

THE WHARFEDALE NATURALIST

VOLUME 77

Review of the year 2022

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WHARFEDALE NATURALISTS SOCIETY

Membership 506 December 2022

www.wharfedale-nats.org.uk

Affiliated to the *Yorkshire Naturalists Union*

Member of the *Yorkshire Wildlife Trust*

Founded 1945

Registered Charity No 509241

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FOREWORD 2022

As appears to be usual these days I am delighted to be able to start this Foreword by reporting another very successful year for the Society, notwithstanding ongoing uncertainties regarding the pandemic. Our success, and continuing viability, in the final analysis, depends on our members and their support is especially appreciated in these uncertain times. As I write this our membership stands at a near-record level which I find quite amazing, but hopefully this is an indication that we must be doing something right!

This positive report about the state of the Society sadly is not mirrored by the state of wildlife in the UK including, of course, within our Wharfedale boundary. We all know the reasons for this which include climate change and agricultural intensification. It is in the latter area that I believe we can have an impact, however small, through our policy of funding local projects that seek to mitigate the worst effects of the agriculture problem. In part we do this by direct participation in local nature reserves but, more especially, by using the funds we generate through subscriptions and donations, to directly fund local projects from other groups who share our concern about wildlife decline in Wharfedale and beyond. The rise of these local conservation initiatives is to be applauded and I know our support is much appreciated.

In these uncertain pandemic times, I think perhaps there is an inevitability that attendances at Meetings, especially if indoors, have reduced but I do not think this reflects badly on the Society's Programmes in any way. It should also be borne in mind that, on any comparative basis, these attendances are very much on the high side as our visiting Speakers regularly attest. This somewhat reduced attendance also applied to our 75th Anniversary Lecture by renowned entomologist and broadcaster George McGavin at Christchurch but an audience of circa 150 was excellent in these circumstances and raised, at George's request, over £1000 for the Ukrainian Red Cross Fund.

In general, I have every reason to believe that our Summer and Winter Programmes are popular with Members and provide a very worthwhile and entertaining basis to our work. This also applies to our Webinars because they enable us to contact those Members who would not normally attend indoor or outdoor events for whatever reason. There is no doubt that this initiative is now set to be a permanent feature of our activities.

As ever no Foreword would be complete without expressing my most sincere thanks to our stalwart Recorders who, through their collation of sightings, and their Reports in this Review, provide a great record of the state of wildlife in Wharfedale.

In a similar vein, I must again express my gratitude to your Committee who continue to be so conscientious and innovative to ensure that your Society remains relevant and worthy of your Membership. Also of course thank you to John Stidworthy for once again producing this very professional Review.

Finally, I should add that this year will be my last as your President. My wife, Anne, has been an essential support throughout and I know she will join me in saying, without hesitation, that it has been a wonderful 20 years in this role, but it is time to step aside. My heartfelt thanks to everyone who has contributed and helped over that time. I do not doubt that my successor, to be approved at the March 2023 AGM, will also be able to count on your support.

Peter Riley, President

Events Programme – May 2022 to April 2023

TUESDAY EVENING NATURE WALKS

May 3	Barden and Strid Wood	Helen Steward
May 10	Ilkley Trees	Sue Stevens
May 17	Eccup Reservoir	David Smith
May 31	Bat Safari	Matthew Whittle
Jun 7	Ben Rhydding Gps / Sun Lane	David Smith
Jun 14	Botany, Banter, Beer	Ian Brand
Jun 21	Fewston Reservoir	Peter & Anne Riley

SUMMER VISITS

Apr 30	Butterfly Walk	Nyree Fearnley & Paul Millard
May 14	Potteric Carr	Coach Outing
Jun 4	Birds of Ilkley Moor	Tracy Gray
July 5	Rodley Nature Reserve	Peter & Barbara Murphy
Jul 9-10	24hr Wildlife Recording Nell Bank	Catherine Burton & Gordon Haycock

BOTANY OUTINGS

Apr 28	Thruscross	Nyree Fearnley
May 12	Bolton Abbey, Hambleton Quarry Survey	Mark Jeffery, Forester BAE
May 26	Timble	Bruce Brown
Jun 9	Cray Gill	Heather Burrow
Jun 23	Wheatley Raikes	Bruce Brown & Neil Barrett
Jun 30	Kettlewell	Bruce Brown
Jul 14	Jervaulx Abbey	Bruce Brown
Jul 28	Otley Wetlands	Nicky Vernon & Bruce Brown
Aug 18	Arncliffe, Littondale	Carmen Horner

BIRDING

May 7	Washburn Valley	Andrew Kelly
May 21	Barden Moor	Derek Parkin
Jun 11	Ripon City Wetlands	Helen Steward
Jul 30	Fairburn Ings	Andrew Kelly
Oct 29	Eccup Reservoir	David Smith
Nov 19	Nosterfield Nature Reserve	David Smith
Dec 3	St Aidans RSPB Reserve	David Smith
Jan 19	Grimwith Reservoir	Nigel Steels
Feb 11	Staveley YWT Reserve	David Smith
Mar 23	Bempton Cliffs	Nigel Steels

SPECIAL EVENTS

Oct 8	Fungus Foray	Andrew Woodall
Oct 22	Leighton Moss RSPB	Minibus Trip
Jan 14	Winter Walk round Fewston Reservoir	
(2023)		Peter & Anne Riley

MICROSCOPE EVENINGS IN OTLEY

Nov 10, Dec 8, Jan 12, Feb 9



Mayfly *Ephemera danica* on bellflower (AR)

EVENING TALKS & WEBINARS

4 Jan

Swifts and Us: the life of the bird that sleeps in the sky
Sarah Gibson

We know that spring is here when we first hear the screaming of young swifts as they return from their amazing migration to central Africa, arriving before the mature, breeding adults. Sarah Gibson became fascinated by swifts after 20 years working with the Shropshire Wildlife Trust and subsequently produced a book with the title of this talk.

Due to the rapid decline of swift populations across Europe and their recent addition to Red List of Endangered Birds much of Sarah's talk focused on what we can do to encourage numbers to grow.

Apus apus, the common swift, (family Apodidae), is evolutionarily much older than the family containing swallows and martins, to which it is unrelated. The Messel Pit swift fossil, dating back 47 million years, though not related to our common swift, shows typical swift-like structures, such the stout humerus bone, (also a feature of humming birds).

Our familiar common swift leads an aerial life, eating, drinking, mating, preening and sleeping on the wing. Swifts use their feet and strong sharp claws only at and inside the nesting site when they lay their eggs and raise their young.

Historically swifts were a culinary delicacy so aristocrats built swift towers with appropriate nesting spaces their purpose being to take one chick only from a clutch to offer as a delicacy; Modern methods of encouraging swifts into appropriate nesting sites are thankfully more altruistic. Many different structures with multiple nesting units have been tried, and the best solution so far is the incorporation of 'a nest brick' into new build structures. Encouraging a wide range of nesting birds by incorporating nesting bricks is due to be written into British Building Standards

To conclude the webinar, Will McBain of the 'Ilkley Save Our Swifts Project' described how, supported by the WNS and Climate Action Ilkley, they are supporting swifts in our area. Using <https://www.swiftmapper.org.uk/> to show areas where nesting swifts occur volunteers then pamphlet residents encouraging them to put up nest boxes. More information can be found at www.climateactionilkley.org.uk See also an article from the Gazette 18 March 2021.

Peta Constable

11 Jan

Exploring Urban Wildlife with a Camera.

Rich Bunce

At the time of year when many of us are wistfully dreaming of exotic holidays and wildlife adventures, it was salutary to be reminded of the richness of wildlife experiences here on our doorsteps. Rich Bunce showed us how very diverse the urban environment can be, both in habitat and species. He encouraged his audience to take photographs, to appreciate what is common, question what you take for granted, and (safely) hang your head out of an upstairs window to observe life on your rooftop.

The first part of his talk was accompanied by photographs from London Parks particularly Richmond and Bushey. Photographing fauna which is more accustomed to humans means one can get closer and observe interesting behaviour. By freezing the moment with a photograph one is able to reflect on it later. His photograph of a coot feeding its young was particularly striking showing the tender side of a more usually belligerent bird. He also, in his own words, stuck his ringed

neck out, in favour of parakeets, which bring colour and liveliness to their habitats.

In 2012 Rich moved to Burley in Wharfedale and set up his Walking Photography business. His photographs of local flora and fauna are again magnificent. Starlings with their iridescent feather coloration perched on roof tops, wasps, spiders, sparrowhawks, and bees. His photograph of a crab spider beautifully demonstrated how it changes its colour to blend in with its flower host.

People have a desire to connect with nature and Rich emphasised the need to nurture this and provide more space for people to view birds and mammals. By showing beautifully composed photographs and speaking with such enthusiasm his delight in his subject was very apparent and compelling. These were examples of the rich encounters we can all have locally if we go out and just look patiently.

Polly Hosking

18 Jan

Balancing the needs of food, farming and nature

Chris Clark & Brian Scanlon

'Human judges can show mercy. But against the laws of nature there is no appeal!'

Chris Clark and Brian Scanlon of Nethergill Associates discussed the interplay of the laws of thermodynamics and economics in profitable farming and biodiversity. There is a 'sweet point', the point of maximum sustainable output, at which both are in equilibrium; optimising biodiversity increases profit. Currently, alas, we have unprofitable farm businesses and declining biodiversity.

The talk related the laws of thermodynamics to historical timescales. Laws one and two related to 1900s' emphasis on the volume of farming output and industrial methods state that natural systems only change when work is put into them and energy expended, and that when natural systems are supplied with new energy, the system cannot deliver more than the new amount. These laws impacted on the post-1939 managed landscape when artificial fertilisers improved yields in the short term but increasing amounts were needed to maintain output. The third law as applied to the 2000s and the reclamation by nature and the future for the managed landscape states that reversing natural systems will not create a pathway to an original point; it merely changes one pattern of biodiversity for another.

Maximum output relates to the volume of meat produced commensurate with the point at which the free issue grass runs out. Grass substitutes will not only be more expensive, but will push grass yields beyond the point that can be maintained sustainably by nature. To prevent the fertility running out either winter grazing/fodder has to be acquired or artificial fertilisers used. Outgoings can outpace incoming revenue, thus reversing profitability. Just as significant is the collateral damage to the environment. Reduced sheep numbers and a profitable switch to cheese making on a Nidderdale farm has had a dramatic positive impact on biodiversity: a win-win situation for farming and nature.

25 Jan

Climate Change - What Should We Do?

Steve Peel

Steve Peel from Climate Change Ilkley gave an important talk on the consequences of climate change, where we are at, and what urgently needs to happen. Serious reasons for concern include: more extreme weather, disruption of wildlife and

ecosystems' variable impacts on crop yields, loss of coral reefs, melting ice caps; sea-level rise and coastal flooding. Climate warming is mainly due to increasing atmospheric carbon dioxide from burning fossil fuels, the richest 10% of the world population being responsible for almost half the total life-style consumption emissions. A groundbreaking Paris agreement was made in 2015 at COP 21 to pursue efforts internationally to limit global warming to below 1.5°C. This is higher than preindustrial times but analysis has shown we are on a warming projection of +2.1°C which will have severe, irreversible, widespread impacts.

In 2019 the Independent Climate Change Commission (CCC) reported that only 7 out of the 24 UK targets were on track and in 2020 produced recommendations¹ for the government and advice² for what individuals can do to support the global effort which Steve covered in his talk (and see links below). New increased ambitions were announced and in October 2021 a Net Zero Strategy was published, of which Chris Stark, CEO of the CCC said "Not 3 gold stars but we didn't have a plan before, now we do". Environmental groups have high lightened omissions.

At COP26, Glasgow November 2021, the current binding targets made by each country were found to be inadequate and 'The Glasgow Pact' has been formed with stronger pledges. COP27 will take place this in Egypt year. Quick and radical action is needed by all governments. What can we do? Support local environmental groups and the new Climate and Ecological Emergency Bill. Ending with a rallying call for us not to give up, he emphasized that individual behavior change can make an effect.

Georgina Flynn

8 Feb

Geese and Wader Spring Migration, exploiting the freezing niche

Linda Jenkinson

Linda Jenkinson was welcomed back to Wharfedale Naturalists. Linda is a biologist, birdwatching guide and co-founder of Leeds Birdfair. Her talk provided a fascinating glimpse into the behaviour of those species of geese, ducks and waders which spend winter in the UK then migrate to the Arctic, northern Russia and Canada to breed during the summer months. Winter migrants leave around April. They slip away unnoticed, often during the night and in stages, flying at high altitude to avoid turbulence. Tell-tale signs of imminent departure plans are 'head flagging' and flapping their wings.

Approximately 27,000 British Whooper swans head for Iceland. Other migrating geese include Pink footed geese (350,000 migrate from the UK), duck species including Wigeon, Common scoter, Goldeneye and Pintail along with a variety of waders.

So why does all this happen?

The arctic landscape is composed of Tundra (treeless plain) and Taiga (boreal forests) mostly Pines, Spruces and Larches, offer attractive habitats for breeding as do the many islands off the coast of NE Canada and archipelagos north of Russia with their inlets, extended coastline and isolation. Benefits of this environment are an abundant food supply, 24 daylight, less competition for food and fewer predators. However this journey is not without hazards. Birds can be hunted during their migration. Feeding grounds used en route are being affected by changing agricultural practices and climate change. Climate change is also having a dramatic effect on conditions in the Arctic. The permafrost is thawing, fires and drought are increasing, sea levels are rising. These affect insects and plants evolved to survive sub-zero temperatures and thus reduce the food supply upon which migrating birds depend.

Oil and gas drilling cause pollution and despite COP 26 there continue to be wrangles over land and sea that might be a source of carbon based energy supplies in the future.

Linda encouraged us to respect our wintering birds and do all we can to help reduce climate change.

Alison Roberts

22 Feb

British Mountain Plants - History, status, and Future

John Birks

Our presenter, John Birks, Emeritus Professor in quantitative ecology and paleoecology traced the complex history of mountain plants (Arctic Alpines) through fossil analysis as well as describing his own research and that of other botanical pioneers. Post glacially, 11,600 years ago as the planet warmed, many plants took 'refugia' above the tree line or on steep limestone slopes and sea cliffs where forest could not develop.

In Britain there are now 150 species 60 of which are only found in the Scottish Highlands. Many like Jacobs Ladder at Malham Cove are rare. Some like Ladies Mantle on the summit of Ingleborough are endemic. There are also new discoveries e.g. Teesdale Violet. He focused on the 90 species in Northern England and North Wales starting in the Craven Pennines where the 'prize' is the Purple Saxifrage of Pen-y-Ghent. The limestone pavements are wonderful for plant diversity while the caves and potholes of the surrounding area are good for mosses and liverworts. The Northern Pennines finds the bright blue Spring Gentian on Cronkley Fell, and Alpine Saxifrage on High Cup Nick. The Blanket bogs towards the Cheviot are great for 'Peat Alpines'. In the Northwest Pennines, the Marsh Saxifrage, which likes intermittent grazing, is the only one recorded at international level. The Lake District area is rich in mountain plants but they are more difficult to find. Rarities are Alpine Catchfly and the purple Pyramidal Bugle. Similarly in North Wales, the specialty being the Snowden Lily is found on mossy cliffs.

John looked at the effect of climate change, redoing botanical studies in Norway to show that over the last 70 years mountain plants like shrubs and grasses have extended their elevational limits by 200-300m and some summit plants have declined in frequency. Summits are becoming more species rich and thermal imaging has shown great geodiversity leading to biodiversity. However, evidence for local extinction is very rare though GPS with Google Earth is being used to map potentially threatened species over time. The future is not certain. Flora is not static and increased traffic from vehicles and walkers will also have an effect.

Georgina Flynn

1 March

The Nature of Lockdown Part 3 Mid-August to December 2020

Anne Riley

"If you just bother to look there is so much to see." So stated Anne Riley during her third webinar on what she had observed throughout the first year of the Pandemic. So many of us felt we had benefitted from being outside, 'In Nature', at this strange time, but Anne with the aid of a magnifying glass and close up camera had really noticed and recorded the lives of insects and plants. Speaking against a background photograph of marching aphids on plant stems she entertained and educated us with facts and her usual superb photographs.

There were several nudges towards gardening in an environmentally friendly way, especially leaving seed heads and

and plant stems for insects to overwinter in. Other plants, such as the Devil's-bit Scabious were commended for providing food and shelter for insects as well as for their medicinal qualities and historical names. Anne is a great champion of ivy which provides a valuable habitat and food source for insects and birds. It does not kill trees, is not parasitic and only uses its host for stability.

One group of insects which are definitely parasitic are the parasitoid wasps belonging to the Ichneumonidae. These came in for special attention.

They lay their eggs inside caterpillars which are then eaten alive by the larvae, a practice which caused Charles Darwin to question the existence of a loving creator God.

Anne studies the behaviour of the insects that she finds. Excited to discover and take a photograph of a snail killing fly, she watched and photographed the drama of its entrapment by a spider. Hoverflies, harvestmen, stone flies, spring tails, shield bugs and solitary bees were all beautifully recorded and their life styles explained. Her enthusiasm and affection for these species was very apparent. So many creatures, sometimes literally at our feet if we only bother to stop, bend down and look.

Polly Hosking

5 April

The Hidden Life of Garden Bees

Bridget Strawbridge-Howard

There are 352,000 species of flowering plants worldwide that require insect pollination, namely: beetles, butterflies, moths, flies and bees. These pollinators are at the bottom of the food chain but they underpin most terrestrial ecosystems. Bridget Strawbridge, a wildlife gardener in Cornwall (and author of *Dancing with Bees: A journey back to nature*), made a strong plea for their importance.

There are 25,000 known species of bees. Britain and Ireland have only 1 honeybee species, 24 bumblebee species, more than 250 solitary bee species and 70 brood parasites (cuckoo bees). Six bumblebees are brood parasites that lay eggs inside the colonies of host bees and kill the queen.

Worldwide there are 20,000 species of solitary bee. There is a huge diversity in shape and size, the smallest being a harebell carpenter bee. There is also great diversity in nesting habitats, including ground and cavity nesting bees which may utilise hollow twigs, holes left by wood-boring insects, or nest boxes (bee hotels). The red mason bee, for example, nests in crumbling mortar and lines each cell with mud and pollen; leaf-cutting bees use leaf sections to seal off their nest from predators; snail shell nesting bees predators; snail shell nesting bees repurpose abandoned shells; and wool carder bees scrape hair from leaves such as lamb's-ear to weave into a cocoon.

Intriguing mechanisms have evolved by which bees obtain nectar and pollen. The foxglove has evolved hairs on the lips to deter small-tongued pollinators; short-tongued nectar-robbing bees have strong mandibles with which to bite a hole at the base of a flower. The inflorescence of a dandelion contains around 100 individual flowers, across which a bee merely walks to obtain pollen. Bumblebees may 'buzz pollinate' tomato plants; by vibrating body, legs and mouthparts to loosen pollen grains which she can 'comb' into her pollen baskets.

What can we do to help mitigate bee decline? Encourage wild areas in our gardens, mix wild and native flowers, allow plants to grow in lawns (such as vetch and clover). Support Buglife; and support wild flower meadows and wildlife corridors.

Phil Batman

27 Sept

Conservation Projects in Cumbria for Rare Species of Butterfly

Chris Winnick

Butterfly expert Chris Winnick, Chair of Cumbria butterfly conservation, gave a wonderful talk on the rare butterflies in Cumbria, North Lancashire, and the Morecombe Bay area concentrating on the Fritillary species, considered the most threatened. In this area we find the High Brown, Pearl Bordered, Small Pearl, Dark Green, Silver Washed and the Marsh Fritillary. These habitat specialists have highly specific requirements, the caterpillars needing specific plant species in plentiful supply, the right climate and microclimate, and correct overwintering. Violet is needed for most fritillaries and milder winters have reduced supply due to excessive grass growth. Survival is affected by climate change, as they are not able to adapt quick enough, and by habitat degradation.

The butterfly lives for about two weeks and will lay 100-150 eggs, only about 10-15 reaching adulthood. The High Brown with its diagnostic rusty rings is the rarest in the UK and in serious decline. The trend for the Pearl Bordered, the second rarest is also down. This decline correlates with coppicing disappearing, the woodland becoming too dark. The Small Pearl is less niche, the trend is generally up, and it survives well in damper areas, feeding on marsh violet and dog violet. Capture and release projects track changes over time.

Species recovery strategies involve a process of assessment, diagnosis, solution testing, recovery, and sustainability management. A problem here is lack of resources. An innovative project reintroduced the Cumbrian Marsh Fritillary butterfly to Carlisle, Penrith, Keswick, and Egremont. This rare and legally protected butterfly has been disappearing since the 1950's due to changes in cattle grazing. The host plant Devils-bit Scabious was grown in nurseries and the caterpillars spooned out one stage before pupation. Liaison with farmers was needed to make sure the grazing was back in place. It was a success and on all sites the numbers are going up.

25 Oct

Curlews at a Crossroad

Samantha Franks, Senior Research Ecologist

This was a fascinating and information packed talk. Sadly, there is a general decline in populations of Curlew, Lapwing, Oystercatchers, Snipe and Red Shanks in the UK. This is due to changing farmland practices including agricultural intensification, rye grass cultivated for silage which is inappropriate for nesting, increased drainage causing drier ground and consequently fewer insects. Deforestation and peat extraction also play a part, as do predators such as crows, foxes, stoats and weasels.

Climate change, as always, is a factor. Summer droughts and heat waves impact on chicks' behaviour. They try to shelter from the heat rather than feeding. Wild fires are yet another risk.

Studies have shown that only 20% of nests survive incubation due to unsatisfactory conditions and predators.

There is, however, some good news. Several organisations are trying to improve the curlew population. Collaborative working through the Curlew Recovery Partnership is bringing about an improvement in the viability and life expectancy of hatched chicks.

A project called Headstart is having some success in raising chicks to an age when they have a better chance of survival. Eggs are taken out of the wild and reared in a protective environment until they are 50 days old. They are then released. Four eggs raised in captivity can result in 3.2 fledglings on

average. Alas, Headstart is expensive in terms of staff and equipment. It is also a risky and difficult process. Consequently it can't currently be rolled out nationally but it is successful in East Anglia. Ongoing studies are examining the behaviour and survival of raised chicks by chipping them prior to release. There is reason to hope.

Alison Roberts

1 Nov

The excrement Factor – the Natural History of Dung

Dr George McGavin

'Planet Poo!'

Dr McGavin gave an unabashed talk about 'shite' (*sic*)! Responsible for its unmistakable aroma is skatole, which is pleasant in low concentrations. Its importance is appreciated by world leaders. Stalin had the stool of his visitor Mao Zedong analysed. Poo was collected from King George III in the search for the cause of his madness.

Where do we deposit it? Only in recent times has defecating become private. Hampton Court had a massive communal loo, one row of seats perched worryingly below the other. Henry VIII's 'Groom of the Stool' was responsible for wiping his bottom. Nice work if you could get it? A prestigious post, one holder executed for an affair with Anne Boleyn. Moving forward a few centuries, the Japanese are renowned for automated lavatories. And we must remember that 2.5 million people don't have access to a lavatory at all.

Now here's a question: how much dung is produced? Back-of-an-envelope calculations estimate humans at 1.7 billion kg per day. Insects love the stuff. Dung beetles, that most charismatic of species, roll it away. Dung on the African plains is cleared daily by such means. Beetles cling onto anal hair of kangaroos in order to lay eggs in fresh dung.

We can use it. As a building material. As fuel: biogas. As fertiliser: guano. Even to blow things up: gunpowder is made with a component of dung. We can appreciate it for its aesthetic quality: the celebrated artist Pietro Manzoni canned his own for auction; Professor William Buckland commissioned a table made of fossilised dung. And it illuminates the past: thousands years-old rat middens provide a window onto past ecology; analysed fossilised faeces from the rectum of T. Rex proves it was a carnivore.

Food for thought at your next visit to the smallest room in the house?

8 Nov

Wildlife Friendly Otley

Andrew McKeon & River Six

In a week of international wrangling at the COP 27 talks and unseasonably warm temperatures in Britain it was a relief to have a practical, optimistic talk. Andrew McKeon supported by River Six, introduced us to the charity, Wildlife Friendly Otley. Set up in 2018, its aim is to bring together schools, businesses, families and local environmental and nature groups to support Otley as a wildlife friendly town and to encourage people to nurture wildlife. Starting with a promotional film, Andrew stressed the nature emergency that the world is facing. The decline of species, degradation of habitat and indifference of people can all be turned around by small positive steps that can make a big difference. One such small step, is Otley's duck campaign, encouraging nearby shops to stock duck food and informing the public about the negative impact of feeding the park ducks with bread. Another is habitat restoration, caring for public land and promoting wildlife gardens. As one parent in

the film said, if it helps people to discover nature they will learn to love it.

In contrast, Rob Knipe's talk was a condensed history of Wharfedale during the last 350 million years. He first used the very useful, pictorial image of a toilet roll to show the analogy of time. The present era being less than a segment. Rob then went through each age and stated where Wharfedale was positioned geographically, what forms of wildlife inhabited it at that time and what the climate was like. It was interesting to map the movement of Wharfedale from near the equator 300 million years ago to where it is now. The presence of huge scorpions as big as a cat, dragonflies with a wing span of a metre and giant millipedes, eight feet long and weighing eight stone also gave cause for reflection. Wharfedale's dry stone walls are a good indicator of what rocks are in the area and how these can be dated. The oldest rocks, (350mya) are in the west around Kettlewell and the younger (66mya) towards the East. An fascinating talk on an enormous subject made very accessible by the speaker.

Polly Hosking

29 Nov

St Kilda: Sailing to the edge of the World

Sara Frost of Naturetrek

As the boat hired by Naturetrek began its journey from Oban to St Kilda up the Sound of Mull, the 10 lucky clients on board were thrilled when a White-tailed eagle flew close and low across the bows. And this was just the beginning of a fascinating journey full of wildlife delights.

Sara Frost, who leads cruises for Naturetrek all over the world, gave the Wharfedale Nats a totally fascinating presentation of a cruise she leads to the Outer Hebrides, made special by including several ports of call on the way thus making the entire voyage as exciting and interesting as the arrival at and exploration of St Kilda itself.

Lucky participants may see such natural wonders as freshwater otters, puffin colonies (the record for the number of sand eels a puffin can hold in its beak at one go is 81) as well as huge colonies of Guillemots, Gannets, Fulmars, Manx Shearwaters, White-beaked as well as Common dolphin, Minke whales, Orca, Porpoises plus the possibility of Cuckoos on Harris and Corncrake on Lunga,

Then comes the arrival at Hirta, main island of the St Kilda archipelago where there is evidence of stone-age inhabitants. The must-have tick here is, of course, the St Kilda wren. Though now uninhabited, Hirta until August 1930 was home to sturdy, resilient Gaelic people, self-sufficient as there was little or no contact with the outside world. They did have both a church and a school and occasionally risked sending messages in tiny unmanned boats, some of which, especially on a north-west wind, arrived at far-flung destinations, including Norway.

Increasing contact with the outside world led to the inhabitants realising that life could be more comfortable and easier in larger communities and in August 1930 the remaining few residents evacuated each leaving an open bible in their forsaken dwelling.

Sara also touched on serious issues such as the question of whether the re-introduced White-tailed eagles, now numbering 150 nesting pairs, do take live lambs as maintained by farmers – research results are inconclusive but suggest they take only carrion. These islands are fragile and their future is uncertain. There have been serious declines in some bird populations, though others seem steady but avian flu is a worry.

Peta Constable

Dentdale - a hidden gem

Ian Brand

On a very cold and dark December night, we were rewarded by a wonderful presentation by Ian Brand about Dentdale.

Ian's talk was well researched, and his love of the area was evident. This was backed up by a superb presentation, splendid photographs, and diagrams to illustrate the talk.

The evening was well attended, and the audience were given a glorious romp through the geology, ice ages, natural and human history, and farming of the dale.

The talk started with the formation of the Dentdale and why certain rocks give a distinctive shape to the landscape today. Carboniferous limestone, millstone grit, shales and coal measures have all left their different topographical marks on the dale. It is hard to believe that the dale we know, was once near the equator where the changing environments from tropical sea, river delta, swamp and tropical rain forest gave us the different strata, that now form the bedrock.

We then jumped forward 300 million years to the ice ages. These left recognisable scars on the landscape today including 'U' shaped valleys, flat bottomed glacial lakes and glacial debris forming moraines as the glaciers retreated. Dent has one of the few corries found in the Dales with its distinctive 'armchair theatre' appearance overlooking Dent village.

The talk then moved onto human geography and history. Dent is famous for the birth of Adam Sedgwick the first emeritus professor of geology at Cambridge University and also friend, mentor, and tutor to Charles Darwin. As a local lad he noticed that the rounded Howgills were very different in appearance from the landscape of the Dales. Sedgwick discovered this was caused by the 'Dent fault'. A large block of land to the west of Dent rising upwards against the block of land forming the Dales to the east.

The first half finished with the Viking influence on language and distribution of farmsteads, knitting, Quakers and even the Dent Vampire!

After an interval with tea and coffee and social mingling enjoyed by all we reconvened, and Ian talked about northern hay meadows, of which there are fine examples in Dentdale. Their natural history, and management and how they are now being conserved and restored.

In all a glorious, well-illustrated and carefully researched talk which entertained, educated, and enthused the audience.

A fitting Christmas lecture with something for everyone

Huw Roberts



Below a beech wood (in Scotland) (JS)

Park Wood

A few years ago an article in the Annual Review said that beech tree seeds did not germinate as far north as Ilkley. I found this surprising as at the time there were tens of thousands of beech saplings (mainly less than 20 years old) in Park Wood.

Eventually I realised that many beech trees were planted around here in 1900 and earlier, because the wood was used for making clog soles and bobbins for the textile industry.

The dense canopy of the beech trees in Park Wood produces so much shade that no grass grows, and very little in the way of plants can thrive. Rabbits cannot make much of a living here either, so any seeds that germinate, and can find a patch of sunlight to grow in, may be able to establish themselves without being eaten off.

John Webb

At the end of the last ice age there were no beech trees in Britain, but a small population remained in southern Europe, and slowly spread as the climate warmed. Beech may not have reached Britain until 3,000 years ago. For a long time in the modern era it was considered native only in south-east Britain, although it is now found through most of Britain, partly from being planted by people to make use of its wood, and partly through natural spread. 2022 was a good year for crops of beech nuts in Yorkshire, so perhaps the climate here is now suitable for beech to reproduce naturally.

Until I moved to Ilkley I lived in the Chilterns, not far from High Wycombe, which was once famed for its furniture utilising the local beech. The furniture ranged from rustic, the parts made in the woods using pole lathes, to much more sophisticated pieces. It is famous for its 'Windsor' chairs. In the 19th century the High Wycombe area made these, but they were shipped to London via Windsor. Most of the furniture factories have gone, but Ercol still manufactures high end furniture in the area.

The rounded Chiltern hills are often capped with 'hats' of beech woods. They make for some good scenery, but as John Webb has noted, they are often bare below. Easy to walk through, but short on an understorey and base layer of plants. They do harbour some interesting orchids, and also the rare yellow bird's-nest, a plant without chlorophyll that depends on a fungal partner for nourishment.

John Stidworthy

BUTTERFLIES 2022

Historically we receive a lot more reports from lower down the Dale. Generally speaking, we class the Upper Dale as anywhere from Barden Bridge upwards, into both Wharfedale and Littondale, so it would be great if anyone is out walking in more northern / remote areas and can send us records of any butterflies that you see. We also receive barely any records from the very lowest part of our area, between Pool-in-Wharfedale, and Rougemont, as this too, is an area that few people seem to visit.

Generally it was a terrible year for butterflies in the WNS recording area. In fact I have to go back as far as 2002 to find a worse year for total number of reports. This is especially worrying, as in general more people have started to send in records in more recent years. So, it does seem to point towards a definite decline in the numbers of butterflies. This is also in line with results from the Big Butterfly Count that is run by Butterfly Conservation over a three-week period each year. More people are sending in records, but the total number of butterflies is fewer, and the number of butterflies per 15 minute count is also lower.

On a slightly more positive note though, I think that it is worth mentioning the fact that more and more people are now submitting records directly to on-line recording schemes, such as iRecord, Big Butterfly Count, and the UK Butterfly Monitoring Scheme (UKBMS). Unless someone also sends these records in separately to us, then we have no knowledge of them. So there are undoubtedly butterfly records for our area that we never know about, which has only recently become more of an issue. These schemes are all excellent, as they encourage members of the public to look for, and record butterflies, and they also have the advantage of being sent to the VC Recorders, and so become part of the National Database. If anyone does use an on-line recording scheme, but would also like to send in their records to myself or Paul, then please tell us that you have sent them in to iRecord, etc. We then mark them as duplicates on our Master Spreadsheet, so that the VC Recorder is aware that they will have received them already.

Summary

The ups

Holly Blue was up by 105% on 2021, and was seen widely in the lower dale, often in gardens.

Comma was up 66.7% on 2021, although still down on the 10 year average.

Clouded Yellow was seen at 2 sites, and at least 3 different butterflies.

Silver-washed Fritillary had a good year nationally, and a single female made it to Sun Lane NR.

The downs

Sadly, most species were down on 2021, as well as being down on the 10 year average. All the skippers and the whites were down, as well as the later summer grassland species such as **Meadow Brown** and **Ringlet**.

More details can be found in the individual species reports.

BEST PLACES TO SEE BUTTERFLIES

Locations of peak counts

SITE	BUTTERFLY PEAK COUNT
<i>Timble Ings</i>	Small Skipper, Painted Lady
<i>Stainburn Forest</i>	Large Skipper, Green-veined White, Wall
<i>Otley Wetlands</i>	Orange-tip, Speckled Wood, Gatekeeper
<i>Addingham</i>	Large White

Sun Lane Nature Reserve, Burley **Small White, Clouded Yellow, Brimstone, Silver-washed Fritillary, Peacock, Comma, White-letter Hairstreak**

Humberstone Bank **Small Heath**

Kettlewell **Scotch Argus**

Duck Street Quarry, Greenhow (private site) **Ringlet, Meadow Brown, Small Tortoiseshell, Common Blue**

Kilnsey **Dark Green Fritillary, Northern Brown Argus**

Skyreholme, Parcevall Hall **Red Admiral**

Lindley Reservoir **Small Copper**

Burley, Lindley, & Beaver Dyke Reservoir **Purple Hairstreak**

Burley Moor **Green Hairstreak**

Burley **Holly Blue**

2022 in detail

As always, our analysis is based on records we receive, and influenced by a number of factors. For example, if people no longer visit a site, visit less frequently, or don't send in records, then consequently numbers will be down. Our recording system is not scientific, but it does give us an *indication* of what is happening in our countryside and continues to be extremely valuable for this reason. In particular, our records may be used to assist the opposition of proposals for the development of wildlife rich land in our area. All WNS butterfly records are also sent to the VC Recorder, and they are all entered onto a National Database, which is often used in collaboration with data from other wildlife organisations. So by sending in your records you are helping all wildlife, and not just in your local area, but nationally too.

We received 2400 records this year compared to 2952 in 2021, so overall it wasn't a good year for the number of records. 2021 wasn't a particularly good year either. However, while some species fared badly, others had a very good year.

Transects (UKBMS)

These are fixed routes that are walked at regular intervals, and there are three different kinds. The idea is to get consistent data over a long period of time, to help look for long term trends in butterfly and moth populations and distributions, and also flight periods, which can tell us a lot about things such as climate change.

Full transects are walked once a week for 26 weeks from 1 April until 30 September and all species of butterfly and moths are recorded.

Species only transects are walked once a week during the normal flight period for the species that is being targeted, but all species of butterfly and moth are recorded.

A Wider Countryside Butterfly Square (WCBS) is a 1km square selected at random that is walked once a month in July and August, with the option to add a walk in May or June as well. All species of butterfly and moth are recorded.

The WNS recording area has examples of all three, but as all the data is entered directly onto a Butterfly Conservation database on-line the records don't automatically come to Paul or myself. The exceptions are the ones that Paul, myself and David walk, David and I walk a full transect at Sun Lane NR, Burley, along with Janet Kyriakides, and I thought that it was very interesting to note that this site was without doubt the best site in 2022 for butterflies in general, with the peak count for seven species.

INDIVIDUAL SPECIES REPORTS

Details of individual species follow. For each species the common name is followed by the Latin name. The first reference number is that of the old Bradley Fletcher numbering system which has now been replaced by the Aggasiz numbering system (figures in brackets).

The number of records in 2022 is compared with the average of the TEN previous years, and the percentage change is given.

The initials in brackets denote individual observers whose names are at the end of the report. A number of records came in after the report was prepared and are therefore not included. These records however will be added to the WNS database, and sent to the VC Recorder.

HESPERIDAE (SKIPPER)

Dingy Skipper *Erynnis tages* 1532 (57.001)

No records

Small Skipper *Thymelicus sylvestris* 1526 (57.006)

60 records, 31.0% DOWN, 34 sites, 14 observers, 273 individuals

First sighting 17 Jun Otley Wetlands NR when 5 were seen (PP)

Last sighting 04 Aug Timble Ings when 28 were seen (NF)

Peak Count 26 Aug Timble Ings when 1 was seen (NF)

There were far fewer records, and the number of individuals was less than half of that in 2021. The number of observers was down, but the number of sites was very similar, so perhaps people didn't get to check them as often. It was still significantly better than the poor year of 2020.

Large Skipper *Ochlodes sylvanus* 1531 (57.009)

11 records, 75.1% DOWN, 10 sites, 7 observers, 24 individuals

First sighting 10 Jun Otley Wetlands NR when 2 were seen (PP)

Last sighting 29 Jul Lindley Reservoir when 1 was seen (NF)

Peak Count 08 Jul Stainburn Forest when 9 were seen (NF)

I have records going back to 1947, and this was the worst year for this pretty Skipper with the number of records less than a third of almost any other year. It was however seen over a wide area with records from Otley, Burley, Lindley Reservoir, Stainburn Forest, Humberstone Bank, Bastow Wood, and Hawkswick. Last year we only had one record from further north than Addingham, so the spread of sites is encouraging.

PIERIDAE (WHITES)

Every year we get people who tell us that they have seen Whites that they haven't been able to identify. Don't worry, none of us can identify all the Whites that we see, but here are a few tips that I hope you will find useful. Firstly, binoculars are a massive help, as Whites tend to be very flighty and you often can't get close to them. I find the underside of the wing easier. Both Large and Small White have a fairly plain yellow coloration, and on the Large White you can often see the bolder black markings of the upperwing showing through. Green-veined White is usually quite strongly marked with a series of veins, as the name suggests. And an Orange-tip female, that doesn't have the very obvious orange markings of the male, has a pretty mottled olive-green pattern.

Orange-Tip *Anthocharis cardamines* 1553 (58.003)

136 records, 15.2% DOWN, 45 sites, 24 observers, 298 individuals

First sighting 26 Mar Ilkley when 1 was seen (PJB)

Last sighting 16 Jun Conistone, Throstles Nest when 1 was seen (NF & PM)

Peak Count 22 Apr Otley Wetlands NR when 16 were seen (PP)

The male Orange-tip must be our easiest butterfly to identify with his bright orange wingtips, very clearly visible, even in flight. This white wasn't too far down on the 10 year average, and it was only 6.8% down on 2021. It also had a fantastic year in 2020, the best by far in over 20 years, so that obviously affects the 10 year average. There were 2 reports of double figures, and we also had reports of eggs, which are actually quite easy to find underneath the flower heads of Milk Maid (Cuckoo Flower), or Garlic Mustard. Last year we only had 1 report further north than Addingham, at Grassington, but this year we had numerous reports from the Upper Dale, as far north as Yockenthwaite (GH).

Large White *Pieris brassicae* 1549 (58.006)

113 records, 24.4% DOWN, 31 sites, 26 observers, 187 individuals

First sighting 14 Apr Otley when 1 was seen (PP)

Last sighting 28 Sep Otley when 1 was seen (NF)

Peak Count 29 Jul Addingham when 9 were seen (JP)

Although it was down on the 10 year average and the number of individuals was significantly lower than in 2021 it was certainly not the worst year that we have seen. There was also a good spread of sites over the entire area. It was only seen in low numbers with no counts in double figures this year. Along with Orange-tip and Small White this butterfly also had its best ever year in 2020, probably a combination of some lovely dry, sunny Spring weather, and the Covid lockdown, when people were confined to the local area, and perhaps finding some solace in butterfly watching.

Small White *Pieris rapae* 1550 (58.007)

193 records, 17.1% DOWN, 48 sites, 29 observers, 404 individuals

First sighting 16 Apr Burley when 1 was seen (PR)

Last sighting 28 Sep Addingham when 2 were seen (IG)

Peak Count 25 Jul Sun Lane NR, Burley when 16 were seen (JK)

Things were not too far away from the 10 year average, and although the number of individuals was around 80% of 2021, we did have 4 counts in double figures this year, whereas we had none last year. This is another common, widespread species, and we had a good spread over the whole area.

Green-veined White *Pieris napi* 1551 (58.008)

128 records, 44.9% DOWN, 47 sites, 21 observers, 349 individuals

First sighting 16 Apr Stainburn Forest when 3 were seen (NF)

Last sighting 23 Sep Sun Lane NR, Burley when 1 was seen (NF)

Peak Count 29 Apr Stainburn Forest and 15/05/22 Stainburn Forest when 18 were seen (NF)

We had the lowest number of records since 2002, and the number of individuals was also around a third down on 2021, which in itself was a bad year. There were 7 counts in double figures, against 9 last year. It was, however, seen over much of the area with records as far up Wharfedale as Langstrothdale (GH), and as far up Littondale as Litton (NF). We need to hope for a good Spring in 2023, and then hopefully the early emerging butterflies will have a better year.

