels, with a fascinating commentary on their ecology and behaviour. For further information on their online and field courses, see: www.speckledwoodwildlife.co.uk

Journey down the Thaw Valley: On 14 October, Rob and Linda Nottage described the wildlife, scenery and history they have encountered on their walks in the Thaw Valley, Vale of Glamorgan. An article with further information on the book they co-authored '*A Journey down the Thaw Valley*' featured in the January 2021 newsletter.

Sand dunes: On 4 October, Laura Bowen talked about conservation work in Welsh sand dunes sites, such as Kenfig and Merthyr Mawr. The approach is no longer to 'stabilise' dunes, but to enable dynamic processes to help open up sand areas and increase biodiversity. This involves using machinery to excavate notches in the fore dunes and to bring in grazing cattle. Much of this work was funded by the EU LIFE project 'Sands of LIFE'. Since this talk, in January 2022, the Sands of LIFE team reported the discovery of petalwort (*Petalophyllum ralfsii*) in dune slacks at Merthyr Mawr, where it had been historically present but not recorded in recent years. Further information on Welsh sand dune restoration can be found on the website: naturalresources.wales

Community-based conservation: Among the other talks (virtually) attended by Society members, on 9 December Madi Bowen-Parry and Meg Howells outlined the benefits of conservation projects that are community-led or involve a high degree of citizen participation. They described several successful examples, including the Conservation Volunteers, Seawilding (seawilding.org), and the My Wild Cardiff project.

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.

Summary for 2021

The year started on the chilly side in January, with the Jetstream on one of its wild fluctuations to the south, plunging the UK and much of Western Europe into a spell of wintry weather and bringing the worst snowfall in Spain for half a century. Storm Cristof caused flooding along the Dee around the 20th followed by widespread snow over much of Wales around the 23rd. The temperature in a snow-covered St. Harmon, Powys fell to -10°C on the 25th. The cold spell continued for the first two weeks of February with cold easterly winds across the whole of the UK. Cardiff had its coldest night of the year on the 11th (-3.3°C) although Braemar in Scotland was somewhat colder on the same night (-22.9°C). Heavy rain over much of South Wales on the 20th saw flooding in the Tywi Valley. High pressure dominated during late February and early March giving dry, often cloudy conditions though it became more unsettled in late March and very warm towards the 30th when Cardiff reached 22.4°C .

April was dry and sunny, the driest April since my records began and cold, ground frost was recorded somewhere in the UK every day of the month. May was by contrast very wet, the wettest I have recorded, with 203 mm (8") of rain in North Cardiff.

June was dry as the Jetstream remained well to the north for much of the month. The first half of July was unsettled but the Jetstream moved northward again mid-month and as a result temperature levels rose spectacularly. The Met Office issued its first Amber Heat Warning and temperatures exceeded 30°C in north of Cardiff every day from the 17th to the 22nd of July.

The Jetstream was off on its travels again for much of September and October. For periods of a week to 10 days it remained well to the north, resulting in dry, settled and often very warm conditions, interspersed with spells of very wet weather when the Jetstream was near or south of the UK. One such wet spell at the end of October resulted in 87.8 mm of rain. (3.4") in the last 4 days of the month.

By contrast, November was very dry, often cloudy with little frost. Only 41.9 mm of rain was recorded in North Cardiff during the whole month, the driest November since my records began in 1986.

December was exceptionally mild, especially towards the end of the month with air originating in the tropics spreading across the UK. However, tropical air has the capacity to hold more water vapour than colder polar air and North Cardiff saw 102 mm (4") of rain in the last 10 days with 41.0 mm (1.6") in the 24 hours from 9:00 am on Christmas Day, the wettest day of the year.

Overall, the year was on the dry side of average with above normal temperatures. Significant snow fell on only one, 3.5 cm was measured on the 23rd of January.

