

THE WHARFEDALE NATURALIST

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Review of the year 2021

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Dragonflies	David Alred
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Ladybirds	Anne Riley
Moths	Mike & Joyce Clerk
Spiders	Stef Pearse
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Weather	Peter & Sheila Bancroft

WHARFEDALE NATURALISTS SOCIETY

Membership 506 December 2021

www.wharfedale-nats.org.uk

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FOREWORD 2021

Notwithstanding the risk of sounding repetitive, I am delighted once again to report another very successful year for the Society, despite the problems associated with running an organisation like ours through the Covid pandemic. Without in any way minimising the impact of this dreadful virus we have at least been able to take advantage of the opportunity to develop and strengthen our ability to show on-line Webinars as a reasonably effective replacement for our cancelled Indoor Meetings. The efforts of Jeff Davitt, Jenny Watson and Helen Steward are especially appreciated in this regard not least because they also have other roles which they have carried out most conscientiously. The Webinars have also meant that we have been able to offer a better service to those of our members who do not wish to, or feel able to, attend 'live' winter meetings at Christchurch. There is a lesson here for our future Programmes which is not lost on your Committee.

Possibly linked to the above, our Membership is at a near record high, comfortably above 500. This is especially noteworthy given the general downward trend for similar organisations across the country in recent times. I have spoken to a good variety of our members over the last year and the generally positive and supportive comments about the Society are in themselves testament to the hard work of the Committee, Recorders and other volunteer helpers and I would like to take this opportunity to thank them all. The high level of membership and related low Subscription rate (supported by donations from many members) have produced a healthy financial position which has meant that we have been able to increase the funding we make available to conservation projects throughout our area, including to the five nature reserves where we are directly involved and to other like-minded organisations. These funding amounts may be relatively small but we do believe they make an impact at a time when support for nature conservation initiatives is so important. Thanks are of course again due to the organisers and volunteers at 'our' nature reserves who continue to try to ensure they provide a haven for our beleaguered wildlife.

Clearly no organisation such as ours can operate at this time without reference to the now very real crises in both climate change and biodiversity. Regarding the latter, with nearly all the relevant indices still heading in the wrong direction, it is incumbent on Societies such as WNS to step up to the plate and try to make a contribution however small. Our charitable objectives would demand no less.

Given the impact of the pandemic on our Winter Programme it is especially gratifying to note that we were able to progress the Summer Programme more or less as planned and it was not a surprise therefore to record some significant attendances. As usual I would like to extend my thanks to the Programme Organiser, Helen Steward, and all those who volunteered to lead events.

I must also of course refer to our Recorders who once again have been carrying out their work behind the scenes, and producing their Reports, which are of course such an important feature of these Reviews. Although inevitably these Reports cannot be expected to be fully scientifically rigorous for determining long-term trends, they have always been an important snapshot as to what is happening in our area and therefore present a fascinating and valuable indication of Wharfedale wildlife status.

As usual it has been a great pleasure to work with our Officers and other Committee members through the year. They are unfailingly supportive, committed and helpful, fulfilling their responsibilities most conscientiously. A special thanks to Tim Howson our Webmaster who has now moved away, his role being taken over by Catherine Burton and Matt Whittle who are gradually working on further developing the website and ensuring it is kept up to date. I am also pleased to report that Ian Brand has settled into his role as Vice President – he is always looking for new ideas to try to ensure he keeps us on our toes. The 2021 Christmas Quiz was one of Ian's ideas as was the weekly circulation direct to Members of 'Nature Notes' which Jenny Watson now does so conscientiously.

You will find in the Review an Obituary of Jenny Dixon, past President and originator of the *Nature Notes* local newspaper columns some 20 years ago. Jenny's mastery of the English language was legendary, on top of which she was a delightful person to know with a deep and abiding interest in natural history. We shall miss her greatly.

Many thanks are again due to John Stidworthy for editing and producing this superb record of our activities through 2021. Last but not least, to all our members, a heartfelt thank you from me for all your support!