Clouded Yellow *Colias croceus* 1545 (58.010)

4 records, 263.6% UP, 2 sites, 4 observers, 5 individuals

First sighting 25 Jul Otley Wetlands NR when 1 was seen (PP)

Last sighting 02 Sep Sun Lane NR, Burley when 1 was seen (NF & CH)

Peak Count 26 Aug Sun Lane NR, Burley when 2 were seen (R)

It was wonderful to have sightings of this beautiful butterfly after an absence of 3 years. In 2019 we had a single record, and before that we had 10 records in 2014, and 16 records in 2006, so you can see how infrequently we get to see this pretty migrant. There were at least 3 different individuals as the first was seen a month before any others, then we (NF) saw a single butterfly twice at Sun Lane NR, 12 days apart, and from photos that I managed to take we were able to confirm 2 separate individuals. This was also confirmed by 2 being seen at Sun Lane NR during the period between our 2 sightings (R). We have only one other yellow butterfly, the Brimstone, but they are quite easy to tell apart, even in flight, as the Clouded Yellow tends to look more orange coloured in flight, and usually flies closer to the ground.

Brimstone *Gonepteryx rhamni* 1546 (58.013)

70 records, 19.3% UP, 23 sites, 20 observers, 97 individuals

First sighting 27 Jan Grass Wood when 1 was seen (TS)

Last sighting 26 Aug Burley when 1 was seen (PR)

Peak Count 15 Jun Sun Lane NR, Burley when 4 were seen (NF)

At last, we have a butterfly that had a good year. It was up on both the 10 year average, and also up from 2021. It is always a joy to see this bright yellow butterfly on an early Spring day, it certainly never fails to put a huge smile on my face. As it overwinters as an adult it can sometimes be seen very early in the year. 2022 had the fourth highest number of records. It is mostly just seen as a single butterfly, and never in large numbers all at once. The caterpillars feed on Alder Buckthorn and Purging Buckthorn, and these species of tree are being planted more often now, partially in the hope of attracting this lovely butterfly. Alder Buckthorn is present at Sun Lane NR, a good site for this species, and Purging Buckthorn is present in woods in the Upper Dale, most notably Grass Wood, another good site, where there are lots of mature trees, as well as newly planted ones grown from seed taken from local trees.

NYMPHALIDAE (NYMPHALIDS – THE MULTI-COLOURED SPECIES PLUS THE BROWNS)

Wall *Lasiommata megera* 1615 (59.002)

37 records, 46.2% UP, 26 sites, 14 observers, 61 individuals

First sighting 19 May Trollers Gill when 2 were seen (PM) and Otley Chevin when 2 were seen (PP)

Last sighting 30 Aug Beaver Dyke Reservoir when 1 was seen (MC)

Peak Count 23 Aug Stainburn Forest when 7 were seen (MC)

Although down by 31.5% from 2021 it was still significantly up on the 10 year average, and this species is actually doing well in our area, so more good news, as it isn't faring so well in other parts of the country. It's a pretty butterfly, and does like to land on walls, as its name suggests. It's another butterfly that is only ever really seen in low numbers, but it can turn up in a variety of habitats, preferring warm, dry areas, often with patches of bare ground, or very short grass. Riverside paths are often a good place to look.

Speckled Wood *Pararge aegeria* 1614 (59.003)

196 records, 23.6% DOWN, 52 sites, 27 observers, 773 individuals

First sighting 17 Apr Sun Lane NR, Burley (NF), Otley (PP), and Addingham (MO) when 1 was seen at each location

Last sighting 29 Sep Norwood Bottom when 4 were seen (MB)

Peak Count 30 Aug Otley Wetlands NR when 58 were seen (PP)

Records were 3.2% up on 2021. The number of individuals was slightly less than in 2021, but some late records that came in after we had calculated the percentages take the number of individuals past last year's total. The late records also included counts of 100+ seen at both Otley Wetlands NR (DA), and Timble Ings (DA), which is double last year's peak count of 51 at Timble Ings.

Small Heath *Coenonympha pamphilus* 1627 (59.005)

57 records, 49.3% DOWN, 31 sites, 12 observers, 580 individuals

First sighting 02 Jun Kilnsey when 7 were seen (NF)

Last sighting 26 Aug Threshfield when 2 were seen (GL)

Peak Count 10 Jul Duck Street Quarry, Greenhow when 120 were seen (MB)

Small Heath records were low this year even on the upland transects where we can follow abundance numbers on the transects. This is disappointing as we have recently been seeing an expansion in distribution and abundance. These days it principally is an upland butterfly, despite having made a reappearance in lowland sites over the last couple of years. It is a grassland butterfly favouring longer grass at the margins in fields and meadows, sadly there is precious little of this once abundant habitat in the lowlands now.

Scotch Argus *Erebia aethiops* 1618 (59.008)

10 records, 3.8% DOWN, 6 sites, 3 observers, 191 individuals

First sighting 06 Aug Bastow Wood when 25 were seen (NF)

Last sighting 07 Sep Bastow Wood when 1 was seen (NF)

Peak Count 12 Aug Kettlewell when 107 were seen (PM & NF)

This re-introduced butterfly is now firmly established in five Upper Wharfedale locations. Research using a catch mark release and re-capture technique at Smardale Gill show the females are very sedentary straying no more than a few hundred metres in their lifetime. So we can now be reasonably confident that our five colonies were due to separate unofficial releases. Mostly they are on private land and are showing little interest in spreading further despite there being plenty of nearby suitable habitat for them to move in to. Genetic bar coding indicates the original stock came from Smardale Gill. They are easy to see in August and form the highlight of a walk up to Bastow Wood where they can be seen adjacent to the footpath.

Ringlet *Aphantopus hyperantus* 1629 (59.009)

112 records, 45.1% DOWN, 48 sites, 26 observers, 1194 individuals

First sighting 17 Jun Otley Wetlands NR when 2 were seen (PP)

Last sighting 14 Aug Thruscross when 1 was seen (TW, DF, & PT)

Peak Count 10 Jul Duck Street Quarry, Greenhow when 245 were seen (MB)

I have to go back to 2003 to find a year with fewer reports, although 2020 only had 2 fewer. It is down by 22.8% from 2021, which is not as bad as the 10 year average. We also had some late records of 100+ at Otley Wetlands NR (DA), and Timble Ings (DA), and if these and other late records were added to the total then the number of individuals is similar to 2021. It will be interesting to see how the hot, dry spells of last summer affect numbers in 2023. Will it have helped them, as the adults may have had more chance to breed, or will it have affected the caterpillar's foodplants, so that fewer caterpillars survived?

Meadow Brown *Maniola jurtina* 1626 (59.010)

172 records, 24.6% DOWN, 69 sites, 28 observers, 2061 individuals

First sighting 14 Jun Otley Wetlands NR when 2 were seen (PR)

Last sighting 05 Sep Sun Lane NR, Burley when 7 were seen (JK)

Peak Count 10 Jul Duck Street Quarry, Greenhow when 295 were seen (MB)

This other later summer grassland species wasn't as badly affected as the Ringlet, and was only down by 17.7% on 2021. And despite the number of reports being down the number of individuals was over 400 more than in 2021 if some late records are also taken into account, so that is great news. As with the Ringlet, 2020 wasn't a good year, but that is probably expected as they both fly in similar habitats, at a similar time of year. Both Meadow Brown and Ringlet are widespread and they were seen as far up Littondale as Litton, but only as far as Kettlewell in Wharfedale.

Gatekeeper *Pyronia tithonus* 1625 (59.011)

36 records, 2.4% DOWN, 14 sites, 9 observers, 181 individuals

First sighting 22 Jun Addingham when 1 was seen (JO)

Last sighting 19 Aug Otley when 1 was seen (MC)

Peak Count 25 Jul Otley Wetlands NR when 41 were seen (PP)

Whilst down a touch on the 10 year average, it was up by 2.9% on 2021, and there were more than double the number of individuals seen, which is excellent. There were 4 reports in double figures. It is mainly seen in the areas of Leathley, Otley, Lindley, Burley and Addingham, but this year there was a record from Thruscross, a good way from the main area, so who knows where else it might be found. It would be fantastic to have a record from further up the Dale, so one to look out for in 2023.

Marbled White *Melanargia galathea* 1620 (59.012)

No records

Dark Green Fritillary *Argynnis aglaja* 1607 (59.019)

31 records, 31.3% DOWN, 19 sites, 11 observers, 93 individuals

First sighting 09 Jul Grass Wood when 1 was seen (NF)

Last sighting 14 Aug Thruscross when 5 were seen (PM, NF, JS, TW, DF, & PT)

Peak Count 16 Jul Kilnsey when 13 were seen (PM)

It is easy to forget that the Dark Green Fritillary has only recently colonised our area. Our records show a steady consistent expansion since 2003, before this it only showed up sporadically. It is a specialist of the upland grasslands in Upper Wharfedale where it can be easily found talking nectar from Spear Thistle. It is often seen on our highest peaks where it performs it's courtship, this behaviour is called hill topping. The larvae feed in the open on Marsh Violets which can be frequent in damp upland calcareous pastures. The butterflies are like the Silver-washed Fritillary and are strong, and range far and wide. The latter species however prefers its violets in a woodland setting.

Silver-washed Fritillary *Argynnis paphia* 1608 (59.017)

1 record, 233.3% UP, 1 site, 1 observer, 1 individual

01 Aug Sun Lane NR, Burley when 1 was seen (JK)

This species is a relative newcomer to Yorkshire, and the main site at Bishop Wood, near Selby, is a long way from here. However, it is a strong flyer, and in good years some individuals set off looking for pastures new. 2022 was one of those good

years. A single female was seen feeding on Buddleia at Sun Lane NR (JK), and was fortunately photographed. The ID was confirmed by Nick Hall, who is a transect walker at Bishop Wood, where you can easily see 50+, the place to go if you want to see this species. We last had one in 2019, and before that we had one in 2006, one in 2013, and one in 2014. It's a large Fritillary, and certainly a stunning butterfly to see, so here's hoping for more of them in future years.

Red Admiral *Vanessa atalanta* 1590 (59.023)

230 records, 7.9% DOWN, 58 sites, 35 observers, 520 individuals

First sighting 15 May Stainburn Forest when 1 was seen (NF)

Last sighting 18 Oct Skyreholme when 1 was seen (PM)

Peak Count 26 Aug Parcevall Hall, Skyreholme when 46 were seen (AG)

This gorgeous butterfly was only slightly down on the 10 year average, and records were up by around 15% from 2021. The number of individuals was well up on 2021, when only 311 were seen so it was actually a very good year for this migrant species. Most migrants did have a good year in 2022, so perhaps conditions were favourable to bring them across from the continent. There were 8 counts in double figures, and it is certainly a striking butterfly to see in large numbers. This is a species that also migrates back to the continent later in the year, and if you find yourself on a flight path in the right conditions you can watch them flying past one after another, usually in October. We once saw this on the bridleway that comes from Malham Tarn, down to Arncliffe Cote, and once on the west coast of Scotland.

Painted Lady *Vanessa cardui* 1591 (59.024)

48 records, 43.8% DOWN, 27 sites, 19 observers, 60 individuals

First sighting 07 Jul Skyreholme when 1 was seen (PM)

Last sighting 17 Sep Burley when 1 was seen (BS)

Peak Count 04 Aug Timble Ings when 3 were seen (NF & JS)

Another beautiful migrant, the number of both records and individuals was very similar to 2021, just marginally higher this year. It was down significantly on the 10 year average, but this species tends to have a spectacular year, approximately every 10 years, which obviously affects the average. Along with the Red Admiral it is widespread, and can turn up anywhere. It does have a liking for Buddleia, if you have that in your garden, but it can just as easily be seen nectaring on thistles high on a moor, or Knapweed along a riverside or in a woodland glade.

Peacock *Aglais io* 1597 (59.026)

156 records, 52.0% DOWN, 55 sites, 33 observers, 265 individuals

First sighting 11 Mar Otley Wetlands NR when 1 was seen (NF & PR)

Last sighting 04 Nov Timble when 1 was seen (PR)

Peak Count 04 Aug Sun Lane NR, Burley when 9 were seen (JK)

It wasn't a great year, although it was only 35.5% down on 2021, so not as dramatic as the 10 year average. There were only half the number of individuals that were seen in 2021, and this is another species that can be readily seen almost anywhere, including gardens. It is also a species that many people can identify, especially when seen landed. The peak count was only a third of that in 2021. It was seen at a similar number of sites to 2021, and it was seen further up both Wharfedale and Littondale this year.

Small Tortoiseshell *Aglais urtica* 1593 (59.027)

194 records, 52.0% DOWN, 65 sites, 32 observers, 351 individuals

First sighting 27 Jan Skyreholme when 1 was seen (PM)

Last sighting 04 Nov Skyreholme when 1 was seen (PM)

Peak Count 01 Aug Duck Street Quarry, Greenhow when 33 were seen (MB)

Sadly this pretty and familiar butterfly fared the worst of all the Vanessids. It was its second worst year in the past 20 years, and the number of individuals was well down on the 875 seen in 2021. It may be thought that it should do well every year, as the caterpillars feed on Nettles, which are abundant in many places. But there are so many other factors to take into consideration, such as the weather, both during the winter when this species hibernates as an adult, and during emergence and mating times. We found some adults hibernating in a barn in Littondale in December 2021, but when we checked again in early Spring of 2022, all we found were scatterings of wings on the barn floor, so they had all been predated, either by birds or bats. It is another common and widespread species though, and can easily bounce back if conditions are more favourable in another year.

Comma *Polytonia c-album* 1598 (59.031)

110 records, 21.9% DOWN, 29 sites, 23 observers, 172 individuals

First sighting 18 Mar Ilkley, Middleton Wood when 1 was seen (NF)

Last sighting 18 Oct Skyreholme when 1 was seen (PM)

Peak Count 25 Jul Sun Lane NR, Burley when 13 were seen (JK)



Comma (NF)

And now onto some good news. Although down on the 10 year average this attractive bright orange butterfly was up by 66.7% on 2021, with more than double the number of individuals than in 2021 too. It was seen in every month from March to October, but May and June only had a couple of reports each when it is between broods. It is always a joy to see the brilliant flash of orange in early Spring, and it lifts your heart equally in late Autumn, when a good place to look is on Brambles, as it likes to feed on ripe blackberries. The furthest up the Dale that it was seen was at Skyreholme (PM), and a couple were also seen at Thruscross reservoir (NF). It would be nice to have some sightings from further up than this. In 2021 it was seen at Grass Wood, and it has been seen twice as far up as Yockenthwaite, in 2007 (KB), and in 2013 (NF), but it is very rare to get a record from further up than Grass Wood.

LYCAENIDAE (BLUES AND HAIRSTREAKS)

Small Copper *Lycaena phlaeas* 1561 (61.001)

64 records, 0.8% UP, 32 sites, 19 observers, 144 individuals

First sighting 30 Apr Burley Moor when 1 was seen (PR)

Last sighting 04 Nov Farnley when 1 was seen (NF)

Peak Count 23 Sep Lindley reservoir when 17 were seen (NF)

This small, cheeky butterfly is holding its own in our area. It seems to be fairly stable in general, although 2022 was down on 2021 in numbers of reports, sites, observers, and individuals. This could be due to previous known sites simply not being visited this year. Last year we had good counts on Barden Fell, and none this year. It can be difficult to spot, as it is very small, and flies very fast. It can turn up anywhere, as the caterpillar foodplant is Sorrel or Sheep's Sorrel, found in many grassland habitats. August and September were the peak months, and a top tip is to look on the flowers of Ragwort, which it often inhabits.



Small coppers mating (NF)

Purple Hairstreak *Favonius quercus* 1557 (61.004)

3 records, 75.2% DOWN, 3 sites, 3 observers, 3 individuals

First sighting 28 Jul Burley when 1 was seen (PR)

Last sighting 30 Aug Beaver Dyke Reservoir when 1 was seen (MC)

Peak Count 28 Jun Burley (PR), 10 Aug Lindley (NF), and 30 Aug Beaver Dyke Reservoir (MC) when 1 was seen at each location

Sadly, we were back to the more usual single figure records, after a spectacular year in 2021. 2021 was very exceptional, as it seemed to be a good year anyway, but we also had a couple who are no longer in the area, who went out specifically looking for it at numerous sites. I do believe that it was genuinely down significantly on 2021, as we (NF) went out looking for it at sites where we had seen it in 2021, with no success. It is possible that the very hot spell of weather affected this species, as it was right in their flight time. It is a species that, unusually, is best seen between about 5 - 7pm. On one occasion we went out looking for it around 7 - 8pm, and the temperature was still probably in the high 20s. Was it possible that it flew even later than normal in the evening?

Green Hairstreak *Callophrys rubi* 1555 (61.005)

19 records, 70.0% DOWN, 11 sites, 6 observers, 167 individuals

First sighting 14 Apr Otley Chevin when 4 & 5 were seen (NF & DM)

Last sighting 19 May Trollers Gill when 3 were seen (PM)

Peak Count 30 Apr Burley Moor when 50 were seen (PR)

This exquisite little butterfly had its worst year since 2001, although the peak count was the same as 2021. This is another, small, feisty butterfly, and it can be hard to spot until you get your eye in. I think that people are mostly looking for something bigger, and in flight it appears brown, rather than



Green hairstreak (NF)

green. It was the subject of our annual WNS Butterfly Walk, and it was seen by everyone who came on that walk. It is common in our area on moorland with Bilberry and Heather, and can be seen in quite large numbers. I suspect that it may have been under recorded this year, as we had no records from a previous prolific recorder of this species, and there were no records from Barden Fell, or the moors above Grassington. Some sites can be quite inaccessible, and are not always visited every year. I truly hope that 2023 is a better year for it, one of my favourite butterflies.

White-Letter Hairstreak *Satyrrium w-album* 1558 (61.006)

6 records, 72.6 % DOWN, 5 sites, 5 observers, 6 individuals

First sighting 9 Jul Ilkley when 1 was seen (KS)

Last sighting 7 Aug Sun Lane NR, Burley when 1 was seen (NF)

Peak Count Only 1 was seen for each of the 6 records

After 2 fantastic years in 2014 and 2015 with over 50 records in each of those years, it hasn't been faring as well. This is another species that is very difficult to spot, and so it is almost certainly under recorded. It lives in the top of Elm trees, and binoculars are used by keen spotters who are specifically looking for it. It is a mainly brown butterfly, and really needs to be seen at rest, or nectaring. It does come down to nectar, more so than the Purple Hairstreak. We had 2 sightings this year, both at Sun Lane NR. One was by the entrance, nectaring on Orange Blossom, and the other was at the far end of the site on a different day, when one landed right next to us on the path. It is worth keeping an eye out anywhere with Elm trees present.

Holly Blue *Celastrina argiolus* 1580 (61.012)

123 records, 96.5% UP, 20 sites, 17 observers, 194 individuals

First sighting 15 Apr Otley when 1 was seen (GH)

Last sighting 23 Sep Sun Lane NR, Burley when 2 were seen (NF)

Peak Count 29/07/22 Burley when 10 were seen (PR)

It was a fantastic year for this lovely blue butterfly, the third best year ever, and 2018 and 2019 were only marginally up on this year. Records were up by 105% from 2021, and the number of individuals was up by around 200%. It is known to run on a cycle with a parasitic wasp whose larvae predate only Holly Blue caterpillars. Some people suggest a 5 year cycle, but looking at WNS records it often seems to have 2 good years together. 2018, 2019, and 2022 were all quite significantly higher than any other year, so it looks to be generally doing very well in our area. It has 2 broods, the caterpillars feeding on Holly in Spring, and Ivy in late Summer. It is often seen in gardens, indeed if you see a blue butterfly in a garden, or a more urban setting, then it will almost certainly be a Holly Blue, especially if there is no Bird's-foot Trefoil close by, the food plant of the Common Blue caterpillar. The undersides are completely different, the

Holly Blue having a pretty silvery blue colour with small black markings, whereas the Common Blue has some orange markings, and much larger spots. The Holly Blue does tend to be pretty lively and it can be very difficult to see the underside, especially as they often perch high in the trees. Practically all records were from Otley, Burley, Menston, Ilkley, and Addingham, with odd sightings at Leathley (DO), Farnley (NF), Lindley (NF), and Timble Ings (NF). And a good distance from any of these sites it was seen twice at Skyreholme (PM). It was seen from mid April until late September, with a definite lull in June, and more records for the second brood, which seems to be the normal for our area.

Northern Brown Argus *Aricia Artaxerxes* 1573 (61.016)

18 records, 59.4% DOWN, 7 sites, 5 observers, 103 individuals

First sighting 19 May Trollers Gill when 1 was seen (PM)

Last sighting 17 Jul Bastow Wood when 3 were seen (PM, NF, & LW)

Peak count 17 Jun Kilnsey when 32 were seen (PM & DR)

Another year and another record broken, The earliest sighting on the Yorkshire database now is 19 May. The Trollers Gill colony is in a very small sun trap. It is also the most southerly of the Wharfedale populations. This individual took advantage of a brief warm spell. We had to wait until 2 June for the next



Northern brown argus

observation when conditions once again improved. Once again we have had no records of the closely related Brown Argus so we can be reasonably sure that Upper Wharfedale retains its status as a core population of this threatened butterfly. Where the two species fly together they are easy to confuse and there is some evidence that they are capable of interbreeding. I have a feeling that the butterfly has moved slowly uphill over the last decade, whether this is because of climate change or a beneficial change in Agri-environment schemes, with reduced sheep grazing and a shift to cattle on the upland pastures I do not know. We were fortunate that Upper Wharfedale had enough rain to keep the Rock-rose from desiccating during the widespread summer drought. As I write this we have just emerged from a cold December. This often bodes well for butterflies in the following season. So I hope that this our most important butterfly will have a better year in 2023

Common Blue *Polyommatus icarus* 1574 (61.018)

61 records, 18.0% DOWN, 23 sites, 13 observers, 587 individuals

First sighting 10 Jun Kilnsey when 1 was seen (PM & NF)

Last sighting 21 Sep Lindley Reservoir when 1 was seen (NF)

Peak Count 10 Jul Duck Street Quarry, Greenhow when 367 were seen (MB)

It was a good year for this beautiful butterfly. Records were up by 1.7% on 2021, but it was the best year since 2017. And the number of individuals was well over double of that in 2021, which had just 244 individuals. In fact the peak count this year was more than the total of all individuals for 2021, but Duck Street Quarry (a private, locked site) is an exceptional site for this species, and we had no records from there in 2021. The peak count away from this site was only 16, at Lindley Reservoir (NF). The first sighting was 2 weeks later, and the last sighting was 3 weeks later than in 2021, the last sighting being a very tatty, well worn female. It is very widespread in our area, and can be found anywhere with Bird's-foot Trefoil. The dazzling blue male is easy to identify, even in flight. The only other species that it could be mistaken with is the Holly Blue, but they are mostly found in different habitats. The one site where I know that both species are present is Sun Lane NR, but usually in different areas of the site.

OBSERVERS

Records were received from the following people:

Alder, Chris (CA); Alred, David, & Joan (DA); Arrowsmith, Sara (SA); Barnham, Mike (MB); Batterby, Rick (RB); Barton, Susan (SB); Breen, Patricia (PB); Brown, Bruce (BB); Burns, Peter & Janet (PJB); Burrow, Dick & Heather (DB); Clerk, Mike & Joyce (MC); Dunne, Mick (MD); Fearnley, David & Nyree (NF); Fisher, David (DFi); Godden, Claire (CG); Gramshaw, Audrey (AG); Grant, Ian (IG); Haycock, Gordon (GH); Healey, John (JH); Hindle, Jan (JH); Horner, Fred & Carmen (CH); Jakeways, Diana (DJ); Kyriakides, Janet (JK); Light, Gerald (GL); Longden, Margaret (ML); McMahon, Dave (DM); Millard, Paul & Jennifer (PM); Miller, Peter (PMi); Morris, Diane (DM); O'Connor, Denis (DO); O'Donnell, Maire (MO); Olive, Jackie (JO); Penrose, Jessica (JP); Peters, Jo (JP); Purvis, Paul (PP); Ramsden, Dave (DR); Riley, Peter & Anne (PR); Russ (R); Serjeant, Tony (TS); Shackleton, Karen (KS); Smith, Jo (JS); Speed, Bruce & Pauline (BS); Tannet, Peter (PT); Thompson, Julia (JT); Ward, Sarah (SW); Whitaker, Terry (TW); Wilding, Royanne (RW); Wiseman, Lee (LW); WNS Butterfly Walk, (WNSBW).

FINALLY

Firstly, we would like to say a massive thank you to everyone who has sent us records this year. All records are very welcome, as the more that we receive the better the overall picture we can get of our area. All species are important, as something that is common today may not be in a few year's time, or it may have moved in distribution. This is really useful in looking at longer term trends for all species, both in the numbers seen, the distribution changes, and the flight periods. The flight period shows us if a species is flying for longer, and also if they are emerging earlier/being seen later than usual. As all the WNS butterfly records are sent on to the VC recorder, and are then entered onto a national database they can be useful in so many ways, obtaining grants for conservation bodies/farmers, reviewing planning applications, monitoring climate change and biodiversity, and looking at butterfly populations and distributions nationally, to name just a few.

It's very easy to send us in your records. We have an Excel spreadsheet that I can send you if you just send me an email, you can use a spreadsheet of your own, ideally Excel, send me the details in an email or a text if there are not too many, or written records, are all gratefully accepted. I am also very happy for people to send me photos for ID help.

All that we need is your name, where you saw it (ideally with a grid reference), date, which species, and how many (please make an educated guess if you aren't sure of the exact number).

Watching and recording butterflies should bring huge pleasure. You don't need to worry about identifying every one (we certainly can't), and some people just send in occasional records, perhaps a species that they think is more unusual, or in an unusual place, or in exceptionally large numbers. We have a huge amount of fun going to places looking for butterflies, and when you see something in a new place, or just see lots of different species, it is such a delight. Hopefully the sun is shining, and usually there are pretty flowers too, and some of the sites in our area are spectacular. Please feel free to contact me if you want any information on where or when to see a particular species, and I will do my best to help.

I hope that any butterflies that you see in 2023 make you feel happy and relaxed, and put a smile on your face for the rest of the day, as they do to us.

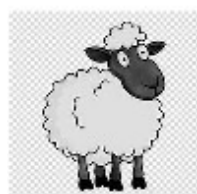
Nyree Fearnley and Paul Millard

Butterfly Recorders 2022

Department of unlikely observations

Not in Wharfedale, but at the Solway Coast in Southern Scotland, we enjoyed a pleasant walk in the sunshine. We got back to our car, which was in a small car park next to a small field with three sheep in it. The next thing we knew, a rabbit was running full pelt down the length of the field, hotly pursued by a sheep, also apparently running flat out.

What was going on? Only the sheep and rabbit knew, or possibly not. However, it was not the sort of interaction you would expect to see, and we probably never will again. (JS)



Eyes like a hawk?

The neighbourhood sparrowhawks sometimes try to strike the zebra finches in the aviary at the bottom of our garden. They do not seem to notice the wire mesh, and crash into it and hang there by their talons for a minute or two, before releasing themselves while looking rather huffy.



AMPHIBIAN REPORT

NEWTs

Great Crested Newt *Triturus cristatus*

Although they were known from sites in both W and N Yorkshire, none were reported from Wharfedale until after GH introduced 600 eggs each year from 2009 to 2011 to ponds at the Nell Bank Centre, Ilkley. They had been surveyed there in 2018 but not since, until this year when GH counted four males and eleven females by torchlight on 20 May and caught six males and six females in bottle traps on 21 May. He thinks the population is probably in excess of 50.

They were also recorded at Nell Bank on 9 July.

He also recorded two males and many eggs in a garden pond in Riverside Park, Otley.

Two were seen at Gallows Hill NR on 21 March although again this is thought by GH to underestimate the true population.

Palmate Newt *Lissotriton helveticus*

On 20 January in a Riverside Park, Otley, garden with four ponds it was a surprise to find, after the ponds had all been completely frozen for the previous two days, that there were palmate newts in all four, a total of 17. Numbers rose to 30 by 7 February despite partial ice cover the previous night. 170 were counted on 22 March with at least 30 attacking the frogspawn laid just three days before, nibbling through the jelly to eat the eggs and developing frog tadpoles (DOC).

Newts and frogs are known to have a boom-bust relationship with high newt numbers leading to a decrease in frog populations.

Palmate newts were also present in two other Riverside Park garden ponds with large numbers in one of them.

At the Nell Bank Centre, GH counted 49 males and 20 females by torchlight on 20 May and 33 males and five females using bottle traps on 21 May.

They were again recorded at Nell Bank on 9 July.

Smooth or Common Newt *Lissotriton vulgaris*

There were only three reports of smooth newts this year, making them the least recorded of Wharfedale's four species.

Two females were in a Riverside Park pond on 12 April and they were recorded at Nell Bank on 9 July.

In a Burley garden they were noted as present but outnumbered by alpine newts.

Alpine Newt *Ichthyosaura alpestris*

Apparently a common species south of the river, with their introduction perhaps dating back to the 1990s when they were distributed to Bradford schools. They are the dominant species in the Rileys' Burley garden pond.

North of the river at Nell Bank, six males and nine females were counted by torchlight on 20 May, spread between three of the ponds. On 21 May, four males and two females were caught in bottle traps in two of the ponds (GH).

FROGS AND TOADS

Common Toad *Bufo bufo*



Common toad (DoC)

Low Dam, a small lake in the Washburn valley a little below Thruscross Reservoir, has been known for some years as a major toad breeding site.

In 2014 and 2015 there was high mortality among the toads. In both years, KS sent samples to the Zoological Society of London for post-mortem without any conclusive reason for the deaths being reached, except for Chytrid fungal disease being ruled out.

In 2017 over 100 were reported without the die-off of the previous two years although without the numbers recovering.

No surveys were then carried out at Low Dam until KS did another as part of the Nidderdale AONB clean water survey. On 25 March he recorded 257 toads with six mating pairs but no spawn. There were 20 dead males. A second visit on 4 April recorded 70 toads and 150 strings of spawn at the top end of Low Dam. This time there were 15 dead in three amplexus balls. Reproduction in toads is very stressful and there can be high mortality.

At Gallows Hill NR, another site where mass breeding has been recorded in the past, on 21 March there was a total of about 30 toads, most probably males, with just one mating pair (DOC). It seems likely that the main mating event had not yet taken place.

At Howgill Side Farm, at the lower end of Beamsley Moor, there were at least 12 toads present with lots of others squashed on the road (M&DL).

Other records were of two below a corrugated iron sheet near Low Dam in late April and single toads of various sizes in two Otley gardens in May and July, Grass Wood in August and Thruscross Reservoir in September.

Common Frog *Rana temporaria*

The first frogspawn of the year was reported on 4 March with a massive 60 clumps in Low Dam and surrounding ditches with one solitary frog remaining (KS). On a return visit on 25 March there was no sign of the spawn with speculation that a pair of nearby mallards could have been responsible for its disappearance. Mallards have been recorded eating frog spawn although hopefully much of it had hatched.

More spawn was reported from Farnley Fish Farm on 9 March (D&NF).

On 19 March spring seemed to arrive all at once in one Otley garden with the first chiffchaff singing from the nearby woods

and the first brimstone butterfly coinciding with the first frogs and spawn in a garden pond.

In late March, with spring put on hold by several days of snow and freezing temperatures, small pools on the hillside opposite Nethergill Farm in Langstrothdale held spawn while there was lots more in a small backwater of Oughtershaw Beck (DOC).

Clumps of spawn were observed at OWNR and in several Otley garden ponds in early April with many tadpoles at OWNR in May.

On 15 June a pond at Throstle Nest Farm at Kettlewell held over 50 frogs as well as thousands of tadpoles with the pond edges black with them (D&NF).

REPTILES

Common Lizard Zootica vivipara

The UK's most common reptile and widespread in our area, especially in moorland, bog and woodland edge, often seen basking on sunny days or vanishing into heather or bracken.

There were 14 records, 12 of these of adults with one juvenile and one new born (In northern Europe the 'viviparous' lizard gives birth to up to 11 young, born in a transparent membrane from which they soon break).

They usually emerge from hibernation in March and the earliest examples were three seen singly on 23 March in the upper Washburn during reptile surveys carried out by Haycock and Jay (H & J) for Nidderdale AONB. These surveys recorded seven other singles on 25 March, 14 April, 13 & 23 September.

Other singles were seen from the Norwood Edge area (D&NF and M&JC) and from close to Low Dam where one was seen on 18 April within 30cm of a slow worm (RH).

They are essentially ground dwelling but will climb occasionally and the greatest number seen were three photographed basking on a wall in Loftshaw Gill on Middleton Moor on 17 April, the only reptiles seen on what was a fruitless search for adders.

Slow Worm Anguis fragilis

There were 10 records of these legless lizards this year. Seven of these came from H & J's reptile survey, from south-facing slopes above Thruscross Reservoir and further up the Washburn: a female on 14 April then two more females and four juveniles on 7, 13 and 28 September.

Two came from the area between Low Dam and Thruscross Reservoir (KS and RH). Further north, a male was seen near Bastow Wood on 17 May (RG).

They can sometimes be seen basking in the sun but spend much of the day hiding between rocks or under logs or strategically placed sheets of metal or roofing felt, emerging at twilight.

Females retain the eggs within their bodies, giving birth to an average of eight young in the summer. When fully grown they can reach 50cm, somewhat smaller than an adult adder.

Adder Vipera berus

There were 17 sightings of adders, with the vast majority coming from the areas of moorland around Thruscross and the upper Washburn valley. Seven of these came from detailed consultant surveys carried out by Haycock and Jay for the Nidderdale AONB Adder Watch Survey. The rest came from a variety of observers.

Adders hibernate in groups in frost-free underground sites, clustering together for warmth, usually from October to March



Adder (DoC)

but with the climate warming they often now emerge earlier although this leaves them vulnerable if cold weather returns.

Males tend to emerge earlier than females to set up territories and the earliest report this year was of a male on 23 February (H&J).

The largest number seen together was three on 12 March by Alan Moore at a hibernation site near Thruscross. On 9 April, further up the Washburn valley he found two adders on a day that seemed totally unsuitable. They came out when the sun shone but went back under shelter during hail showers. At the same site he found three sloughed skins.

H & J's other six records were of five males and one female, all seen in March and April. There were only two Thruscross/Washburn sightings later in the year, one on 7 August (DOC) and one on 14 August (KW) but adders become much harder to find the more the bracken grows.

There were two reports of adders further north, one from Buckden Pike and another from Cocklake Flats, northeast of Kettlewell and probably just out of our recording area, both in late May (RG).

Although the number of sightings in our area is encouraging and the upper Washburn area a stronghold, there is no doubt that adders are in trouble both nationally and locally.

WNS's adder expert, David Alred, made six visits to the upper Washburn this year and saw two adders twice, a single once and none on the other three visits. In years gone by he would have expected far greater numbers.

Climate change and habitat destruction causing isolation of some populations of adders and consequently less genetic mixing are just two of the factors at work.

Nidderdale AONB's Adder Watch Survey continues in 2023 and they would welcome more volunteers. Anyone interested can contact Kelly Harmar at kelly.harmar@harrogate.gov.uk

MAMMAL REPORT

INSECTIVORES

Hedgehog Erinaceus europaeus

Fewer hedgehog records than previously were submitted this year with none at all from either Burley in Wharfedale or Ilkley. Jenny Dixon's reports of multiple hedgehog visits to her Ilkley garden have been sorely missed since she passed away last year.

Around Otley there were multiple visits by probably the same hedgehog to a garden in St David's Road (M&JC) while several gardens in Riverside Park were regularly visited by at least two animals, one a half-size juvenile, the other an adult. The latter was encountered several times in one garden and, instead of

curling up straight away, froze for about ten seconds before turning and bolting round a corner before hiding and curling up in a patch of cover (DOC). Perhaps hedgehog survival would be improved if they all learned to run and hide.

On another occasion a trail camera, set up to capture small rodents eating scattered sunflower seeds, instead produced video of an opportunistic hedgehog hoovering up every last seed before trundling on.

There was one other live hedgehog reported from a garden in Hebden (RL).

There were ten reports of road deaths, some in the south of the region from Otley to Leathley and Pool with others further north from Bolton Abbey up to Grassington and Coniston.

It is to be hoped that the scarcity of records does not reflect a further drop in the hedgehog population with their numbers already thought to have fallen by at least 46% over the 13 years from 1995 to 2018.

They are now categorised as Vulnerable on the Red List for England's mammals. Reasons for their decline include loss of habitat and food sources and poisoning by chemicals used in farming and in gardens (They are very susceptible to slug pellets ingested by snails and slugs) as well as death on the roads.

Mole *Talpa europaea*

There were no reports of moles found on the surface but molehills are obvious throughout Wharfedale wherever the soil is deep enough for tunnelling and where it is likely to contain the earthworms and insect larvae which are their main food.

However, recent research estimates that the earthworm population of the UK has fallen by at least a third in the past 25 years with the decline attributed to an increase in the use of pesticides and animal-worming products which accumulate in the soil as well as repeated applications of inorganic fertiliser.

Given that earthworms are crucial for the healthy soil that underpins our ecosystems it has been said that a large fall in the earthworm population would be as serious as the devastating drop being seen in the insect population. Many birds such as thrushes and starlings which rely on soil invertebrates are in long-term decline. The same is likely to apply to moles.

Common Shrew *Sorex araneus*

Only one record: A dead shrew in an Otley garden at the edge of Farnley Hall Woods was dark black-brown, more ginger along the sides with greyish-white underparts, the 'three-coloured' look characteristic of a common rather than a pygmy shrew.

Pygmy Shrew *Sorex minutus*

No confirmed records this year although Steve Waterman saw shrews on two occasions in June and July, once on a path up to Ilkley Moor and once on the road coming down from the moor. Pygmy shrews are more likely to occur on moorland than common shrews so the likelihood is that they were pygmies.

Water Shrew *Neomys fodiens*

A small grey mammal dashing around the pond both in the water and around the bulrushes' was Paul Purvis's description of the first water shrew reported in Wharfedale since 2016, from the pond near the White House on Otley Chevin. In the years 2008 to 2016 they were seen eight times spread across five of those years, mainly from garden streams and ponds. One of those records came from a different pond on the Chevin.

The biggest of Britain's three shrews, they are never very abundant and are seldom seen. It is hard to tell if their population is declining but they are very vulnerable to pollutants and pesticides in water.

As insectivores their main prey consists of invertebrates taken on land (earthworms, snails and beetles) as well as from the water surface and by diving and hunting underwater (water skaters, caddis and mayfly larvae). They will also take small fish, newts and small frogs when the opportunity presents.

BATS

Identification of bats relies largely on using a bat detector to convert their high frequency echolocation calls down to a frequency we can hear. The sound of the call and its peak frequency is then used to identify the bat, put alongside the emergence time after sunset, habitat, size and flight pattern.

Ten species have been identified in Yorkshire of which four are rare. Of these four, Brandt's and Whiskered have been recorded from upper Wharfedale although most records are not recent. These two are difficult to tell apart and were only separated from one another in 1970.

Common Pipistrelle *Pipistrellus pipistrellus*

In Otley these were identified from gardens at Riverside Park and St David's Road with bats recorded as pipistrelles (species unknown) in a garden bordering the Wharfe.

Common pipistrelles were also identified from Panorama Drive in Ilkley with one recovered dead from a chimney by David and Midge Leather, from Simon's Seat Farm at Skyreholme and from surveys of derelict barns neighbouring Ros Lilley's house in Hebden. Here a day roost was identified with the bats foraging nearby.

They were also recorded at the WNS survey weekend at Nell Bank, Ilkley. Maggie Brown from the WY Bat Group attended and gave a class in bat identification to a small group. She used a bat detector linked to a tablet with an app to show sonograms (the app from the USA but not yet perfected for Europe) demonstrating how technology is rapidly advancing in the previously obscure art of bat identification.

Soprano Pipistrelle *Pipistrellus pygmaeus*

These were separated as a distinct species only in 1999 on the basis of the higher frequency of their calls.

They were reported on 9 July from the Nell Bank survey weekend, on 28 July from Simon's Seat Farm, Skyreholme by Gordon Haycock and in the surveys of derelict barns in Hebden (RL).

Brown Long-eared Bat *Plecotus auritus*

These are probably the most common bats after the two pipistrelles but register only quiet ticks on a bat detector. They apparently often hunt by hearing and sight without using echolocation and will take large moths, sometimes picking them off vegetation instead of taking them in flight.

They were reported on 28 July at Simon's Seat Farm as well as on 13 September during the survey of the derelict barns in Hebden.

Daubenton's Bat *Myotis daubentonii*

They are most often seen emerging from under bridges to fly low over the water picking up insects from on or close to the water surface.

They were recorded from two of the small bridges on the Washburn upstream from Lindley Wood Reservoir and along the Wharfe near Nell Bank (RH).

Noctule Bat *Nyctylua noctula*

The largest of Yorkshire's bats which often emerges just after or occasionally before sunset, often seen flying singly and directly

above tree top height. It has a characteristic loud call at quite a low frequency.

On 13 April several were above the hillside on the western side of Lindley Wood Reservoir (DOC). On 9 July they were seen flying singly along the valley during the Nell Bank weekend and passing over an Otley garden on 16 July. During the surveys of the Hebden barns on 25 August and 13 September they were recorded, passing unseen, on six and four times respectively (RL).

Natterer's Bat *Myotis nattereri*

On 16 July and several other dates, bats zooming around at about head height above a pond in an Otley garden bordering Farnley Hall Woods gave fast crackling calls like a zipper being undone across the whole frequency range (10 – 120 kHz). These were reckoned to be Natterer's, one of the less common Yorkshire bats but said by MG of WYBG to be present in Farnley Woods (DOC).

RABBITS AND HARES

Rabbit *Oryctolagus cuniculus*

Rabbits were reported from the length of Wharfedale from Otley up to Nethergill in Langstrothdale. They are still common but their numbers have fallen over recent years as a result, not only of myxomatosis but also from a new and more virulent form of Rabbit Viral Haemorrhagic Disease. A rabbit disease expert commented recently, 'Rabbits may be at an all-time low. When did you last see a roadkill rabbit? You don't anymore – they simply aren't around like they used to be.'

On the Riverside estate in Otley, none were seen in January until a female was seen on February 2 gathering dried grass. On 18 February the first tiny rabbit kittens appeared, three of them with a female apparently keeping watch and allowing the kittens to nuzzle up to her. However, by two days later they were being left to their own devices and were being actively hunted by several local cats which probably killed most of them. One was seen with a young rabbit in its jaws.

Small numbers survived to roam the estate later in the summer (DOC).

The biggest colony reported was of at least 12 in a field behind Burley Nursing Home (PP).