Report from a friend of the Society

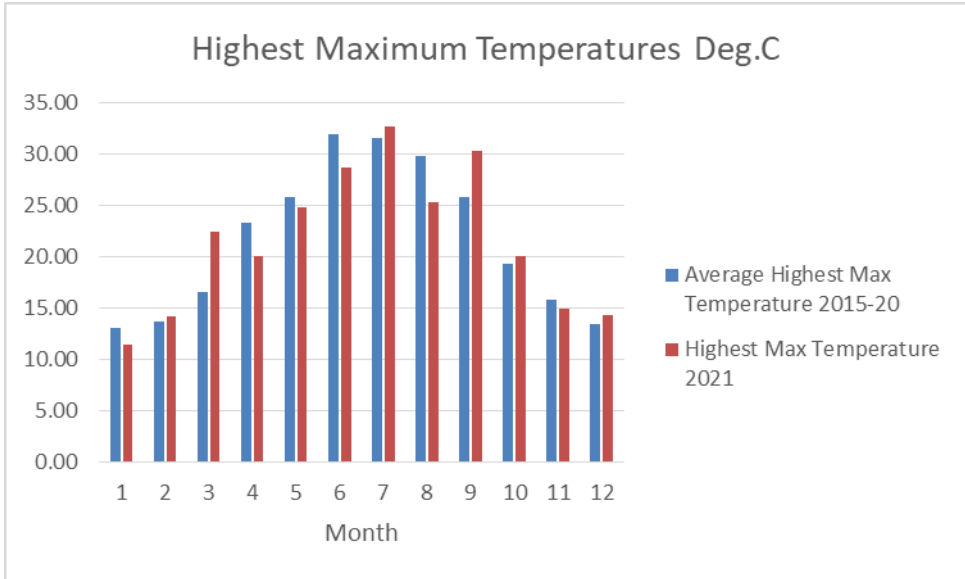
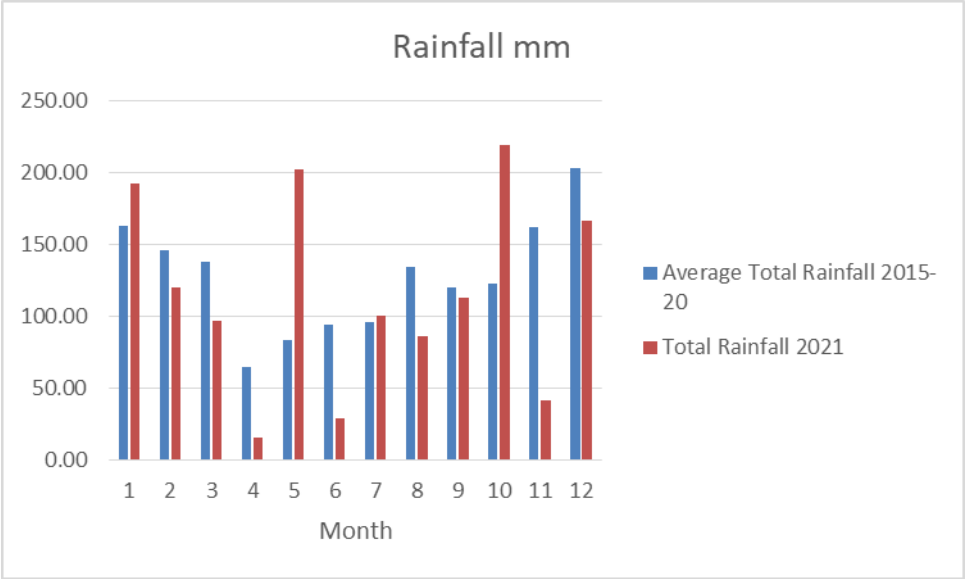
Weather Summary for