Peter Riley, President

Events Programme – May 2021 to April 2022

TUESDAY EVENING NATURE WALKS			BIRDING		
May 18	Lindley Wood	Peter & Anne Riley	May 1	Nosterfield NR/Flasks Lane	Brenda & Derek Parkin
May 25	Eccup Reservoir	David Smith	May 8	Grimwith Reservoir	David Smith
June 1	Otley Wetland	Peter & Anne Riley	Jun 12	St Aidan's RSPB Reserve	Helen Steward
June 8	Swinsty Reservoir	Ian Brand	Aug 14	Blacktoft Sands RSPB Reserve	David Smith
June 11	Along the Wharfe	David Smith	Oct 16	Tophill Low Nature Reserve	David Smith
SUMMER VISITS			Nov 13	South Walney Island	David Smith
June 5	Birds of Ilkley Moor	Tracy Gray	Nov 27	Eccup Circular Walk	David Smith
July 6	Rodley Nature Reserve	Peter & Barbara Murphy	Jan 22	Staveley YWT Reserve	Helen Steward
Aug 17	Scargill House for Scotch Argus	Nyree Fearnley & Paul Millard	Feb 26	Grimwith Reservoir	Andrew Kelly
BOTANY OUTINGS			Mar 26	Upper Wharfedale	Andrew Kelly
May 20	Ben Rhydding Gravel Pits	Steve Parkes	SPECIAL EVENTS		
June 3	Littondale- Hawkswick	Carmen Horner	Oct 9	Fungus Foray	Andrew Woodall
June 24	Foxup	Bruce Brown	Jan 15	Winter Walk round Fewston Reservoir	Peter & Anne Riley
July 15	Burley Woodhead & IB's Ferns	Ian Brand	MICROSCOPE EVENINGS IN OTLEY		
July 29	Ilkley Moor around the Tarn	Carmen Horner	Nov 18, Dec 16, Jan 20, Feb 17 & Mar 17		
Aug 5	Thruscross Dam	Heather Burrow			
Aug 19	Skirethorns Lane & Threshfield Moor	Bruce Brown			



Young great spotted woodpecker recovering after collision with window (DoC)

EVENING TALKS

In 2021 the programme of Tuesday evening talks has been carried out remotely via Zoom, which has proved to be a successful format. Many of these talks can still be seen via recordings on the Society's website

12 January

Nature in Lockdown

Anne Riley

Wharfedale naturalists warmly welcomed Anne Riley to talk about her lockdown observations while exploring the countryside local to her home in Burley in Wharfedale.

Anne is a longstanding member of the group. She is a valued contributor to many Wharfedale Naturalists Society's activities. Anne had a career as a hospital pharmacist and has had a passion for natural history since childhood along with a longstanding interest in entomology. Anne's scientific, analytical and enthusiastic approach absolutely shines through. How could anyone not be interested in her amazing photographs of even the smallest insects and her often humorous but very knowledgeable descriptions and explanations?

During the first lockdown Anne regularly explored Burley Moor and her own wildlife garden. Armed with her trusty camera she was on the lookout for the winged, spotted, furry, tiny creatures that can be seen if you know where to look.

The huge variety of insects to be found is truly amazing. The green hairstreak butterflies are small and pretty. They have a line of tiny white dots on their wings hence the 'hairstreak'. The wolf spider does not make a web. It pounces on its prey instead. The tiger beetle has amazing scissor jaws which can mash the ants it preys on. Cuckoo bees lay their eggs in the nests of solitary bees and don't collect pollen. Green lacewings are a useful garden inhabitant as their larvae eat aphids. The flower bug is not so welcome. It is a predator of other insects and can pierce flesh. Other creatures included a lizard (hard to spot), a male grouse with its vibrant red eyebrow and a little owl.

Anne's main message? Insects are the foundation and support of all earthly life. They are often beautiful and can perform the most intricate and technically brilliant functions. Enjoy and respect!

Alison Roberts

26 January

A year in the Life of Swifts

Linda Jenkinson

Look no feet! *Apus apus* the common swift, eats, drinks, mates, preens and sleeps (half its brain awake and half asleep) on the wing, thus the family name for all swifts, *Apodidae*, 'footless'. Swifts, of course, have feet but land on them only when they enter their nesting site, lay eggs and rear their chicks. The rest of the time, sometimes for three continuous years, they are on the wing. A swift that lives 18 years may cover 4 million miles.