Diseased and immobile rabbits were seen at Addingham Moorside and Rocking Moor.

Brown Hare *Lepus capensis*

Brown hares continue to thrive in Wharfedale with 47 records received, three quarters of them of single animals, seven records of two or three together with the largest number being nine in the open fields of Timble Ings.

Most of the sightings were from lower Wharfedale around Otley, Leathley, Farnley, Askwith, Ilkley and the Washburn Valley. Further up the dale Kelvin Smith commented, 'Hare numbers very good with leverets observed from March onwards both alive and dead on the roads in the Washburn and also near Appletreewick, Burnsall, Grimwith and Hebden.' They were also reported from Kettlewell, Coniston, Buckden, Hubberholme, Yockenthwaite and Nethergill Farm.

Although records remain high, their numbers fell by 80% in the last century and there is currently concern over deaths from myxomatosis and rabbit haemorrhagic disease which have been shown to jump species from rabbits to hares.

RODENTS

Grey Squirrel *Sciurus carolinensis*

Common in most gardens and in deciduous and mixed woodland, especially in lower Wharfedale. They are so numerous as to be underreported with three and four recorded in a number of gardens and at OWNR.



Grey squirrel (JS)

It is difficult to keep them off feeders but one solution to them climbing metal poles has been found to be a few drops of washing-up liquid occasionally dripped on to the poles. It is worth it simply to see the squirrels getting half way up before sliding down again. Can squirrels look surprised?

Their numbers decrease going further up Wharfedale but they are certainly seen as far as Rakes Wood at Buckden.

The only area from which they are actively excluded is the Red Squirrel Reserve at Greenfield in Langstrothdale which operates an exclusion zone of 5km around the reserve in order to limit contact between reds and greys with the latter carrying squirrelpox which is easily transmitted to reds and which kills them within a week.

Red Squirrel *Sciurus vulgaris*

The stronghold for red squirrels in Wharfedale is the Greenfield Red Squirrel Reserve in the far north of our recording area.

As the area is owned by a forestry management company, until recently access has been restricted. However, in 2022 public rights of way were created into the forest. New bridleways of seven miles in length plus footpaths of half a mile now exist in High and Low Greenfield and the adjacent Cam Woodlands.

In the dense woodlands the red squirrels may still be difficult to locate and it may be easier to view them at Nethergill Farm, just to the northeast where the Thomases welcome visitors and where the squirrels are attracted to feeders, with at least three present towards the end of the year.



Red squirrel (JS)

Also fairly straightforward is a red squirrel viewing area at Snaizeholme, part of the Widdale Red Squirrel Reserve, just out of Wharfedale into Wensleydale.

Reds can also be viewed at Kilnsey Country Park which has a captive breeding programme.

Wood Mouse *Apodemus sylvaticus*

Also called Field Mouse or Long-tailed Field Mouse.

On 24 January a trail camera, set up in an Otley garden bordering Farnley Hall Woods, produced video sequences of a wood mouse making frequent forays to collect scattered sunflower seeds, taking them away for probable storage. Although wood mice are the UK's commonest mouse they are nocturnal – hence the large eyes and ears – so seldom seen. A trail camera is an excellent and fairly cheap way to discover what is in your garden overnight!

They were also recorded in RL's Hebden garden in the spring and on the Nell Bank survey weekend on 9 July.

One was dead near Farnley on 15 September.

House Mouse *Mus musculus*

No records were received this year. Any mouse found inside a building is worth examining as it may not be a house mouse. Wood mice enter buildings at times.

Field Vole *Microtus agrestis*

Despite being Britain's commonest small mammal they are seldom seen and are difficult to tell apart from a bank vole. The field vole has greyer upperparts and a shorter tail. They are more likely to be found in grassland and moorland. A vole glimpsed in Loftshaw Gill on Middleton Moor on 18 March while searching for adders was probably a field vole.

SW reported seeing a vole near Burley in the talons of a kestrel. Next time you see a hovering kestrel or a short-eared or barn owl slowly quartering grassland it is probably hunting mainly for field voles.

Bank Vole *Clethrionomys glareolus*

Also known as the Red-backed Vole, it is more red-brown above with a longer tail (about half the length of its head and body) than a field vole. Its habitat is usually deciduous woodland or scrubland or along hedgerow banks.

In an Otley garden adjacent to woodland, bank voles were seen on several days in August and September running from under the hedge to collect seeds fallen from the bird feeders (D&MOC).

They were also recorded from a Hebden garden (RL).

Two were found dead, one beside Green Lane in Otley and the other on Ilkley Moor, identified from its dentition (D&ML).

Water Vole *Arvicola amphibius*

In 2020, Yorkshire Water introduced two batches, each of 100 water voles, bred in captivity, into the pond and ditches of Timble Ings. It had previously been verified that American mink, their main predator, were absent.

In September 2021, WNS volunteers attended a training day at Timble Ings to learn how to detect the presence of the voles. Since then, a number of visits by WNS members have failed to produce any sightings. On one visit a probable burrow was found with possible feeding signs detected.

Phil Tennyson of Yorkshire Water, overseeing the project, reports that due to staff shortages he did not do a full survey of the voles this year. He had one sighting of a mink in August but thinks it did not return.

There had been a suggestion that another training day would be run in 2022, in conjunction with Nidderdale AONB. This did not take place but it is hoped to set one up for next summer.

Brown Rat *Rattus norvegicus*

It is perhaps surprising, given the stories told about them in the popular press, that rats are not seen more often. The truth is that research estimates the urban population of rats is about three million and that your nearest rat is likely to be no nearer than 50 yards, not the six feet of popular legend!

The only live rats reported were from Nethergill Farm in Langstrothdale but rats are more numerous around all farms.

Elsewhere, there were three reports of dead rats, two of them from Otley, while Ruth Paynter watched as 'one dead very manky large rat' was dropped by a red kite on Church Lane, Weston, echoing a sight that must have been common in towns hundreds of years ago when kites were essential street cleaners.

CARNIVORES

Fox *Vulpes vulpes*

On 19 January, a fox was spotted on Grove Road in Menston (AK) in an area where the number of disturbed bins suggests they are more numerous. It is true that, to have a really good chance of seeing a fox, it is better to travel into the nearest big town to an area with lots of fast food outlets.

Three of the other records submitted were more likely to be of country foxes: one at Lindley on 19 January (D&NF), one in the Washburn valley on 14 April (PR), one at OWNR on 29 April (JW) while one crossing the road near Smith's Garden Centre at the edge of Otley might have been a commuter between town and country (RP). One was dead on the A65 between Burley and Ilkley in November (RP).

On 11 May, an active fox earth with bedding and a rabbit carcass was found in Hubberholme Wood (GH).

Stoat *Mustela erminea*

There were two reports of stoats in ermine, the first at Timble Ings on 12 January (JK).

The second had been seen by a gamekeeper friend of KS on Pockstones, maybe not long before he 'dealt' with it.

The adoption of a completely white coat is obviously unlikely to benefit the animal this far south where periods of snow are becoming increasingly rare. During the last 14 years there have only been two other reports of stoats in full ermine in Wharfedale, one of which was also at Timble, in 2009, with the other at Appletreewick in 2014. Some stoats may become partially white. In 2010, one at Kettlewell was $\frac{3}{4}$ white while one in Langstrothdale had just a white tail with the tip still black.

The other records this year were: one photographed by Simon Carey running along the old railway line east of Otley, two between Kettlewell and Coniston on 16 April (RP), one crossing the wooden bridge to the silt island at OWNR on 8 April (PP), one on Busky Dike Lane, Fewston on 19 August (PR) and one dashing across the road to Blubberhouses, north of Otley, on 19 September (DOC).

One was seen at Nethergill Farm several times (H&MT), while another was seen on a couple of occasions near Burley weir by SW who noted it had a wound on the back of its leg and wondered whether it would survive.

Weasel *Mustela nivalis*

There were no sightings reported this year.

It is thought that the British populations of stoats and weasels are similar with up to half a million of each but weasels

are typically seen less often, perhaps because their hunting strategies take them more often into burrows and stone walls rather than into the open.

American Mink *Mustela vison*

Mink have been present in Wharfedale since at least 1988 with the destruction of the water vole population following soon after. One of the factors behind the expansion of mink numbers was thought to be the collapse of the otter population in the 1950s and 60s caused principally by the build-up of toxic chemical pesticides in the food chain.

Since the return of otters to Britain's rivers, the number of mink is thought to be falling again with otters displacing and occasionally killing mink. Mink are perhaps less likely to hunt for fish in an area where they might confront an otter.

PT saw one at Timble Ings, of concern because of mink's targeting of water voles.

There were few other sightings. RL photographed one near Hebden suspension bridge and heard other reports of them from the same spot. It was said at Nethergill Farm that the local gamekeeper had killed several.

Polecat/ Polecat-ferret *Mustela putorius*

On 11 April, Rachel Huxham photographed a dead possible polecat or polecat-ferret on the A65 close to Chelker Reservoir, above Addingham. She sent the photos to the Yorkshire Mammal Group who thought that it was a polecat-ferret as the facial markings were not distinct (A pure polecat typically has a black bandit mask separating a band of pale fur above the eyes from a pale muzzle.) and the overall colour was too pale.

In 2017, a dead polecat was found on the road at the same spot implying that there could well be a population of polecats or polecat-ferrets around Chelker. There is a polecat population in Cumbria.

Otter *Lutra lutra*

For 50 years up to 1998 there were no records of otters in Wharfedale, in line with a catastrophic fall in their population nationally. As predators at the top of the food chain they had accumulated organochlorine pesticides from the fish they had eaten. Since the banning of these highly persistent poisons their numbers along the Wharfe have gradually risen until they now seem well established along the length of the river.

The first report of the year was from RH who has been observing otters along a stretch of the river between Denton and Ilkley Bridges for several years. On 11 January she watched a female and juvenile feeding, the mother being very wary, hissing when she realised she was observed before they both disappeared. She saw probably the same two again on 4 February, two again on 6 May with single animals on four other dates between January and May.

On 13 June she watched an otter swimming upstream past Beanlands Island, passing ten small ducklings hidden minutes earlier by the mother duck in a dense grassy tussock on the stony bank.

She also discovered spraint under the footbridge in Strid Wood where Dicken Dyke joins the river, on rocks near Bolton Bridge and on the ledge under the road bridge at Blubberhouses where the Washburn enters Fewston Reservoir.

This latter record appears to be the furthest of an otter up the Washburn valley. In fact, since the reappearance of otters in our area there has never been a reported sighting of an otter on the Washburn River or from the reservoirs with spraint or footprints seen on only four occasions.

There was a report from a fisherman, passed on by RP, who had seen two otters on both 22 and 23 January, downstream of



Badger (*DoC*)

Knotford Nook. Two animals together could be a mating pair for otters will mate at any time of the year with the pair staying together for several weeks. Alternatively they could be a female with a large cub for the young remain with their mother for up to a year.

Another regular otter watcher and photographer, SW, saw two otters upstream of Otley intermittently but consistently in each month from January to April, presumably a mother and cub from the length of time they were together. Since April he had seen an otter only twice, one heading upstream near Burley and another near Sandbeds, between Ilkley and Addingham.

There were no sightings at OWNR but substantial spraint was found there on 8 April by PP. On 17 August one surfaced in the Wharfe below his Otley garden opposite OWNR.

Several reports were passed on by SC who has watched and photographed otters for several years. His contacts reported a number of sightings around Otley in April, one on Otley weir on 28 November and one seen pretty much every day for seven days up to 16 December, between Otley's white bridge and Gallows Hill.

Much further up the Wharfe a number of walkers reported otter sightings at Hubberholme (H&MT).

The long term survival of otters on the Wharfe obviously depends on the health of the river, again under threat of pollution, this time from sewage and agricultural run-off high in nitrates and phosphates.

A December 2022 report indicated that the clean-up targets for England's rivers have been pushed back by more than 30 years, from 2027 to 2063.

Badger *Meles meles*

In lower Wharfedale, just two setts were visited during the year, both of them active. At the one watched most often at least six adults were seen on 19 April but only three adults were in evidence on later visits on 21 May and 19 August. Rabbits were using several of the sett's entrances.

Badgers were reported to have returned to Thruscross after an absence of several years with an active sett with four entrances noted.

A badger paw print at Stainburn Forest was on a track possibly used regularly – they do tend to use well worn paths.

A number were found dead at the roadside: one young one and two long dead adults at different points above Middleton, others single animals above Lindley Wood Reservoir, at Weston and Timble.

The Badger Trust estimates that 50,000 badgers are killed on the roads each year. Badgers are opportunistic feeders and will eat dead animals with the main source probably being roadkill. This obviously leaves them open to being struck by vehicles themselves.

For the third successive year a dead badger appeared on the A658 below Riffa Wood, admittedly a fast road but the coincidence does open the possibility of an animal dumped after badger baiting, a horrific crime that continues with thousands of victims country-wide.

Nationally the badger cull is now in its tenth year with an expected toll of 200,000 badger deaths in 2022, despite a government commissioned study which ran for eight years and concluded that 'badger culling can make no meaningful contribution to cattle TB control in Britain.'

DEER

Roe Deer Capreolus capreolus

There were 63 records submitted this year. 17 of these were at OWNR of up to four animals including one group of a female with two juveniles, perhaps the same as the female with two small young seen there the previous June (PP).

There were nine sightings from the Washburn valley as far up as Thruscross of up to three animals. 16 more came from within a small radius of Otley including a female with a fawn on Otley Chevin on 24 August by David and Nyree Fearnley. Three sightings on Ilkley Moor included one of a male, female and young (M&DL).

Other reports stretched the length of Wharfedale including Threshfield, Grassington, Conistone and Kettlewell and into Langstrothdale at Hubberholme and the fields around Nethergill Farm.

There were no reports of other deer species.



Roe doe (JS)

CONTRIBUTORS

To amphibian, reptile and mammal sightings

Much as I would like to, it is not possible to acknowledge every individual record but they are all important in building up a picture of Wharfedale wildlife. Many thanks to the following who sent in records and my apologies if I have omitted anybody.

David Alred (DA), Simon Carey (SC), Mike & Joyce Clerk (M&JC), David & Nyree Fearnley (D&NF), Robin Guppy (RG), Karl Harrison (KH), Gordon Haycock (GH), Rachel Huxham (RH), Andrew Kelly (AK), Midge & David Leather (M&DL), Ros Lilley (RL), Paul Millard (PM), Alan Moore (AM), Denis & Margaret O'Connor (D&MOC), Ruth Paynter (RP), Paul Purvis (PP), Peter & Ann Riley (P&AR), Jo Smith (JS), Kelvin Smith (KS), Phil Tennyson (PT), Helen & Malcolm Thomas (H&MT), Jenny Watson (JW), Steve Westerman (SW), Ken White (KW).

Mammals, amphibians and reptiles are seen relatively infrequently so many people may have just a few records. All are useful and I am happy to receive them by email, post or conversation with paper lists or spreadsheets equally acceptable.

Denis O'Connor

Grouse and mouse

Two instances of unusual animal behaviour

The protective grouse

My daughter-in-law had an unusual experience when attacked by a male grouse while running on the moor above Stead during the breeding season. These were her thoughts as the grouse became very defensive:

"Wow, that has never happened to me before. What a brave grouse. He saw me coming then chased me so fast and even pecked my calf. A one off, I'm sure."

She continues:

"The next time I went running on the moor near Stead Crag I saw him, waiting. I got a bit scared. What will happen today? I ran slower, thinking maybe I could sneak past. But no, the grouse was waiting for me. This time he was in a prime position on top of a rock which meant he could catapult himself right on to my head like something out of a Hitchcock film. I was running along with a cross grouse on my head, fortunately I was wearing a cap. Who knew I would need protective clothing for a run on the moor? And things continued. I saw him, he saw me. I was repeatedly chased by this same brave little bird, as many as 10 times. I was in awe and scared at the same time but what an adventure.

This male grouse was there every day I was running regardless of the weather, good, bad or terrible but only during the nesting season. Has anyone else had such an exciting experience? I have run on this moor for years and years but only in 2022 have I been chased off by this brave grouse".

A lonely creature?

(10 November 2022) Last night in bed I kept feeling a tickling round my head and the rest of my body. My husband was away. What could it be? a dream? Then a slight nip, a nightmare?

The next morning I pulled the bedclothes back, perhaps an earwig had found its way in. Out shot an indignant little brown mouse disturbed from its lie in. Who was most surprised, it or me? It disappeared only to shoot out from under the bed a little later.

Was it a brave, fearless, foolish or lonely mouse, perhaps a pioneer in search of a warm winter resting place. It seemed totally unperturbed by my restlessness and had perhaps even spent the whole night there. Am I alone in having such an experience? Is this a new development in rewilding or a strange symptom of climate change.

These are the true stories of the grouse and the mouse.

Sarah Ward

And a Nightingale Sang at Fingringhoe!?

It's not great having a birthday in the middle of January, especially when gifted a chest infection. My midwinter misery was relieved by a more welcome present: Ros was planning a Spring trip to Essex to hear, and hopefully see, nightingales.

I've never heard the song of the Nightingale in the UK. A few years ago, we had a sighting of a pair near Lincoln, but too late in the season to hear them sing. So, at the end of April this year, with the camper van packed and ready, we set off for Essex, a place I'd not experienced in the spring or any other season.

It's a long drive, but after a few hours, we were turning off the motorway near Saffron Walden and finding ourselves driving through the most beautiful rural landscape. Picture book villages with thatched cottages, a pond by the green, an Olde Worlde Inn. Essex! Who knew?

Our campsite near the village of Peldon, just south of Colchester, had a wonderful view of the Abberton Reservoir and, as we woke up the next morning, a cuckoo calling! But we were in search of the nightingale, so after breakfast, we set off

for the nearby Essex Wildlife Trust reserve at Fingringhoe Wick. Overlooking the Colne Estuary, the reserve is sited on an area of former sand and gravel extraction, now reclaimed to form an impressive range of habitats: heathland, reedbeds, ponds, scrub, meadow and estuary mudflats.

The Trust claims between 30 to 40 pairs of nightingales, and after pulling into the car park and switching off the engine, we heard at least two of them. And they were everywhere! We did catch the occasional glimpse of the small, brown birds as they dived into the deepest thickets. But it's the song - unbelievably powerful, with its trills and whistles and gurgles - that is so thrilling, intoxicating.

We returned the next day, late in the afternoon, when they were still singing! Of course, other birds were available - cuckoo (seen as well as heard) and an array of warblers, waders and birds of prey. What a birthday present!

So, during these darkest of winter days, plan a trip to Fingringhoe. The only way is Essex.

Terry Flynn

Ben Rhydding Gravel Pits Local Nature Reserve

Wildlife highlights

Despite the dry weather we saw orchid numbers bounce back. Flowering stems increased from about 30 in 2020 to about 60 in 2021 and almost 200 in 2022, roll on 2023! The majority were southern marsh with some common spotted and hybrids between the two. The shorter grass cut in late summer may be helping. This year we also assisted the dispersal of orchid seed (more like fine sandpaper dust than seed) into other areas. Numbers of yellow rattle, ragged robin and devil's-bit scabious also increased.

Thanks to 120 free trees from the Woodland Trust and our great team of volunteers we continued to plant up the gaps in the roadside hedgerow. We also tried to our hand at laying parts of the hedge, I don't think we will any prizes for style but we should get a healthier hedge as a result.

We had fewer otter sightings than last year, they were mainly limited to a large dog otter, with the mother and cubs spending most of their time upstream at Ilkley. Sand martins had a good year helped by the low water levels with about 24 nests, of these about 8 had second broods. Little grebes continue to do well with up 8 birds in the river in the autumn. We were also treated to 4 teal, a woodcock and a snipe. Breeding birds included all 4 scrub warblers. We were unable to locate where the kingfishers bred this year it was either upstream or downstream of the reserve!

In one day in July, we had four records of white letter hairstreak and over 100 ringlets, overall, it was a good year for butterflies. We were also delighted to have our first record of a female golden-ringed dragonfly. We wondered on reflection if we had seen them in prior years and had misidentified them as southern hawkers. It always pays to have a proper look. We understand that they don't normally travel far but they do breed at Timble Ings.

Group Visits

In June we welcomed the 1st Ben Rhydding Beaver Scouts and the 5th Ilkley Brownies and Guides. We did a scent trail to go with the rubbing plaques and set up some pond dipping tables, where the highlights included baby frogs, toads, water beetles and nymphs. A year 9 class from Ilkley Grammar School also paid us a visit.

In December we were joined by our friends from Open Country in Harrogate who coppiced some willows and hazel to help build up the roadside dead hedge.

Accessibility

Not surprisingly, a site that is noted for its marshy grasslands can get quite muddy and uneven. We hope to complete these works before spring 2023. We have used sandstone aggregate from a local quarry which is broadly neutral as we don't want to change the soil chemistry. A local family very generously funded our fourth bench, so now anyone who can walk about 75 metres at a go can now enjoy the full length of the riverbank path.

Thank You

A big thank you to the Society for its support which this year included the funding of tools, fuel for the mower and signage.

Of course, none of this would be possible without our excellent group of volunteers. If you would like to join us, we run weekday sessions as well as Saturday mornings, please give me a call on 07770 840156 or email me at parkes.steve@hotmail.co.uk.

Likewise, if you or your family are members of a local group who would like a day time or evening visit, we would be delighted to host you.

Steve Parkes & the BRGP team



Botany Report

Fortunately life returned pretty much back to normal in the 2022 season with all Covid restrictions fully lifted, and so we were able to carry out a full programme of 9 Thursday botany meetings, ranging throughout our area from the Washburn valley to the upper reaches of Wharfedale and Littondale. Surveys were carried out at Otley Wetlands nature reserve, Bolton Abbey Estate and BNB took part in a nationwide crab apple survey. We also had a great day at Jervaulx Abbey in Wensleydale.

BNB with much help from CH continued with recording in various tetrads in the WNS area, updating old records and finding new ones, all now going towards a future atlas of British botany. Previous records up to the end of 2019 have been incorporated into the BSBI 2020 Atlas which is due to be published in March 2023. It should give a fascinating insight into how our flora has changed since the previous 2000 Atlas with the effects of climate and habitat changes becoming ever more prevalent.

It will be interesting to study the WNS weather report for 2022, but the botanical impression was a mild winter and warm dry spring bringing plants on early, followed by a mostly dry and occasionally very hot summer knocking things back, continuing mostly mild and dry for part of autumn with good fruit harvests for some species. The rains finally arrived in mid-October encouraging a late flush of green growth and flowering, lasting until the first proper frosts in mid-December.

Records received and items of interest are reported in geographical order travelling upstream from southeast to northwest.

Weeton to Lindley

In mid-winter when little is in flower it is always a treat to come across a clump or two of Winter Aconite *Eranthis hyemalis* with their attractive sunshine yellow globes and green ruffs. CH noted 3 plants in Leathley, flowering on 28 January. Giant Butterbur *Petasites japonicus* has been monitored by NF for a number of years at Dob Park (and is still doing well there), but a new site was found this April, a smaller colony of about 20 plants in Castley village. Later NF reported 100 plants Yellow Archangel *Lamium galeobdolon* in Riffa Wood, 250 Wood Stitchwort *Stellaria nemorum* by Lindley Wood Reservoir, and 50 Unbranched Bur-reed *Sparganium emersum* in the Farnley Fish Farm goit. In the same area JP spotted a few plants of Sanicle *Sanicula europaea* and Agrimony *Agrimonia eupatoria*.

The wooded Rougemont Carr lies right at the eastern edge of our area near Weeton and is noted for its fine displays of bluebells. SW reported they were wonderful in early May, but the known patch of Leopard's-bane *Doronicum pardalianches* was still a mass of leaves and no flowers yet. Returning along Gallogate Lane towards Weeton they came across two big patches of Goldilocks Buttercup *Ranunculus auricomus*, really nice.

BNB/CH returned to some of these eastern tetrads to look for spring plants not present on the original survey dates. On Dunkeswick Lane there was Snowdrop *Galanthus nivalis*, Three-nerved Sandwort *Moehringia trinervia*, Ramsons *Allium ursinum* and Ivy-leaved Speedwell *Veronica hederifolia*. In Braythorn Lane, north of Stainburn we saw Hard Shield-fern *Polystichum aculeatum* Sweet Violet *Viola odorata* and Cowslip *Primula veris*, before turning west down the rough bridleway to find Fringecups *Tellima grandiflora* and by the beck side Moschatel *Adoxa moschatelina*. On the west side of Riffa Wood plantation is a damp lightly wooded area by Riffa Beck, a good spot for Large Bittercress *Cardamine amara*, Wood Anemone *Anemone nemorosa* and Wild Daffodils *Narcissus pseudonarcissus*. The hedgerows along the main Harrogate road

near Riffa and the Hunter's Pub are places to look for Hemlock *Conium maculatum*, Oxford Ragwort *Senecio squalidus* and halophytes Danish Scurvygrass *Cochlearia danica*, Reflexed Saltmarsh-grass *Puccinellia distans* and Lesser Sea-spurrey *Spergularia marina*.

Upper Washburn valley

BNB/CH parked at Stacks Point to check the drawdown zone at Swinsty Reservoir, which was quite extensive in early October following this dry summer. The specialist species in this habitat must be able to grow quickly as the water levels reduce through the summer exposing soils, then be happy to be inundated as the water levels rise back up again in autumn to winter. A good list was compiled including Whorled Mint *Mentha x verticillata*, Marsh Ragwort *Jacobaea aquatica*, Tufted Forget-me-not *Myosotis laxa*, Marsh Cudweed *Gnaphalium uliginosum*, Sand Spurrey *Spergularia rubra*, Water-pepper *Persicaria hydropiper*, Trifid Bur-marigold *Bidens tripartita* and Mudwort *Limosella aquatica*.

A couple of weeks later we started at Swinsty Moor to explore the northern end of Swinsty Reservoir and the wooded path to the Washburn Heritage Centre. Mountain Currant *Ribes alpina* was noted near the carpark and Early Hair-grass *Aira praecox* in the churchyard. We moved on to Busky Dike Lane seeing Snow-in-summer *Cerastium tomentosum* on a wall, Wild Strawberry *Fragaria vesca*, Soft Downy-rose *Rosa mollis*, and further on Lesser Stitchwort *Stellaria graminea* and Guelder-rose *Viburnum opulus* where the path took us up to the A59. The roadside verge had colonies of Common Bistort *Bistorta officinalis* and Greater Burnet-saxifrage *Pimpinella major*. We dropped down Cobby Sike Lane on the way back, in lengthening shadows. Wydra Lane is east of Fewston village and becomes botanically interesting around the bridge crossing Spinksburn Beck. BNB/CH found Moschatel and Angelica *Angelica sylvestris* on the stream bank, Cut-leaved Crane's-bill *Geranium dissectum*, Tufted Vetch *Vicia cracca* and Crab Apple *Malus sylvestris* on the roadside, and hiding under a small oak were the spiky rosette leaves of a Monkshood *Aconitum napellus* agg., not in flower.

We held a botany meeting in late May in the Timble to Timble Ings area (see report), but NF visiting earlier in the month noted Marsh Violet *Viola palustris* and was intrigued to find a form of Marsh-marigold *Caltha palustris* (p38) with double petals (flore pleno) growing in the track-side ditch near Timble cross roads. This is most likely to be an escaped garden cultivar. Later in the season alongside the Red Gate track in Timble Ings NF spotted 2 plants of Common Fleabane *Pulicaria dysenterica* and JP came across Zigzag Clover *Trifolium medium*. Deeper in Timble Ings there is a flush area where Bog Asphodel *Narthecium ossifragum* grows, which JP found to be doing well this year despite the ground underfoot being much drier than normal.

BNB/CH explored the path north from Blubberhouses following the River Washburn upstream to Low Dam, which was also visited from the Thruscross direction on a WNS botany meeting in late April (see report). Before reaching Low Dam there is a wooded carr area with nice stands of Wood Horsetail *Equisetum sylvaticum*, amongst Remote Sedge *Carex remota*, Water-cress *Nasturtium officinale* and Hairy Woodrush *Luzula pilosa*. In September BNB checked the moorland above finding sphagnum flushes with Bog Asphodel, Round-leaved Sundew *Drosera rotundifolia*, Cranberry *Vaccinium oxycoccos* and Cross-leaved Heath *Erica tetralix*.

The YNU visited Humberstone Bank Farm, north of Thruscross, in August and their botany list was kindly passed on to us via NF. WNS had a botany meeting there in 2018 to see the Chickweed Wintergreen *Lysimachia europaea* in the plantation adjacent to Redlish Road, finding more than 100

scattered plants on our June visit. YNU reported 45 plants limited to a 2 x 2 metre patch and closer to the roadside. So has there been a decline in numbers or is the later time of year visited by YNU a factor? To the west of Humberstone Bank a vast area of moorland stretches over to Skyreholme and Appletreewick, but is crossed by a good landrover track. BNB visited an isolated tetrad here in an area named The Great Stray, where only 2 plant species have ever been recorded in the past. The grassy track sides held a few species like Eyebright *Euphrasia* agg. and Knotted Pearlwort *Sagina nodosa*, but otherwise only typical moorland species were seen, totalling 80 species. Unexpected finds were a flowering Montbretia *Crocosmia x crocosmiiflora* near the track and a dried-up pool with abundant Water-purslane *Lythrum portula*.

Otley

The Otley Flood Alleviation Scheme built on the old cattle-market site by Otley Bridge was completed at the end of 2021. It involved diverting Kell Beck into a new course outflowing into the river upstream of the Bridge, and the construction of a 1.5 metre high embankment behind it to keep floodwater away from Billam's Hill and adjacent properties. Opening up the previously culverted beck provided new habitat and improved biodiversity. It is always of interest to observe bare landscaped ground to see what plants develop as the year progresses, but in this mostly dry spring and summer of 2022, little happened until autumn arrived. Then a couple of weeks of wetter weather and the site turned into a riot of colour, as a result of planted seed-mixes finally flourishing. The plants were multi-coloured garden varieties of Cosmos, Mexican Toadflax, Rudbeckia, Cornflower, Sunflower, Flax and Poppies, admittedly not wild plants, but garden plants growing wild and in great profusion.

Along the new beck-side some native species were developing - Reed Sweet-grass *Glyceria maxima*, Yellow Iris *Iris pseudacorus*, Winter-cress *Barbarea vulgaris*, Brooklime *Veronica beccabunga*, Purple Loosestrife *Lythrum salicaria* and Fool's-water-cress *Helosciadium nodiflorum* among others. On drier ground some weedy species cropped up, such as Fiddleneck *Amsinckia micrantha*, Weld *Reseda luteola*, Hedge Mustard *Sisymbrium officinale*, and Redshank *Persicaria maculosa*. The area behind the flood-works, once clear of the construction company's materials and equipment, reverted to its previous state, that is as mostly hard standing for the use of Otley Show and other events. It soon became covered in yellow Narrow-leaved Ragwort *Senecio inaequidens* and a few seedlings of Cosmos and the Toadflax had migrated in, so it will be interesting to see what else develops here in a year or so.

MW visited the site in November and recorded the hybrid Scentless x Sea Mayweed *Tripleurospermum inodorum x maritimum*, new to our area. BNB met up with MW/BAT a week later to see the plant, which was somewhat larger than the common Scentless Mayweed, but the key difference is in their achenes which display intermediate characters between the two parents, notably in thickness of achene ribs and shape of oil glands. Nearby, some large fleabanes with bushy heads were confirmed as Bilbao's Fleabane *Erigeron floribundus* and a plant of Field Pennycress *Thlaspi arvense* was seen. Two alien grasses, probably introduced via bird seed, were noted, Japanese Millet *Echinochloa esculenta* and Common Millet *Panicum miliaceum*, and MW had seen a third, Great Millet *Sorghum bicolor* on his previous visit. A shrub growing wild at the Billam's Hill edge of the site was confirmed as Cape Figwort *Phygadeuon capensis*.

In late June DM who works for Natural England joined BNB to check two plants of Pyramidal Orchid *Anacamptis pyramidalis* he'd seen in Otley. They were splendidly flowering on the grassy footpath climbing from Bradford Road to the bridge over the old railway line and adjacent to Alan Wilson's

garden. It appeared that Alan had strewn seeds mixed in sand onto the path about 4 years ago and two plants had popped up this year. Alan clearly has a good technique as orchids are not easy to establish from seed. Their likely origin is the Thorp Arch/Wetherby area where 'pyramidals' are known to occur, and not much doubt that they are the first in Otley! Afterwards we climbed up to West Chevin where DM showed me sites for Common Spotted-orchid *Dactylorhiza fuchsii*, Bitter-vetch *Lathyrus linifolius* and Early Hair-grass. A hay-meadow with plentiful Yellow Rattle *Rhinanthus minor* was looking good.

Other Otley records reported during the year included Toothwort *Lathraea squamaria* on the river bank at the end of Gallows Hill reserve (JP), Mexican Fleabane *Erigeron karvinskianus* on Otley Churchyard wall (BNB), Corn Poppy *Papaver rhoeas* on Burras Lane pavement below the Church wall (BNB), Peach-leaved Bellflower *Campanula persicifolia* in a ginnel off Burras Lane (BNB) and Cyclamen (or Sowbread) *Cyclamen hederifolium* on the old railway line near the golf course (BNB).

Menston

Porritt's Field sits rather incongruously in the heart of Menston village by Cleasby Road, an open green space surrounded on all sides by housing. Its benefactor Miss Beatrice Porritt left it to the local community in 1996 on condition that it should never be developed. It has been used for a number of years as grazing land for cattle and horses, but the trustees now think it could be managed better for nature conservation, aiming to gradually increase its habitat for all types of wildlife by creating a traditional wildflower meadow. Menston Area Nature Trust (MANT) members will look after management operations for the next few years starting with a lighter grazing regime to encourage seed set and more diversity of wild flowers. Members are building up a wild flower nursery to gradually introduce extra species into the field. A Platinum Jubilee oak will be planted in the centre of the field and a few horse chestnuts along the boundary to replace older trees when they die. Volunteers, especially the younger members of the local community will be encouraged to participate in the scheme with recording, etc.

In June a preliminary plant survey of the field was carried out by four MANT members including SW who arranged for their list to be passed on. It totalled 23 herbaceous plants, 11 grasses and 6 tree species. The main grasses were Yorkshire Fog *Holcus lanatus* and Meadow Foxtail *Alopecurus pratensis*, along with frequent Cock's-foot *Dactylis glomerata*, Crested Dog's-tail *Cynosurus cristatus* and Sweet Vernal-grass *Anthoxanthum odoratum*. Stinging Nettles *Urtica dioica* were abundant along the boundaries, and throughout the field were Meadow Buttercup *Ranunculus acris* and Creeping Buttercup *R. repens*. Under the trees gave more shade with some Ivy-leaved Speedwell, Wood Avens *Geum rivale*, Lords-and-Ladies *Arum maculatum* and Wood Dock *Rumex sanguineus*. A few sedges were noted - Common Yellow-sedge *Carex demissa*, Hairy Sedge *C. hirta* and Oval Sedge *C. leporina*. Horse-chestnut *Aesculus hippocastanum* and Small-leaved Lime *Tilia cordata* were the prominent trees along with some birch, hazel, grey alder and wild cherry. So at the moment the list is typical of well-grazed pasture with fairly limited diversity, but MANT are hoping to achieve much greater variety in the future which will benefit other wildlife.

AMG reported that 1 plant of Ragweed *Ambrosia artemisiifolia* had returned to her Menston garden after a year or so's absence. It is an annual classed as a neophyte-casual usually originating from bird seed. AMG's plant was nearly 3 feet tall in early September. On the other hand, her regular Broad-leaved Helleborine *Epipactis helleborine* came up this year but died before fully flowering in the hot weather. Whilst

waiting for a train at Menston station in September BNB checked out a few plants along the ginnel on the south side of the railway line, and found Fool's Parsley *Aethusa cynapium* new to this tetrad. It is an umbellifer, a large genus of quite similar looking umbrella-like white flower heads and finely divided leaves. But Fool's Parsley is easily identifiable by its conspicuous drooping bracteoles. Other finds along the ginnel were Large Bindweed *Calystegia silvatica*, Perennial Sowthistle *Sonchus arvensis* and Tufted Vetch.

Burley

In March SW reported that Wild Daffodils were doing very well in a private wood near Colston House off Moor Lane, growing all along the stream and in many places in the wood. NF identified 20 plants of Thyme-leaved Speedwell *Veronica serpyllifolia* in the field beyond Sun Lane nature reserve in May. Also that month BNB found a good sized colony of Blue Sowthistle *Cicerbita macrophylla*, recognised by its distinctive lobed basal leaves, by the A65 near the Indian Restaurant. Then in August BNB noted some plants of interest along the stream side path from Burley House Field to Sandholme Drive, the sweet smelling Scented Mayweed *Matricaria chamomilla*, Small-flowered Crane's-bill *Geranium pusillum*, Nasturtium *Tropaeolum majus* escaping from nearby allotments, and nearer the stream bank a Great Horsetail *Equisetum telmateia* colony and a shrub of Fuchsia *Fuchsia magellanica*. Then later in the year AR spotted a striking poplar tree on the edge of Burley Moor near where the footpath from Burley Woodhead triangle starts. Leaf samples showed a distinctly flattened petiole, leaf edges with hooked serrations and glands at the leaf base, which suggested Hybrid Black-poplar *Populus x canadensis*, its parents being Black Poplar *P. nigra* and an American species *P. deltoides*.

The annual Burley Summer Festival always includes some different walking themes and this year David Asher (DA) the Walks Organiser contacted BNB about a possible Tree Walk in the village. So after a walk round with DA in May we agreed that a route through Grange Park, down Back Lane to the Village Green at the Malt Shovel corner, then on to Burley House Field would be viable for a two hour walk with over 30 different trees to see. The event took place on a dry day in August with 28 people present. Grange Park had a range of mature species, including Hornbeam *Carpinus betulus*, Cut-leaved Beech *Fagus sylvatica* 'Aspleniifolia', Common Lime *Tilia x europaea*, Turkey Oak *Quercus cerris*, Weeping Ash *Fraxinus excelsior* 'Pendula', Western Red-cedar *Tsuga heterophylla* and two rather fine, gnarled looking False Acacia *Robinia pseudoacacia* with delicate leafage and stems armed with spiky twin thorns. The showpiece on the Village Green was a Wellingtonia *Sequoiadendron giganteum* planted in 2000 and no doubt soon to become the tallest tree in Burley. Nearby two distinctive blue-green Atlas Cedar *Cedrus atlantica* were well adorned with growing cones. In Burley House Field there was Balsam-poplar *Populus trichocarpa* suckering freely from larger trees in Burley House grounds next door. Another suckering tree Aspen *P. tremula* was close by, along with a Copper Beech *F. sylvatica* f. *purpurea* and an exotic crab apple Siebold's Crab *Malus toringo* from Japan with lobed leaves, white flowers and tiny fruit. The orchard recently planted with many varieties of apple, pear and plums is coming on nicely. DA is giving consideration to publishing a Tree Trail booklet based on the walk which would be of interest to many in the local area.

Denton, Askwith and Clifton

The tetrad that covers Denton village and surroundings was partly explored by BNB, starting along the riverbank east of Toll Bridge. This was pretty overgrown in August with lots of tall nettles and Himalayan Balsam *Impatiens glandulifera*, better visited earlier when rich in spring flora. Nevertheless around 50

species were recorded including Bittersweet *Solanum dulcamara*, Garden Solomon's-seal *Polygonatum x hybridum*, Creeping Yellow-cress *Rorippa sylvestris*, Green Figwort *Scrophularia umbrosa* and Branched Bur-reed *Sparganium erectum*. Back on the road by the Denton turn-off there was Spindle *Euonymus europaeus* and Fly Honeysuckle *Lonicera xylosteum* growing over the wall in the woodland. A prominent lone tree in a field was a Walnut *Juglans regia*, then at a nearby track side Red Bartsia *Odontites verna*, and in the hedgerow some sprawling Hop *Humulus lupulus*. Lunch was taken on a churchyard seat looking onto Intermediate Polypody *Polypodium interjectum* lining the wall opposite with some Wall-rue *Asplenium ruta-muraria*. Rue-leaved Saxifrage *Saxifraga tridactylites*, very shrivelled at this time of the year but just discernible, covered a shed roof in the village centre, and by the roadside in short turf were Sun Spurge *Euphorbia helioscopia*, Red Deadnettle *Lamium purpureum*, and the rarer subspecies of Ivy-leaved Speedwell *Veronica hederifolia* ssp. *hederifolia* with larger bright blue flowers. Other interesting finds on the outskirts of the village were Sweet Violet, Spearmint *Mentha spicata*, and a cultivated field with a weedy understorey of Pale Persicaria *Persicaria lapathifolia*, Scentless Mayweed and the hybrid Broad-leaved x Curled Dock *Rumex x pratensis*, which was later confirmed by BAT.

Moving to the Askwith tetrad, we already had a few recent records by the riverside and the stepping stones across to Burley, but few elsewhere, so BNB/CH decided in September to start from the village and explore the northern side of Askwith. We set off up Hallam Lane noting Hop and Black Bryony *Tamus communis* scrambling in the hedgerow, and a colony of Dewberry *Rubus caesius* below. Higher up near Grassguards Farm was more disturbed ground with some aliens and weedy species, Fodder Burnet *Poterium sanguisorba* ssp. *balearicum*, Wild Carrot *Daucus carota*, Bristly Oxtongue *Helminthotheca echioides* and Opium Poppy *Papaver somniferum*. The path west took us to Town Head crossing a tree lined ford with Hard Shield-fern, Lady Fern *Athyrium filix-femina* and Opposite-leaved Golden-saxifrage *Chrysosplenium oppositifolium*. More garden escapes and casuals were on the roadside by Town Head, such as Greater Periwinkle *Vinca major*, Greater Celandine *Chelidonium majus*, Argentine Vervain *Verbena bonariensis*, and on the walls Biting Stonecrop *Sedum acre*, Caucasian Stonecrop *Phedimus spurius* and the rosettes of House-leek *Sempervivum tectorum*. A soil dump on the path to Scales House was colourful with Musk-mallow *Malva moschata* and Shining Crane's-bill *Geranium lucidum*, then Peppermint *Mentha x piperita* and Yellow Iris were seen by a stream on reaching Hall Lane. The roses in the hedgerow along here are complex. There is definitely Japanese Rose *Rosa rugosa*, also a different species with urn-shaped hips which might be a hybrid and/or a form of Dutch Rose *R. 'Hollandica'*. Their stems, covered in fine acicles as well as larger prickles, separate them from dog roses or downy roses. We walked down Hall Lane back to Askwith and noted Intermediate Evening-primrose *Oenothera x fallax*, Caper Spurge *Euphorbia lathyris* and Adria Bellflower *Campanula portenschlagiana* along the village street.