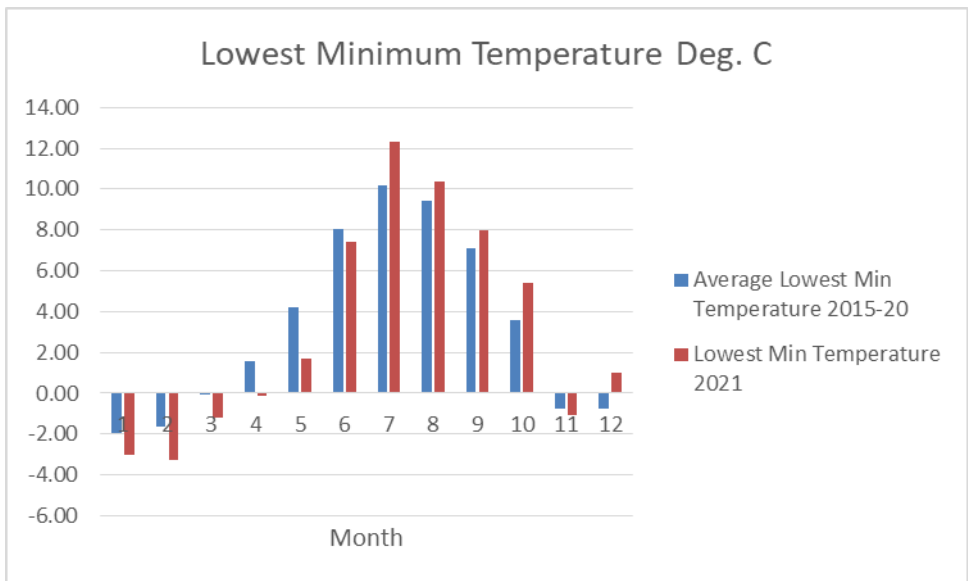
<u>Annual Weather for North Cardiff 2021</u>					
	<u>Jan.</u>	<u>Feb.</u>	<u>March</u>	<u>April</u>	
	1	2	3	4	
Total Rainfall in mm	191.9	120.0	97.2	15.2	
Highest in one day in mm	28.0	18.8	27.6	6.0	
Date of Highest Rainfall	19th	15th	10th	27th	
Highest Maximum Temperature Deg. C	11.4	14.2	22.4	20.0	
Date of Highest Temperature	28th	24th	30th	23rd	
Lowest Minimum Temperature Deg. C	-3.0	-3.3	-1.2	-0.1	
Date of Lowest Temperature	7th/8th	11th	7th	7th	
Although exposures for both rainfall & temperatures are not Met. Office standard the above figures are reasonably representative of the urban conditions.					
Note: Exposures for both rainfall & temperatures are not to Met. Office Standards					

for North Cardiff 2021

<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
5	6	7	8	9	10	11	12
202.1	28.9	100.2	85.7	112.6	219.0	41.9	166.8
26.8	11.0	17.3	25.9	29.8	38.8	9.0	41.0
8th	19th	5th	7th	28th	28th	9th	25th
24.8	28.7	32.7	25.3	30.3	20.0	14.9	14.3
31st	13th	19th	26th	7th	7th	13th	30th
1.7	7.4	12.3	10.4	8.0	5.4	-1.1	1.0
7th	4th	6th	3rd	29th	22nd	28th	3rd/7th
			Total Rain fall			1381.5	mm
						54.4	inches
			Long Term Average			1447.0	mm
						57.0	

Weather Summary for North Cardiff 2021





And now the weather

As a retired meteorologist, I am often asked to explain the difference between CLIMATE and WEATHER. I like to think of CLIMATE as the summation of the day-to-day WEATHER experienced in any one location over the course of the year. WEATHER is the end result of the processes which occur in the atmosphere as heat energy from warmer areas of the globe spread outwards towards the poles. These processes are complicated by two main factors, the earth is spinning and its surface is not uniform, having oceans and mountain ranges etc. The part of this complex global process which affects the weather in our latitudes is a stream of strong winds at high altitude which encircles the north pole. There are no fixed boundaries to contain this stream of air, it can meander forming waves of varying amplitudes and is subject to changes in velocity along its length. Meteorologists refer to it as the North Atlantic Jetstream.

The strength of the Jetstream is determined by the temperature gradient across it. Global warming is affecting these gradients. It is well established that the polar regions are warming more rapidly than the tropics. This is due to the loss of sea ice and snow in the polar regions, reducing the amount the amount of solar energy reflected back into space. Thus, temperature gradients between the poles and the tropics are reducing and this in turn means that the strength of the Jetstream is reducing.

Although jetstreams are high altitude features, generally 30 to 45,000 feet, they are responsible for generating and moving surface weather. Computer models are very good at predicting the future position and movement of jetstreams and the excellent graphics now available to TV Weather Presenters means that they can, when time allows, use what they refer to as the Airmass Chart (essentially an overall temperature chart) to explain the movement and development of the jetstreams and associated weather.

Another important aspect of Global Warming is that warmer air can hold more water vapour than colder air, which means it has the potential for heavier rainfall. So, we find ourselves having to contend with a warmer atmosphere with more heat energy controlled in our latitudes by a weakening Jetstream. It should not be a surprise in these circumstances to see the Jetstream wobbling north or south away from its usual position, adopting and holding contorted shapes and producing unusual, sometimes extreme weather in places which have in the past been immune to such events. If Global Warming continues there is little doubt that we can expect more frequent and more extreme weather events here in the UK and across the globe.