Linda, of Start Birding, who runs the Leeds Swifts project with Martin Calvert, treated us to a wonderful, insightful presentation of the life of swifts with especial reference to their worrying decline (53% between 1995 and 2015) and the abnormal year they had in 2020. Part of the Leeds project is to put nesting boxes complete with video and MP3 players under roof spaces on houses allowing intimate observation of life inside a nesting box. We witnessed an angry male evicting a rival male and chicks doing press-ups (head and tails up and chests pushed against the wall of the box) to strengthen their pectoral muscles before fledging. Modern building methods of hermetically sealing off suitable under-the-eaves nesting spaces

have impacted very negatively on swifts and partly accounts for their decline. Other factors include massive loss of insects due to pesticides and clearance of insect friendly areas, and in 2020, inclement weather.

A most fascinating part of Linda's talk was about her role as foster mother to the many wounded chicks she has rescued and hand reared in her bedroom cum nursery. The chicks need feeding every 40 minutes on special food and are difficult to feed as, unlike the house martins she has also reared, swift chicks do not gape to receive food so Linda has to open their beaks very gently to push the food in. Linda shared delightful photos of her babies, peeping over their boxes, making eye contact with her as they follow her every movement.

How does she know when they are ready to leave her care and be set free? Firstly, their behaviour changes. They no longer make eye contact but stare straight ahead, refuse food and scuffle around restlessly in their boxes. They also need to be weighed and measured. A chick needs to weigh about 42 to 43 grams before it can be released. Finally comes that heart warming moment when the chick is set free to commence its life on the wing.

To learn more about Linda and Martin's work contact leeds.swifts@gmail.com. Their future plans include learning more about swift migration, liaising with councils and building projects to provide suitable nesting spaces and general data collection.

Peta Constable

9 February

25 Years of Garden Birdwatch with the British Trust for Ornithology

Everyone knows about the immensely popular Big Garden Bird Watch, run by the RSPB, which has taken place on the last weekend of January for the last 42 years. Fewer people may be aware that the BTO organises the more in depth Garden Bird Watch where around 20,000 registered volunteers send in weekly records of birds visiting their gardens.

One of the few compensations of lockdown has been, for many of us, the extra time and space in our lives to appreciate visitors to our immediate surroundings and especially to our gardens for those of us lucky enough to have them. At our most recent meeting David White and Rob Jacques, Supporter Development Officers with the BTO, presented a talk analysing the weekly data submitted over the last 25 years by the participants.

Broadly, over this period there have been big changes: sightings of wood pigeons and goldfinch are up, house sparrows, song thrush, starlings and greenfinch are down. All species benefit from gardens which are rich in natural food and bird feeders. We were told what bird foods attracted which species, in which months different species were the most frequent visitors and the best orientation for nest boxes.

David White stressed that feeding garden birds came with a responsibility. Bird feeder hygiene is a must requiring regular cleaning of feeders in a mild detergent. Sometimes more drastic steps may be needed. First noted in 2006, a disease called trichomonosis has caused a serious decline in the Greenfinch population. This disease can be passed on to other birds so to prevent this and other diseases from spreading we should stop feeding altogether for a couple of weeks. Distressing photos of Trichomonosis and other avian diseases were shown to illustrate their gravity.

The analysis of some relatively newcomers to gardens was particularly interesting. The ring-necked parakeet's range is

spreading further north though nobody really knows when or how they first arrived in the Victorian era. Blackcaps are increasingly wintering in Britain but it is thought that these are birds coming in from Northern Europe for the winter rather than breeding birds staying on.

During questions to Rob Jacques, we learnt that having a smaller garden does not necessarily mean fewer species will visit and that anyone can sign on to be a garden watch recorder with the BTO. It is free and you do not have to submit counts every week. However, every piece of data is a valuable record of what is living in and visiting our gardens.