In the Clifton area JP reported Tansy *Tanacetum vulgare* opposite the Roebuck pub and a large patch of Field Scabious *Knautia arvensis* a little further up Newall Carr Road before reaching the Clifton village turn-off.

Ben Rhydding

DAB contacted BNB in April regarding some interesting plants seen on his visit to Ben Rhydding and Wheatley Rakes, which BNB followed up a week later. Poking out of the hedge bottom at the end of Ben Rhydding Drive and the Methodist Church was a fine Italian Lords-and-Ladies which he identified as *Arum* 'Chameleon'. Its leaves had a most distinctive dark and pale green marbled pattern. Up in the Rakes in the boggy clearing

with many large aliens was the white form of Bleeding Heart *Dicentra formosa* f. *alba*, 'stunning' commented DAB. He also mentioned some good *Narcissus* cultivars still in flower - N. 'Emperor', N. 'Empress' and the 'poeticus' N. 'Sempre Avanti'. All these springtime plants soon go over and were not present on our June WNS/BBG botany meeting held there on our way to Stead (see report). ML found 1 plant of Common Hemp-nettle *Galeopsis tetrahit* on the Rakes in August, and also informed BNB that she had been told of the origin of the large aliens there. Apparently they came from a nearby garden's collection whose owner died then subsequently a new house was built on the garden. A lot of his stuff was just bulldozed into the wood, but the plants have clearly taken to their 'new home' and flourished.

SS/BNB met up with Chris Forshaw who lives in Ben Rhydding and is planning to produce another Tree Trail, this one around the centre of Ben Rhydding. He showed us around his projected route with over 50 different tree species described. Essentially the route took us from St John's Church along parts of Bolling Road, Wheatley Lane, Cheltenham Avenue and Ben Rhydding Drive. Some publishing considerations were discussed with SS which will help to decide on the final number of trees to be selected for a forthcoming trail booklet. Some interesting species seen included Corkscrew Hazel *Corylus avellana* 'Contorta', Siberian Elm *Ulmus pumila*, Judas Tree *Cercis siliquastrum*, Damson *Prunus domestica*, Walnut, Deodar Cedar *Cedrus deodara*, and Siberian Crab *Malus baccata* among many others. Fine examples of mature beech, common oak and scots pine and other conifers were also admired. We look forward to Chris completing his project and providing us with another Tree Trail around Ilkley. Incidentally the Tree Trails produced by SS continue to be popular and get re-printed when required. They are still available free from the Grove Bookshop and Tourist Information Centre.

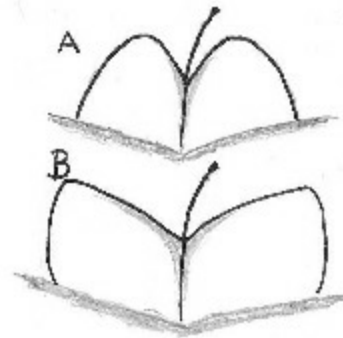
Ilkley

Early in the year BNB went to see if the Winter Aconite in Ilkley Cemetery was in flower. What an amazing sight to brighten up a dull February day, a mass of golden yellow aconites and white snowdrops (p38) intermingled over several square yards! Winter is also a good time to find winter-green plants that tend to hide under taller vegetation in summer. BNB/CH spotted the Stinking Iris *Iris foetidissima* along the riverside path, north bank and west of Old Bridge which had eluded us for a year or two, but still in the same spot at the fence corner by a stream.

In early April DAB offered to help us identify some local Daffodil cultivars if we sent him photos showing the full plant, a close-up with side view and its height measurement. SS devised a route by the riverside within her survey squares SE1148 and SE1248, with BNB/CH joining in to take the photos and grid references. Our first group of 6 different types was on spare ground at the corner of Middleton Avenue and Denton Road. We crossed New Bridge and took the path east on the south bank through to the back of the cemetery (another 5), then onto Beanland's Island (5 more). After crossing the suspension footbridge we followed the river bank east past Nell Bank to the monad boundary opposite Beanland's Island (10 more). DAB shortly replied identifying 23 cultivars out of a total of 26 sent, which we thought was very impressive. As mentioned in last year's review garden daffodils cannot be pinned down to Latin names as they invariably tend to be hybrids of at least three *Narcissus* species, so can only be precisely recorded as their cultivar names. The sandy river banks are ideal places to look for them, especially the older and long established cultivars that are easier to identify. Variation in daffodils includes trumpet size shape and colour, outer petals size, shape and colour in relation to the trumpet, doubled petals or split trumpet, and size of plant, and examples of most of these were seen. Some of the commonest cultivars DAB identified were *Narcissus* 'Carlton',

N. 'Actaea', N. 'Golden Spur', N. 'February Gold' and N. 'Tete a Tete'.

In July the WNS held a 24 hours wildlife recording meeting at Nell Bank Centre, ably organised by Catherine Burton, and an opportunity for all recorders to gather and record on this 25 acre site with a variety of habitats including open grassland, woodland and hedgerow, ponds, taller vegetation, some of it planted, and ruderal areas. BNB/CH spent the first day recording the flora and totalled about 170 species which was increased by another 17 when full records from everyone had been collated. Interesting species we noted, amongst many others, were Cherry Plum *Prunus cerasifera* with juicy ripe plums, Large-flowered Evening-primrose *Oenothera glazioviana*, Field Bindweed *Convolvulus arvensis* and a rare plant for our area Green Field-speedwell *Veronica agrestis* [A]. This tiny speedwell has small blue and white petals and fruit



lobes which barely diverge and have glandular hairs, unlike its commoner relative Common Field-speedwell *V. Persica* [B] with widely divergent fruits and wavy non-glandular hairs. Aquatic species seen in the main pond and dipping ponds were Nuttall's Waterweed *Elodea nuttallii*, Ivy-leaved Duckweed *Lemna trisulca*, Greater Duckweed *Spirodela polyrrhiza* and Rigid

Hornwort *Ceratophyllum demersum*. It was a very successful event which will help Nell Bank with environmental education and form a basis for future bioblitzes.

It seems to have been a good year for Broad-leaved Helleborines. In addition to the Wheatley records (see meeting report) ML sent August records for 1 plant off Cowpasture Road, 15 on Westwood Drive opposite Overdale, and another 40 huge ones within Overdale's walled garden. ML's notes also mentioned how prolific and sweet the blackberries have been despite the summer drought. The situation with bilberries was mixed, many very small or few in number, but in ML's 'secret place' were millions of huge ones, with five pounds of fruit gathered in less than an hour. BNB reckons many of us have our favoured places where the good ones grow!

Addingham

Still on the search for more Winter Aconites BNB/CH found a nice patch growing under trees in the small park off the main street in Addingham at the end of January. Then another one, no longer in flower, was spotted in March when exploring Addingham Moorside for early spring flora. BNB/CH started from Cocking Lane end, passing a dead badger (roadkill), and taking the path via Gatecroft to Upper Gate Croft. Snowdrops and primroses were in flower, and by a stream we found Water Mint *Mentha aquatica* and Alternate-leaved Golden-saxifrage *Chryso-splenium alternifolium*. The old pond filling in now had Bulrush *Typha latifolia*, heads still standing from last year, and we were able to spot the new growth of Pignut *Conopodium majus* and Field Woodrush *Luzula campestris* on steeper grassy banks. The scattered houses along Addingham Moorside were the source of some naturalising escapes such as Pirri-pirri-bur *Acaena novae-zelandiae*, Lesser Knotweed *Koenigia campanulata* and yellow and purple Crocus. Dropping back towards Addingham was Three-nerved Sandwort and clumps of Common Polypody *Polypodium vulgare* on the walls at Weaver's Cottage.

HMB found Bulbous Buttercup *Ranunculus bulbosus* and Goldilocks Buttercup in Addingham near the junction of Sugar

Swifts in Hebden

Hebden Parish Council [HPC] has been involved in various initiatives to support the environment. This year it was proposed to councillors that a new village group should be formed to help. There have always been volunteers but the group has been formalised and holds regular meetings as Hebden Environmental Action Team [HEAT] Some HPC/HEAT projects include the development of a hay meadow, monitoring invertebrates in Hebden Beck, tree planting and the establishment of a community orchard.

A small subgroup is concentrating on Hebden birds. The Hebden Bird Group aims to promote interest in and enjoyment of local birds and to promote a local environment where birds may thrive.

This year we have surveyed summer migrants. In order to establish a population baseline we have identified the nesting sites in the village of four species: swifts, house martins, swallows and spotted flycatchers. You can see our results in the map.

We have some concerns about all our summer migrants. We know that some people actively discourage house martins because of the mess that they make. Their nest sites are mainly concentrated on one house on Main Street where they are safe as long as the property stays under the same ownership.

Our swallows are more widely distributed around the village but the Hebden Hall Farm barns sites are under threat because of a plan to convert them to housing. The spotted flycatcher population appears stable but one traditional nest site was unexpectedly abandoned. The birds did find another site nearby.

We decided to focus on swifts as, arguably, these iconic birds have the greatest potential of the four species surveyed for engaging public interest. Their life cycle offers a strong narrative: they live almost entirely in the air, they migrate thousands of miles and they return to the same nests each year.

Their 'screaming parties' are a characteristic feature of Hebden in summer and attract the attention of villagers and visitors. In addition to locating their nest sites we have recorded the birds' arrival and departure dates and the fluctuations in numbers during the summer months.

Members of the bird group became a village feature, peering with binoculars into the rooflines and braving the biting insects



Swift (PW)

as we hung about at the main road bridge to count maximum numbers of swifts overhead at dusk.

The first birds were recorded on 10 May. As you can see from the map, we definitely identified 10 swift nest sites but we are aware of other possible locations.

Our first 'official bird group survey at the crossroads by the bridge was on 7 June when we recorded 14 swifts. The largest flying party of 30 was recorded on 28 July. Almost all had left the village by 12 August when we recorded 3 over the bridge.

But we were astonished to find that we kept seeing a lone bird. Finally, we managed to follow this bird to its nesting site at the back of Brook Street. We were able to make video recordings of a bird entering the nest. Then on 26 August, we were able to see that there were two adult birds and sounds of young were heard. By the next day they had left.

Wharfedale Naturalists Society has awarded us a grant to support the swift population. We will be able to place swift nest boxes, with sound systems on timers playing call sounds, around the village. The locations will be chosen either to consolidate an existing site or to offer a potential new site.

We are planning a village presentation for Hebden residents in April and offering a guided village walk to look at swifts during Swift Awareness Week, 1 to 9 July 2023. Thank you, Wharfedale Naturalists Society, on behalf of the Hebden Bird Group.

Ros Lilley

Galls on Oak



Marble gall

There are well over 1000 plant galls (an abnormal growth caused by the presence of another organism) in the UK, but most are small and inconspicuous. The most noticeable are some of the galls which occur on oak trees.

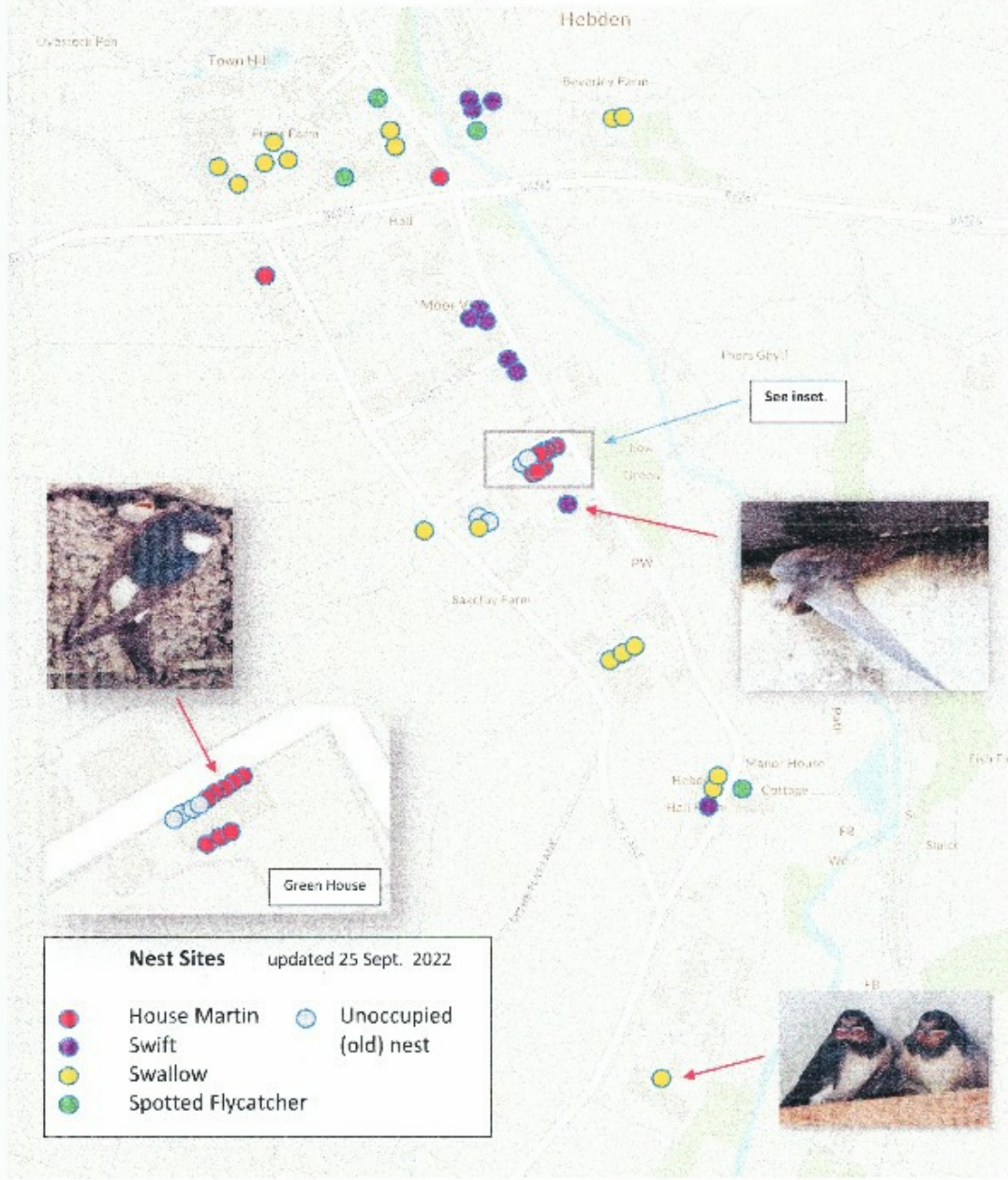
Perhaps the marble gall is the most familiar of all and it has an important place in history as the source of iron gall ink, an indelible ink which has been used for over a thousand years and with which documents like the Magna Carta and the American Declaration of Independence were written, not to mention the drawings of Leonardo da Vinci, the notes of Charles Darwin and

the musical scores of Bach and Mozart. The wasp which causes its formation (*Andricus kollari*) was only introduced into the UK around 1840 from the Middle East – prior to this, galls for ink making were imported. Amazing that a tiny wasp has had such an impact on human history, or at least on its recording!

Now as a child I used to call these marble galls 'oak apples', but that name belongs to another gall, supposedly quite common, but I hadn't found one for ages until this year when I found one within reach on an oak on one of my walks round Burley. It was quite large, about an inch and a half across, and spongy to the touch – and to my delight, on it were several shiny little wasps sticking ovipositors right in! These were chalcid wasps (from the Greek *khalkos*, 'copper'), possibly *Torymus* species (thanks to George McGavin for this!). These were not the cause of the gall (a wasp called *Biorhiza pallida* lays its eggs on developing buds and the larvae stimulate the tree to produce a gall for protection and food) but rather a parasitoid of the gall wasp larvae. The full story can be much more complicated with several species of wasp possibly present, parasites of parasites – but that's what makes insects so fascinating!

Anne Riley

Hebden Summer Migrant Bird Survey, 2022



- Nest Sites** updated 25 Sept. 2022
- House Martin
 - Swift
 - Swallow
 - Spotted Flycatcher
 - Unoccupied (old) nest



Bird turnover in the garden

In the last Annual Review I mentioned that we had a large number of bullfinches visiting the bird feeders in our garden. Towards the end of the year, in amongst the usual range of visitors, were some small brown-streaked finches. On closer inspection they were lesser redpolls, a species we had not seen before here.

As the winter went on, these novel visitors disappeared, and the bullfinches became less numerous, or at least, they reverted to visiting singly or a pair at a time. A varied collection



Siskin (PW)

of tits continued to come, but now it was the turn of siskins to appear in large numbers, 30 or more spending a large part of the morning in a tree at the bottom of the garden, and swooping down to coat the feeders in yellow plumage. As we enjoyed the siskins we realised that the little brown birds were there again, but this time in their spring plumage, the males with subtle pink plumage on the breast and the red feathers on the head that give the species its name. The female lacks these colours. Sometimes there were half a dozen

redpolls at a time who took over a feeder.



Lesser redpoll (JS)

Hedgehogs and others

Early in the summer we opened the back door to let the dog out before bedtime and a hedgehog was on the lawn. Dog went to sniff it and hedgehog curled up. I called the dog back, and when we looked again at the hedgehog it was legging it at impressive speed towards cover. This was a recurring theme, even when the dog wasn't there. We had very wary hedgehogs.

A trailcam showed the presence of three hedgehogs, one small and two much larger, one differentiated by a lighter band across its back. They were seen on cam at about 3am mostly. We kept track of them for some weeks, but although the weather was hot into September, they disappeared from our view early in August. We hope to see them again, or others, in 2023.

One hot day in summer we took our afternoon tea down to the patio at the bottom of the garden. Nothing on the path as we went down. I went back to the house for something ten minutes later, and there was a large dead rat on the path. The dog wore a nonchalant 'no big deal' air.

As summer went on, there were still birds of all sorts coming to feeders, but gradually the mix was no longer dominated by one species. Numbers slackened during August, then as September arrived the birds on the feeders were very few compared to the earlier peaks. Were the birds finding plenty of food in the wild? Or had some disease struck?

We need not have worried, the birds returned in variety in October, but this time it was the goldfinch that was in abundance. Like the siskins before them, they took over the tree at the bottom of the garden as their rallying point, and from



Goldfinch (PW)

there came down to the feeders, or else took off as a flock for some unknown destination. But they kept coming back, and as the year ended they were still the most conspicuous birds outside our windows.

Other birds that visit the garden include two pairs of pheasants, up to ten crows at a time, ditto jackdaws, and up to a dozen blackbirds (probably Scandinavian) in winter. The pheasants confine themselves to the ground, but the crows, jackdaws and blackbirds, in spite of not being built for the job, manage to scabble a tenuous foothold on a feeder and peck out or dislodge enough sunflower seeds to keep them happy.

Dunnocks you normally see foraging on the ground, but these too can perch on a feeder when the whim takes them. Blue tits, coal tits, great tits, chaffinches and robins are common. Less so, but still often feeding, are longtailed tits, nuthatches and great spotted woodpecker. Sparrowhawks visit, and one day in summer one sat on top of the feeder pole for a while. Its hopes were unfulfilled.

John Stidworthy

Other mammals we encountered included a bank vole that popped out from a flowerbed to pick up seed fallen from a feeder and popped back, never to be seen again. Also a woodmouse that appeared twice in a week, walking along a wooden railing on the outside of our first floor balcony. Quite what the attraction was we were not sure. It must have climbed up the stonework of the house to get there and there was no way back other than climbing down or falling off.

Bats were scarce this year but we did detect common pipistrelles late in the summer.



JS

Speedy hedgehog

Ladybirds 2022

The widely held impression that insect numbers have steadily declined over the last few decades is backed by the 'car numberplate splat' study (The Bugs Matter Citizen Science Survey) which shows a decline in abundance of flying insects in the UK by 64% between 2004 and 2022. So, it's no surprise that one sees many fewer ladybirds than 20 years ago!

On a positive note, it was the best year for 2-spot records for over a decade (27 records totalling 131 individuals.) Around 2010 when Nevil Bowland was the recorder, there were several years when he noted 2-spot as 'the most recorded ladybird'. A steady decline followed (probably in part due to growing numbers of Harlequin Ladybird) with just 1 record in 2017, and just a handful each year since. It will be interesting to see what 2023 brings!

2022 records come mainly from Paul Purvis and from me - Hazel Watson and Ric Else who contributed so many in 2021 are no longer in Wharfedale, so a direct comparison with last year is not possible.

7-SPOT LADYBIRD *Coccinella 7-punctata* (38/191)

I found my first ladybirds of the year including two 7-spots on 4 January on the wooden fence by Stead Wood. Audrey Gramshaw brought me one on 1 February which she feared would be a Harlequin, but it was a 7-spot. On a warm sunny day on 25 February I counted 20 on ivy by the Bull Farm. Sadly a few days later someone (misguidedly in my opinion) had pulled



7-spot on ivy

all the ivy from the fence and on 8 March I found just three. On 18 March on a wooden fence with some ivy near Scalebor pavilion I counted 26 including three mating pairs. The following day I found 30! I continued to find good numbers on that fence through the rest

of March. Our first garden record at Woodhill was of three on 24 March. There were scattered records from Burley throughout April, and Paul Purvis found one by the sailing lake at OWNR on 8 April. On 23 May PP recorded several larvae on nettles by the fishing lake at OWNR and on 1 June an adult with both larvae and pupae. Records of small numbers continued from PP around Otley through July, August and September and my last record is of 2 on Stead Wood fence on 18 October. So, after a promising early start, not a very good year for the 7-spot with no really big counts.



Mating pair of 7-spots

EYED LADYBIRD *Anatis ocellata* (5/5)

I found this large, handsome ladybird (7- 8.5mm) in March, April and again in August in the 'usual' place on the pine path SE152458 near Scalebor.

CREAM SPOT LADYBIRD *Calvia 14-guttata* (6/9)

A reasonable year - first sighting in February under a pile of stones in PP's garden and then through April and May around Burley. The peak count was four on Stead Wood fence on 19 May (AR).

2-SPOT LADYBIRD *Adalia 2-punctata* (27/131)

As noted in the introduction, it was a very good spring and early summer for 2-spot ladybirds with a peak count of 31 on a patch of nettles near the fishing lake at OWNR on 10 June (PP). Karen



Mating 2-spots

Shackleton found a nice *sempustulata* form on her outside bin on 5 May which she initially thought might be a pine. There were a few records of singles through the rest of June and July (PP and AR), and then a final record of two on Stead Wood fence on 4 November (AR).

ADONIS LADYBIRD *Hippodamia variegata*

No records this year.

10-SPOT LADYBIRD *Adalia 10-punctata* (5/9)



10-spot

This small ladybird (~4mm) is very variable in colour and pattern - even more so than its close relative, the 2-spot. It has brown legs whereas the 2-spot has black legs.

The first record came from PP on 24 February - under the same pile of stones as a cream spot. I found an attractive chequered form (*decempustulata*) on a wooden fence near Scalebor pavilion on 19 March and on 13 April a mating pair plus one on



Mating 10-spots

a metal fence at Scalebor. The last record was 4 November, two *decempustulata* on Stead Wood fence along with harlequins and 2-spots.

14-SPOT LADYBIRD *Propylea 14-punctata* (8/9)

The first record was on 14 April at Sun Lane and then odd ones around Burley and in our garden through May and June. PP found one on the patch of nettles near the fishing lake at OWNR on 10 June and the last record was from Green Lane, Otley on 23 June, also PP.

22-SPOT LADYBIRD *Psyllobora 22-punctata* (4/7)

No return to the big numbers of 2020 – just a few records from the Bull Farm Path in Burley (AR) and one on 11 August on garden furniture in PP's back yard.

ORANGE LADYBIRD *Halyzia 16-guttata* (4/8)



The first record was of three individuals on 4 January on Stead Wood fence (a good place!). Also a 20 January record of one found under a nest box lid when checking the boxes in the Paddock at Sun Lane. The last record was of an individual on 24 August on a Cosmos flower at Woodhill.

LARCH LADYBIRD *Aphidecta oblitterata*

No records this year.

PINE LADYBIRD *Exochomus 4-pustulatus* (1/1)

Just one record on a Cosmos flower in PP's garden on 9 August.

KIDNEY SPOT LADYBIRD *Chilocorus renipustulatus* (2/2)

One larva on 13 July (funny looking little thing, very spiky!) and one adult on 5 August, both on the Pine Path (AR).



Kidney-spot larva

18-SPOT LADYBIRD *Myrrha octodecimguttata* (4/4)

Four records – two in March and two in June on the Pine Path (AR).

STRIPED LADYBIRD *Myzia oblongoguttata*

No records despite diligent searching!

CREAM-STREAKED LADYBIRD *Harmonia quadripunctata* (2/2)

Just two records this year in June on the Pine Path (AR).

HARLEQUIN LADYBIRD *Harmonia axyridis* (36/782)

Rather fewer records this year, but Harlequin still outnumbers all native ladybirds put together.

The first record was of a small aggregation on Stead Wood fence (along with orange and 7-spot) on 4 January (AR). David Varney reported lots overwintering in his house in Ilkley. PP's first record was 9 March on a hyacinth in his back yard, and Nyree Fearnley found one in her kitchen. Through March and April they turned up in small numbers and then in May PP recorded 23 on the patch of nettles near the fishing lake at OWNR where he was also finding lots of 2-spots. I counted 40 between Scalebor and Stead on 17 May and again on 2 June. PP found 32 on 'the' nettle patch on 10 June and lots of larvae and pupae through July and

August. On 13 July, Audrey Gramshaw brought me a pupa on a leaf in a pot. When we opened the pot, there was a newly emerged Harlequin Ladybird with the wing cases pale orange and spotless! I watched the spots develop and colour deepen over the next 48 hours. I no longer routinely squash harlequins (lost battle!) and even fed it some aphids before letting it go! Numbers really built in October and I could easily count over 100 on fences round Scalebor and Stead Wood. On 27 October between Stead Wood and Stead Lane there were hundreds flying, landing on trees, walls and on me! My last record was of a solitary one under ivy leaves on a Scalebor fence on 29 December.



Newly emerged

Apologies to anyone who sent records and not mentioned in the text.



At 3hr



At 48hr

Anne Riley

Yellow with a Pearl Border

The poor, exhausted, often rather drab warblers, the stilts and the boobies that seem to increasingly find themselves in the UK are not on my photographic agenda; unless of course they land on the bird table. Similarly, I feel no compulsion to chase rare migrant butterflies which are also showing up more regularly in the UK, like the subtly beautiful long-tailed blue which has arrived, and indeed bred successfully, in the South of England.

However, the chance to acquaint myself with Yorkshire's rarest resident butterfly finally became too great a temptation and, after a bit of research and conversation with experts in the field, I decided to attempt an encounter with this depressingly scarce fritillary. Given the tendency these days for some butterflies to emerge early, and a vague recollection that this species was historically known as the April Fritillary, I decided to chance my luck on a nice warm day towards the end of that month.



I had memorized directions to the main site and heeding the catchy instruction to 'keep the sewage works firmly on my left' I wandered slowly in search of likely habitat; a mosaic of bracken, scrub and grassland. A site fitting the description was easily located, and I felt sure one of these beautiful insects would glide past at any minute or even better perch on a frond of bracken. None did, and I had to settle for a fleeting glimpse of an annoyingly fast flying painted lady. It turned out I had attached too much importance to the butterfly's historic name and failed to factor in the effect that the adoption of the Gregorian calendar in 1582 would have on my plans; surely a common mistake. The April tag might still apply to southern colonies but generally not to those on the North York Moors.

All is never lost on wildlife forays, even if the anticipated star of the trip fails to appear, and I whiled away a couple of hours exploring the area and after all I was pretty sure I had successfully located the correct spot for a return visit later in the Spring. The weather, amongst other things, conspired against my return until nearly three weeks later when I once again

made what now felt like a familiar journey. The gorse-strewn hillside gleamed with flecks of its gaudy yellow flowers and their coconut scent pervaded the calm air. From suitable vantage points male yellowhammers proclaimed dominion over their part of the patchwork and added a subtle lemon tinge to the tops of their chosen podia.

It was by no means warm, about sixteen degrees, but the breeze was very light and breaks in the cloud had been promised so I sat down to enjoy an early lunch of something more substantial than the 'little bit of bread and no cheese' suggested by my gold-feathered companions. My hopes were raised when a red admiral sped past until I remembered that, unlike the pearl bordered fritillary which requires the elevated temperature of the leaf litter to even consider emerging from its chrysalis, this insect manages to overwinter in the UK. I proceeded to finish lunch then, as if at the tweak of the thermostat, the temperature rose by about five degrees and right on cue a coppery coloured insect whizzed by and

disappeared down the sward. It couldn't be anything else could it? The right size, a fast low flyer and most importantly the right habitat. Even so the doubts crept in. Could it be a comma, a wall, a very early, very large skipper or a late first-brood speckled wood. I stood up camera at the ready and much to my delight after a short saunter, there on a frond of bracken was the beast I had hoped to see.

Fritillaries, possibly the orchid equivalent of the butterfly world rarely disappoint. Whether my judgement was coloured by our

protracted introduction, and although I didn't perhaps do it justice in my photograph, this one lived up to its billing. The checkerboard black lines and spots on marmalade-copper wings contrasted beautifully against the dull brown of the dead fern. Soon of course, they were everywhere and throughout the afternoon and, I must admit, early evening I watched them flit along the bracken rides occasionally, rather tantalisingly, pausing briefly to nectar on a bloom of blue bugle, until hunger too got the better of me. One or two local naturalists appeared and suggested, as naturalists are prone to do, that the 'frits' had of course been flying for a week or two but I refused to become at all crestfallen and headed off for supper.

My experience was crowned to perfection in Kirkbymoorside with arguably the best fish and chip supper to be enjoyed anywhere other than at the coast. On the drive home I reflected on the gorse peppered hillside with its lemon-finch soundtrack which had indeed provided the perfect foil for the pearl bordered beauty whose acquaintance I had finally made.

Kelvin Smith



Double-flowered *Caltha palustris* (NF)



Crab apple (BB)



Milk thistle (BB)



**False-toothed
Lady's-mantle** (BB)



Chives (BB)



▼ Rustyback (BB)

Eastern Sowbread (IB)

Rayed tansy (BB)

▼ Winter aconites & snowdrops (BB)





Broom moth caterpillar (NF)



Shed skin of broad-bodied chaser (NF)



Curlew in snow (DoC)



Azure damselflies (DoC)



Comma butterfly (NF)



Blackcock (KS)



Fly on dandelion seed head (NF)

Flowers at Sun Lane reserve (NF)





Hare (KS)



Lesser black-backed gull (KS)



Double-headed field scabious (NF)



Little ringed plover (KS)



Mason bee
Osmia
bicornis at
a bee hotel
(AR)



Common
sandpiper
chick (DoC)



Top left: **Green hairstreak (NF)**

Top right: **Golden plover (DoC)**

Middle left: **Lapwing (KS)**

Middle right: **Meadow pipit (KS)**

Bottom left: **Moorhen & chicks (KS)**

Bottom right: **Bittern (PW)**



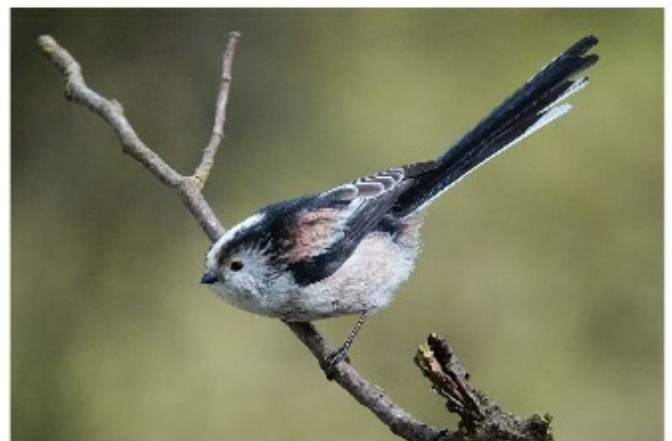
Dunnock (PW)



Sedge warbler (PW)



Pochard (PW)



Long-tailed tit (PW)



Female brambling (RL)



Male brambling (RL)



Plume moth (KS)



Puss moth (AR)



Walnut orb-weaver *Nuctenea umbricata* (AR)



Sicus ferrugineus (AR)



Snipe (KS)



Southern hawker (DoC)



Female blackbird on *Mahonia* (PW)

Red-legged partridge (KS)





Skylark (KS)



Small coppers mating (NF)



Oystercatchers with redshank (NF)



Green silverlines (NF)



**Gorse
Shield Bug
(AR)**



Robin (PW)



Field of bog asphodel on Ilkley Moor (JS)



Cucumber spider (AR)



Froghoppers *Cercopis vulnerata* mating (AR)



Juvenile great spotted woodpecker (?)



Swallow-tail moth *Ourapteryx sambucaria* (AR)



Chalcid wasp *Torymus* sp. (AR)



Holly blue (AR)

To Catch a Thief

Those of a certain age will no doubt remember that in the 1960s and 70s the vast majority of households in the UK had milk delivered direct to the doorstep; usually in good time for breakfast. However, the rise of the supermarkets, who could sell milk cheaper than the poor milkman could buy it, and the increased use of plastic containers saw doorstep bottle deliveries dwindle massively by the turn of the century.

local milkman was still supported. Our village had a few bottles on doorsteps, but the tops remained intact, so I began to wonder if, with a bit more material to work on and despite the distraction of readily available bird table fare our local tit population might rediscover the skill.

I decided to do a small, rather unscientific, experiment to see how long it would take an inquisitive bird, and of which species, to discover the potential source of food, and placed



An associated memory from the home delivery era, and fascination for me, was the fragmented tinfoil scattered across the doorstep whenever our bottles were left unprotected for any length of time. The same thing happened to the more vulnerable, crated, third pint bottles which were delivered to our primary school early each morning. Damaged tops invariably meant that some of the contents were missing and although these incidents amused us kids they annoyed our mother who seemed to divide her anger between her own forgetfulness and the pesky birds before, with no thought of Psittacosis, she would grudgingly decant what she considered to be the contaminated part and pour the rest on our cornflakes. In both scenarios members of the titmouse family were implicated and were occasionally caught in the act. But which species had made the initial discovery and was it just curiosity or was it their sense of smell that alerted them that these unnaturally shaped vessels contained food?

With the demise of the doorstep delivery, and the increased tendency for bottle protection with purpose made plastic covers, did the habit just die out or had our modern taste for semi-skimmed meant that the thief's efforts were now insufficiently rewarded with energy rich cream to justify the effort of opening the bottle. In some rural areas milk rounds endured and the

several capped, but unprotected, bottles of full fat milk near the bird table. They were used as perches and latrines, but the contents were frustratingly ignored. I made small beak-like incisions in the foil but to no avail as the tops, although dirtier, remained intact but when I supplemented the fluid with crushed peanuts blue, coal and great tits as well as a robin soon cottoned on. I was however no nearer finding which species might reinvent the technique of opening the cap so I took away the nut component and they all soon lost interest. Stories about bird flu began to appear in the media so for fear of widening the avian skill base and incurring the wrath of my neighbours I photographed one of the candidates and stopped the project.

The war on plastic is thankfully gaining traction and perhaps for anyone who opts for their milk to be delivered the old-fashioned way it is still sensible to protect your bottles, and ensure your birds have a continuous supply of peanuts, just in case one of the redtop newspapers finds an excuse to do a page three-type scare feature on the diseases spread by resourceful *great tits*.

Kelvin Smith

Wharfedale Weather Summary

Rainfall

Total rainfall for the year was 983 mm which is higher than perceived because of the memory of the hot dry summer

This compares with **annual average rainfall** of 940mm since 1926 & 1001mm this century

The **lowest annual rainfall** was recorded in 1964 with 605mm & the highest was 1391mm in 2020

For the third consecutive year there was very little rain in April (32, 10 & 16mm). However the **lowest month** was August with 22mm

The **highest monthly rainfall** was recorded in February with 161mm with 155mm in November

Temperature

The **coldest months** were December (average 2.03°C) & January 3.53°C

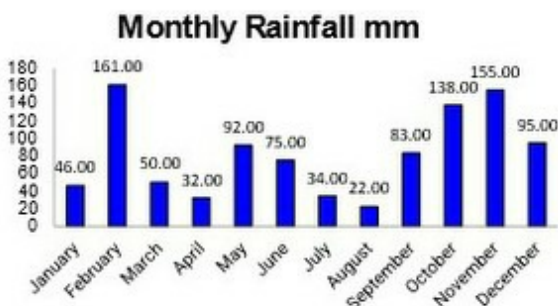
The **warmest months** were August & July (18.27°C & 18.19°C) & the highest daily temperature was 39°C recorded in July when there were 5 consecutive days over 30°C. August had a high of 34°C when again there were 5 consecutive days over 30°C

The **average daily temperature** was 10.00°C (9.59°C for 2020) compared to the average since 1936 of 9.04°C & 9.68°C for this century.

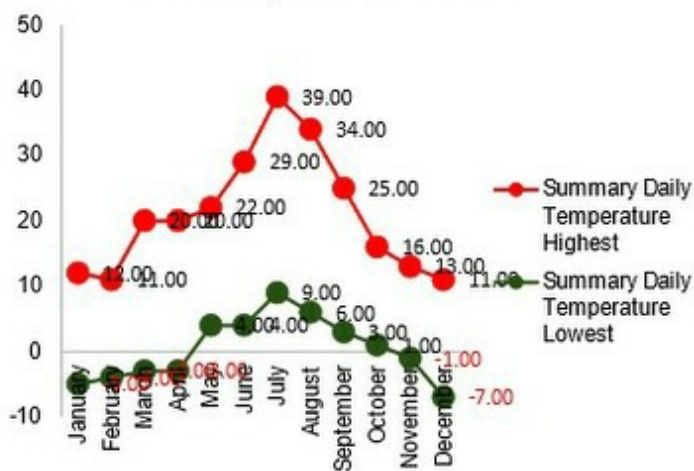
The **coolest year** was 1986 at an average of 7.1°C & the warmest were in 2004 & 2007 at 10.4°C; the only year above 10°C outside this century was 1959 at 10.1°C

Temperatures of **zero & below** were recorded in 6 months of the year with the latest sub zero temperature being on 28 April

Peter & Sheila Bancroft



Maximum & Minimum Monthly Temperature



Hill and Back Beck. A newspaper article HMB came across explained that Goldilocks Buttercup was not a straightforward species but an aggregate of apomictic forms which can reproduce themselves independently of sexual pollination, resulting in many clonal forms. The jury is out on whether we continue to regard it as one species or split into lots of microspecies (let's hope not!). Later in the year NV mentioned she had a 'triffid' growing in her garden cold frame, no idea where it came from but possibly a bird seed alien. It grew from a small bump in June and by the end of October was around 3 feet tall with one flower head out and more to follow. It was a Milk Thistle *Silybum marianum* (📷 p38) which has purple flowers surrounded in a ruff of spiky bracts and broad but attractive white marbled leaves with spiny edges, so interesting and a rare sight for some of us.

NV/HMB have also been surveying the lower section of Riddings Lane which heads northwest from Addingham village towards Riddings Farm, but the path continues to Highfield House on the golf course. About 70 herbaceous species and 15 woody species were recorded, many being typical native hedgerow plants, but with a few escaped garden geraniums, stonecrops and a Buddleja thrown in. BNB/CH covered an adjacent area around Bracken Ghyll golf course and Heathness Gill adjacent to the main A65 in November. Near High Laithe were crab apple and plum trees. The steep sided, wooded valley of Heathness Gill with some boggy patches was of greater interest with Hard Shield Fern, Soft Shield-fern *Polystichum setiferum*, Borrer's Male-fern *Dryopteris affinis* ssp. *borreri*, Wood Speedwell *Veronica montana*, Bugle *Ajuga reptans*, Dog-violet *Viola riviniana* and Greater Stitchwort *Stellaria holostea*. A large sedge needs to be checked next year when in flower.

HMB also provided some information on the programme of events organised by the Addingham Environment Group, encouraging local participation in the recording of all forms of wildlife, in addition to active involvement in conservation issues in the Addingham area and definitely of great benefit to the local community.

& Hazlewood

SW/HMB enjoyed a wonderful spring walk up Kex Beck, parallel to the main A59, seeing lots of Alternate-leaved Golden-saxifrage really spreading well (below Oaks Hill), along with many primroses. Bluebells were just starting to come out. In Hazlewood the daffodils and sweet violets were still plentiful, but the latter were starting to be overtaken by cleavers and nettles. ML also visited in spring but thought numbers were less this year, so probably the date chosen makes a difference in these warm and dry early springs we seem to be experiencing now. BNB/CH also explored the Kex Beck area from Hazlewood finding Leopard's-bane by the A59, then along the valley of the beck Sanicle, Betony *Betonica officinalis*, Cat's-ear *Hypochaeris radicata* and Spring Sedge *Carex caryophylla*. Higher up the valley was Large Bittercress. Later in the year BNB checked the craggy gorge below Deerstones to re-find patches of the gametophyte form of Killarney Fern *Trichomanes speciosum*, pretty much unchanged since first recorded in 2005. Another re-find was Great Horsetail from a 2008 WNS botany meeting, seen here in a wooded area by the beck where the path crosses on its way up to Howgill Farm. A couple of recently made ponds contained Yellow Water-lily *Nuphar lutea*, Water-plantain *Alisma plantago-aquatica*, Water Horsetail *Equisetum fluviatile* and Intermediate Water-starwort *Callitriche brutia* ssp. *hamulata* recognisable by its characteristic 'spanner ends' to its linear leaves.