This article was contributed by a friend of the Society, who as a young meteorologist over 50 years ago, was involved in research being carried out by the Met Research Flight at Farnborough. He spent many uncomfortable hours at high altitude in unpressurised research aircraft monitoring the instruments measuring the detailed structure of jetstreams.

Red admirals

Mary Salter reported 3 red admirals on 12 January 2022, the first butterflies in her garden in 2022, on Daphne and Mahonia.



Photos: Mary Salter

Fungi

Linda Morris shared this photo on the Society's social media, of diverse fungi photographed in Cardiff in November 2021.



Birdlife at Forest Farm

Phill Blanning took these photos of dippers and a kingfisher (following page) at Forest Farm, Cardiff, on 10 December 2021.





Kingfisher. Photo: Phill Blanning

Coed Caerdydd: Cardiff Forest

What is Coed Caerdydd?

Coed Caerdydd is an ambitious **10-year programme of tree canopy expansion** in Cardiff, linked to the city's **One Planet** climate change strategy.

By working with communities to plant new trees and care for existing woodlands, **we want to increase coverage across the city from 18.9% to 25%.**



What do trees do for Cardiff?

Trees are vital to the health of our city and our planet.

They help to manage some of the difficulties we experience as our city grows, by **improving air quality** and **taking up surface water** which can cause flooding. They **store carbon** from the air and soil, helping to address some of the problems driving our changing climate.

They also provide an **attractive and green environment** throughout our city which **supports wildlife and healthier communities**. Oak trees alone support 2,300 species.

Our trees annually remove...

- 190~ tonnes of airborne pollutants = 10.5% of the pollutants emitted by Cardiff's traffic
- 356 million litres of rainfall = reducing water treatment costs and risk of flooding
- 7,900~ tonnes of carbon = annual emissions from 14,000 cars

Coed Caerdydd will...

- Work closely with landowners, volunteers, community organisations, and funders to **identify land** and carry out **tree planting and aftercare**
- Plant the **right trees in the right places** for **nature** and **communities**
- **Protect our current and new trees** against **climate impacts** and **diseases**
- **Raise awareness** about the **importance of trees** and provide **opportunities for everyone** to be able to play a part in making our **city a greener and healthier** place to live.

Care for our
1.4 million
existing trees



Plant
839ha of
new trees



Train and
work with
communities

Get Involved!

We need support from communities, land owners, and businesses across the city to achieve our goal of 25% coverage by 2030. So if you want to know more about Coed Caerdydd or would like to **get involved in tree planting, care, suggesting sites, or promoting the project** please contact:

Email: CoedCaerdyddProject@Cardiff.gov.uk

Facebook: [@CoedCaerdydd](https://www.facebook.com/CoedCaerdydd)



This document is available in Welsh / mewn ddwyieithen on or gof yn Gymraeg



Spring into action with Plantlife

For those wanting to brush up on their plant knowledge, Plantlife are running a series of digital workshops, talks, and art sessions throughout February 2022. These include introductions to ferns (3 Feb), grasses (4 Feb) and lichens (7 Feb); bryophyte identification (15 Feb); making and monitoring wildflower meadows (8 Feb); listening to nature (18 Feb); and ash dieback (23 Feb). For full details and booking see:

<https://www.plantlife.org.uk/uk/discover-wild-plants-nature/spring-into-action>



Bank of the River Taff. Photo: Stephen Nottingham

Cardiff National Park City

A new initiative to recognise Cardiff as a National Park City has just been launched. London became the first 'National Park City' in 2019. The initiative aims to make cities 'greener, healthier, wilder'.

The Cardiff National Park City Group is an unincorporated association aiming to support the development of Cardiff as a National Park City. Anyone can register for membership, which is free, and you can withdraw your membership at anytime.

The Cardiff National Park City association aims to:

- a) Improve people's well-being and to improve biodiversity, habitat and access to nature by establishing Cardiff National Park City;
- b) Embrace and celebrate the diversity of communities, cultures and the landscape and seascape of Cardiff;
- c) Champion the value of nature in reducing inequality in Cardiff;
- d) Empower individuals, households, communities and organisations to take action to increase and improve the biodiversity of Cardiff.

Further information:

<https://nationalparkcity.wales/>

<https://nationalparkcity.london/>



Cwm George, Dinas Powys. Photo: Stephen Nottingham

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