Polly Hosking

23 February

Bugs Britannica

George McGavin

We were incredibly fortunate to again welcome George McGavin, renowned academic, entomologist, broadcaster and author, to speak to us, this time via a Zoom Webinar from his home in Berkshire.

George studied Zoology at Edinburgh University, followed by 25 years as an academic at Oxford University. A career in the media followed including regular appearances on The One Show and contributions to many wildlife programmes. He travelled to many remote parts of the world to study, film and enjoy the huge spectrum of global entomology. But it was during George's time at Oxford that he made an interesting chance discovery. Whilst trying to engage two slightly unenthusiastic students he suggested that they take a piece of bark from Wytham Woods, back to the laboratory to find out what it had to offer. An investigation by the two students resulted in a Petri dish of assorted bugs which rather surprisingly, since this is one of the most researched pieces of woodland in the world, included a hitherto unknown species of wingless midge. George fortunately spotted this just as the students were about to tip the contents of the dish down the sink!

George's absolute fascination with the insect world was encapsulated by his explanation of the incredible lifecycle of The Oil Beetle. The Oil Beetle is able to secrete a toxic oil which prevents birds and other insects eating it. The female produces a pheromone which attracts the male. The female then drags the male round for a couple of hours so that eggs that are laid are fertilized. When larvae emerge they crawl up the stems and into flowers where they lie in wait for a solitary mining bee on which they hitch a ride to the bee's nest which is a well stocked underground pantry of pollen. The larvae have a feast, pupate to adults, emerge from the bee's nest and the whole cycle starts again.

But, as we know, things are not looking too optimistic environmentally. The overuse of pesticides (including the neonicotinoids in agriculture) are contributing to a dramatic fall in the insect population which form the foundation of the entire pyramid of life. We all need to consider our actions with regard to the environment and where possible campaign for government and local policy change.

So how can we help?

At a local and fairly simple level we could encourage the young to develop an interest in nature by purchasing a simple x10 hand lens and looking for insects while outside. Never use pesticides, encourage natural predators, make a pond if only a small one, leave large weedy areas and some dead wood lying around in the garden. Compost waste, plant insect friendly flowers and spread the word. A real prod to think about the impact on the environment in everything *Insects of Britain and*

Ireland a comprehensive guide by Paul Brock. So, with book, hand lens and enthusiasm, what are you waiting for?

Alison Roberts

10 March

The importance of WNS species reports: Birds (Andrew Kelly) and Butterflies (Nyree Fearnley)

If, like me, the first sighting of a butterfly in the garden and the first views of a charismatic female Goosander and her young on the Wharfe, give you a deep sense of joy and a feeling that some things are still right with the world, you will appreciate the huge contribution made by our Society's recorders to the knowledge of what is and isn't present in our local patch on an annual basis. They record sightings of their own and others, take photographs, collate the thousands of submissions sent in from Wharfedale's keen 'citizen scientists', analyse, tabulate and draw up very detailed reports on the different categories of local flora and fauna. These reports, published in the Annual Review, beautifully supported by stunning photographs, give an invaluable view of the plant and animal life in both Upper and Lower Wharfedale, and enable us and other organisations with whom the data is shared, valuable (and sometimes worrying) insights in annual trends over many years.

2020 was obviously an unusual year because of Covid and the impossibility of ranging freely from our homes. Andrew confessed he had expected a fall in the number of records sent in but in fact the numbers of records increased to 12,800 with 8,400 submitted by 33 local participants with other records available from sources such as the BTO and the Bradford Ornithological Group, (BOG). A total of 156 different bird species were seen, nearly the same as in 2019. Andrew also expects to process and obtain another 10,000 records from Bird Track. While fewer records came in from North Wharfedale, probably due to people not being able to drive any distance from home, there were considerable increases from some nearby places of natural interest easily accessible while keeping to Covid rules. Andrew's brilliant graphs showed the dips and rises in numbers of both reports handed in and the species seen over a number of years, for example a considerable increase in barn owls but a decrease in little owls, an increase in hobbies but a decrease in kestrels. 2020 was a good year for wagtails including the yellow wagtail and produced some interesting rarities, some not seen in our area for some years, such as marsh tit, scaup, spotted redshank, lapland bunting, sandwich tern and Cetti's warbler. However, absent were a few species seen in previous years such as ringed plover, lesser spotted woodpecker, ruddy shelduck and white stork. The absence of the lesser spotted woodpecker is likely to be because it was not possible to visit the known habits of this small elusive bird.