BNB/CH explored some quiet paths between Langbar and Beamsley on a sunny August Bank Holiday. Along the path from Howber Hill Farm

to Curren Hall we found some Quaking-grass *Briza media*, Early Hair-grass and Betony. At the Curren Hall pond was Hybrid Monkeyflower *Erythranthe x robertsii*, Hart's-tongue *Asplenium scolopendrium*, Marsh-marigold and Sweet Violet. A little further down the road a pleasant path heads west then northwest to Beamsley, crossing fields, conservation plantings and woodland edges. Mostly common species were noted, but Smaller Cat's-tail *Phleum bertolonii* was of interest, then by Thurstones Beck was Water Forget-me-not *Myosotis scorpioides*, Apple Mint *Mentha x villosa* and the hairy species of Dog-rose *Rosa corymbifera*. The hedge along Lowfield Lane contained some English Elm *Ulmus procera*, rarer than our common native Wych Elm *U. glabra* and not helped by its greater susceptibility to Dutch elm disease. The path by Crier Hill brought us on to the road climbing back up to Langbar. Flat-sedge *Blasmus compressus* is regarded as a scarce species for our area, but was found to be still flourishing by the Ling Chapel turn-off, last recorded in 2012, and we also spotted Greater Burnet-saxifrage, Yellow Rattle, Tufted Forget-me-not and Bristle Club-rush *Isolepis setacea*.

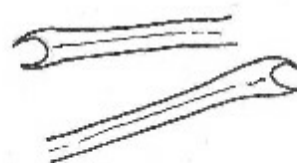
Bolton Abbey, Halton East & Barden Moor

Prior to a March meeting with BAE, BNB/GH had time to meander along the road near the Estate Office and noted a colony of 'Hidcote Blue' Comfrey *Symphytum x hidcotense* on the grass verge plus Thale Cress *Arabidopsis thaliana* on the wall top of a pit. Further along this back road one comes to the village of Halton East where a few tetrad boundaries meet up and so were subject to some plant recording over the year. In April, BNB/CH looked for early season plants in SE05L on the south side of Halton East, finding Early Dog-violet *Viola reichenbachiana*, Aubretia *Aubrieta deltoidea* and Creeping Comfrey *S. grandiflorum* around the village. In wooded Lumb Gill there was Wood Anemone, Sweet Woodruff *Galium odoratum* and Moschatel. On the road leading to Draughton village we found Water Avens, Sweet Violet and Wild Strawberry, then in an A59 layby Peony *Paeonia officinalis* and Stinking Iris.

The northern part of Halton East is in tetrad SE05M, stretching north to Halton Height, which BNB explored in June. The moorland east of Halton Height is dominated by heather with only limited numbers of other acid-loving species, but an upstanding and better drained mound was more interesting with Heath Speedwell *Veronica officinalis*, Early Hair-grass and Common Dog-violet *V. riviniana*. The path to Halton East passed a wet flush with Sharp-flowered Rush *Juncus acutiflorus*, Creeping Forget-me-not *Myosotis secunda* and Greater Bird's-foot-trefoil *Lotus pedunculatus*. Marsh Foxtail *Alopecurus geniculatus* was nearby. The village roadsides were more species rich with common wayside plants including Columbine *Aquilegia vulgaris*, Water Avens and Common Polypody on the wall tops. A cheery hello came from IB and Huw passing by on their bikes.

To the west of Halton East is tetrad SE05H which BNB/CH checked out in September, starting at Halton Height. The grass turf here is quite rich in different species but so well grazed by the sheep that the plants are really tiny, so definitely a 'hands and knees job' with lens in hand to identify them. Eyebright was managing to flower, seen along with the leaves of Yarrow

Achillea millefolium, Lesser Trefoil *Trifolium dubium* Lady's Bedstraw *Galium verum*, Self-heal *Prunella vulgaris*, Fairy Flax *Linum catharticum* etc. The bridleway descended towards Halton East passing a flush with Bog Pondweed *Potamogeton polygonifolius*, Marsh Pennywort *Hydrocotyle vulgaris* and Lesser Spearwort *Ranunculus flammula*. We stayed inside the tetrad by taking the path west to Calm Slate and on to Eastby village. The walls opposite the houses



Intermediate
Water-starwort

were enhanced by colonies of Ivy-leaved Toadflax *Cymbalaria muralis*, Reflexed Stonecrop *Petrosedum rupestre*, White Stonecrop *Sedum album* and Houseleek rosettes, whilst at their base were Toad Rush *J. bufonius*, Silver Lady's-mantle *Alchemilla conjuncta* and Fool's Parsley. The road back to Halton Height became more interesting when we came across a sphagnum bog area with Cranberry, Cowberry *Vaccinium vitis-idaea*, Cross-leaved Heath and Round-leaved Crowfoot *R. omiophyllus*.

The tetrad above Halton Height SE05J covers part of Barden Moor with Lower Barden Reservoir which BNB visited in October. The reservoir track crosses heather dominated moorland with few other species, but the grassy track foundations enable a more neutral turf to grow and more variety, such as Self-heal, Germander Speedwell *Veronica chamaedrys*, Daisy *Bellis perennis* and Thyme-leaved Speedwell. In a gravelly area Parsley-piert *Aphanes arvensis*, Common Whitlowgrass *Erophila verna* and Common Bird's-foot-trefoil *Lotus corniculatus* were found. A stream ravine gave better shelter and more nutrients for Field Forget-me-not *Myosotis arvensis*, Lemon-scented Fern *Oreopteris limbosperma*, Marsh Violet and New Zealand Willowherb *Epilobium brunnescens*. The drawdown zone at the end of the reservoir had some typical species including Shoreweed *Littorella uniflora*, Red Goosefoot *Chenopodium rubrum*, Marsh Cudweed, Water-purslane and Marsh Pennywort. In a sphagnum flush beyond was Cranberry, Cross-leaved Heath and Velvet Bent *Agrostis canina*. The track zig-zagged up to a higher level then joined the track heading up to Upper Barden Reservoir. Near the junction occurred the best finds of the day, on a small wall embankment stabilising the track edge. Here were Black Spleenwort *Asplenium adiantum-nigrum* and Rustyback Fern *A. ceterach* (📷 p38) both uncommon but the latter was definitely an unexpected surprise in this elevated moorland spot. Unfortunately ongoing track improvements hereabouts may affect their long term future.

Barden to Appletreewick

The big patch of Herb Paris *Paris quadrifolia* in the woodland southwest of Barden Bridge was reported by NF to contain around 100 plants, so continuing to do well. It must be our lowest site in Wharfedale, the next nearest being in Grass Wood. In early March IB noted a Cyclamen in flower in Troller's Gill near Appletreewick, growing 3-4 metres off the valley floor on a grassy ledge. It looked to be the spring flowering Eastern Sowbread *Cyclamen coum* (📷 p38), most likely an escape from Parcevall Hall.

BNB/CH recorded the tetrad around Appletreewick village and riverside. There were about 80 common species along the village street, then in the hedgerow between the two pubs a purple autumn flowering crocus was spotted, taken to be Autumn Crocus *Crocus nudiflorus*. More were in flower on the grassy verge outside the Craven Arms. Along the riverside path were Common Basil *Clinopodium vulgare*, Peppermint and Sweet-briar *Rosa rubiginosa*. We took the bridleway up Kail Lane reaching limestone soils and outcrops with Thyme *Thymus drucei*, Hairy Rock-cress *Arabis hirsuta* and Limestone Bedstraw *Galium sternerii* Eventually we angled south back to the village along a walled lane with Soft Shield-fern, Giant Bellflower *Campanula latifolia* and Bird Cherry *Prunus padus*, and over 170 species for the day.

A couple of weeks later BNB/CH visited another tetrad on the river's west side between Barden and Burnsall, which took in the hamlet of Drebley. Along the roadside near our parking layby were several clumps of Black Spleenwort. Down the road to Drebley were Plum, Upright Hedge-parsley *Torilis japonica*, Houseleeks on the wall, and Slender Speedwell *Veronica filiformis* in the field beyond. The path drops down to the river where there are normally stepping stones to be seen, but not

this day after recent heavy rain; there were no signs of them, the river was in full spate. As we looked along the river bank for new plants, we stopped, having seen some movement ahead, and were delighted to observe an otter scampering along the river bank towards us until it sensed us and slipped back into the river. Satisfied with the day's records we retraced our steps back to Drebley.

Hebden to Grimwith Reservoir

On the path from Hebden suspension footbridge going downstream to Loup Scar in March, SW spotted a sizeable clump of Cyclamen leaves under the trees close to the path. This was the autumn flowering Common Sowbread, the commonest species that easily naturalises itself away from cultivation. Its leaves die back in summer, and then flowers appear in autumn before the leaves return for winter. BNB/CH explored the adjacent tetrad to here, taking in Hebden village and the riverside around the suspension bridge. It is a very plant rich area with over 200 species recorded over the day. The village street (Mill Lane) dropping down to the river was lined with Common Lime, Wych Elm, Cherry *Prunus avium* and Red Chestnut *Aesculus carnea*. Near the footbridge were Black Medick *Medicago lupulina*, Common Valerian *Valeriana officinalis*, Dame's-violet *Hesperis matronalis*, Restharrow *Ononis repens* and the Hedge x Marsh Hybrid Woundwort *Stachys x ambigua*. A damper area downstream was colourful with Devil's-bit Scabious *Succisa pratensis*, Betony, Great Burnet *Sanguisorba officinalis*, Greater Bird's-foot-trefoil and there were some fruiting spikes of Common Spotted-orchid. The return was made by Ranelands Farm and the path alongside Hebden Beck, seeing Whorled Mint, Watercress, Brittle Bladder-fern *Cystopteris fragilis*, Pyrenean Scurvygrass *Cochlearia pyrenaica* and Peppermint.

On a hot summer's day in July the BBG held a joint meeting with the WFS at Grimwith Reservoir led by BNB. We covered the eastern half of the reservoir shoreline, taking more or less the same route as a WNS meeting in 2017. Some time was spent on the grassy areas around the car park and the picnic tables below, building up a good list of species, including Yellow Oat-grass *Trisetum flavescens*, Sneezewort *Achillea ptarmica*, Square-stalked St John's-wort *Hypericum tetrapterum* and lots of Common Spotted-orchids. Autumn Gentian *Gentianella amarella* also occurs here but had not appeared by then (it was found later by BNB/CH). The path east was lined with Soft Lady's-mantle *Alchemilla mollis* and large stands of Shore Horsetail *Equisetum x litorale*, the hybrid of Water x Field Horsetails. The inflow streams at the eastern end of the reservoir proved interesting for a number of different sedges - White Sedge *Carex canescens*, Oval Sedge, Brown Sedge *C. disticha*, Pale Sedge *C. pallescens* and Bristle Club-rush. BAT spotted a hybrid dock amongst some Northern Dock *Rumex longifolius*; it was Northern x Broad-leaved *R. longifolius* x *R. obtusifolius* and a new record for us. As in past visits, the grassy bank along the eastern end was prolific with Adder's-tongue *Ophioglossum vulgatum* and Twayblade *Neottia ovata*. A little group of Northern Marsh-orchid *Dactylorhiza purpurella* were nearly gone over, and then by a bridge someone spotted a nice clump of Meadow Barley *Hordeum secalinum*. At the northeast corner we were able to access the reservoir shoreline, quite extensive in July this year. The drawdown specialist plants included Water-pepper, Marsh Yellow-cress *Rorippa palustris*, New Zealand Pygmyweed *Crassula helmsii*, Water-purslane and the tiny Mudwort. The marshy area above gave us some extras - Marsh Speedwell *Veronica scutellata*, Common Spike-rush *Eleocharis palustris*, Marsh Cinquefoil *Comarum palustre* and Bulbous Rush *Juncus bulbosus*. We returned back having totalled almost 200 species for the day.

Grassington area

Below Grassington in the calcareous spring flush by the riverside near Lythe House NF noted 20 Bird's-eye Primrose *Primula farinosa* in June, then 5 flowering Monkeyflower later in October. The same day further up the Wharfe below Ghaistrill's Strid they saw a plant of Greater Knapweed *Centaurea scabiosa*. HMB came across another 50+ Bird's-eye Primrose on a stream bank above Wood Nook, Skirethorns. Also in the Skirethorns area are the old Threshfield Limeworks with a renovated Hoffman kiln, which KB informs us can sometimes be a site for Bee Orchid *Ophrys apifera* to pop up. On the opposite side of the dale BNB took a walk up to Kelber and Mossdale Scar recording tetrad SE06E. Of interest were lots of Alpine Pennycress *Nocca caerulea* by lead workings on Kelber, Pale Forget-me-not *Myosotis stolonifera* at Gill House Beck, and on the limestone crags at Mossdale - Green Spleenwort *Asplenium viride*, Roseroot *Rhodiola rosea* and Small Scabious *Scabiosa columbaria*. It was good to see some young Juniper *Juniperus communis* bushes growing on the crag ledges.

In mid-May the HDNS came for a tour round Grass Wood led by BNB and Joe Bodycote YWT who was very knowledgeable on bird calls and identified a wood warbler. The Wood was at its best with much spring flora still evident and we saw Goldilocks Buttercup, Herb Paris, primroses, cowslips and their hybrid False Oxlip *Primula x polyantha*, also a nice group of Early-purple Orchids *Orchis mascula*. We lunched on a mound just inside Bastow Wood surrounded by colonies of Alpine Cinquefoil *Potentilla crantzii* (or more probably its hybrid with Spring Cinquefoil, *P. x beckii*). Bird's-nest Orchids *Neottia nidus-avis* have had a good season in Grass Wood. PM reported 3 plants by the far gate (NW corner) still emerging on 20 May, and which eventually increased to 5 plants later on. Then on a YWT work party we were surprised when NF spotted 1 spike in the main quarry car park and SD found 2 more in the southern part of the Wood, all new sites for them. Finally BNB noted 2 together in a previously known site, so a total of 10 plants for the year. Another orchid with past sightings in the Wood but not seen for a number of years is Twayblade. But this year PM noted one higher up the slope above the far gate. Its basal twin leaves appeared rather damaged so unlikely to flower this year, let's hope it recovers. Then CH with BNB spotted a group of three by the boundary wall, but just on the road side of the wall. Last year we mentioned the newly determined micro-species of lady's-mantle which is more or less restricted to Grass Wood, False-toothed Lady's-mantle *Alchemilla falsadenta* (p38). BNB checked out some of its locations this summer, all being at path sides especially where they might become a little muddy, and so far has been seen in 17 of the Grass Wood botanical compartments, so seems to be well established.

The YDNP are working on a project to propagate young trees of selected species using seeds of local provenance, to build up a stock suitable for future planting schemes. One species of particular interest is Rock Whitebeam *Sorbus rupicola* and BNB was contacted by their Wildlife Conservation Officer Rachel Brindle (RB) for any likely source tree locations. BNB/CH/RB met up in mid-September to walk through Grass and Bastow Woods. The Grass Wood trees were too small to produce meaningful quantities of fruit so we continued to Dib Beck Head where some trees grow on the encircling crags. One mature tree was found at reachable height with a good crop of hard green berries, still to ripen, but would soon make a good source tree, which RB will follow up. NF was also in the Dib Beck area in August finding Field Scabious with a double head and one plant of Dark-red Helleborine *Epipactis atrorubens*. The latter do pop up occasionally in this area, but generally speaking are rare plants in Wharfedale and over the Yorkshire Dales, so great to see.

Upper Wharfedale

BNB/CH visited Kilnsey Park for the first time at the beginning of June, hoping to find their re-introduced Lady's-slipper orchids *Cypripedium calceolus* in flower. We were pleasantly surprised at the amount of botanical interest on site and plan to run a WNS botany meeting there in 2023, so will report more details next year. Suffice it to say that despite the hot dry weather one of the orchids was still in fine form displaying its heads of dark red tepals and bulging yellow slipper lips to perfection. Meanwhile NF on Low Ox Pasture above Kilnsey Crag noted 30 Early-purple Orchid with Bloody Crane's-bill *Geranium sanguineum* and Spring Sandwort *Sabulina verna*. Then across the valley in Conistone's Girling Trough they found 2 Greater Knapweed in early August.

Throstles Nest Farm is situated upstream of Conistone adjacent to the Wharfe and the back road to Kettlewell. Its 10 acre meadows have been managed to conservation standards for over 20 years after re-seeding back then with seed from a nature reserve near Halifax, and up to 1000 Common Spotted-orchids can be present. PM arranged for a biological survey to be carried out in mid-June and BNB/CH were invited to survey the flora. Habitats were the two hayfields, hedgerows, riverside area and a pond. We totalled 174 different plant species. The dry summer was taking its toll on meadow growth but Common Spotted-orchids were frequent with one possible hybrid, some Ragged-robin and lots of Yellow Rattle and Eyebright to enhance herbaceous plant growth. We found one Fragrant Orchid near the river bank. The water level was very low, just a few pools in places, but the bank sides were rich in species, e.g. Brown Sedge, Spearmint, Sand Leek *Allium scorodoprasum*, Common Fleabane and others. Pond aquatics included Common Stonewort *Chara vulgaris*, Common Water-plantain, Water Horsetail and a nice plant of Blue Water-speedwell *Veronica anagallis-aquatica*.

In August at Park Rash above Kettlewell NF reported 8 Autumn Gentian and 5 Bird's-eye Primrose. Later in the year BNB had a look round Dow Cave, along the valley east of Park Rash, not visited since a WNS meeting in 2012. The cave entrance up a steep side valley is spectacular, hemmed in by limestone crags, providing shelter for some woodland and a wealth of plants on the rock ledges and scree. Typically there was Wild Basil, Wood Melick *Melica uniflora*, Hard Shield-fern, Hairy Violet *Viola hirta* and Hairy Rock-cress. Polypodies were checked, some Common, but also the hybrid Common x Intermediate *P. x mantoniae* was confirmed.

In Starbotton village ML commented on the cobbled entrance to an old barn which was completely carpeted with Rue-leaved Saxifrage in May. It was gone by the time BNB/CH came to survey later in the year. The village walls were populated with various stonecrops, Wall Lettuce *Mycelis muralis*, Common Polypody and Shining Crane's-bill. A naturalising garden escape by the road side was going over but still showed remnants of yellow daisy-like flower heads. It was a fleabane in the *Inula* genus, but will have to await another year for a full ID. We explored along the Dalesway path towards Buckden as far as Steps Gill. A well-drained grassy bank displayed some calcicoles, Salad Burnet *Poterium sanguisorba*, Rock-rose *Helianthemum nummularium*, Thyme, and on the track close by were Hoary Plantain *Plantago media* and Silky Lady's-mantle *Alchemilla glaucescens*. The marshy area along here contained Water Mint, Pyrenean Scurvygrass, Jointed Rush *Juncus articulatus*, Floating Sweet-grass *Glyceria fluitans* and sedges, still to ID when next in flower.

Higher up the Dale we visited Cray Gill on a delightful WNS botany meeting in June (see report). BNB/CH also explored a tetrad on the eastern side of Cray. We came across a very photogenic waterfall in Cow Close Gill accessible from Cray

High Bridge with rocks to scramble around, looking for species such as Wild Strawberry, Green Spleenwort, Marsh Hawksbeard *Crepis paludosa* and Rough Hawkbit *Leontodon hispidus*. A little downstream in the turf was Spring Sandwort with 4 Moonworts *Botrychium lunaria*.

Littondale

NF reported 30 plants of Grass-of-Parnassus *Parnassia palustris* in Slets Gill field near Hawskwick in September. There was also a late flowering Bird's-eye Primrose. BNB explored up the valley of Cote Gill above the nearby Arncliffe Cote. Of particular interest were 6 trees of Rock Whitebeam growing on the steep valley sides, most being mature trees with decent sized trunks. Then near the valley head on the northeast facing scar of High Lineseed Head some montane species were found, Hoary Whitlowgrass *Draba incana* and Alpine Cinquefoil, or as noted in Bastow Wood, more probably its hybrid with Spring Cinquefoil, *P. x beckii*. It was examined by MW who confirmed it was an intermediate, but the exact status of these plants needs further taxonomic research.

We visited the well-developed limestone pavement, part of Blue Scar, on the south side of Arncliffe on a WNS meeting this year (see report). BNB/CH also explored the limestone scars on the north side of the village ascending the wooded Park Scar and traversing along Brayshaw Scar with yellow garlands of Horseshoe Vetch *Hippocrepis comosa* as the highlight, and we intend to visit with the botany group in 2023. Scoska lies between Arncliffe and Litton, steep sided woodland on the west side of Littondale. Its cave is of importance for wintering bats and some moth species. NF visited in April noting Green Spleenwort by the cave entrance. Blue Moor-grass *Sesleria caerulea* was in flower, a lovely 'cerulean blue' as per its Latin name.



Tuberous comfrey

BNB/CH recorded the Litton tetrad in June. We found Tuberous Comfrey *Symphytum tuberosum* in a small wooded area near the river, recognisable by its yellow flowers and deeply divided sepals with pointed tips. We met a friend of CH who gave us permission to cross their fields and enter the ravine of Potts Beck on the north side of Litton. A waterfall fell over a craggy limestone scar clothed in the evergreen Entire-leaved Cotoneaster *Cotoneaster integrifolius*. The rocky sides sported New Zealand Willowherb, Common Polypody and dark red flowered Columbine, and in a calcareous

flush above was Dioecious Sedge *Carex dioica*, Tawny Sedge *C. hostiana* and lots of Bird's-eye Primrose. It was a fascinating area to explore in what was virgin country to us.

BNB explored the slopes west of Litton climbing up to the summit of Darnbrook Fell in June. The steep escarpment of Cow Close Fell with craggy limestone outcrops was of interest with Goldenrod *Solidago virgaurea*, Wood Crane's-bill *Geranium sylvaticum*, yellow Hawkweeds *Hieracium* agg. and a nice clump of Beech Fern *Phegopteris connectilis* growing in a small niche. On the acidic moorland above was Cloudberry *Rubus chamaemorus*, Cranberry and Bog Asphodel. The summit at 62.4 metres altitude was a mess of bare dry peat and eroding peat hags with the trig point propped up on 4 feet high concrete blocks to maintain its spot height. One can only imagine the amount of peat being lost, all exacerbating climate change effects. Descending north into wetter areas there was a nice flush with Marsh Violet, Marsh Cinquefoil, White Sedge and Sneezewort.

Above Litton is Nether Hesleden where a good path can be followed through valley bottom meadows which BNB/CH explored in August. Near New Bridge a large stand of Saracen's Woundwort or Broad-leaved Ragwort *Senecio sarracenicus*

could be seen over the wall from the path. Further along we came across the orange coloured Monkeyflower that NF photographed for last year's Review, and which at the time was thought to be a variant of the commonly occurring monkeyflower hybrid *E. x robertsii* (the genus name *Mimulus* now updated to *Erythranthe*). Monkeyflowers are a difficult genus, originating from North and South America, often as fertile aggregates or complex mostly sterile hybrids sold as garden plants which readily escape and proliferate vegetatively along water sides. On closer inspection this orange spotted plant can more accurately be identified as Coppery Monkeyflower *E. x burnetii*, which is a hybrid of the North American *E. guttata* and the Chilean *E. cupreus*.

Botany Section Outings

Below Thruscross Dam, 28 April

Leader: Nyree Fearnley

Fearnley

On a dull, and rather cool, morning 8 of us set off from the car park by Thruscross Dam. As we left the car park there was a nice patch of Wood Forget-me-not *Myosotis sylvatica*, always lovely to see in spring. Continuing down the steps we were seeing plenty of new species, but mostly still just in leaf. BNB was explaining the differences in some of the ferns, which are very attractive as fresh new fronds, but not always easy to identify. Broad Buckler-fern *Dryopteris dilatata* with its dark scales was an easier one to identify.

As we came onto the flat area at the base of the dam there was a Norway Maple *Acer platanoides*, a non-native, but with the lovely fresh leaves of early spring. As the day wore on we saw several more tree species with their beautiful new leaves, such as Horse Chestnut, Hawthorn *Crataegus monogyna*, Hazel, Beech, Downy Birch *Betula pubescens*, and Silver Birch *B. pendula*. At the edge of the flat area below the dam we also found the first orchid leaves, Common Spotted-orchid, and the only two plants of Cowslip that we saw all day.

On the riverside section there were some of our favourite spring flowers, such as Primrose *Primula vulgaris*, Common Dog-violet, Greater Stitchwort, and Bugle *Ajuga reptans*. A large Norway Spruce *Picea abies* had fallen next to the path, giving excellent views of the new cones, which are normally high up in the treetops. As we arrived at the old Millpond, known also as Low Dam, there were good examples of both Field Horsetail *Equisetum arvense* and Water Horsetail *E. fluviatile*, the latter being especially attractive with its stripy stems.

We skirted round the bottom end of the Millpond, and had a forage about in a damp area just off the path, finding some pretty Marsh Violets and confirming that a large area of tall, bluish green leaves was Bottle Sedge *Carex rostrata*. The whole of the banking leading back up onto the track was a carpet of heavenly Bluebells *Hyacinthoides non-scripta*, always a joy.

At the next junction we took a higher path that leads up onto the edge of the moor, giving a different habitat. Here we saw Tormentil *Potentilla erecta*, Hare's-tail Cottongrass *Eriophorum vaginatum*, Heather *Calluna vulgaris*, and Bracken *Pteridium aquilinum*. Then the descent back towards the river was a yellow tunnel of Gorse *Ulex europaeus*. When we were almost back down to the flat grassy area by the river there was the most delightful patch of Ground-ivy *Glechoma hederacea*, tumbling over a small stone bridge, and close by a large Box *Buxus sempervirens*. We returned to the bridge over the Washburn via a slightly different path, then had to tackle the climb back up all those steps to the car park.

Report by Nyree Fearnley.

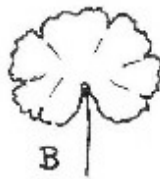
Timble area: West side, 26 May Leader: Bruce Brown

10 members met in Timble village on a rather drizzly murky day, but after such a dry spring the rain was really appreciated by the plants, more so than by us. We admired the Timble Millennium Oak, one of four planted in local Washburn villages to mark the AD2000 Millennium. A Pedunculate Oak *Quercus robur*, it had now become a decent sized healthy looking tree, possibly 20 feet tall, and interesting to be able to correlate the tree's current size with its known age.

We took the path heading south to Timble Gill Beck. Grasses were growing well in the meadow and we identified Meadow Foxtail, Perennial Rye *Lolium perenne*, Soft Brome *Bromus hordeaceus*, Sweet Vernal, and amongst them it was nice to spot Changing Forget-me-not *Myosotis discolor*. An old wall base now covered over in a short turf was yellow with Cat's-ear. Moschatel, flowers now gone over, was seen enjoying some tree shade, along with clumps of Three-nerved Sandwort and some Bluebells. Ferns, also, included Male Fern *Dryopteris filix-mas*, Lady Fern and Broad Buckler plus a Common



Polypody. In a damper flush nearer the beck TS spotted Oval Sedge in flower. Closer to the beck were good colonies of Golden-saxifrage both Opposite-leaved [A] and Alternate-leaved [B] growing side by side,



enabling their botanical features to be compared and contrasted, notably the larger flower heads and kidney shaped leaves of the latter. Wood Speedwell displayed its pale lilac petals and SW found the leaves of Angelica and Wood Anemone.

Rather than trample the growing grass, we followed the stream edge around the next meadow, and noted a few tree species - hazel, willows, rowan, ash and an attractive Bird Cherry with its clusters of white flowers. We squeezed through a narrow ancient stone stile into pasture land grazed by sheep. Our first Bulbous Buttercup was recorded and gateways were places where weedy species such as Pineappleweed *Matricaria discoidea*, Knotgrass *Polygonum aviculare* and Greater Plantain *Plantago major* were seen to congregate. A really interesting section of the route followed, through a very narrow field like a grassy avenue, lined with Field Maple *Acer campestre*, Norway Maple, Crab Apple, Plum and Guelder-rose. Field Rose *Rosa arvensis* was identified by the presence of last year's hips showing protruding styles. Some veteran gnarled and twisted Bay Willows *Salix pentandra* were fascinating to see, one sporting a large bracket fungus thought to be Dryad's Saddle.

We reached the Blubberhouses road amongst a white froth of Cow Parsley *Anthriscus sylvestris* at its peak at this time of year. A few open fields came next with more drizzle to contend with, so nowhere to stop for lunch just yet. Some stiles in need of repair were crossed with care, and have been reported by SW but action was still awaited. The Ellarcarr Pike track is known by some regular members as a good site for orchids. We saw many basal leaf rosettes along the track sides and ditch, mostly too early for flowers. One had some tantalising pink buds developing, but not quite far enough on to identify. Also not in flower but easy enough to name by its basal leaves in pairs was Twayblade, and around 12 plants were counted. Arriving at the Red Gate track into Timble Ings, we agreed to walk on for a few more minutes to where the stream Long Dike crosses, and thankfully nestled down here for lunch against a sturdy wall, which gave good protection from the elements. The stream side was home to a nice clump of Water Avens and one plant of Wintercress. The large horsetail colony was Shore Horsetail, a hybrid of Water x Field Horsetails. A scaly male-fern was still unfurling its croziers, identified previously as *Dryopteris cambrensis*.

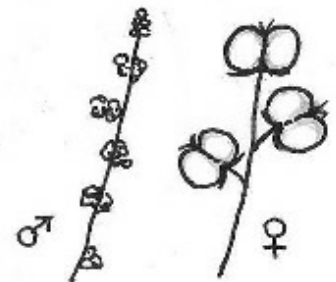
A pleasant path through some birch trees to the plantation edge brought us back onto Red Gate by the little carpark. Last winter's Storm Arwen had uprooted many conifers further into the wood making most paths unusable, but hopefully will get cleared away later in the year. Now heading east towards Timble, the road passes a few homes with inevitable naturalised garden escapes on the verge alongside, including Londonpride *Saxifraga x urbium*, Globe Thistle *Echinops bannaticus*, various Geraniums and Monkeyflower in the ditch. Near the crossroads were a few plants that may have originated from seed mixes - Ox-eye Daisy *Leucanthemum vulgare*, Corncockle *Agrostemma githago*, Fodder Burnet and a beautiful colony of purple-flowered Chives *Allium schoenoprasum* (p38).

The rain ceased and the sun appeared for the last mile into Timble. With nearly 200 species already recorded, we didn't expect many more, but managed to add Swedish Whitebeam *Sorbus intermedia*, Bird's-foot-trefoil and the smaller cousin of the meadow foxtail, Marsh Foxtail, growing in a puddle.

Cray Gill, 9 June

Leader: Heather Burrow

This was our first Upper Wharfedale meeting of the season and the drive to Cray was at its best with sunshine on the Dales meadows and a mass of yellow and white flowers. 13 members arrived at the layby on the north side of Hubberholme Bridge, a delightful spot at the river's edge. We followed the minor road eastwards near the riverbank for a while, and soon built up a good number of plant records. The large mature Wych Elms were admired, clearly having resisted Dutch elm disease over the years, and lots of their fruits were scattered along the road. We examined the dioecious Dog's Mercury *Mercurialis perennis* with male and female flowers on separate plants. The more insignificant male flowers provide the pollen whereas the larger round fruits developing on the females made their recognition much easier.



Dog's Mercury

Soon we came to Stubbings Bridge, adorned with Wall-rue and Maidenhair Spleenwort *Asplenium trichomanes*, where Cray Beck crosses the road and the stile onto the gill side path beckoned. Along the rocky stream edge there was Pyrenean Scurvygrass, Hairy Rockcress, Primroses and Coltsfoot *Tussilago farfara* leaves in the water. At the pathside the meadow flowers included Eyebright, Sticky Mouse-ear *Cerastium glomeratum* and the tiny blue flowered Wall Speedwell *Veronica arvensis*, then a little further on was Sheep's Fescue *Festuca ovina*, Thyme-leaved Sandwort *Arenaria serpyllifolia* and Changing Forget-me-not. The path moved into a more shaded section with hazel, bird cherry and woodland flowers such as Wood Crane's-bill, Red Campion *Silene dioica*, Sanicle, Ramsons and fruiting spikes of Bluebells. The hybrid Avens *Geum x intermedium* was spotted along with its parents Wood Avens *G. urbanum* and Water Avens *G. rivale*, and a few plants of Hard Shield-fern were seen.

A patch of yellow Rock-rose near the old packhorse bridge made the perfect lunch spot - with just enough 'empty' patches on the bank to sit on. More limestone-loving species were now present giving a rich flora of Kidney Vetch *Anhyllis vulneraria*, Small Scabious, Fairy Flax, Hairy Violet, grasses such as Crested Hair *Koeleria macrantha*, Quaking, Meadow Oat *Helictochloa pratensis*, and Spring and Glaucous *Carex flacca* sedges. The next field had limestone outcrops covered in Wild Strawberry, Rue-leaved Saxifrage and Cat's-ear. HMB then directed us to a wet area near the gill where there was a lot of Hard Rush *Juncus*

inflexus hiding a number of more interesting plants such as Butterwort *Pinguicula vulgaris*, Marsh Arrow-grass *Triglochin palustre*, Brooklime and Tawny Sedge. Several orchids were present, definitely Common Spotted and the more squat darker Northern Marsh, and possible hybrid forms were discussed but difficult to resolve. Bird's-eye Primrose is always nice to see and along with it a couple of well disguised spikes of Lesser Clubmoss *Selaginella selaginoides* and a patch of Few-flowered Spike-rush *Eleocharis quinqueflora*.

Climbing up to the White Lion pub at Cray we noted some young Fragrant Orchid *Gymnadenia conopsea* agg. spikes and a couple of crane's-bills, Cut-leaved and Dove-foot *Geranium molle*. A stream crossing the track had Water Mint, Ragged-robin *Silene flos-cuculi* and Square-stalked St John's-wort. Spear-mint was confirmed by its smell. Now heading down the Buckden road we found Wood Crane's-bill, Sanicle and Agrimony, then turned onto the narrow minor road back to Stubbings Bridge. Hiding in the hazel shrubbery HMB pointed out Herb Paris, then Melancholy Thistle *Cirsium heterophyllum* just starting to open its big purple heads and already attracting bumble bees. Another highlight under the hazel was a known colony of Kidney Saxifrage *Saxifraga hirsuta*, still going strong. It is separable from similar species like Londonpride by its hairy petioles with red-tipped glands.

Clouds rolled in with a fine misty drizzle for our final return to the cars, but not enough to dampen our spirits. As HMB said, it was a wonderful flower rich day. Our count was 204 species.

Report by Heather Burrow and Bruce Brown

Wheatley Rakes and Stead, 23 June Leaders: Neil Barrett & Bruce Brown

In last year's Review BNB mentioned finding marsh orchids at Stead, the scattered community between Burley Woodhead and the Cow & Calf below Hangingstone Road. NB went to check them out and came across a separate location with a number of orchid species. So it was agreed to follow this up in 2022 with a joint meeting of Wharfedale botanists and the BBG. We decided to start on Ben Rhydding Road and take in the wooded area above known as Wheatley Rakes, also described in the Review.

16 met up on a lovely summer's day, a good mixture of members from both groups. As expected, the path up the Rakes was a jungle of native and alien species, the latter including Broad-leaved Bamboo *Sasa palmata*, Giant-rhubarb *Gunnera tinctoria* and Ornamental Rhubarb *Rheum palmatum*, all of which would normally be classed as undesirable 'thugs' but seem to fit in here. Knotted Crane's-bill *Geranium nodosum* was a new find, along with French Crane's-bill *G. endressii*. The shrub *Deutzia scabra* was in flower, then members noticed around 5 plants of Broad-leaved Helleborine, a new and interesting record for here. Pink-purslane *Claytonia sibirica* was plentiful and the one plant of Ostrich Fern *Matteuccia struthiopteris* was still going strong with its well-formed shuttlecock. Our path climbed up to the lower moor slopes, passing Rock Crane's-bill *G. macrorrhizum*, Apple Mint and Honey Garlic *Allium siculum* on the way. At a small waterworks surrounded by short grassland, we re-found Spiked Sedge *Carex spicata* and Changing Forget-me-not first recorded by DAB, then on top was Smooth Hawksbeard *Crepis capillaris* and Bulbous Buttercup. We crossed the golf course, fortunately quiet today, then along the track to the Wharfedale Grange retirement complex. Just beyond a small dry stream was a nice grassy bank suitable for a lunch spot where we were kept company by a local Jack Russell terrier.

We were now reaching the scattered farms and houses that make up the hamlet of Stead. A stream issuing from a garden had a large number of conspicuously large-leaved American Skunk-cabbage *Lysichiton americanus* plus some Yellow Iris and

Water Mint. The wet area where BNB saw Southern Marsh-orchids last year had been landscaped to make a new ditch and no plants were visible, but hopefully they might return in future years. However when we reached the path above Stead Hall Farm our luck was in - several wet patches were prolific with marsh orchids which NB and BAT could identify for us. There were Common Spotted, Northern Marsh and the hybrid between *Dactylorhiza x venusta*. Northern Marsh-orchids were starting to go over now, but the hybrids looked really good. Then nearby, a nice specimen of Southern Marsh *D. praetermissa* was confirmed (making up for the earlier site lost). Possible hybrids with this were too difficult to confirm, but could well be present. A Bee Orchid was a bonus. Further down the path, lined with Broom *Cytisus scoparius*, Cat's-ear and Mouse-ear Hawkweed *Pilosella officinarum*, we came to a flat area with more marsh-orchids and also more bee orchids, some pink and others a more unusual white colour. Smooth Tare *Ervum tetraspermum* was also present, not that common in our area.

Arriving at Stead Hall Farm we were quite surprised but definitely pleased on a hot sunny afternoon to find a mobile cafe in operation offering ice creams and drinks, so we took full advantage to have a welcome break. The map shows quite a network of public paths around here so we could choose an alternative route to get us back to Wheatley Rakes. We ended up at a roadside triangle amongst houses, shaded by pines, where we found around 20 more broad-leaved helleborines, so they were obviously doing really well in 2022. Finally we dropped back down the Rakes to the cars, passing spring flowering Coralroot *Cardamine bulbifera*, so now gone-over. With lots of eyes to spot plants and a rich mixture of natives and aliens it was not surprising to clock up almost 250 species over the day.

Kettlewell - Dowber Gill Beck, 30 June Leader: Bruce Brown

Our last meeting visiting Dowber Gill Beck was in July 2013 led by HMB, so we were due for a return. From the north eastern side of Kettlewell the beck flows down a steep-sided valley towards the village, with its headwaters on the slopes of Great Whernside, not that we would be getting that far today. The valley sides are mostly short turf pasture rich in limestone loving plants. 6 members met in the village on a fine and generally sunny day. We set off north east getting on to Hoobank Lane as far as Dowber Gill Bridge, where our path diverted east following the beck side.

We started recording at the bridge seeing many common species along the ash-lined beck edge, including Sweet Cicely *Myrrhis odorata*, Meadowsweet *Filipendula ulmaria*, Crosswort *Cruciata laevipes*, Nipplewort *Lapsana communis*, etc., along with Wall-rue and Hairy Rockcress on the bridge stonework. Over the stile into the first field there were small limestone outcrops with species such as Wild Thyme, Harebell *Campanula rotundifolia*, Parsley-piert and Bird's-foot-trefoil. The valley sides steepened, covered with masses of golden yellow Rock-rose, Mouse-ear Hawkweed and Tormentil. White flowered bedstraws, mostly Limestone Bedstraw were profuse. We hoped to see some fragrant orchids and were not disappointed. They have been split into three separate species nowadays, but sometimes it is difficult to define which one. NB considers the ones here to be somewhere between Chalk Fragrant *Gymnadenia conopsea* and Marsh Fragrant *G. densiflora* but more genetic work needs to be carried out by the taxonomists to be definite, so we'll keep the former name for now. A fruiting spike of a gone-over Early-purple orchid was found along with a few Carlina Thistles *Carlina vulgaris*.

A little higher up the valley we were able to access the beck itself which here was bounded by some larger crags, adorned with Hawkweeds, Goldenrod and Lesser Meadow-rue *Thalictrum minus*. The steep banks dripped with tufa encrusted

seepages, home to Bird's-eye Primrose, Butterwort, Lesser Clubmoss and Long-stalked Yellow-sedge *Carex lepidocarpa*. An area of boulder scree was colonised by Mossy Saxifrage *Saxifraga hypnoides*, Herb Robert *Geranium robertianum* and some specialist limestone ferns - Rigid Buckler *Dryopteris submontana*, Limestone Oak *Gymnocarpium robertianum*, Green Spleenwort and Hard Shield. We got as far as an old lead mining area with short 'calaminarian' turf having developed over the spoil. Here were numerous white stars of Spring Sandwort, also Alpine Pennycress, no longer in flower but recognisable by its characteristic shaped fruits. Both are sometimes known as Leadwort because of their tolerance to soils containing lead and other metal ores. Unexpectedly a Bee Orchid turned up, somewhat slug nibbled.

Now it was time to retrace our steps, but not being in a hurry, we decided to continue plant recording from Dowber Gill Bridge back towards Kettlewell, adding another 50 species to the 150+ already seen. Native plants such as Wintercress, Common Whitlowgrass, Foxglove, Biting Stonecrop occurred with other common weedy species. Also a number of garden escapes along the sides of the track and adjacent Cam Gill Beck appeared to be well naturalised, including Garden Arabis *Arabis caucasica*, Astrantia *Astrantia major*, Dusky Crane's-bill *G. phaeum* and Red Valerian *Centranthus ruber* amongst others. Back in the village there was Wall Speedwell and Garden Pansy *Viola x wittrockiana* at the stony road edge.

Jervaulx Abbey, Wensleydale, 14 July Leader: Bruce Brown

Jervaulx is a Cistercian Abbey dating back to 1156 and is situated by the banks of the River Ure in Wensleydale about 5 miles north-west of Masham. Its extensive remains are in private ownership and, what makes it different to many ancient monuments, is that the owners believe that the best way to preserve the abbey ruins is to let the walls, pillars and stonework become naturally vegetated as a protection from weathering and decay, rather than the more expensive option of regular removal of all growth back to bare surfaces which need more frequent re-pointing. As a consequence the ruins have become a botanical paradise with some species possibly originating back to the days of the monks. Local botanists have made surveys on occasions with around 200 species of plants recorded on the ruins and surrounding grounds. NV has collated data from past Wharfedale visits - Upper Wharfedale Field Soc. in 1997, WNS in 1998, and then NV with Joyce Hartley in 2008. So now in 2022 it was a new site for most of us, and we looked forward to our visit.