For many of us, finding and identifying and, above all, photographing butterflies needs keener eyesight, patience and knowing where to look for them. Nyree Fearnley clearly has these competences in abundance. Unlike the records for birds, where the actual number of species seen in 2020 was much the same as in 2019, butterfly records were slightly down from 29 species in 2019 to 28 in 2020, probably because Covid restrictions prevented people from travelling to different sites. Finding species depends greatly on knowing what their plant food is, especially those species which do not necessarily frequent gardens. Looking high into oak trees, for example, to find a purple hairstreak requires a strong neck, good binoculars and the ocular acuity to spot tiny movements. Nyree's patience has led to some of the stunning photographs she used to illustrate her presentation. We learnt that the population of the comma here has decreased and that it seems to be moving north. Unknown in Scotland in the past it is now abundant there. Climate change? Grass Wood in 2020 provided the

earliest record ever (20 May) of the northern brown argus. I learnt that it is possible to identify individual green hairstreaks by the number of streaks on the wing and also that recorders can keep strange pets! Nyree collected a brimstone egg and watched it pupate and then hatch into a butterfly.

Peta Constable

24 March

AGM and

Effecting Recording

Catherine Burton

My last report focussed on the importance of the work of the Society's species recorders and summarised the reports from two of them. This time our AGM was followed by a talk from Dr , consultant ecologist and WNS Bee recorder on effective recording.

MAKE YOUR RECORDS COUNT IN RESEARCH AND PLANNING!

Catherine is passionate about recording and stresses that anyone interested can be a recorder, even if it's just your own local patch and mostly obvious species identified. Why record? Well, it can be very enjoyable and make you more observant. Importantly, your records, submitted via the Wharfedale Naturalists, feed into local and national organisations involved in planning and research. We cannot protect species unless we know what's there, so your records can make a difference to habitat management and protection. For example, records may establish that a specific area is home to protected species and that area is then designated a Site of Special Scientific Interest, thus obliging local authorities to take this into an account when considering planning applications.

Catherine demonstrated how important knowing what is where by describing her current project concerning saving toads crossing a busy road as they try to reach their breeding grounds. The recent development at High Royds involved the construction of the mandatory 'compensation pond' in the middle of the site. Toads are very canny at sussing out exciting new breeding locations and it was not long before toads from the other side of Guiseley Drive were crossing to the new pond and being killed in their hundreds by passing vehicles. Had more been known about the toads' presence on the other side of the road the new pond could have been dug on their side, or a tunnel built under the road. Catherine and her volunteers are out night after night with their buckets, capturing the toads before they cross and transferring them safely to where they are determined to go.

What data do you need to include?

Name of recorder; name of species and number; date of record; site - grid reference if possible or identifiable description of site, e.g. your garden, the Wharfe at Barden Bridge, etc. If your interest is aroused contact Catherine.catwasp@gmail.com

President's AGM Address

(Summary)

When Covid struck, Peter Riley, President of the Wharfedale Naturalists Society, realised the extent to which the Society's usual activities would have to be curtailed, and feared the Society would decline greatly. However, at the AGM on March 23rd, Peter was able to report the many positives that have confounded his worst fears. Membership has increased, finances are healthy and the weekly internal circulation and publication in the Ilkley Gazette/Observer of Nature Notes has continued.

The usual winter programme of indoor talks moved to highly popular and successful Webinar presentations, summaries of which have also been published in the Gazette. Even though the working parties which help maintain five small, local reserves

have had to be suspended, the Society continues to support and/or liaise with organisations such as Climate Change Ilkley, the Ilkley Clean River Campaign, the Addingham Environment Group, Wildlife Friendly Otley and the Environment Group of the U3A. New Members are very welcome. The annual membership fee remains at £12.50.