10 members met up in the Jervaulx carpark on a lovely summer's day. The first plant of interest was on the edge of the main road near the entrance gate to the abbey grounds. Looking rather tansy-like with divided leaves and dense heads of white flowers, it is actually Rayed Tansy *Tanacetum macrophyllum*, but was once mis-named as a plant in the Yarrow genus. It is a naturalised alien, rare in England, but there is quite a large colony of it growing here, known since 1912. The path took us through a field with sheep languishing under a large old sycamore, trying to keep cool, and not moving as we passed closely by. At the gate into the abbey ruins there is an honesty box for donations to help with future preservation and leaflets on the abbey and also a plant list of past surveys.

Once inside, the first call for our attention was a large Deodar Cedar *Cedrus deodara* with its cones sitting upright on the branches sweeping down to eye level. At this time of year the new cones on cedars are hard and green, but as they mature they turn brown and the scales disintegrate whilst still on the tree, allowing the seeds inside to escape, leaving behind the vertical peg from the cone's centre. Then approaching the ruins themselves it was amazing to see such a profusion of plants and small shrubs completely covering all the horizontal surfaces and

scrambling or hanging down over the vertical stonework. The grassland below was partly mown with areas left for grasses and flowers to mature and set seed, so good for insects. PM and NF kept a count of butterflies seen and others recorded the plants.

The masses of white umbellifers were mostly Greater Burnet-saxifrage. Yellow coloured flowers were represented by Giant Lettuce *Lactuca virosa* growing 10 feet high in places, also Wall-lettuce, Smooth Hawksbeard, and Bird's-foot-trefoil on the lawns. Purple flowered Knapweed *Centaurea nigra* was attracting bees and blue Harebells were in flower. The walls quickly warm up in sunshine so attract early flowering plants such as Aubretia, Wallflower *Erysimum cheiri*, Common Whitlowgrass, which had all gone over by July. Also the shallow soils dry out quickly so many plants were suffering in this year's hot dry weather, as seen with the shrivelled up polypodies, speedwells, etc. Nevertheless, exploring the ruins was delightful with lots of nooks and crannies amongst the cloisters and grassy areas sheltered by surrounding walls, never quite knowing what might turn up next. Just a few of the plants seen included Hop trefoil *Trifolium campestre*, Pellitory-of-the-wall *Parietaria judaica*, Black Spleenwort, Common Spotted-orchid, Mullein *Verbascum thapsus*, Marjoram *Origanum vulgare*, and there were many more. Lunch was leisurely taken on a sunny lawn.

Afterwards we decided to take the public path to the riverside. On one side of us a field of planted maize had a few clumps of Common Field-speedwell and Field Bindweed as weeds but otherwise was completely devoid of anything else so had obviously been well sprayed. The other side was woodland with the yellow heads of Leopard's-bane visible through the trees. By the riverside it became more grassy but with little other flora present. However the river edge with its collapsed banks and shingles was botanically more interesting. There were masses of Creeping Yellowcress, a rhizomatous crucifer spreading through the sandy gravel and stones; also Water Figwort *Scrophularia auriculata*, Dame's-violet, Water Forget-me-not, Whorled Mint and various willows and alder. We came across a clump of Hybrid Woundwort which has the purple spikes of Marsh Woundwort *Stachys palustris* with the smell and longer leaf stalks of Hedge Woundwort *S. sylvatica*, its two parents. Returning to the cars we drove a mile to stop at Brymor and enjoy a well-deserved and cooling ice cream.

Arncliffe and Blue Scar, 18 August Leader: Carmen Horner

15 members set off from Arncliffe Village in fine weather. We looked around the village centre and saw a number of interesting plants including Druce's Crane's-bill *Geranium oxonianum* in the village and Ivy-leaved toadflax on walls. Mainly along Cowside Beck was Butterbur *Petasites hybridus*, Great willowherb *Epilobium hirsutum*, Dotted loosestrife *Lysimachia punctata* and Broad-leaved Ragwort, this last a hardy perennial that grows to 1.5 or even two metres tall in damp places and is in flower from July to September. It is spreading all along the beck-side and in damp places in and around Arncliffe. Wych elm was also seen, the only truly native elm of northern Britain.

Moving on to Botany Lane (very appropriate!), it is narrow with vegetation at either side, providing a good habitat for plants. Unfortunately, the invasive Japanese Knotweed *Reynoutria japonica* was present. There were four species of mint, seen quite close together - Water, Spear, Apple and Sharp-toothed Mint *Mentha x villosanervata*. Sweet Cicely was around, we could smell the scent. This plant is used to sweeten fruit. Good-King-Henry *Blitum bonus-henricus* was spotted, it has been used as a vegetable for centuries - perhaps we should try some! Gooseberries, brambles and raspberries were still in fruit and provided a good snack. Houseleek was naturalised on the wall near the pub. Water drains from the hillside onto the

path in one area and makes a useful pool for a variety of wet loving plants such as Marsh Lousewort *Pedicularis palustris*, Small sweet-grass *Glyceria declinata*, Amphibious Bistort *Persicaria amphibia*, Yellow Iris and two rushes, Jointed and Toad Rush. It's also ideal for Flat-sedge in the more calcareous flushes.

We are now at the end of Botany Lane and go through the gate onto hillside grassland. The land here is privately owned and we have got permission from the owner to be there. We were greeted with the lovely pink/blue Small Scabious dotted around the field. There were the remains of Early Purple Orchids which had now gone over and were brown, but their good numbers would have been a good show earlier in the year. A small colony of Autumn Gentian in short turf by the track was spotted, they were also getting past their best but still showing some lovely blue petals. We saw various sedges and a good number of grasses. Sweet vernal-grass is a common perennial of grasslands and meadows that flowers between April and July. Its dense clusters of flowers form cylindrical heads and when young smell like new mown hay, several plants were still in flower. The hillside field was dotted all over with many colourful flowers and ferns - Limestone Bedstraw, Crosswort, Smaller Cat's-tail, Knotted Pearlwort, Fairy flax, Common Polypody and Green Spleenwort. Bird's-eye Primrose, a few still in flower, Grass-of-Parnassus, Common Butterwort and Hoary Plantain prefer a slightly damper habitat to the others. Coming up to the limestone outcrops we began to see some of the rarer ferns - Limestone Fern is a deciduous fern of cracks, fissures and scree in limestone rock, but also found in shallow grikes on limestone pavement. Looking carefully with a lens you will see the fronds covered with minute glands which give it a grey appearance. Sharing the same habitat is Green spleenwort. Blue Moor-grass along with seedlings of ash, yew and sycamore were seen in the hillside grassland.

Travelling up to higher slopes we arrive at Blue Scar limestone pavement. Great care must be taken when walking on the pavement because the grikes can be very deep, but it is an amazing place to be and there are many plants to be discovered in and around the pavement. An interesting find was *Flea-sedge* *Carex pulicaris*, which is very tiny and hard to spot. It is named after the appearance of its fruits which, when ripe, look like a cluster of fleas attached to the stem. The fruits are shiny and dark. We settled for lunch and it started to rain quite heavy but didn't last long. Care was taken on the pavement as it was now wet. Another fern seen growing from a crack in the limestone pavement was *Rigid Buckler-fern*, in its typical habitat. It is quite a rare plant that only occurs with any frequency in the North West of England. Other finds were Hairy Rock-cress, Spring Sedge, Wood Anemone, Sanicle and one plant of Common Twayblade. Trees regenerating in the pavement grikes were Holly, Ivy, Eared Willow *Salix aurita* and a whitebeam, well bruised by over-grazing. We re-found the one plant of Dark-red Helleborine first spotted by Anne Tupholme on our last meeting here in 2017, and in exactly the same place. Anne has since died, so we looked upon the plant affectionately, as a memorial to her.

On the way back we called in the Waterworks field at the end of Botany Lane. We found it very wet and boggy, exactly the habitat we were looking for. The spring runs through the field and we found a variety of wetland plants, Marsh Arrowgrass, Marsh Valerian *Valeriana dioica*, Common Butterwort and Sneezewort. A number of interesting sedges were spotted, Flat, Tawny, Star and Dioecious Sedges, the latter being unusual in that it has male and female spikes on separate plants. Few-flowered Spike-rush and Sharp-flowered Rush with creeping rhizomes were seen, also the spreading deciduous shrub with arching purplish stems, Purple Willow *Salix purpurea*.

Report by Carmen Horner.

Surveys

Crab Apple Tree Survey, May & October

Our native crab apple *Malus sylvestris* is usually separated from domestic or orchard apples *M. domestica* by its small sour fruits about one inch in diameter, and hairless leaves, fruit stalks and outer sides of its sepals, the others having hairier features and larger fruit. But there is much variation and it can often be difficult to reliably separate them. *M. domestica* itself is an aggregate of various species hybridised over centuries, probably originating with the central Asia species *M. sieversii*, and in current cultivars with *M. sylvestris* as a major contributor in the mix. Apple trees are self-sterile which means that they can only produce fertile seeds by accepting pollen from another tree, and are apparently not that fussy about which *Malus* species provides the pollen. Hence many, if not most, crabs found in the wild are to some extent hybrids (which themselves are fertile) or introgressed forms of *M. sylvestris* or *M. domestica*. With the popularity now of introducing crabs from other parts of the world into gardens, it is possible that even more variation may be occurring. The Japanese 'John Downie' crab apple was often planted in orchards as an extra pollen source for commercial apple trees.

The 'Orchard Network Crab Apple Project' was set up in 2021 with some grant funding for DNA work to look more closely at the genetic relationships between *Malus* species and issues of crab apple identity. Hopefully a more reliable identification key may result from this, and the fruit will be evaluated for apple and cider-apple breeding, especially with regard to any disease-resistant characters. The project covers the country and DAB, our vice-county recorder for VC64, asked if BNB wished to check for any suitable trees in Wharfedale to add to the study.

Four trees were selected. Tree 1 is a mature tree around 50 feet tall on the bridleway from Menston High Royds Cemetery to West Chevin. Tree 2, also in Menston, is along Bingley Road, a smaller hedgerow tree maybe 20 feet tall. Tree 3 is better known; it is the large crab in Sun Lane Nature Reserve, Burley. It has 8 trunks, so presumably coppiced many years ago, and is thought to be at least 100 years old. Tree 4 (📍p38) is just inside the Ben Rhydding boundary, a solitary tree about 30 feet tall in a large field alongside the path from the A65 by the Indian restaurant up to Ben Rhydding Drive and Wharfedale Grange.

Two surveys were requested, a spring survey when the trees were in flower and a second survey in autumn when the trees were in fruit. On 1 May all 4 trees looked magnificent, in full flower with petals white and pink-tinged. Tree 2 had downy leaf undersides and hairy sepals, whereas the other three were basically glabrous with just slight hairiness along their sepal edges.

We were asked not to survey the fruit too early in autumn in order for their colour and texture to fully develop, but on the chosen date, 2nd October, most of the apples had fallen to the ground, following our hot dry summer this year. However enough were left to fulfil the survey, although their leaves, especially Tree 4 out in the open, were starting to fall or shrivel. 13 fruit characters had to be checked - shape, dimensions, colour and surface patterns, stalk and calyx characters, also taste. Trees 1 and 4 were most typical of native wild crabs, around 3cm in size, slightly flattened in shape, wider than high, with pedicels about 2cm long, and a sour to acrid taste. Tree 2 had slightly larger apples with a short stalk and a slightly sweeter taste suggesting some hybridisation with domestic apples. The Sun Lane Tree 3 was more interesting with some typical crab characters but otherwise its fruits were smaller, around 2cm size, and somewhat conical in shape, narrower at the calyx end with a slightly protruding spike, and longer pedicels 3-4cm. Taste was slightly sweeter than a typical crab.

The impression gained was that it might be a hybrid between *M. sylvestris* and another crab species with longer pointed fruits, e.g. 'John Downie' or something similar.

Photos of trees in flower and fruit along with apple samples were sent to the ONCA headquarters in Norfolk. Over 100 trees have been recorded by more than 30 surveyors in different parts of the country during 2022, and 45 have been selected for DNA analysis. So we now await the results of all our efforts, hopefully to be received sometime over winter. The project will continue in 2023/24 and will include examination of further suitable trees. So if any WNS members know of any crab apple trees, preferably mature looking and growing wild, BNB would like to be informed so that they could be included in the project. It would be nice to add some trees growing higher up in the dales, Upper Wharfedale, Littondale or the Washburn.

Bolton Abbey Estate - Hambleton Quarry Survey, 12 May Leader: Mark Jeffery

BNB has vague memories of visiting Hambleton Quarry on a botany meeting back in 2006, a long time ago now, and so would be new territory for many current members. It is an old limestone quarry with adjacent large lime kilns by the side of the Bolton Abbey railway line, and would have been a hive of industry back in the day. Now, long disused, it has become well vegetated with an array of plant species, both natives and aliens, so interesting to visit again with permission from BAE and we were led by Mark Jeffery, Estate Forester.

There was space to park a few cars at the quarry entrance but others preferred to use a large layby a short way west along the A59. Passing under the railway bridge we entered the quarry and were met with the sight of the quarry face composed of different bands of rock strata shaped into a spectacular anticline (see p56), which is of sufficient geological importance for the quarry to be designated as a SSSI. DL was with us and explained the geological features and their formation. Afterwards he wrote a short summary which is very informative and worth producing here in full.

"The highly folded muddy limestone and thin mudstones in the quarry are the same age (440 million years) as the Great Scar Limestone on the Askrigg block north of Grassington, divided by the Craven faults. It was a period when earth's tectonic plates were pulling apart, thinning the crust and pulling it into blocks and basins. The Askrigg block is buoyed up by the presence of the underlying Wensleydale granite, while the Craven Basin, which stretches south towards Derbyshire and east into the present-day Irish Sea, gradually sank as large amounts of fine sediment poured in. The Skipton earthquake in 1944 was focussed on the Craven fault zone and suggests the faults may have been in motion over a long period of time. The North Craven Fault at Grassington divides Wharfedale into part block and part basin, providing a contrast of limestone upland to the north with a softer landscape to the south, while between the two, overlooking the basin are the Cracoe reef knolls, rich in a big variety of fossils.

The rocks in Hambleton Quarry are made up of dark grey impure limestone (the Draughton Limestone), mudstone and the Tiddeman Breccia which forms a layer of coarse angular fragments in the core of the anticline at the back of the quarry. On the right, strata that originally were horizontal have been pushed vertically or even overturned by earth movements at the end of the Carboniferous period when tectonic plates converged again to form the uplift of the Pennines and minor anticlines. Fossils in the quarry are rare but occasional ones are well preserved, such as the crinoid fragments and a small bryozoan we found. Small spiny fish lived in the warm equatorial seas together with goniatites, brachiopods, bivalves, straight-coned nautiloids and small trilobites."

Returning to botanical considerations, the lower quarry floor had some damper areas with Hard Rush, Meadowsweet, Giant Willowherb, Angelica, Common Spike-rush, Hairy Sedge, a few spikes of False Fox-sedge *Carex otrubae* and also a few plants of Common Spotted-orchid. The quarry sides were much drier with patches of grassland, scrubby hawthorn and elder, and fine shaley scree from eroding bands of Bowland Shale in the crags above. Masses of Wild Strawberry colonised this habitat, along with some Hawkweeds, Cat's-ear, Germander Speedwell, Bush Vetch and Bird's-foot-trefoil.

Further up the quarry we came across an area used for tipping soil and rubble, now well vegetated with weedy species such as Garlic Mustard *Alliaria petiolata*, Thale Cress, Lesser Swine-cress *Lepidium didymum* and Dandelions. There were garden throw-outs and alien casuals like Wall Cotoneaster *Cotoneaster horizontalis*, Aquilegia, Creeping Jenny *Lysimachia nummularia*, Buddleja, poppies and even a potato. Attractive looking plants in flower included Shining Crane's-bill, Yellow Corydalis *Pseudofumaria lutea* and Green Alkanet *Pentaglottis sempervirens*.

We dropped back to the bottom of the site noting a small pool surrounded by Yellow Iris and a few plants of Common Vetch *Vicia sativa* close by. The short turf hereabouts contained Field Woodrush and Spring Sedge. On the railway underpass were Wall-rue and Maidenhair Spleenwort, with much Greater Burnet-saxifrage nearby along with Wood Sedge *Carex sylvatica* and Giant Fescue *Schedonorus giganteus*. More trees were present at this level - sycamore, hazel and willows. Our final look around was by the limekilns and the bank of Hambleton Beck, yielding Ramsons, Wood Speedwell, Blackcurrant *Ribes nigrum* and Red Campion.

Overall the 12 members present recorded 150 species on a dry, mostly sunny day. Thanks are due to Mark Jeffery and the Bolton Abbey Estate for allowing us access onto this private site. Back in 2006 we started at Bolton Abbey station and had permission from railway personnel to walk along the line to the quarry entrance. NV provided a list of plants seen then - over 80% of the flora in the quarry has remained unchanged.

Otley Wetlands Nature Reserve, 28 July Leader: Bruce Brown

In the early days of the nature reserve the contractors Hanson still operated a concrete mixing plant on site at the east end of the conservation lake and close to the carpark, so this area was never part of the official reserve. BNB recalls that there were areas of hard standing for vehicle movements and a wet area or small pond close to the carpark with waste water that was calcareous and gave some influence on the species by the carpark where water occasionally seeped through. When Hanson's finally vacated the site all traces of industrial plant were removed and shrubs planted, but the areas of hard standing took quite a number of years to vegetate over. Now the site is looking much more natural with full vegetation cover and quite scrubby especially on the bank behind where the shrubs have grown really well. The flatter area is mostly dry with shallow or stony soil, but closer to the carpark there is still a damper area with rushes etc.

We intended therefore to record here this meeting, designated Area O, as an initial survey. A good turn-out of 16 members came along on a mild cloudy day, but it managed to keep fine. Many small species were adjacent to the parking area and we gradually worked our way eastwards to the access drive near the portacabins. The damper areas had Jointed Rush, Hard Rush, Creeping Buttercup, Water Mint and Knotted Pearlwort. The grassland area contained Dove's-foot Crane's-bill, Fairy Flax, Glaucous Sedge, Fox-and-Cubs *Pilosella aurantiaca*, Pale

Lady's-mantle *Alchemilla xanthochlora*, Black Medick, Creeping Cinquefoil *Potentilla reptans* and lots more. Some interesting finds included Purple Loosestrife, Musk Mallow, Spiked Sedge, Agrimony in flower, and Betony was nice to see. There were some marsh-orchid fruiting spikes, but too far gone to identify which type. A year or two back a few Bee Orchids had appeared, but they seemed to be absent this year.

On the opposite side of the access road were a couple of shrubs of Spurge-laurel *Daphne laureola* doing well. Fruits were developing on blackberries, rowan, guelder-rose and the roses, Dog Rose and Sweet-briar. By lunchtime we had clocked up 91 species, so afterwards were determined to get at least 9 more. We followed the grassy track at the back of the bank along the north boundary of the site and slowly our count crept up to the 100 mark. Dropping down the track back to the carpark produced another flurry of species including Red Bartsia, Remote Sedge, Hoary Willowherb *Epilobium parviflorum* and False-brome *Brachypodium sylvaticum*, finally reaching nearly 120 separate species.

Six of us stayed on for a stroll along the sailing club track to the reserve boundary and back by the bird feeders. We noted some clumps of Hemp-agrimony *Eupatorium cannabinum*, Viper's-bugloss *Echium vulgare*, Marjoram and Bearded Couch *Elymus caninus*. The pink flowered water-lily (a cultivar of White Water-lily) in the corner of the conservation lake seen for many years was still looking good. TS spotted a kingfisher skimming across the river and NF recorded several butterflies including Gatekeeper and Meadow Brown. Blue damselflies were common.

Bruce Brown

Acknowledgements

I am very grateful to everyone providing records, attending meetings, taking part in surveys or helping with information and plant identification. A particular mention is given to Carmen Horner for her contributions to this report and her considerable recording input over the year. The following initials and abbreviations have been used in the text.

AMG Audrey Gramshaw

AR Anne Riley

BAE Bolton Abbey Estate

BAT Jesse Tregale

BBG Bradford Botany Group

BNB Bruce Brown

BSBI Botanical Soc. of Britain & Ireland

CH Carmen and Fred Horner

DA David Asher

DAB David Broughton VC64 BSBI Recorder

DL David Leather

DM David Martin

GH Gordon Haycock

HDNS Harrogate & Dist. Naturalists Soc.

HMB Heather Burrow

IB Ian Brand

JP Jo Peters

KB Karen Bullimore

ML Midge Leather

MW Michael Wilcox

NB Neil Barrett

NF Nyree and David Fearnley

NV Nicky Vernon

PM Paul Millard

SD Stephen Dawes

SS Sue and Neil Stevens

SW Sarah Ward

TS Tom and Susan Simcock

WFS Wild Flower Society

YNU Yorkshire Naturalists Union

YWT Yorkshire Wildlife Trust

Geology corner



Fossil plant on house wall (JS)

Anticline at Hambleton (BB)
see page79



Bird Report

Introduction

The following species reports are based on approximately 16000 records received from a range of sources. This figure is not quite as high as last year, but is still at least double previous years. In total, some 161 species were recorded this year in our area, a similar figure to last year.

Approximately two-thirds (66%) of these are from the BTO BirdTrack database. Other sources include: Addingham Environment Group (21%), local What's App groups (5%), WNS members (8%). This is not the complete amount of data available, simply the amount that it has been possible to gather and/or process in the very limited time available given the deadlines set by the Society for publication of this review. The WNS Review is the first of the year to be published by some margin, which, whilst such early publication has some distinct advantages, there are inevitably other knock-on effects, and the loss of some data is one of them.

These figures also show a significant drop in the apparent relative contribution by WNS members - it was 25% last year. This is partly due to some members now contributing via BirdTrack (a welcome move!), but it is also down to a situation that was flagged up a few years ago, when it was noted that membership contributions were becoming increasingly reliant on a small group of stalwarts. Well, the bulk of those stalwarts have now moved on, either geographically or spiritually, and they have not sadly been replaced. I am therefore all the more grateful to those who continue to provide their observations.

The increase in the volume of data and the tight timescales that are required to process them means that there is also less time to deal with any one set of submissions. In particular, it was not possible to fully process some late member submissions. I would therefore ask that people read the 'Notes on Submissions' below carefully please. They have changed somewhat for the forthcoming year!

One final note about sightings: whilst this report lists 161 species, 3 species for which there were single sightings have been omitted. In all cases, this is because the species is sufficiently rare in our area to be a 'description' species, i.e. rather more information (a detailed 'description') is needed before local rare bird committees can accept them as confirmed sightings. WNS does not have its own committee, and relies on acceptance by others. Unfortunately, time and/or inability to identify the observer mean that this process hasn't been completed in these 3 cases.

Notes on the species reports

Taxonomy: The species accounts reflect the extensively revised taxonomic order and scientific nomenclature of the BOU British List 9th edition (Dec 2017).

Descriptors: *Rare:* a migrant or visitor seen less than one year in three, in very low numbers. *Scarce:* a species seen in very low numbers, and usually at very few sites (<5); if a visitor, not every year. *Uncommon:* may be seen annually, but usually at few (<10) sites and in low numbers. *Common:* seen frequently and widely (>20 sites), or at fewer sites in large numbers.

Nomenclature and abbreviations: *The northern region* is that above Barden Bridge, *the southern region* downstream. Barden Moor and Fell are included in the southern region, as is the Washburn valley. *Mid-Wharfedale* is the part of the dale between Barden and Pool Bridges. *Upper Wharfedale* is thus above Barden Bridge, whilst *Lower Wharfedale* is below Pool Bridge. *South Wharfedale* refers to the valley below the A59. References to Beaverdyke, Chelker, Fewston, Grimwith, John O'Gaunt's, Lindley Wood, Swinsty, Scargill, Thruscross, Upper and Lower Barden

mean the reservoirs or the area in their vicinity. *Burley* refers to Burley-in-Wharfedale. *BRGP* refers to Ben Rhydding Gravel Pits.

Months are all abbreviated to their first three letters.

Rare birds: Whilst this report lists 161 species, 3 species for which there were single sightings have been omitted. In all cases, this is because the species is sufficiently rare in our area to be a 'description' species, i.e. rather more information (a detailed 'description') is needed before local rare bird committees can accept them as confirmed sightings. WNS does not have its own committee, and relies on acceptance by others. Unfortunately, time and/or inability to identify the observer mean that this process hasn't been completed in these 3 cases.

Acknowledgements

My huge thanks to everybody who contributed, either directly or indirectly. This report is only possible because of the work and commitment of those volunteers. As a small acknowledgement of that contribution, I have tried to list here all the names of those who contributed either directly. Owing to time constraints and changes in the nature of the data, credits in the species reports have not been included this year, but my I am no less grateful than in previous years - please forgive the omission. Equally, my profound apologies if I have missed anybody off this list.

Avril & David Benson, Andy Jowett, Chris & Joan Alder, David & Nyree Fearnley, Mike & Joyce Clerk, Philip Galtry, Paul Purves, Ros Lilley, Susan Barton, Tom & Ruth Paynter, John Poland, members of the Nidderdale AONB and Local Birding What's App groups, members of the Addingham Environment Group, all contributors to BTO BirdTrack. BirdTrack is organised by the BTO for the BTO, RSPB, BirdWatch Ireland, SOC and WOS.

Notes on submissions

Contributions are welcome, and much appreciated - this report would be impossible without them! However, please do note the following.

By far the best method is to submit your records via the BTO's BirdTrack system, either online at home or via their app on one's mobile phone. This not only makes the recorder's job MUCH easier, it guarantees that the BTO receives this valuable information. If you could let the recorder know you are doing this, it would be much appreciated.

If not using this system, the next best method is via email, using the standard Excel spreadsheet or Word document template available from the recorder directly. **Email address is andrewkelly58@gmail.com.** Please read the notes that come with this - following them will make the recorder's life many times easier.

Please avoid submitting personally customised spreadsheets. They can be hard to interpret, and even harder to extract data from in a useable format - this has often taken several hours, and I have had to take the difficult decision to not include them in future. I simply do not have the volunteer time.

Please also ensure that each record has all the relevant data included. In particular, precise date and location and an indication of numbers are important. Numerous submissions have to be put aside each year simply because they are too vague.

Please note that I need to receive any records for Jan-Nov before the end of Dec. Any Dec records need to be submitted by Sunday Jan 7th. Any received after these dates cannot be included in time for the review without prior arrangement.

CANADA GOOSE *Branta canadensis*

Common resident breeder and visitor

Present on or near most larger stretches of open water throughout the year, peak counts were 150+ at Thruscross in Jan, 100+ at Otley Wetland in Jun, 40 at Barden Moor in Jul, 125 at Grimwith in Sep, and 250 at John O'Gaunts in Dec. Breeding was widely noted.

SNOW GOOSE *Anser caerulescens*

Rare vagrant/local escapee

Up to 2 birds were seen amongst greylags on a number of occasions in the Blubberhouses Moor/Thruscross area between 4 Feb and 12 Mar, with a single bird seen briefly in the same area at the beginning of Nov. The last record of this species in our area was in 2006.

GREYLAG GOOSE *Anser anser*

Common resident breeder and visitor

Widely distributed throughout our area, especially on larger stretches of water, from Threshfield-Grimwith southwards, with 16 at Kettlewell on Jun 2nd the only record north of this line. Peak counts included 375 at Grimwith in Jun, 350 at Otley Wetland in Dec, 300 at Thruscross in Jan, 250 at John O'Gaunts in Dec, 200 on Barden Moor in Mar. Breeding was widely noted.

PINK-FOOTED GOOSE *Anser brachyrhynchus*

Regular passage migrant

Overhead skeins were seen regularly throughout Jan-Feb and from Sep onwards, often in their hundreds, the largest count being 1583 over Weston Moor on 21 Sept. Landed birds were recorded at Thruscross (30, 23 Feb) and Otley Wetland (25, 14 Dec), both sets mixed in with greylags.

WHITE-FRONTED GOOSE *Anser albifrons*

Scarce passage migrant

Last recorded in our area in Oct 2018, in the Hoodstorth area, a single bird was observed nearby on 12-13 Mar, at Thruscross Rsr.

BAR-HEADED GOOSE *Anser indicus*

Escapee

This species is not on the British list, but has been recorded in our area most years since 2015. One was briefly seen at Barden Bridge on 4 Jun, another at Chelker Rsr on 9 Oct.

MUTE SWAN *Cygnus olor*

Locally common resident breeder

This remains very much a species of the southern end of our area. Just two birds were recorded north of the A59: one at Grassington on 28 Jun, another at Bolton Abbey on 31 Oct. Individuals/pairs were irregularly sighted at Chelker and Addingham, otherwise all reports were downstream from BRGP. Breeding was recorded at Otley Wetland (up to 7 adults and 7 cygnets), Wharfebank Mills and Knotford Nook.

WHOOPER SWAN *Cygnus cygnus*

Uncommon but regular passage migrant

There were sightings at 4 locations in the first quarter of the year: 32 at Knotford Nook on 10 Jan; up to 51 at Fewston on 8 Mar; 18 on 27 Feb and up to 65 on 11 Mar at Chelker; and 38 on Lower Barden Rsr on 25 Mar. In the final quarter, 6 were seen at Otley on 8 Oct dropping south from Denton, and 10 ending the year where it started at Knotford Nook on 3 Dec. Small numbers were also seen overhead at Weston Moor during the second week of Oct.

SHELDUCK *Tadorna tadorna*

Uncommon passage /winter visitor; occasional breeder

Highlight of this year has to be a breeding pair at Riffa pond near

Pool, with 3 young recorded. 2 were also seen at Linton Mills at the end of Mar, 2 more at Hoodstorth on 11 Apr, and an individual at Otley Wetland on 23 Apr.

MANDARIN DUCK *Aix galericulata*

Common resident breeder, winter visitor

This species is well established along the Wharfe up to Grassington, with a more northerly sighting at Starbotton in Apr. Bolton Abbey remains the main centre, with a peak count of 56 in Dec. 18 was the highest count in the Washburn, at Leathley in the same month. Up to 11 adults were seen at High Royds pond in the first half of the year, a record there. All breeding noted was along the Wharfe, including 20 young seen near Burley on 16 May.

GARGANEY *Spatula querquedula*

Rare visitor

2 birds were seen on 3-4 Jun at Barden Bridge, the first in our area since 2016.

SHOVELER *Spatula clypeata*

Uncommon passage migrant / winter visitor

One individual was seen at Knotford Nook 6-13 Jan, followed by a pair at Riffa pond on 6 Feb, 2 drakes at Otley Wetland on 10 Mar, 4 at Chelker the day after, with 4 also back at Otley Wetland on 4 Apr. 5 were noted at the same location on 23 Aug, whilst towards the end of the year individuals were seen both at Knotford Nook (3 Dec) and at Otley Wetland (15 Dec).

GADWALL *Mareca strepera*

Locally common passage migrant / winter visitor in small numbers

The normal main sites, Knotford Nook and Otley Wetland, accounted for all but one record. At the former, birds were present in Jan and Dec, with peak counts of 14 and 22 respectively. At the latter, there were up to 2 in the first 2 months of the year, and up to 10 from 30 Aug onwards. There were also two May sightings: a pair at High Royds pond on 11 May, and an individual at Otley Wetland on the 19 May.

WIGEON *Mareca penelope*

Common winter visitor, passage migrant

Otley Wetland remains the main stronghold for this species in our area, with peak counts of 200+ birds in the first 2 and last 3 months of the year. Nearby Knotford Nook peaked with 46 in the early period, just 17 in the latter. Further north there were up to 32 birds at Grimwith in Mar, but only 1 was seen in the autumn, on 14 Sep. One-off sightings included one each at Addingham and Farnley Lake in Jan, and up to 15 at John O'Gaunts in Dec.

MALLARD *Anas platyrhynchos*

Common resident breeder, passage migrant, winter visitor

This species continues to be the ubiquitous year round water bird in our area. Highest counts were 220 at Grimwith on 16 Sep, up to 117 in a number of counts along the Wharfe at Bolton Abbey in Oct, 70 at Swinsty in Jun, 49 at Otley Wetland in Jul. A regular population of 30+ adult birds at High Royds shows the impact of public feeding; 16 young from 3 broods were also observed here in Jun. Extensive breeding was also evident all along the Wharfe.

PINTAIL *Anas acuta*

Scarce passage migrant / winter visitor

Recorded 2-3 times annually until as recently as 2013, but only seen once since, in 2020 at Thruscross. 2022 saw a reversion to the old pattern: a drake at Otley Wetland on 29 Jan was the first and only sighting in the early months. In the autumn, 3 were at Scargill Rsr on 4 Sep, and 2 were at Knotford Nook between 26 Nov and 3 Dec. A flock of 21 was also seen overflying the Weston Moor watchpoint on Sep 22.

TEAL *Anas crecca*

Common passage migrant / winter visitor, occasional breeder

Seen at 15 different locations during the year, matching last year's high, this species remains reasonably widespread in our area even if most counts remain in single digits. Peak count for the first 5 months of the year was 12 at Otley Wetland; furthest north were 2 at Grimwith in Mar. An individual in the same location was the only summer sighting. Autumn sightings were all in the south, with a peak of 28 at Otley Wetland in Dec. In the same month, there were up to 7 at Knotford Nook, and an all-time high of 4 at BRGP. Other sightings of 1-5 birds were mainly at Strid Woods and High Royds pond, with a few along the Washburn.

POCHARD *Aythya ferina*

Uncommon passage / winter visitor

A bird that has declined from a common regular visitor to just occasional sightings, of which there were none in two of the last 3 years. This year, 4 were seen at Knotford Nook on 10 Oct, and up to 4 (including at least 2 female) 18-20 Dec at Otley Wetland.

TUFTED DUCK *Aythya fuligula*

Common resident, winter visitor; occasional breeder

In the north, up to 16 at a time were seen in the Kilnsey-Litton-Grass Wood area through Mar to the end of Jun. Washburn sightings were limited to half a dozen at Thruscross in Feb, a similar number at Blubberhouses Quarry in Apr, and a presence at Fewston and John O'Gaunts in the same month. There were up to 27 in Jan-Feb at Otley Wetland, single digits throughout Jul-Sep, then a build up to 31 in Dec. Knotford Nook saw only single digits recorded in Jan and Apr, but an autumn peak of 27 was achieved in Dec. Chelker had records for most months of the year, peaking at 22 in Jul-Aug. Other locations with individuals included High Royds pond and Saw Mill pond in Addingham.

COMMON SCOTER *Melanitta nigra*

Scarce passage migrant

As in most recent years, migrating flocks were noted as they passed overhead, this year on 26 Mar at Burley weir, flying along the river at 8am, and late in the evening 2 days later over Otley.

GOLDENEYE *Bucephala clangula*

Locally common winter visitor, passage migrant

Both Otley Wetland and Knotford Nook support a regular overwintering population. At the former, there was a peak count of 15 in Jan-Feb whilst the late season figure reached 38 by Christmas Eve; unusually, a single male stayed throughout the summer. At Knotford, up to 14 were seen in Jan, whilst the late autumn count reached 21 in Dec. Nearby Farnley Lake saw up to 13 birds recorded in Jan. This year, Chelker also had a presence in both winter seasons, with up to 7 in Feb-Mar and 9 in Nov. Furthest north, up to 4 birds were seen on the Barden Moor reservoirs 21Feb -7 Mar.

GOOSANDER *Mergus merganser*

Common resident breeder, winter visitor

Present all along the main river south of Kettlewell, with limited sightings elsewhere. The largest count of 30 recorded at Knotford Nook in Jan, otherwise biggest counts were along the Hebden-Bolton Abbey stretch, up to 17 at one time. At Otley Wetland, 1-5 were seen in Jan, up to 7 in Nov-Dec. Washburn counts were limited to individuals seen at Fewston (Nov), Lindley Wood (May) and Farnley Lake (Jan). Breeding was widely noted along the river.

RED GROUSE *Lagopus lagopus*

Common resident breeder

This species tends to be taken for granted in our area, and is without doubt significantly under-reported, although present on

most moorland areas. Highest numbers continue to be recorded on the Devonshire Estate, peaking at 45 on Barden Moor in late Mar. 30 were counted on Conistone Moor in Dec. Records at other locations were mostly in single digits.

GREY PARTRIDGE *Perdix perdix*

Uncommon resident breeder

Almost all sightings of this increasingly scarce bird were on the moors north of Grassington: up to 2 on Grassington Moor on several occasions Apr-Jun, a pair at Lea Green on 5 May, and 5-11 on three occasions in Nov-Dec at Yarnbury. The only other sighting was one of 10 at the top of Ben Rhydding Drive on Nov 2nd.

PHEASANT *Phasianus colchicus*

Common resident breeder subject to extensive rearing/releases

Given the volume of imports, artificial rearing and the annual release, it is almost inevitable that this species is common throughout our area. Most records were in single digits, but 32 were seen at Grimwith in Sep. There was only one garden sighting recorded - in Burley.

RED-LEGGED PARTRIDGE *Alectoris rufa*

Common resident breeder, all from released birds.

Whilst not quite as ubiquitous as pheasant, this is another bird that is common throughout our area due to artificial means. Counts, whilst geographically widespread, were almost all in single digits, except for on the Devonshire Estate, with a peak of just 12.

NIGHTJAR *Caprimulgus europaeus*

Scarce migrant breeder

The majority of reports continued to come from Stainburn Forest, starting on 20 May, almost a fortnight earlier than last year, and a week earlier than 2020. Up to 6 were recorded there on numerous occasions to 10 Aug. 1-3 were noted at Timble Jun-Jul, up to 6 near Barden Bridge in May.

SWIFT *Apus apus*

Common migrant breeder, passage visitor

First sightings were even later than last year (30 Apr), with the first on 8 May at Addingham, followed closely by others in Ilkley, Otley and Menston on the 9th (the latest first record at the last in the past decade), and in Burley, Grassington and Bolton Abbey on the 10th. Records were then almost daily until 4 Aug, larger counts including 50+ at Strid Woods on 13 May, 30 at Hebden the next day, 40 at Burnsall on 27 May. Peak count at Weston Moor watchpoint was 67 on 27 Jul. Later, there was just one at Addingham on 21 Aug, and individuals over Weston Moor on 25 Aug and 9 Sep. Breeding was recorded at Burnsall, Addingham, Menston (2 sites) and Otley.

CUCKOO *Cuculus canorus*

Migrant breeder

Records were disappointingly few this year, well down on 2020-21. First birds were heard on Addingham Moor on 29 Apr, 6 days later than both last year and the long-term average. Others were heard over the next 3 days across the rest of Rombald's Moor, with the first elsewhere on 3 May at Kettlewell. Most records were of individuals, although 3 were at Kettlewell at the end of May, and 4 on Barden Moor in early Jun. Most northerly was at Yockenthwaite, most southerly on the Chevin. Records tailed off after 17 Jun, with just one over Weston Moor on 15 Jul, another at Addingham Moorside on 30 Jul, and a very late lingerer (juvenile?) at Hebers Ghyll on 23 Sep.

FERAL PIGEON *Columba livia*

Common resident breeder

Records suggest that this species is under-recorded, but they do

reflect its adaptability to a wide variety of habitats. Only a handful of locations were recorded in each of the northern and Bolton Abbey areas, including Hubberholme, Litton, Kettlewell and Grassington. In the Washburn, one was seen at Thruscross in Feb, another at Lindley Wood in May. By far the largest proportion of records were in the southern main valley with sightings throughout the year, many from gardens in Addingham, Menston, Ilkley and Otley. A population of 100+ birds is resident near the bridge at Otley.

STOCK DOVE *Columba oenas*

Common resident breeder

Reports came from all across our area, almost exclusively in low single digits, many from gardens. The only exception was at Weston Moor where a steady stream of birds was seen Jul-Nov. Whilst again mostly single digit counts, a peak of 92 was recorded on 11 Sep.

WOODPIGEON *Columba palumbus*

Common resident breeder

This continues to be one of the most ubiquitous species in our area. Most counts were small, although 200+ were seen amongst wheat at Denton on 9 Aug. Weston Moor saw an unusually large build up: 11500 passed through on 30 Oct, 13300 on 2 Nov, and an exceptional 87000+ on 4 Nov, a day where "there was not much else moving". Several other days saw counts of 1000+.

COLLARED DOVE *Streptopelia decaocto*

Common resident breeder

A species that first arrived in the 1950s, peaked in the 90s, but has since seen a steady decline, although remaining familiar enough to almost certainly be under-reported. An unusually high 22 were noted in Addingham on 1 Dec, and 20 at Threshfield on 27 Oct.

WATER RAIL *Rallus aquaticus*

Scarce resident breeder, uncommon passage/winter visitor

For the first time in 4 years, a bird was reported beyond Otley Wetland, with one noted at Farnley Lake on 10 Jan. Otherwise, all other records were at the main site, with two in the spring (11 Apr, 26 May), and three in the period 8-17 Dec.

MOORHEN *Gallinula chloropus*

Common resident breeder, passage visitor

Recorded all along the Wharfe up to Kilnsey, with a high of 36 at Strid Woods in May. 9 was the Otley Wetland peak, in Sep. The population at High Royds pond grew to up to 14 at once. Breeding was noted at Grass Wood, Ilkley Tarn and Riffa Pond.

COOT *Fulica atra*

Locally common resident breeder, passage/winter visitor

After an unusually high number of 12 locations in 2021, the six this year reverted more to recent norms. Knotford Nook remained the main centre, with the 96 seen in Jan and 97 in Dec back up to 2019 numbers. A peak count of 38 at the other main centre, Otley Wetland, was almost double recent highs here. Other locations included Chelker (up to 4, Feb then Aug-Oct), individuals at Beaver Dyke on 23 Apr and Riffa pond on 30 Apr, and, for the first time, a breeding pair at High Royds pond, with 4 young seen in May.

LITTLE GREBE *Tachybaptus ruficollis*

Uncommon resident, winter visitor; occasional breeder

After an exceptional 2021, location numbers reverted more to previous years, with this species recorded at 8 locations. Furthest north was a pair at Linton on 19 Jan. In the Washburn, 1-2 birds were seen at Blubberhouses Quarry, Thruscross and John O'Gaunts in a 4 day period in Apr. In the main valley, largest counts were at BRGP, culminating in an unusually high 8 on 16 Dec. Elsewhere,

one was at Otley Wetland on 10 Mar, a pair nearby on the Wharfe on 11 Dec. An unusual sighting was of one on Panorama Rsr, Ilkley, on 31 Aug.

GREAT CRESTED GREBE *Podiceps cristatus*

Common resident breeder, winter visitor

All records continued to come from this species' usual sites at Knotford Nook, Otley Wetland, Swinsty and Chelker. As usual, largest counts were at Knotford, with 10 noted on New Year's Day, and 7 on Boxing Day, but none between 10 Apr and 10 Oct. 1-2 were seen at Otley Wetland throughout the year. 3 were at Chelker from 15 Aug - 9 Oct, 2 at Swinsty on 28 Jun and 1 Aug.

OYSTERCATCHER *Haematopus ostralegus*

Locally common migrant breeder

Recorded the full length of our area in the first 8 months of the year, with highest counts mid-Mar: 85 at Grimwith, 120 at Linton Mills, 60 at Chelker as birds passed through. Later numbers were mostly in single digits. Unusually late individuals were reported at Burnsall on 21 Sep and Ghaistrill Strid on 3 Oct.

AVOCET *Recurvirostra avosetta*

Rare autumn/winter visitor

An individual was seen and photographed at Lindley Wood on 8 Sep. This is the first record of this species in our area since at least 2000.

LAPWING *Vanellus vanellus*

Common resident breeder, winter visitor

Early counts exceeded 100 at Hoodstorth, Sandwith Moor, Barden Bridge, Barden Moor, Burley and Otley Wetland, with a peak of 600 in the Denton-BRGP area on 27 Jan. Numbers were lower and more widely spread across most upland areas during breeding, before picking up into the autumn: the first 100+ count was at Chelker on 29 Jul, then subsequently at Otley Wetland, Denton (300+, 30 Oct), Ben Rhydding, Knotford Nook, Addingham (300, 21 Dec) and Barden Moor. Four figure totals were recorded at Weston Moor on 13 Oct (1127) and 18 Oct (2700). Young were seen at Malham Moor Lane, Grassington Moor, Burnsall, and Thruscross.

GOLDEN PLOVER *Pluvialis apricaria*

Locally common resident breeder, passage/winter visitor

Early counts reached 400 at Hoodstorth (Jan) and 500 at Middleton Moor (Mar), with other 100+ counts at Chelker, Rombalds Moor, and Burnsall. Up to 25 at a time were recorded over the summer months across northern moors, with single digit numbers to the south. Post-breeding, these climbed again, peaking at 700 at Sandwith Moor in Oct, with another 100 or so on Ilkley Moor. There was a steady stream of birds over Weston Moor Jul-Nov, including 1794 on 8 Oct and 7000 on 3 Nov.

RINGED PLOVER *Charadrius hiaticula*

Uncommon passage visitor, occasional breeder

All reports were in the Grimwith area. First was of 6 by the sailing club buildings on 12 Mar, seen on a Society walk. Later counts peaked at 12 on 12 Jun, also the last report of the year. 3 were reported from neighbouring Mossy Moor on 7 Apr.

LITTLE RINGED PLOVER *Charadrius dubius*

Uncommon migrant breeder, passage visitor

1-2 birds were seen in the Linton Mills area 28 Mar - 11 Apr. 2-3 were recorded in the Barden Moor and Barden Bridge areas on 3 occasions 24 Apr - 16 Aug. Another was reported at Fewston dam on 5 Jun.

WHIMBREL *Numenius phaeopus*

Uncommon passage migrant

2022 was a fairly typical year, with individuals seen over Pool on 13 Jul and at Conistone on 8 Sep. Thirty were recorded over Weston Moor on 18 Aug.

CURLEW *Numenius arquata*

Common resident breeder, passage migrant

We are fortunate to be able to describe this species as 'common', and to have such a strong population, although numbers do appear lower than in years past. It is deeply disturbing to see regular feeding areas subject to both actual and threatened development, with all the longer term implications for this and other species involved. Early year counts reached 300 in the usual favoured locations round Denton, 150 in fields between Burley and Otley. Most records during the breeding season were in single figures, on uplands, although 20-30 at a time were recorded above Kettlewell and Conistone, and at Rocking and Barden Moors. Young were seen at Grassington Moor and Appletreewick. Post-breeding numbers in the southern part of the main valley were similar to early year ones round Denton and at Burley-Otley, with 100+ also noted regularly feeding in fields allocated to development at Ben Rhydding.

BAR-TAILED GODWIT *Limosa lapponica*

Rare passage migrant

There were two reports of this species, last seen in our area in 2010: a flock of 60 briefly at Chelker on 11 Mar, and a single bird at Barden Bridge on 5 May.

BLACK-TAILED GODWIT *Limosa limosa*

Scarce passage migrant

Following three consecutive years of sightings of this previously rare visitor, a single bird was seen at Otley Wetland on 18 Jul. A small flock of a dozen birds was also seen over Weston Moor 5 days later.

RUFF *Calidris pugnax*

Rare passage migrant

This was the second recorded year in succession for this species in our area following on from a gap of over a decade, with 2 birds seen at Lindley Wood Rsr on 9 Sep.

DUNLIN *Calidris alpina*

Uncommon passage migrant

Very unusually, a large flock of c60 birds was reported from Chelker Rsr on Mar 11th. Rather more typical for our area, 1-3 birds were seen at Grimwith 19 Apr - 21 Jul, an individual at Grassington Moor on 14 Jun, another overhead at Weston Moor on 10 Oct, and a third at Otley Wetland on 20 Dec.

WOODCOCK *Scolopax rusticola*

Resident breeder, passage migrant, winter visitor

Small numbers of 1-4 birds were reported throughout the first 7 months in the Washburn Valley (Timble and Stainburn), at Grass Wood and round Bolton Abbey, with an exceptional 12 at Barden Bridge on 28 May an occasional individual was also seen at East Otley. In the last 5 months, single birds were seen at Otley Wetland on 19 Oct, and at Skyreholme and BRGP in Dec.

JACK SNIBE *Lymnocyptes minimus*

Scarce passage migrant/winter visitor

After a 5 year gap, this was the second year in succession for this species to be recorded in our area, with an individual seen at Sandwith Moor on 17 Oct.

SNIBE *Gallinago gallinago*

Resident breeder, passage migrant/winter visitor

Mostly recorded widely on upland areas in ones and twos during the breeding season, although there were no reports of young. Single digit numbers were recorded regularly at Weston Moor Aug-Nov, with highs of 58 on 22 Sep and 14 on 10 Oct. During the winter months, individuals were noted at High Royds pond (Jan), Otley Wetland, BRGP and Sun Lane (all Dec).

COMMON SANDPIPER *Actitis hypoleucos*

Common migrant breeder, passage visitor

Widely distributed along the Wharfe and other stretches of water, first sighting was on 11 Apr at Gallows Hill, with regular reports until early Sep, the last on the 22 Sep at Buckden, a fortnight after the penultimate. Highest count was 19 at Grimwith on Jun 19th, otherwise most were in low single digits except on the Barden-Bolton Bridge stretch of the Wharfe where there were multiple reports of 6-11 birds. Young were observed at Grimwith and near Addingham.

GREEN SANDPIPER *Tringa ochropus*

Uncommon passage migrant

All records for this visiting migrant were in the first and final quarters, mostly at Otley Wetland, as usual. Early on, a single bird was seen there 11 Jan - 11 Feb, with 2 present on 23 Mar. At the end of the year, 3 were reported on 2 Oct, and an individual 3 - 9 Dec. Elsewhere, one was seen at John O'Gaunts on 26 Oct, another at Riffa Pond on 20 Dec.

REDSHANK *Tringa totanus*

Uncommon migrant breeder, passage visitor

Earliest arrivals were seen at Middleton Moor on 11 Mar, and then at Grimwith on a Society walk on the 12 Mar. Up to 4 birds at a time were then seen most days from Starbotton to Menston until 24 Jun, after which the only record was on 3 Jul at Addingham Moorside. There was just one Washburn record this year, at Blubberhouses Quarry on 20 Apr.

BLACK-HEADED GULL *Chroicocephalus ridibundus*

Common resident breeder, passage/winter visitor

Easily the most common gull in our area, widespread in large numbers throughout the year, and often ignored by observers. Larger first half counts included 150 at Chelker (11 Mar), 600 at Barden Moor (10 Apr). Summer high was 200, again at Barden Moor (7 Jul), with 120 at Threshfield on 27 Jul and 100+ at Otley Wetland on 12 Aug. 400+ were there in Nov as well, with 200 at Knotford Nook (15 Dec). In the Washburn, largest count was 50+ at Thruscross on Midsummer's Day.

MEDITERRANEAN GULL *Ichthyaetus melanocephalus*

Scarce passage/winter visitor

Most recent years have produced 1-2 sightings, although 2020 was a blank year. Four records was thus something of a high. The first was an adult at Knotford Nook on New Year's Day, followed by a 1st winter bird at Pool on 9 Jan. The other two were both at Otley Wetland, on 23 Jul and 11 Dec, the latter another first winter bird.

COMMON GULL *Larus canus*

Common passage/winter visitor

Widespread in larger numbers during winter months, this species occurs in only occasional single figures in the summer. First quarter counts reached 400 at Knotford Nook on New Year's Day, 300 at Pool a week later, 500 by Little Almscliff Crag in early Mar. In the north, largest counts of up to 100 were all at Threshfield, reaching 160 at the end of Oct. Dec highs included 101 at Skyreholme, 250 at Knotford Nook, and 200 at Otley Wetland.

GREAT BLACK-BACKED GULL *Larus marinus*

Uncommon passage/winter visitor

Three or four sightings a year are not unusual for this species, so this was an above average year, with 5: one at Thruscross on 22 Jan, 2 at Barden Fell on 3 Apr, 4 at Grimwith on 23 Jun, one at Hubberholme on 9 Jul, and the last near Barden on 16 Aug.

HERRING GULL *Larus argentatus*

Uncommon visitor, increasingly common

The increased sightings noted last year appeared to carry over to this, particularly in the north, with birds reported throughout the year, including 22 at Grimwith on 14 Sep, and the most northerly at Hubberholme on 9 Jul. In particular, there were numerous reports from Threshfield. However, biggest numbers were in the south, especially in Jan: 62 at Knotford Nook on 1 Jan, 47 at Pool on the 8 Jan, the former our highest recorded count recently. At the end of the year, largest count was 15 at Addingham on 9 Dec.

CASPIAN GULL *Larus cachinnans*

Rare visitor

A first winter (second calendar year) bird was reported at Knotford Nook 2 - 4 Jan. This is only the third record of this species in our area. The first was in 2005 at Otley and Grimwith. At this time it was still regarded as a subspecies of Herring Gull, so this is only the second as a separate species, the first being an immature individual at Scargill in Aug 2018.

YELLOW-LEGGED GULL *Larus michahellis*

Scarce visitor

Recorded on average every 2-3 years in our area recently, an individual was seen in the Barden Bridge-Bolton Abbey area 29 Apr - 7 May.

LESSER BLACK-BACKED GULL *Larus fuscus*

Common resident, passage visitor; has bred.

Widespread in our area, geographically and in time, usually in small numbers. Highest counts included 10 at Knotford Nook on 1 Jan, 28 at Threshfield on 30 Apr, 40 at Addingham on 2 Aug and 18 at Scargill on 4 Sep. Weston Moor had regular small numbers too, the exception being 31 on 13 Oct.

COMMON TERN *Sterna hirundo*

Uncommon passage/summer visitor; occasionally breeds

Unusually, there was just one sighting this year, 2 birds at this species' favoured local location, Otley Wetland, on 23 Jul.

GREAT NORTHERN DIVER *Gavia immer*

Rare passage/winter visitor

The immature bird reported in last year's review at Knotford Nook, stayed on into the New Year, so earns a place in this year's review as well. First reported on Boxing Day 2021, it was last seen on 18 Jan. This was the first in our area since 1999, and was recorded and reported by many!

CORMORANT *Phalacrocorax carbo*

Common resident/visitor; occasional breeder

As last year, sightings were fairly evenly spread along the Wharfe from Grass Wood downwards and along the Washburn reservoirs, with additional sightings at Chelker and Grimwith Apr-May. Numbers were generally in single figures, except at Otley Wetland during the first and last quarters, where counts regularly reached over 20, peaking at 27 in early Dec.

GREY HERON *Ardea cinerea*

Common resident breeder

Usually recorded singly, with all records this year south of Kilnsey,

highest counts included 6 at Hebden on 6 Sep, 9 at BRGP on 2 Nov, and 6 at Otley Wetland on 15 Dec. Garden overflights were noted at Burley and Menston.

GREAT WHITE EGRET *Ardea alba*

Scarce visitor

First report was of one seen overhead at Burley on 4 Mar. At the other end of the year, on 4 Nov, there were two sightings at Castley and Otley Wetland, presumably of one bird. There were also a string of sightings 1 - 23 Dec of an individual again at the wetlands - could this have been the same one? These follow on from 2 sightings in 2021, and one in 2016, the only ones in the past 15 years or so.

LITTLE EGRET *Egretta garzetta*

Increasingly common visitor

Until recently this was regarded as a scarce visitor. This year it was recorded widely in every month except Jun, with sightings pushing ever further north as far as Kettlewell in both Apr and on Christmas Day! Most were ones or twos, although 6 were at Burley on 17 Jul, and again at Otley Wetland 3 days later. Unlike last year, none were reported in the Washburn valley.

OSPREY *Pandion haliaetus*

Scarce but regular passage migrant

First reports were on 7 Apr at Mossy Moor, and Chelker and over Otley on the 8 Apr. How many these represent is uncertain. Another was over Barden Bridge on 25 Apr. Two unusual midsummer sightings were at Swinsty on 12 Jun, and upstream from Barden Bridge on 21 Jul. The final records were of an individual seen fishing on several occasions 6 - 9 Aug at Lindley Wood.

SPARROWHAWK *Accipiter nisus*

Common resident breeder

Widely noted from Conistone southwards, where one was seen over the bridleway to Dib Scar on 17 Apr. Almost all sightings were single birds, plus a handful of pairs. Perhaps the most common raptor to be seen in gardens, with sightings in Addingham, Burley, Menston, Otley and Pool.

GOSHAWK *Accipiter gentilis*

Scarce passage migrant

Sightings were all in the Washburn valley, or on Barden Moor. Up to 2 males were recorded round Thruscross in Jan, one mobbing a kite. Two were also seen south of the A59 towards the end of Feb, displaying on one occasion. There were several reports of 1-2 birds over Barden Moor in Mar, another at the beginning of Aug. Finally, an individual was seen twice in Sep-Oct, a month apart, at Weston Moor.

MARSH HARRIER *Circus aeruginosus*

Uncommon passage migrant/visitor

An early juvenile male, was reported over Askwith Moor on 17 Jan. The next was not until 4 Jun, near Burley, followed by two Jul sightings on 23 May at Middleton Moor and 27 Jul over Weston Moor. Another was at Sandwith Moor on 26 Sep. The final record an adult male photographed over Otley Wetland reedbeds on 20 Dec.

HEN HARRIER *Circus cyaneus*

Uncommon passage/winter visitor

As in previous years, most sightings in the first third of the year were individuals, mainly ringtails, over the southern Washburn moors and Barden Moor. Others were noted at Grimwith during the first week in Jan and the last in Apr. Last quarter sightings were all females or immature males in the main two areas.

RED KITE *Milvus milvus**Common resident breeder*

We are lucky to have this bird so common, to the extent that it is almost certainly much under-reported; this reviewer had the almost surreal experience of finding that more children in a local class of year 3s (c.8 years old) could recognise this species than robins or blue tits! Mostly seen in ones or twos, larger gatherings were regularly reported. Largest count this year was 42 at Trollers Ghyll on 5 Dec, with 25+ recorded on several occasions through the year at Denton, and 30+ at Farnley Lake on Dec 22nd. Furthest north were sightings at Buckden in Apr and Sep, with another seen at Litton on 10 Jul. Evidence of breeding was noted at several sites in the Washburn valley.

WHITE-TAILED EAGLE *Haliaeetus albicilla**Rare vagrant*

Only once previously recorded in our area (2010), there were remarkably two sightings of this magnificent bird this year. The first was on 10 Sep at Starbotton, no. G452, an Isle of Wight juvenile returning southwards after an extended tour of the English north. The second was on 25 Nov, another individual flying over the Burley-Otley road, again likely to be on its way south. Previous 'tourists' from the Isle of Wight reintroduction programme have tracked further eastwards, over the lower reaches of the Wharfe, outside our area.

BUZZARD *Buteo buteo**Common resident breeder, passage migrant, winter visitor*

The most widespread and commonly recorded raptor in our area. Most sightings, as ever, were of 1-2 birds, but up to 6 at a time were seen in the Washburn valley, and as many as 12 over Barden Moor. Evidence of breeding was seen at Threshfield, Barden Moor and Farnley Lake.

BARN OWL *Tyto alba**Resident breeder*

This species continues its expansion from just one location in 2009, and is now seen regularly throughout our area. Most extreme records geographically this year were at Buckden in Sep, and Litton in Jun, although they are known further north. All sightings were of 1-2 birds, apart from 3 at Denton Moor in Feb, 4 at Timble Ings in Jul, and 3 at Sandwith Moor in Sep. One was even seen during an RSPB Garden Birdwatch in Addingham! Breeding was noted at Barden Bridge, Addingham, Timble Ings, and Stainburn.

LITTLE OWL *Athene noctua**Resident breeder*

Records this year were concentrated in two broad areas. First was along the main valley from Storiths to Kettlewell, with regular sightings particularly at Threshfield and on Grassington Moor. Further south, the main concentration recorded was east from Otley, up to 3 seen regularly at the Wetlands, others at East Otley, the Chevin, Pool (a garden record) and Stainburn village. The only outlier was at Addingham in Jun. There were no records from the Washburn this year.

LONG-EARED OWL *Asio otus**Uncommon migrant breeder*

This year was rather more successful than last, when just one adult was reported from a camera trap. Sightings on the land between Wharfe and Washburn were recorded throughout the year, with at least 2 sets of young. There was a single report at the end of Jul from Draughton Moor of a family of 5 (BTO).

SHORT-EARED OWL *Asio flammeus**Uncommon resident /migrant breeder*

Birds were seen throughout the year across our uplands. Furthest north were 2 at Kettlewell in early May. Others were at Grassington Moor in Apr and Threshfield Moor in Jun. Southwards, 1-2 were seen several times around Barden Moor in the early and late months. Eastwards, the most northerly were seen throughout the year at Greenhow, up to 4 at a time. Washburn sightings included Kex Gill in Jun, Sandwith Moor Jan-Mar and Sep, and over the western moors in Jun-Aug.

TAWNY OWL *Strix aluco**Common resident breeder*

Often heard but unrecorded, this species is widely present in our area, far more so than records might suggest. Reports extended north to Starbotton and included most main valley settlements. Most southern reports were from gardens in and around most main settlements, every month at Addingham. Young were recorded in Grass Wood, Threshfield and East Otley.

KINGFISHER *Alcedo atthis**Resident breeder*

Commonly seen along the Wharfe from Hubberholme to Knotford Nook and on the lower Washburn, less so elsewhere, reports this year included 4 at Addingham in Jul, and breeding at Grass Wood and BRGP. Recent mild winters will have helped survival rates. Unusually, one was seen in the Washburn as far north as John O'Gaunts (on the disused Beaver Dyke Rsr outflow), and another briefly at High Royds pond, a first for this location.

LESSER SPOTTED WOODPECKER *Dryobates minor**Scarce resident breeder*

An individual was seen in Jan at the only regularly reported site for this species in our area, a private woodland in the Washburn valley. Another was reported from Bolton Abbey on Aug 3rd (BTO).

GREAT SPOTTED WOODPECKER *Dendrocopos major**Common resident breeder*

A species that is widespread throughout the woodlands of our area, reported from Yockenthwaite and Arncliffe to Weeton. Most commonly recorded during the early part of the year, when birds are easily identified by their distinctive drumming, there were still numerous records in every month, sites including gardens at Addingham, Low Mill (inc RSPB Garden Birdwatch), Burley, Menston, and Otley. Young were reported at Grass Wood, Hebers Ghyll and Menston.

GREEN WOODPECKER *Picus viridis**Common resident breeder*

This is a species that is seen proportionally more in the northern half of our area than most, although one reported from a Grassington garden was a first there. Records extended up to Yockenthwaite, with main concentrations at Grass Wood and Bolton Abbey. Reports thinned out southwards, although 1-2 birds were recorded at East Otley through the spring, and other individuals in Otley, near Menston, and as far south/east as Castley Lane, Pool. Birds were also recorded around all the Washburn reservoirs. Little was noted by way of breeding.

KESTREL *Falco tinnunculus**Common resident breeder, passage migrant.*

Seen throughout our area, from Cray to Pool mainly on uplands and farmland, with garden (Otley only) and urban records (1 in central Ilkley) very limited. Counts were as ever mostly 1-2, although 5+ were at Grassington Moor on 25 Apr, 6 over Weston

Moor on 26 Aug, and 7 at Sandwith Moor on 4 Sep. There were no reports of breeding.

MERLIN *Falco columbarius*

Uncommon resident breeder, passage migrant, winter visitor

Another good year for sightings following the recent 2021 high, across high ground from Conistone to Menston, mainly concentrated around the Conistone-Grassington Moors and the Washburn. Almost all were singles, rare exceptions being 2 at Grassington Moor (15 Jun) and Weston Moor on 11 Sep.

HOBBY *Falco subbuteo*

Uncommon but regular summer visitor

Putting aside the unusual 2020 high, records in 2022 reflected recent years, although the first bird was seen a fortnight earlier than last, on 11 May over Otley. Other sightings ranged from the beginning of Jun to 29 Sep, the last over Weston Moor a fortnight after the penultimate. Almost all were in the south and east of our area, the only exception being a 'northern' bird at Grimwith on 14 Aug.

PEREGRINE *Falco peregrinus*

Resident breeder, passage migrant

It was good to see this year confirm the return to stronger numbers of last year after the steep dip in 2020. Northern sightings were mostly on the high ground from Conistone Moor to Grimwith throughout the year, as well as at Greenhow in Jan and May, and Litton in Jul. To the south, all sightings were in the Barden Moor and Washburn areas, except for the most southerly of the year, at Otley Wetland in Jan.

RING-NECKED PARAKEET *Psittacula krameri*

Possible escapee

With a breeding population established in several Bradford areas, and regular sightings as close as Nunroyd Park, the expectation remains that this species is all set to establish its presence in our area. However, whilst they have been seen as far up as Ilkley on occasion, records remain in the low single digits, and this year is no exception, with sightings limited to 1 then 3 birds a week apart in Oct, over a garden in Pool.

JAY *Garrulus glandarius*

Common resident breeder

Counts for this well spread species, seen as far north as Kettlewell, were mostly in ones and twos throughout the year, although 3-4 were seen daily in a Pool garden in Jan. No breeding was noted.

MAGPIE *Pica pica*

Common resident breeder

Whilst ubiquitous throughout the southern area, sightings further north remain distinctly fewer, although they did reach as far north as Hubberholme in Jul, and as far west as a pair on Darnbrook Fell in Jan. Counts were relatively low, only three at the end of the year at Otley Wetland reaching double figures (max 14, 15 Dec). 9 were seen from a garden in Menston on 15 May, 8 during an RSPB Birdwatch count in Addingham. No direct evidence of breeding was noted.

JACKDAW *Coloeus monedula*

Common resident breeder

One of the most widespread species in our region, reported from all areas in large numbers. None matched the 1000+ numbers of recent years however, with the largest being 300+ at Bolton Abbey in Nov. Migration counts at Weston Moor reached a peak of 279 on 18 Oct, with 254 the following day. The only northern 3-figure count was of 100 at Hebden in May.

ROOK *Corvus frugilegus*

Common resident breeder

Widespread, but often taken for granted where there are rookeries. Almost one-third of all counts simply record a presence, with no numbers. Largest counts included 200 feeding in fields next to Fewston Rsr in Jan, 120 at Castley Lane near Pool the same month, and 100 at Crag Lane Weeton in Jul.

CARRION CROW *Corvus corone*

Common resident breeder

As with most corvids, this is a species that has adapted well to human expansion, and numbers remain strong. As to be expected, counts tend to be lower than the likes of jackdaw and rook, although a surprisingly large 400 were reported at the same time as the above three-figure report for jackdaws at Weeton. 120 were also noted at Stainburn Forest in Aug. Peak count in the north of our area was a far lower 16 at Burnsall on Midsummer's Day.

RAVEN *Corvus corax*

Resident, scarce breeder

A species that has become increasingly well-established in recent years. Primarily seen in counts of up to 5 across our upland areas and along the Washburn, lower level Wharfedale sightings have also been recorded all along the valley Ilkley to East Otley. Breeding was noted at Timble Ings.

WAXWING *Bombycilla garrulus*

Scarce winter visitor

Not seen in our area since 2019, a flock of 11 were recorded briefly at Knotford Nook on 23 Nov.

COAL TIT *Parus ater*

Common breeding resident

Whilst still recorded as widespread as ever, from Hubberholme to Otley, and throughout the Washburn south of the A59, highest counts did not match recent years, the most being 10 at Parcevall Hall gardens on Midsummer's Day, with young noted. Birds were seen in most reporting gardens.

MARSH TIT *Poecile palustris*

Scarce resident

The only reported sighting of this species this year was one at Bolton Abbey on 29 Apr.

WILLOW TIT *Poecile montanus*

Scarce resident

The individual seen regularly in a Menston garden last year continued to show itself throughout this at various times, the only record of this species in our area in recent years.

BLUE TIT *Cyanistes caeruleus*

Common resident breeder

Seen throughout all valleys, counts were similar to recent years, with a high of 40 at Strid Woods in May; 23 were recorded at Grass Wood in Nov, with other counts in both areas in the teens. One of the most commonly recorded garden birds, with young observed widely, including fledging watched as it happened in a Menston garden in Jun.

GREAT TIT *Parus major*

Common resident breeder

Seen equally as widely as Blue Tits, but generally with lower counts, the highest being 16 on the Chevin near the beginning of the year. Counts were generally lower in the second half. Reports of young were sparser, with young noted only at Kettlewell and Grass Wood.

SKYLARK *Alauda arvensis*

Common resident breeder, passage migrant

Whilst not as widely reported this year as last, record numbers were still up compared to previous years. Earliest was at Thruscross at the end of Feb, after which there were frequent reports through to the beginning of Nov, all records after Sep 22nd being at Weston Moor. Away from here, highest counts were at Kettlewell (23 in May & Jun, the former including young), Barden Moor (17 in Apr), and Threshfield Moor (12 in May). Peak count at Weston Moor was 157 on 8 Oct. Young were also seen at Burnsall.

SAND MARTIN *Riparia riparia*

Common migrant breeder, passage visitor

Not a great year! First sighting was on 8 Apr, the latest since 2013 (13 Apr) and second latest this century. There was then a steady stream of records, with an early high count of 23 at Bolton Abbey on 25 Apr, but counts were generally much lower than last year, never exceeding the 50+ seen at Otley Wetland on 25 Jul and (last record of the year) 30 Aug. Direct breeding activity was noted on the Skirfare at Hawkswick, at Kilnsey, Conistone (latest 21 Aug), Grass Wood, Howgill, Appletreewick, Bolton Abbey, Ilkley, BRGP (20 active nests counted) and between Burley and Otley.

SWALLOW *Hirundo rustica*

Common migrant breeder, passage visitor

First sighting was at Otley Wetland on 7 Apr, the latest since 2017 (9 Apr). There was then a week's hiatus, 4 birds at Strid Woods being the first of almost daily sightings through to mid-Sep, after which all but 3 sightings (the last 5 Oct at Fewston) were at Weston Moor. 1176 birds passed through here on 13 Sep, 286 the next day. Numbers then tailed off, but sightings continued most days until 18 Oct, after which the only one was 2 birds on 6 Nov. Numbers and nests during breeding were as ever widely spread, with highest counts at Hebden (32), Strid Woods (30+), and Weeton (30).

HOUSE MARTIN *Delichon urbicum*

Common migrant breeder, passage migrant

Last of the hirundines to return, first was on 13 Apr at Strid Woods. Whilst a fortnight later than last year, it was within 2 days of the decade average. Until the end of the season, highest counts didn't exceed the 16 seen at Strid Woods on 21 May. There were then c.50 at Menston on 18 Aug, where there are colonies in both the village and at High Royds, and 50+ at Addingham on 29 Aug. A late count of 30 was also noted at Thruscross on 17 Sep. Weston Moor numbers started to build up in Aug, with 113 on 18 Aug being the month high. Peak day, as with swallows, was on 13 Sep, (1612), with 431 the next day. The last was seen on 7 Oct, 6 days after the previous sighting. Aside from Menston, the only recorded breeding was at Addingham and Burnsall.

CETTI'S WARBLER *Cettia cetti*

Rare passage migrant / summer visitor

The first record of this species in our area was in 2020, when a bird was briefly heard singing at Otley Wetland in Apr. One was also heard for the first time at Bradford Ornithological Group's Keighley reserve. Whilst continuing to be heard at Keighley, none were recorded at Otley in 2021, so it was particularly pleasing for several hearings to be recorded here this year in the fortnight 11-23 Dec.

LONG-TAILED TIT *Aegithalus caudatus*

Common resident breeder

As in previous years, the majority of sightings were along the lower levels of the main Wharfe valley, primarily below Kettlewell, often in gardens, although there were a couple of sightings at Hubberholme in Jul-Aug, and an individual at Buckden in Sep. Of

tributaries, there were none from Littondale whilst the few Washburn records were focused in woodlands round the reservoirs south of the A59, including 16 at Swinsty in Feb and a family party (inc young) of 15 at Timble Ings in Aug. Largest counts were 33 at Bolton Abbey on 14 Oct, 21 from a garden count at Addingham, and up to 18 in several counts at Grass Wood, all sites where breeding was recorded.

WOOD WARBLER *Phylloscopus sibilatrix*

Uncommon migrant breeder

Records of this increasingly scarce species were limited to two sites all within the space of one month. As last year, most records were from Grass Wood, where 1-2 were recorded on numerous occasions 23 Apr - 28 May. There were just 2 reports from Hebers Ghyll, on 9 and 10 May, as disappointing as a similar 2021 after an excellent count there in 2020.

WILLOW WARBLER *Phylloscopus trochilus*

Common migrant breeder / passage visitor

First heard in our area on 11 Apr singing on the Chevin and at Otley Wetland, then further north at Barden Bridge and Threshfield on 14 Apr. Birds were then reported almost daily across the full extent of our area until the end of Aug, with just one Sep record of 2 at Hebden on the 6th. Counts of 30+ were recorded at Hebden and Stainburn Forest in May, and Grimwith Rsr in Apr and Jun, 20+ at each of Fewston, Thruscross and Grass Wood in Apr.

CHIFFCHAFF *Phylloscopus collybita*

Common migrant breeder, passage / winter visitor

Whilst widely distributed, this is a predominantly southern species in our area; as previously, there were no records from north of Conistone or in Littondale. Earliest was an overwintering bird in a Menston garden in Jan, otherwise the first were reported on 10 Mar at BRGP and Otley Wetland. First north of the A59 was not until 26 Mar at Grassington. Most of the frequent reports until 9 Aug were in low single digits, an exceptional 16 at Strid Woods on 21 May. Aside from a steady stream of sightings at Weston Moor (max 25, 26 Aug) there was a month long hiatus before the first of a series of Sep records between the 6 Sep (Burnsall, last northern) and 29 Sep (Gallows Hill). A single winter stayer was in a Pool garden on 23 Dec. The only direct breeding record was at Grass Wood in Jun.

SEDGE WARBLER *Acrocephalus schoenobaenus*

Uncommon, increasingly scarce, migrant breeder

As last year, there were just 3 records for this species, the first an unexpected singer in the roadside hedge opposite St Mary's School Menston during an early morning walk on 14 May. There was another report from Otley Wetland 5 days later, whilst the final one was not until 9 Aug at BRGP.

REED WARBLER *Acrocephalus scirpaceus*

Scarce migrant breeder, passage visitor

Both recent recording locations produced records this year. Up to 7 birds were heard infrequently between 23 Apr and 9 Jul at Otley Wetland, whilst, after the blank drawn last year following 3 consecutive years of successful recording, a single bird was heard at High Royds pond during the week 9-15 Jun.

GRASSHOPPER WARBLER *Locustella naevia*

Scarce visitor, very occasional breeder

Up to 4 were heard on several occasions at Denton Moor between 14 May and 7 Jul. There were also single records of 2 birds on the moor above Panorama Woods on 15 May, and of another at Grimwith on 18 May.

BLACKCAP *Sylvia atricapilla*

Common migrant breeder, passage / winter visitor

The first probable returner was seen on 27 Mar at East Otley, although overwintering birds were recorded in both Pool and Menston gardens, and no others were noted until 10 Apr, at Sun Lane and Knotford Nook. The first northern bird was next day at Linton Mills. Subsequent records were widely distributed, as far up as Arncliffe at the end of May, and Yockenthwaite in Jun. Frequent sightings continued until mid-Aug, although there was a trickle (1-2 at a time) through Weston Moor to the end of the month. After that, overwintering birds were recorded in Nov-Dec again in Pool and Menston, also in Addingham. Young were reported at Parcevall Hall gardens on Midsummer's Day.

GARDEN WARBLER *Sylvia borin*

Common migrant breeder / passage visitor

Reported in small numbers between 23 Apr (Otley Wetland) and 30 Jun (Middleton Woods), with a high of 5 at Bolton Abbey on 11 May. Birds were recorded as far north as Grass Wood and Threshfield. A series of individuals was seen from Weston Moor through to the end of Aug.

LESSER WHITETHROAT *Sylvia curruca*

Scarce migrant, passage visitor

Matching the high of 4 records in 2020 were reports from Fewston (20 Apr), Menston (22 May), Otley Wetland (23 Jun) and Weston Moor (18 Aug).

WHITETHROAT *Sylvia communis*

Increasingly uncommon migrant breeder, passage visitor

As in previous years, all records were from the south. First was at East Otley on 16 Apr, another on 24 Apr right on the edge of our catchment by The Ings pub at Guiseley. Another Otley bird, this time near the showground, was recorded on 11 May. Furthest north was one at Timble Ings on 9 Aug. Otherwise, all records were at Weston Moor, with regular sightings of up to 4 throughout Jul-Sep, an exceptional 11 on 18 Aug. Unusually, there were no records from the Chevin which normally hosts a breeding population.

GOLDCREST *Regulus regulus*

Common resident breeder, passage / winter visitor

Widely distributed and more evenly recorded throughout the year in our area than last, most reports were of 5 or less. The one exception was a count of 20+ at Thruscross Rsr on 3 Oct.

WREN *Troglodytes troglodytes*

Common resident breeder

As befits the UK's most common species, this species is widely (and loudly!) present throughout our area. Not often counted in larger numbers, 30 were noted at Strid Woods in May and 22 at Stainburn Forest (both May). Young were recorded at Grass Wood and Thruscross.

NUTHATCH *Sitta europaea*

Common resident breeder

Birds were seen as far up as Yockenthwaite (including young), into Littondale, and extensively along the valleys southwards, including the Washburn below Fewston. An unusual sighting was one at Low Dam in Jun. Whilst most counts were ones and twos, up to 10 were seen in and around Strid Woods on several occasions. There was direct evidence of breeding here and at Threshfield.

TREECREEPER *Certhia familiaris*

Common resident breeder

Normally only seen south of Grass Wood, one was recorded at Hubberholme on 9 Jul, and another north of Arncliffe on 13 Nov.

Whilst widespread further south, counts never exceeded 3, and there were no breeding reports.

STARLING *Sturnus vulgaris*

Common resident breeder

Recorded as far upstream as Hubberholme, almost inevitably highest counts were at Weston Moor, with 1082 on 30 Oct and 1416 on 2 Nov; 3 other days saw 500+ pass over. The only other 1000+ count was at Addingham Moorside on 9 Mar. Other notable reports included 200 at Sandwith Moor on 1 Mar, 100+ on wires along Castley Lane on 28 Nov, and 500 at Weeton on 15 Dec.

SONG THRUSH *Turdus philomelas*

Common resident breeder, winter visitor

This species remains one of the most widespread in our area, with records well into the upper valleys, and birds seen frequently in and around southern gardens. Highest count in our area was, as previously, at Grass Wood, although the Jun peak of 7 there was matched at Strid Woods. Young were seen at Grass Wood, Grassington and Parcevall Hall gardens.

MISTLE THRUSH *Turdus viscivorus*

Common resident breeder, passage migrant

Widely and frequently reported south of Kettlewell, there were no records from upper Wharfedale or Littondale this year. No significant post-breeding flocks were noted, the only double digit count being 10 in fields at Menston on 19 Jan. The only juveniles noted were at Strid Woods.

REDWING *Turdus iliacus*

Common winter visitor

Early year birds were seen until 3 Apr, with a high of 100 at Castley Lane, Pool, on 15 Jan. First of the autumn returners was one at Grassington on 20 Sep. The first count at Weston Moor was 228 on 29 Sep, but all were dwarfed by "an amazing" movement on 19 Oct, when 43000 birds were recorded in the one day. Nothing else came close, the next being 429 on 2 Nov. Away from here, double digit autumn flocks were noted throughout the south, with a single three figure count (118) at Bolton Abbey on 6 Nov.

BLACKBIRD *Turdus merula*

Common resident breeder, winter visitor

Perhaps the quintessential garden bird, ubiquitous throughout the lowlands, representing some 4% of all our records. As expected, highest counts were in the winter, with the top 5 all at Otley Wetland, peaking at 28 on 25 Nov, others in their teens at Knotford Nook, BRGP and Strid Woods.

FIELDFARE *Turdus pilaris*

Common winter / passage visitor

Flocks were seen throughout the first 4 months, the last on 20 Apr at Denton. These included 80+ at Weeton, 200+ at Storiths, and 500 at Barden. First autumn sighting was at Weston Moor on 30 Sep, numbers there rising to 1027 on 19 Oct (see redwing) and a peak of 1245 on 2 Nov. Elsewhere, the largest autumn flock record was one of 60+, seen throughout Dec at Threshfield.

RING OUZEL *Turdus torquatus*

Uncommon migrant breeder, passage visitor

Recorded at an unusually high 15 locations, the first report was equally unusual, a single bird on 5 Jan 5, at Hebers Ghyll. More conventional returners were first noted on 24 Mar at Hebden Beck, and the day after at Barden Moor. Numbers reached double digits at Skyreholme on 11 Apr, at Hebden Gill on 13 Apr, and as many as 15 at Grassington Moor on 26 Apr. Others were also recorded Apr-May on high ground either side of the valley above Kettlewell and Starbotton, at Grimwith, Barden Fell, and on Rombald's Moor

above Addingham and Burley. All Jun records were on Grassington Moor (up to 5), with a final isolated sighting at Barden on 16 Aug.

SPOTTED FLYCATCHER *Muscicapa striata*

Migrant breeder, passage visitor

Earliest arrivals were again in the Bolton Abbey area, the first on 28 Apr. All sightings of more than 3 birds bar one were here too, including 12 (young seen) on 14 Jul. Elsewhere, birds were not seen until mid-May, at Hebers Ghyll and Hebden, the latter subsequently seeing a count of 6 on 31 Jul. Reports were frequent and widespread along the valleys to Hubberholme and Litton, until early Sep (last at Threshfield 9 Sep), although only one location was reported in the Washburn valley, Timble Ings.

ROBIN *Erithacus rubecula*

Common resident breeder / winter visitor

The archetypal garden bird, familiarity making it liable to significant under-reporting. Counts at Strid Woods (40, 21 May) and Skyreholme (44, 12 Jan) are probably just illustrative of the strength of population. Other higher counts were in the teens: 15 at High Royds (Jan), 18 at Swinsty Rsr (Feb). Juveniles were seen at Menston, Ilkley Moor, Strid Woods, Grass Woods and Grimwith.

PIED FLYCATCHER *Ficedula hypoleuca*

Migrant breeder, passage visitor

Woodlands between Bolton Abbey and Burnsall, and along the Washburn, continue to be the main strongholds. First to arrive were at the former by 13 Apr, and birds were seen frequently in counts of up to 11 until 3 Aug. At the latter, first sighting was on 20 Apr, the last on 5 Jun. Outside these areas, the only record was one at Burley Moor on 9 Apr. Breeding was recorded at both main centres.

BLACK REDSTART *Phoenicurus ochruros*

Scarce passage visitor

Seen last year for the first time since 2015, a single bird was reported over 2 days near Scargill Rsr 31 Mar - 1 Apr 1st (BTO).

REDSTART *Phoenicurus phoenicurus*

Common migrant breeder / passage visitor

As last year, first sighting was at Menston (on Bleach Mill Lane), on 11 Apr, followed by a steady stream of records until the start of Aug. After this, there were individuals at Weston Moor most days until 27 Aug, one at Hubberholme on 22 Aug, and the final one on 4 Sep, at Addingham.

WHINCHAT *Saxicola rubetra*

Uncommon migrant breeder, passage visitor

First of the year was at Grassington Moor on 25 Apr, followed by 2 at nearby Grimwith on 28 Apr. 4-5 were then seen on 7 Jul at Barden Moor, including young - an unusual record. Finally, 5 were seen at Scargill Rsr on 3 Sep, with another 4 counted the same day on the other side of the valley at Denton Moor. There were counts at Weston Moor 13 Aug - 9 Sep, up to 9 on 21 and 26 Aug.

STONECHAT *Saxicola torquata*

Resident breeder, passage / winter visitor

Seen throughout the year, with sightings from Yockenthwaite to the Chevin and Stainburn. Counts were in single digits through early and late months, whilst almost all spring/summer counts over 5 were at Barden Moor, including 14 on 10 Apr. The exception was the peak count for the year - 17 at Denton Moor on 10 Sep. Up to 5 were seen at Grimwith through the summer, in contrast to last year's blank, and young were noted both here and at Barden Moor.

WHEATEAR *Oenanthe oenanthe*

Common migrant breeder / passage visitor

A species seen primarily on the high ground both sides of the Wharfe valley down to the A65, and at Addingham Moorside and Sandwith Moor in the south. First was at Barden Fell on 17 Mar, the last at Addingham Moorside on 25 Sep, with a peak of 30 at Hebden on 14 May. Outside these areas, the only records were 3 birds on the Chevin on 20 Apr and one at Blubberhouses on 25 Apr. Weston Moor saw a total of 33 move through 9 - 27 Aug, including 11 on 19 Aug. Breeding was seen at Kettlewell, Grassington Moor and Malham Moor Lane.

GOLDFINCH *Carduelis carduelis*

Common resident breeder, passage visitor

A species that continues to thrive with numerous sightings in all regions and reporting gardens. Largest spring flock size noted was 40 over a Menston garden, whilst autumn numbers reached 56 at Grimwith and 55 at Threshfield in Sep, with others of 40 at Addingham in Aug, 42 at Hebden in Sep. Weston Moor saw 900 birds pass over during autumn movements, peaking at 92 on 11 Sep, and 90/96 on 8-9 Oct 8.

SISKIN *Spinus spinus*

Resident breeder, passage / winter visitor

The increase in recorded locations reported in 2021 continued into this year, and this species was widely seen from Kettlewell southwards. Numbers were usually in single digits, although a small number of larger winter/autumn flocks were noted, including 100+ at Otley Wetland in Feb, 200 at Denton Moor in Sep, and 80 at Hebers Ghyll in Nov. Largest count at Weston Moor was 66 on 10 Oct. The only young recorded was in an Ilkley garden.

LAPLAND BUNTING *Calcarius lapponicus*

Rare passage migrant, winter visitor

Just the third record since 2010, one was seen at Weston Moor watchpoint on 13 Sep.

YELLOWHAMMER *Emberiza citrinella*

Scarce resident, probable breeder

A small population in the Weeton area continues to sustain the presence of this species in our area. Up to 4 birds were recorded on 4 occasions Mar-Jun, with another 2 reported on 4 Dec. Weston Moor records included up to 3 birds on 3 days, 10 Oct - 2 Nov.

REED BUNTING *Emberiza schoeniclus*

Resident breeder, passage visitor

As in 2021, northern birds were recorded at Grimwith, with a high of 7 on 23 Jun, and in the Grassington area: singletons at Threshfield and Hebden in Apr, at Grassington Moor in Jun. There were just 2 sightings in the Bolton Abbey area, with 1-2 birds at Barden Moor on 25 Mar and 10 Apr, and another 2 in the Washburn valley: one at Fewston on 25 Apr, another at Lindley Wood on 21 May. Whilst one bird was seen at Whetstone Gate on 2 Jun, all other southern records were between High Royds and Castley Lane. The only site with multiple birds was Otley Wetland, where up to 10 were recorded (11 Dec). There were numerous counts at Weston Moor through the autumn, all single digit except for 10 on 6 Oct.

Andrew Kelly

MOTHS

Earliest moths sighted in 2022 were:

January: **Pale Brindled Beauty** (70.247 - *Phigalia pilosaria* - 1926) (40.006 - *Mompha jurassicella* - 0890).

February: **White-shouldered House Moth** (28.009 - *Endrosia sarcitrella* - 648), **Early Moth** (70.282 - *Theria primaria* - 1960) and **Common Quaker** (73.244 - *Orthosia cerasi* - 2187).

March: **Common Plume** (45.044 - *Emmelina monodactyla* - 1524), (29.001 - *Diurnea fagella* - 663), **Satellite** (73.210 - *Eupsilia transversa* - 2256) and **Small Quaker** (73.245 - *Orthosia cruda* - 2182).

Latest moths sighted in 2022 were:

October: **Rush Veneer** (63.052 - *Nomophila noctuella* - 1398), (49.043 - *Exapate congelatella* - 1026), (49.084 - *Acleris notana* - 1045), **Diamond-back Moth** (18.001 - *Plutella xylostella* - 0464), **Snout** (72.003 - *Hypana proboscidalis* - 2477), **Merveille du Jour** (73.224 - *Griposia aprilina* - 2247), **Angle Shades** (73.113 - *Phlogophora meticulosa* - 2306) and **Lunar Underwing** (73.193 - *Anchoscelis lunosa* - 2270).

November: (40.010 - *Mompha epilobiella* - 893), **Brick** (73.169 - *Sunira circellaris* - 2262), **Spruce Carpet** (70.079 *Thera britannica* - 1769), **Chestnut** (73.194 - *Conistra vaccinii* - 2258), **Yellow-line Quaker** (73.190 - *Leptologia macilenta* - 2264), **Feathered Thorn** (70.244 - *Colotois pennaria* - 1923), **Puss Moth** - cocoon (71.003 - *Cerura vinula* - 1995) and **Northern Winter Moth** (70.105 - *Operophtera fagata* - 1800).

December: with colder, clear nights indoor sightings like (40.008 - *Mompha subbistrigella* - 882) possible.

Total of 6,424 records (1,207 micro and 5,217 macro) were received for **29,083 moth sightings of 568 species** (237 micro and 331 macro). The busiest months for moth sightings were **June** - 1,101 records (197 micro, 904 macro), **July** - 2,055 records (436 micro, 1,619 macro) and **August** - 1,467 records (389 micro, 1,078 macro). The sightings and species recorded in any year always fluctuate according to the weather patterns, abundance of common species and opportunities for regular trapping by WNS moth recorders. Various sites in Burley-in-Wharfedale, Skyreholme, Grass Wood area, Ilkley, Menston, Otley and Pool-in-Wharfedale were regularly monitored using light trapping and wine roping.

Annual moths frequently seen without using any moth trap can be viewed on the Wharfedale Naturalists' Society website <http://www.wharfedale-nats.org.uk/moths/> Every year we get good records from what we term our 'roving moth-ers': gardeners, walkers, shoppers and butterfly recorders, which all add to the overall picture of local moth activity.

January started with warm nights, but very wet, followed by many low temperature nights before ending exceptionally windy, so only 3 species, including Dotted Border (70.255- *Agriopsis marginaria* -1934) seen.

February was a stormy month, with heavy rainfall and 'gusty' days, so traps only caught 17 moths of 8 species, including (32.017 - *Agonopterix arenella* - 0697), Dark Chestnut (73.195 - *Conistra ligula* - 2259).

Hibernating adults of Tissue (70.123 - *Triphosa dubitata* - 1790) and Herald (72.001 - *Scoliopteryx libatrix* - 2469) were found in good numbers in local caves regularly monitored from Feb onwards.

March with warmer days and particularly evenings towards its end gave good moth results: 279 records for 520 moths of 29 species, including: (32.018 - *Agonopterix heracliana* - 0688), Yellow Horned (65.016 - *Achlya flavicornis* - 1659), Red Chestnut (73.336 - *Cerastis rubricosa* - 2139).

Regular moth sightings continued through to mid October in traps or elsewhere: **Twenty-plume Moth** (44.001 - *Alucita hexadactyla* -1288), **Pearl-band Grass Veneer** (63.100 - *Catoptria margaritella* - 1314), **Cherry-fruit Moth** (20.021 - *Argyresthia pruniella* - 0420), (49.029 - *Lozotaenia forsterana* - 1002), **Red-**

barred Tortrix (49.004 - *Ditula angustiorana* - 1010), **Cherry-bark Moth** (49.200 - *Enarmonia formosana* - 1216), **Bud Moth** (49.224 - *Spilonota ocellana* - 1205), (62.048 - *Euzophera pinguis* - 1470), (63.033 - *Udea lutealis* - 1388), **Garden Pebble** (63.057 - *Evergestis forficalis* - 1356), **Brindled Pug** (70.156 - *Eupithecia abbreviata* - 1852), **Double-striped Pug** (70.141 - *Gymnoscelis rufifasciata* - 1862), **Figure of Eighty** (65.010 - *Tethea ocellaris* - 1654), **Chevron** (70.090 - *Eulithis testata* - 1755), **Burnished Brass** (73.012 - *Diachrysis chrysitis* - 2434), **Single-dotted Wave** (70.011 - *Idaea dimidiata* - 1708), **Flame Carpet** (70.053 - *Xanthorhoe designata* - 1722), **Angle Shades** (73.113 - *Phlogophora meticulosa* - 2306), **Purple Thorn** (70.239 - *Selenia tetralunaria* - 1919), **Lime Hawk-moth** (69.001 - *Mimas tiliae* - 1979), **Small Phoenix** (70.094 - *Ecliptopera silaceata* - 1759), **Swallow-tailed Moth** (70.243 - *Ourapteryx sambucaria* - 1922), **Peppered Moth** (70.252 - *Biston betularia* - 1931) and **White-pinion Spotted** (70.279 - *Lomographa bimaculata* - 1957).

Usual annual sightings of Mint Moth (63.006 - *Pyrausta aurata* -1361), (63.007 - *Pyrausta purpuralis* - 1362), **Emperor Moth** (68.001 - *Saturnia pavonia* - 1643), **Humming-bird Hawk-moth** (69.010 - *Macroglossum stellatarum* - 1984) and **Speckled Yellow** (70.229 - *Pseudopanthera macularia* - 1909).

Adults and caterpillars recorded in gardens and on walks for: (40.012 - *Mompha miscella* - 0884 - larval only), **Knot Grass** (73.045 - *Acronicta rumicis* - 2289), **Vapourer** (72.017 - *Orgyia antiqua* - 2026), **Ruby Tiger** (72.024 - *Phragmatobia fuliginosa* - 2064), **Oak Eggar** (66.007 - *Lasiocampa quercus* - 1637), **Tissue** (70.123 - *Triphosa dubitata* - 1790), **Broom Moth** (73.271 - *Ceramica pisi* - 2163), **Fox Moth** (66.008 - *Macrothylacia rubi* - 1638), **Cinnabar** (72.031 - *Tyria jacobaeae* - 2069), **Sycamore** (73.039 - *Acronicta aceris* - 2279) and emerging **Narrow-bordered Five-spot Burnet** (54.009 - *Zygaena lonicerae* - 0171) with many more pupa cases on grass stems (empty /occupied).

The most abundant micro-moths over the 2022 season were:

Light Brown Apple-moth (49.039 - *Epiphyas postvittana* - 998) 84 records - 290 moths (01 May - 28 Nov);

Bird-cherry Ermine (16.001 - *Yponomeuta evonymella* - 424) 52 records for 237 moths (5 Jul to 28 Aug);

Garden Grass-veneer (63.080 - *Chrysoteuchia culmella* - 1293) 39 records - 451 moths (16 Jun to 13 Aug); **Common Grass-veneer** (63.089 - *Agriphila tristella* - 1305) 37 records for 227 moths (01 July to 04 Sept);

Dingy Dowd (41.002 - *Blastobasis adustella* - 873) 36 records for 416 moths (05 July to 11 Sept);

Little Grey (63.067 - *Eudonia lacustrata* - 1338) 36 records for 185 moths (29 June to 13 Aug).

The most abundant macro-moths over the 2022 season were:

Large Yellow Underwing (73.342 - *Noctua pronuba* - 2107) 203 records - 7,065 moths (08 Jun to 25 Oct);

Dark Arches (73.162 - *Apamea monoglypha* - 2321) 114 records for 821 moths (29 June to 08 Sept);

Brimstone Moth (70.226 - *Opisthograptis luteolata* -1906) 86 records for 181 moths (18 May to 12 Sept);

Common Marbled Carpet (70.097 - *Dysstroma truncata* -1764) 83 records - 211 moths (08 Jun to 16 Oct);

Flame Shoulder (73.329 - *Ochropleura plecta* - 2102) 80 records for 201 moths (01 May to 04 Sept)

Great news: Yorkshire Moths website, funded through the Yorkshire Naturalists' Union Grant Scheme, is now Live! Aidan Smith has been the driving force, liaising with Jim Wheeler, who built the website, and other colleagues including Heather Dawe and Charles Fletcher. This website offers information on all the moths that occur or once occurred in Yorkshire with distribution maps, photographs, descriptions, flight graphs, County Recorder comments, recording verification grades, ie - if 'Grade 3' or '4' requiring a photo etc. to confirm identification, plus latest 5 records and much more. <https://yorkshiremoths.co.uk/>

Further photographs and details of moths at:

<http://ukmoths.org.uk/> or <http://www.ukleps.org/index.html>

Conservation Species - 2022 - annually recorded in some specific WNS/VC64 habitats.

- 43.001 *Scythris fallacella* (0913) - (pRDB1) - 1 adult - June
49.174 *Phiaris palustrana* (1074) - (Nb) - 6 adults - July and August
54.003 **Cistus Forester** *Adscita geryon* (0164) - (NS) - 52 adults - May and June
63.003 *Pyrausta cingulata* (1367) - (Nb) - 13 adults - June
63.008 *Pyrausta ostrinalis* (1363) - (Nb) - 15 adults - June
70.071 **Yellow-ringed Carpet** *Entephria flavicinctata* (1743) - (NS) - 2 adults - July
70.135 **Heath Rivulet** *Perizoma minorata* (1805) - (NS) - 6 adults - August
70.139 **Barred Carpet** *Martania taeniata* (1801) - (NS) - 5 adults - July
70.201 **Barred Tooth-striped** *Trichopteryx polycommata* (1880) - (NS) - 7 adults - Apr & 1 larval - Jun
73.146 **Least Minor** *Photedes captiuncula* (2344) - (NR) - 10 adults - July

Grass Wood: Methodically searching found evidence of specific leaf-miners, either Leaf mine (vacated) and/or Leaf mine (tenanted) on the larvae food plant for:

- 2.008 *Eriocrania sangii* (0012) (Uncommon/**Local** - on Birch (*Betula* spp.)
4.002 *Stigmella lapponica* (0116) (**Common**/thinly - on Birch (*Betula* spp.)
4.003 *Stigmella confusella* (0117) (**Rare/local/Common** - on Birch (*Betula* spp.)
4.014 *Stigmella cathartica* (0098) (Rare/very **Local** - on Purging Buckthorn (*Rhamnus cathartica* spp.)
4.042 *Stigmella plagicolella* (0067) (Rare/thinly/**Common** - on Blackthorn (Sloe) (*Prunus spinosa*.)
8.005 *Phylloporia bistrigella* (0128) (**Rare/Local** - on Birch (*Betula* spp.)
10.001 *Tischeria ekebladella* (0123) (**Common**/thinly - on Oak (*Quercus* spp.);
14.013 *Bucculatrix demaryella* (0276) (Very rare/**Local** - on Birch (*Betula* spp.) or Hazel (*Corylus* spp.).

Leaf mines are interesting to find and identifiable to at least the moth family by consulting the mine-keys on the British Leafminer website: https://www.leafmines.co.uk/html/Mine_Guide.htm

Some more moth highlights:

- 4.076 *Etainia decentella* (0020)
1 individual on 11 July in Otley of a rare local **Nationally Scarce B (Nb)**. An easier member of the *Nepticulidae* to identify with its very distinctive black and white markings. Larval mines can be tricky to find on the seeds of Sycamore (*Acer pseudoplatanus*). Adults rest on tree trunk and are attracted to light.
5.001 *Opostega salaciella* (0119)
2 records for 2 individuals on 11 July in Otley and 13 Aug at Humberstone Bank, for a scarce **Local** moth. One of the few all-white species, only likely to be confused with the slightly larger *Elachista argentella*, but easily recognised because of the large white eyecaps at the base of the antennae. It inhabits open areas where the suspected food plant Sheep's sorrel (*Rumex acetosella*) occurs.

8.004 *Incurvaria pectinea* (0132)

1 individual on 6 June at Skyreholme of a rare very **Local** moth. It is characterised by the whitish markings against a bronzy-purple background colour, with a noticeable pale streak at the base of the wing, and a yellowish head. The moths fly in May and June sunshine and the larvae feed on family rosaceae, like, Wild strawberry (*Fragaria vesca*) and Water avens (*Geum rivale*).

9.003 Raspberry Moth *Lampronia corticella* (0136)

1 individual on 29 June at Skyreholme of a very rare local **Nationally Scarce B (Nb)**. This species seems to have decreased in numbers and is now very local in the County - only second record in VC64. A moth of woodland, and sometimes gardens, where the larvae feed on Raspberry (*Rubus idaeus* spp.).

12.017 *Nemapogon koenigi* (0217)

1 individual (* gen. det.) on 13 Aug in Otley of a very rare local **Nationally Scarce B (Nb)** moth with few County records. Flying from June to August from late afternoon onwards its larvae feed on bracket fungi and dead or decaying wood.

14.009 *Bucculatrix thoracella* (0273)

1 individual on 18 July in Otley of a scarce local **Common** moth with few VC64 records. A tiny, easily distinguished species, with large brown patches on a yellow ground colour and a narrow brown streak extending into the cilia. The larvae first mine the leaves of Small-leaved Lime (*Tilia cordata*), or Common Lime (*T. europaea*), then create small feeding windows.

16.010 *Zelleria hepariella* (0435)

2 individuals (* gen. det.) on 18 July and 5 Sept in Otley of this rare **Local** moth with few VC64 records. Its rufous/chestnut forewing colour and 'nose-down' *Argyresthia*-like resting posture make it quite distinctive. Adults emerge in July or August and overwinter, usually in thick cover, before reappearing again early Spring. The larvae feed on Ash (*Fraxinus excelsior*), sometimes gregariously, in spun leaves.

20.024 *Argyresthia semitestacella* (0423)

1 individual on 5 Sept in Otley of a rare **Local** moth with very few County records. One of the larger *Argyresthia* species with a relatively plain golden brown forewing and a whitish dorsal streak extending for much of the forewing length. A fairly late flyer, being on the wing in Aug and Sept. Larvae feed in May and June on the shoots of Beech (*Fagus* spp.).

24.001 *Bedellia somnulentella* (0264)

1 individual on 5 Sept in Otley of an extremely rare and very **Local** moth. First record for WNS & possibly VC64 because earlier 1884 sighting was York. The adults occur in two generations; in August and then October to May, being 'somnolent' in the winter months. The distinctive larvae feed on Bindweeds (*Convolvulus* spp.) and Morning Glory (*Ipomoea* spp.) in July, August and September.

28.004 *Denisia similella* (0636)

1 individual on 13 Aug at Humberstone Bank of a very rare local **Nationally Scarce B (Nb)**. Moths are on the wing in June to Aug and fly in the evening. The larvae feed on fungi under dead wood or bark, and possibly have a two-year life cycle.

32.001 *Semioscopis avellanella* (0666)

1 individual on 15 April in Grass Wood of a rare **Local** moth with very few records in VC64. Adults fly in March and April then later the larvae feed inside folded or rolled leaves of Small-leaved Lime (*Tilia cordata*), Birch (*Betula* spp.) or Hornbeam (*Carpinus* spp.).

35.046 *Bryotropha senectella* (0782) & 35.049 *Bryotropha similis* (0780)

2 individuals on 16 July of *B. senectella* and 1 individual (* gen. det.) on 22 July of *B. similis* in the Grass Wood area. Larvae feed on various mosses (*Bryophytes*). Both are **Local** moths with very few County records.

35.056 Metzneria lappella (0724)

Larva found in the seed heads of Burdock (*Arctium spp.*) on 12 March in Grass Wood of this thinly distributed **Local** moth. Pupation takes place within the seedhead then adult moths fly in June/July.

35.118 Beet Moth Scrobipalpa ocellatella (0814)

1 individual on 8 Sept in Otley of this local **Nationally Scarce B (Nb)** species usually present on shingle coasts and salt marshes. Adult moths are on the wing from May to July and again between August and October. Larvae feed in an untidy spinning on Beet (*Beta vulgaris*) and Sea beet (*Beta maritima*).

35.145 Neotelphusa sequax (0775)

1 individual on 16 July in Grass Wood area of a rare **Local** moth with very few records in VC64. In May and June the larvae feed in spun terminal shoots of Common Rock-rose (*Helianthemum nummularium*) or Hoary Rock-rose (*Helianthemum oelandicum*). This species is confined to chalk and limestone areas.

36.001 Batrachedra praeangusta (0878)

7 individuals between 11 July and 13 Aug in Otley of a scarce local **Common** moth. This is a small, inconspicuous species with elongated narrow forewings. It can be found in a wide range of habitats, where the larvae feed on the catkins and leaves of Poplar (*Populus spp.*) and Sallow (*Salix spp.*).

40.006 Mompha jurassicella (0890)

Records in Otley for 14 individuals (* gen. det.) between 3 Jan and 18 March, then another two on 2 Sept and 29 Oct, of a rare local **Nationally Scarce A (Na)** moth with few VC64 records. During July /Aug larvae feed internally in galleries in the stems of Great willow herb (*Epilobium hirsutum*). Adult moths are on the wing from Sept, hibernating over Winter and appearing again up to April.

42.002 Stathmopoda pedella (0877)

1 individual on 11 July in Otley of a rare **Nationally Scarce B (Nb)** moth with few VC64 records. A small but distinctive moth with a very characteristic resting position. It rests with its enlarged tufted banded hind legs, with long spurs, held almost at right angles to the body and angled slightly upwards. Larvae feed on the seeds of ripening fruits of Alder (*Alnus spp.*) but show little sign of their presence.

45.012 Brown Plume Stenoptilia pterodactyla (1509)

9 records for 20 individuals between 16 June and 1 Aug in Conistone, Otley, Grass Wood area, Kilnsey and Skyreholme for this scarce local **Common** moth. Fresh adult specimens, often seen in vegetation during the day, can be distinguished by their white costal cilia and ochreous wing colour. Larvae mine the shoots and stems of Germander speedwell (*Veronica chamaedrys*) from August to March.

49.009 Capua vulgana (1007)

1 individual on 15 May in Grass Wood of a scarce local **Common** moth with few VC64 records. A fairly broad-winged *Tortrix* of woodland where larvae feed on the leaves of various trees and shrubs. Flying in May and June, the females are less well-marked than males, having paler markings on the base of the forewing, and a buff-coloured head.

49.076 Acleris cristana (1054)

1 individual on 31 Oct in Otley of a rare, very local **Common** moth. This species has an unusual raised patch of scales, or 'scale-tuft', in the centre of the forewing. Flying between August and November then again, after hibernation, from March until May. Larvae feed on a range of rosaceous trees and bushes, including Blackthorn (Sloe) (*Prunus spinosa*) and Hawthorn (*Crataegus spp.*).

49.084 Acleris notana (1045)

1 individual (* gen. det.) on 28 Oct at Skyreholme of a scarce and local **Common** moth with few VC64 records. Very similar to *A. ferrugana* and equally variable, care has to be taken in the identification of these two species. Likewise they share similar

habitats, however, *A. notana* feeds mainly on Birch (*Betula spp.*). Adults fly in July and then Oct, with the second generation overwintering before reappearing in Spring.

49.136 Neocoehylis hybridella (0965)

1 individual on 5 Sept in Otley of a very rare, very **Local** moth with few County records. This moth flying, from June to Sept, has a whitish thorax, which distinguishes it from similar *Cochylis* species. Larvae feed within the seedheads of Hawk's-beards (*Crepis spp.*).

49.313 Dichrorampha acuminatana (1279), **49.320 D. alpinana** (1274) & **49.321 D. petiverella** (1273)

3 individuals between 16 June and 12 Aug in Conistone area, Addingham and Otley of these rare **Local** moths of grassy meadows, rough pastures and hedgerows. Adults are often on the wing in the late afternoon and early evening. Larvae feed on the roots of Ox-eye daisy (*Leucanthemum vulgare*), Yarrow (*Achillea millefolium*) and Tansy (*Tanacetum vulgare*).

65.003 Barred Hook-tip Watsonalla cultaria (1647)

1 individual on 13 May in Grass Wood of a rare very local thinly distributed moth. A **Common** double-brooded species, with adults appearing in May/June, then again in late July/August. The larval is brown, with a pale blotch on the back, and a short tail horn. It feeds on Beech (*Fagus spp.*), and pupates in a cocoon between two leaves.

69.002 Eyed Hawk-moth Smerinthus ocellata (1980) & **69.007 Pine Hawk-moth Sphinx pinastri** (1978)

3 individuals between 3 June and 11 July in Burley-in-Wharfedale and Otley of these **Common** thinly distributed moths. Adults fly from May to July within woodland and suburban localities. *Smerinthus ocellata* has a sombre, camouflaged appearance at rest, but if provoked, flashes hindwings decorated with intense blue and black 'eyes' on a pinkish background. *Sphinx pinastri* is a fairly nondescript greyish member of the Hawk-moths. The colourful larvae, feeds on the needles of Scots pine (*Pinus sylvestris*).

70.018 Plain Wave Idaea straminata (1715)

1 individual on 3 July in Burley-in-Wharfedale of a scarce and thinly distributed **Common** moth. Far less common than the similar Riband Wave (*I. aversata*). The Plain Wave is usually a little smaller with a more silky appearance. Larvae feed on Dandelion (*Taraxacum spp.*) and Knotgrass (*Polygonum spp.*).

70.063 Galium Carpet Epirrhoe galiata (1740)

3 individuals on 16 July in Grass Wood area of a **Common (BAP R)** moth of grassy upland areas to the west of the County. Adults flying from June to August can be confused with Common Carpet (*E. alternata*).

70.099 Beech-green Carpet Colostygia olivata (1774)

5 individuals between 16 and 22 July in Grass Wood/Bastow Wood area of a rare very local upland moth. A **Common** species prone to misidentification given its green colour quickly fades to brown. Larvae feed on Bedstraws (*Galium spp.*) and adults fly July/August in woodland and over limestone grassland.

70.104 Devon Carpet Lampropteryx otregiata (1751)

7 individuals on 13 Aug in Humberstone Bank area of this scarce local **Common** moth. This species continues to steadily expand northwards. Larvae are brown with paler buff markings, and feed on Common marsh bedstraw (*Galium palustre*).

70.154 Marsh Pug Eupithecia pygmaeata (1822)

1 day flying adult of a rare local **Common** moth was seen in the Kilnsey area in June. Attracted to marshy areas the larvae feed on Field mouse-ear (*Cerastium arvense*), consuming flowers and developing seeds.

70.165 Pimpinel Pug Eupithecia pimpinellata (1845)

2 individuals on 16 July in Grass Wood area for this rare very local **Nationally Scarce** moth. Recent adult records from the Ripon area

where Greater Burnet Saxifrage (*Pimpinella major*) grows in profusion, indicates this could be the larvae food plant.

70.198 Seraphim *Lobophora halterata* (1879)

2 individuals on 8 and 21 June in Otley of a scarce local **Common** moth. Adults fly in May and June, a very variable species, with scattered records from broad-leaved woodland. The larvae feed on Aspen (*Populus tremula*) and Poplar (*Populus spp.*).

70.223 Barred Umber *Plagodis pulveraria* (1903)

3 individuals on 23 April in Grass Wood are the earliest ever recorded in the County (*prev. 30/04/1997*). This scarce local **Common** woodland species usually peaks in flying numbers at the end of May. Larvae feed on a variety of deciduous trees, Oak (*Quercus spp.*), Birch (*Betula spp.*) and Sallow (*Salix spp.*).

70.274 Grey Birch *Aethalura punctulata* (1951)

3 individuals between 17 April and 14 May at Skyreholme, Otley and Bastow Wood of this scarce thinly distributed **Common** moth. A smallish species, with a mottled grey ground colour and three darker transverse lines, it frequents wooded habitats seeking its larvae food plant Birch (*Betula spp.*).

70.287 Annulet *Charissa obscurata* (1964)

2 individuals on 16 July in Grass Wood area of a rare local **Common** moth with few habitat sites in the County. A variable species, whose ground colour generally reflects the area it inhabits; whitish or pale grey in limestone and chalky districts, darker forms from peaty soils. Larvae feed on Heathers (*Calluna spp.*) and a range of herbaceous plants.

71.027 Chocolate-tip *Clostera curtula* (2019)

1 individual on 1 May in Otley of this very rare local **Common** moth. This moth inhabits mixed woodlands and is gradually moving northwards so the first record in VC64 was only 2020. The distinctive larvae feed on Poplar (*Populus spp.*), especially Aspen (*P. tremula*) and Sallow (*Salix spp.*).

73.021 Scarce Silver Y *Syngrapha interrogationis* (2447)

3 individuals between 8 July and 13 Aug at Skyreholme, Burley-in-Wharfedale and Harden Gill area of a scarce thinly distributed **Common/Immigrant** moorland species. Adults often fly in sunshine and at night come to light. The green and yellow striped larvae feed on Heather (*Calluna vulgaris*) and Bilberry (*Vaccinium myrtillus*).

73.024 Marbled White Spot *Protodeltote pygarga* (2410)

1 individual on 26 June in Otley of this scarce local **Common** moth. Adults fly from May to July in damp woodland and acid heaths habitats. Larvae feed on grasses, like Purple moor-grass (*Molinia caerulea*).

73.070 Bordered Sallow *Pyrrhia umbra* (2399)

1 individual on 20 July at Burley-in-Wharfedale of a scarce local **Common** moth. Generally a coastal species, with few VC64 records, but occasionally it frequents inland calcareous soils. Larvae feed mainly on the flowers and seeds of Restharrow (*Ononis repens*).

73.183 Dusky-lemon Sallow *Cirrhia gilvago* (2275)

1 individual on 30 Sept in Otley of this scarce thinly distributed **Common (BAP R)** moth. Flying from late August to October it is attracted to either sugared ropes or light traps. Larvae feed on the seeds, flowers and foliage of Wych elm (*Ulmus glabra*) and English elm (*Ulmus procera*) from April to June.

73.188 Flounced Chestnut *Anchoscelis helvola* (2265)

1 individual on 1 Sept in Grass Wood of a scarce local **Common** moth. Records are from the fringes of the uplands where it can be locally common in broad-leaved woodland bordering on moorland. Larvae mainly feed on Heather (*Calluna vulgaris*) and Heaths (*Erica spp.*).

73.207 Golden-rod Brindle *Xylena solidaginis* (2233)

9 individuals on 13 Aug in the Harden Gill and Hey Slack areas of a thinly distributed **Nationally Scarce/Immigrant** moth. Predominantly a moorland species on the wing during August and September it visits sugared ropes and sometimes light traps. Larvae feed on Heather (*Calluna vulgaris*) and Bilberry (*Vaccinium myrtillus*).

73.228 Grey Chi *Antitype chi* (2254)

1 individual on 13 Aug in Hey Slack area of this occasional **Common** moth. Flying in Aug and Sept it can come to light traps. Adults often rest on walls and rocks where they can be very inconspicuous. Larvae feed on various low-growing plants and shrubs in the preferred habitats of moorland and grassy hillsides.

73.331 Barred Chestnut *Diarsia dahlii* (2121)

14 individuals between 13 Aug and 1 Sept in Humberstone Bank, Hey Slack areas and Grass Wood of a scarce **Common** moth. Preferring woodland and moorland the females, usually darker than the males, can resemble Purple Clay (*D. brunnea*). Larvae feed on Bilberry (*Vaccinium myrtillus*) and Birch (*Betula spp.*).

73.341 Northern Rustic *Standfussiana lucerneae* (2104)

3 individuals on 16 July in Grass Wood area of a rare local **Common** moth of mainly coastal and similar rocky inland habitats. Adults are rather indistinctly marked, flying in July and August, often during the day if sunny, and attracted to light traps. Larvae feed on grasses and low plants like Stonecrop (*Sedum spp.*).

73.355 Neglected Rustic *Xestia castanea* (2132)

1 individual on 22 Aug at Skyreholme of a scarce local **Common (BAP R)** moth. Chiefly a species of heaths and moors with the typical colour form of reddish-brown in the north. The larvae food plants are mainly Heather (*Calluna vulgaris*) and Heaths (*Erica spp.*).

74.007 Scarce Silver Lines *Bena bicolorana* (2421)

5 individuals between 11 and 17 July at Burley-in-Wharfedale of this scarce thinly distributed **Common** moth. An immaculate bright looking green moth which inhabits woodland and parkland. Flying from June to August it regularly visits light. Larvae feed on the leaves of Oak (*Quercus spp.*).

74.009 Oak Nycteoline *Nycteola revayana* (2423)

1 individual on 15 March in Otley of this scarce local **Common** moth. A quite variable small species, resembling the Tortricidae in general shape and demeanour, which is often overlooked. It feeds on Oak (*Quercus spp.*) with adults flying in late Autumn, overwintering, then re-appearing in early Spring.

**gen.det. - some moths require examination of a specimen's genitalia to determine to species level.*

Conservation status of micro-species:

RDB3: Red Data Book 3: Recorded from 11-15 10 km squares in Great Britain.

Nationally Scarce A (Na): Recorded from 16-30 10 km squares in Great Britain.

Nationally Scarce B (Nb): Recorded from 31-100 10 km squares in Great Britain.

Local: Recorded from 101-300 10 km squares in Great Britain.

Common: Recorded from over 300 10 km squares in Great Britain.

Migrant: Moths travelling to the UK.

(Source - Micro-moth National Status (published 2012 - Davis et al.)

Conservation status of macro-species:

International Union for Conservation of Nature (IUCN) of Threatened Species -

Review of status of macro-moths in Great Britain - source - Fox et al. (2019)

Red List Status: for example:

'NEAR THREATENED (NT)' - likely to qualify against criteria for a threatened category in near future.

'LEAST CONCERN (LC)' - Widespread and abundant species

GB Status:

'NATIONALLY RARE(NR)' - 15 or fewer hectads (10km x 10km grid sq) GB Ordnance survey - 2000-14

'NATIONALLY SCARCE(NS)' - not more than 100 hectads - 2000-2014 - source - Fox et al. (2019)

'COMMON' - Native species (as resident breeding species) from more than 100 hectads - 2000-2014 & includes former 'Local' status category ones.

'IMMIGRANT' - Species known to migrate to Britain but do not normally survive the winter.

'ADVENTIVE' - Species in Britain as a result of deliberate or accidental importation by humans.

UK Biodiversity Action Plan (BAP):

'Priority Species' - BAP Priority Species

'Declining Species (BAP R)' - BAP Declining Species (Research Only).

(Full details - see <https://yorkshiremoths.co.uk/> Select - 'Info' tab, then Select - 'Conservation Statuses')

We forward all Wharfedale Naturalists' Society (WNS) moth records to the VC64 Co-ordinator for inclusion in the National Moth Recording Scheme (NMRS) for moth species in the UK organised by Butterfly Conservation. Thanks again to Dr. Charles Fletcher (VC 64 Co-ordinator) for his support to fellow moth observers over the last year.

We are grateful for all the records received from:

Chris Acomb, Chris Alder, #Chris J Blakey, Karen Bullimore, Peter & Janet Burns, Win Clements, David & Nyree Fearnley, #Charles Fletcher, Audrey Gramshaw, Gordon Haycock, #Colin Harrison, John & Rachel Healey, Paul Millard, Denis O'Connor, Peter & Anne Riley, #Aidan Smith, Jo Smith, Robyn Smith, Bruce Speed, Barry Trewartha, David Varney, Jane Willis and #Lee Wiseman.

provided their 'moth highlights/species' list for WNS Moth Report purposes only - ensuring no record duplication in NMRS database.

If anyone is interested in taking up moth recording and would like further advice we will be happy to help.

Our e-mail address is: naturefind@clerk54.plus.com

Mike & Joyce Clerk



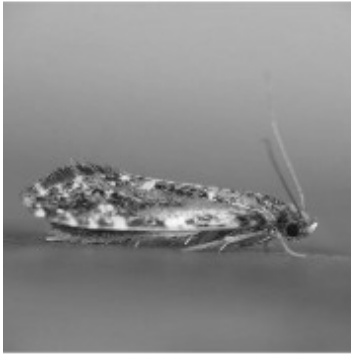
Review of the year 2022

Printed by
John Mason Printers
Back Park Avenue
Skipton
North Yorkshire
BD23 1PN

More moths on pp. 73 & 74

Some moths new to Wharfedale during 2022 and 2021

Info via Aidan Smith



Nemapogon koenigi

1 in Otley

18 Aug 22



Pine hawk moth *Sphinx pinastri*

2 seen 15 Jun 22



Bucculatrix thoracella

1 at Otley

18 July 22



Wax moth

Galleria mellonella

1 seen 13 Aug 22



Acrocerops brogniardella

◀ Vacated mines distinctive.

16 individuals seen.

Chevin & Danesfield

First recorded here 2021



Coptotriche marginea

3 seen in Otley 18 Jul 22

◀ Distinctive mine in bramble



The 500 Tissues in a Day Challenge

Firstly, to clarify, a Tissue is a species of moth, and a very pretty one too. The caterpillars feed on Purging Buckthorn, which we have in good quantities in parts of the WNS recording area. But the most fantastic thing for us is that the adults come into caves, old mine adits, etc. to hibernate for the winter, along with the more common Herald, another stunning moth.

Paul Millard, David and I have great fun going into a few places in Littondale and Upper Wharfedale, where we have permission, to monitor both these species each year. We also liaise with a lady in Scotland, Katty Baird, who does the same thing up there, but they get nowhere near as many Tissues as we do down here. In fact it is possible that our main cave here, Scoska Cave in Littondale, is the best site for Tissues in Britain. We were introduced to this cave 10 years ago by a caver called David Hodgson, who has sadly now passed away, and in the winter of 2013/14, there were 401 Tissues.

As we get so many Tissues in our area, and in Scoska Cave in particular, Katty challenged us to see 500 Tissues in a day. In mid-August we already had good numbers so we thought that mid-September should be about right for peak count time. Peak count is when as many moths as possible have come in for the winter, but before we get too much predation from bats. So, on Friday 9 September we gave it a try. I started at Sleets Gill Cave where there were 24 Tissues and 6 Heralds. A good start as there were only 11 Tissues in August. Then David, a friend, and I moved on to Stonelands Cave and a count of 39 Tissues (37 in August). At Scoska Cave, we met Paul, and had a count of 245 Tissues (272 in August so not as good), and 23 Heralds. There was evidence of bat predation already, which we always get in this cave. So things were not looking as good for our 500 Tissues. Next we went to an old mine adit in Wharfedale, and to our surprise and delight we had a count of 181 Tissues, including never seen before behaviour of a female Tissue with a highly raised abdomen. We thought that she was most likely advertising for a male, but butterflies do this to repel unwanted attention. There were no other moths close by, and we are open to suggestions as to why she was doing this. So we were now up to 489 Tissues, just 11 short! Oh my god, where else could we go? There is a cave close to Paul's house at Skyreholme where we have seen Tissues in the past, so we would try that. And we managed to find 15 Tissues in there, and 1 Herald. Wow, we had done it, 504 Tissues in a day. Three tired, but extremely elated extreme moth-ers.

Heralds can be seen almost anywhere, and it is always worth checking dark, cool, places from late August to March. They readily hibernate in man-made structures too, and have been seen in culverts, and underpasses under roads. Tissues are much rarer, and tend to prefer to be a bit further underground than Heralds, as well as being in more rural, wooded areas. It is a very addictive pastime, and we find ourselves looking for the word cave on maps wherever we are. Even caves with very easy access, or ones popular with cavers, have very few, or no records, and it is so exciting to find a new site. Most of the places that we monitor are on private land, but if anyone is interested in seeing these gorgeous moths then please get in touch with me, and we will try to arrange a visit to take you.

Nyree Fearnley



Male (left) and female (right) Tissue moths



Female Tissue with raised abdomen



Herald moths

Acknowledgements

Many thanks to all those who have contributed to this 2022 Annual Review. Those who have diligently compiled reports from all the records that have been set into them: those who have provided articles based on their own experiences: those who have sent in photos that show the strangeness or beauty of animals or plants, or sometimes just reminding us of the abundance of wildlife in our area. All these are valuable facets of this yearbook

Please don't stop. Keep sending contributions, large and small. Don't be shy of sending something in because you think it isn't good enough. The more variety there is, the better the Review may be. We have some wonderful photographers, and you may think you can't compete, but a photograph showing something of interest, or illustrating an article, can be valuable even if not perfect

Photos

Photographers are credited on the captions with their initials in brackets. If all the photos in an article are by the author the initials may not be added. A few photos are from 'free to use' collections and are not taken by us. In one or two cases the photographer is a WNS member, but a name has become dissociated from the photo. Apologies to anyone not credited for something.

The photographers:

Front cover picture (Short-eared owl), and many others, by

Kelvin Smith (*KS*).

Other photos by:

Anne Riley (*AR*)

Denis O'Connor (*DoC*)

John Stidworthy (*JS*)

Nyree Fearnley (*NF*)

Patrick Wiegand (*PW*)

Ros Lilley (*RL*)

Notes for contributors

As well as the important data about Wharfedale contributed each year by the Recorders of various groups of plants and animals, members are encouraged to send in many other types of material for possible publication.

Alongside accounts of visits to sites in Wharfedale, the Annual Review publishes stories of members' visits to other parts of the British Isles, or wildlife holidays abroad. Poems are welcome too.

Photos are also important. If they are really good they may merit 'standalone' treatment on the colour pages, but photos that illustrate articles are of particular interest. Unfortunately, we only have a limited number of pages in full colour, so we have to be selective, and some articles with photos are published in black and white.

We cannot promise to print all material sent in, but it is better to have more to choose from rather than too little, so do not be shy about sending in your contributions.

Photos

These are preferred in electronic form as JPG files or similar, and can arrive by email. These can easily be manipulated for publication. However, prints can also be sent in if this is what you have, and they will be scanned for use.

Please label all photos with your name or initials and species name (if relevant), so they can be kept track of, and can also inform editors who may not be familiar with every little brown bird or moth.

Text

The advice is: keep it simple. Word files or Open Office files are usually fine.

Format text as little as possible. Just type, and use Return or Enter keys only for a new paragraph. Just leave a **single** space between sentences.

Do not do elaborate formatting. (Indents, bullets, etc). When your file is transferred into a desktop publishing program anything like this will probably not fit, and sometimes has very peculiar consequences.

Likewise, photos or tables **should not** be included in text files. The receiving program may omit them or refuse to load the file. Please send them separately, with an indication in the text file of where they fit if not obvious.

If you are using quotation marks, use single ones, **unless** it is a direct quote of speech, when they should be double.

Keep punctuation conservative. Full stops and commas can do most of the work. Dashes, exclamation marks etc., are generally superfluous.

Use *italics* for species names. Brackets are superfluous. In general text, common names are preferred in lower case. Use **bold** type if it has a special purpose, otherwise sparingly.

Express **dates** as 24 April, 6 June.

To sum up, keep the text straightforward. This will make editing and typesetting much less time consuming.