Peta Constable

20 April

Bats

Greg Slack & Matt Whittle

Do you love them? Do you hate them? Are they the silent nymphs of a summer's night as they fly across your garden or do they make you shudder? They often get a bad press so, to set the record straight with a fascinating insight into the activities and behaviour of bats, the Wharfedale Naturalists were delighted to welcome two bat devotees and serious scientists: Greg, a consultant ecologist specializing in bats and Matt, consultant ecologist and Wharfedale Naturalists committee member. We all know that bats are the only flying mammals but did we know that the UK is home to 18 species of bats (Worldwide some 1,300 species) 25% of UK mammal species. The tiny pipistrelle being the commonest. Weighing in at about 5 grams it can consume up to 3,000 small insects in a night.

Among the very interesting things we learnt were the following:

There are more resident bats in the south of England than in Scotland as the south offers more suitable habitat. They have a long life (41 years being the record) but a low reproductive rate. To conserve energy bats go into hibernation in winter when insects are in short supply and begin to emerge in early spring, feeding intensively to build up fat reserves against the following winter. Females begin to gather at 'maternity roosts' whilst males roost on their own or in small groups. Females suckle their young for about six weeks after which the offspring are mature enough to catch insects and no longer require their mother's milk. During their winter hibernation bats roost singly or in small groups in cool, quiet places with high humidity such as caves, old mines, fissures in rock faces, viaducts and even tower blocks, sheltered from the weather and predators .

UK bats are insectivores, though worldwide different species eat a variety of other foods: nectar, fruit, even small fish, a few species even suck blood (hence some bad press). Different UK species use different insect catching strategies, echolocation being of utmost importance. Bats are not actually blind. They have small eyes with very sensitive vision but they augment this by emitting high frequency sounds which bounce back to their ears enabling them to detect objects in total darkness. The audience were treated to recordings of call frequencies and pitches of several bat species.

In Lower Wharfedale, the lowland water and woodland provide bat friendly habitat. In Upper Wharfedale Roosts are found within the protection of caves and mines. Sadly and for all the reasons that we are familiar with (loss of habitat due to intensive agriculture, herbicides, insecticides, loss of woodland etc) the bat population has declined dramatically over the last century. All bat species are protected under the Wildlife and Countryside Act and protection extends to their roosts and associated habitat. This means that new building developments require a bat survey to assess whether bats or roosts are present and how they can be protected.

More information can be found through West Yorkshire Bat Group or The Bat Conservation Trust along with a number of other organisations.

Alison Roberts

28 September

Ilkley Tree Trails

Sue Stevens

As you walk around Ilkley and its immediate surroundings do you have a sense of well-being inspired by our leafy town? Have you ever sat on the bench by Spence Gardens and wondered about the two special trees to be found there? During lockdown Sue and her husband walked the different districts of Ilkley and developed a series of pamphlets on Ilkley Tree Trails, available at the Grove Bookshop. However, for her presentation, Sue contextualised the Trails more broadly dealing with: What is an urban forest? What are its benefits? What do we have in Ilkley? Who looks after our trees? What is happening to Ilkley trees?

Historically, around 6000 BC, 75% of our land had tree cover. By the early 1900s this had dwindled to 5%. Today, tree planting initiatives have raised that to 13% although that includes inappropriate tree plantations e.g. on the edge of Ilkley, a plantation built on a peat bog. Japan, in spite of its huge cities enjoys 68% tree cover. Are urban trees important? Although only 8% of the UK is urban, 83% of the population live in towns and cities so there are many reasons urban trees are vitally important: carbon storage, improved air quality, improved sense of well-being, economic benefits, more biodiversity and many others. Sue then listed several areas of Ilkley and the trees found there. For example: Middleton has some ancient woodland and the 500 year old Stubban Oak while the Lido area contains Aspen, Western Red Cedar and Cockspur Thorn. Hebers Gill has a mixture of native and non-native trees including larch which is becoming dominant and is susceptible to an invasive fungus. The river bank has some rare Black Poplars and many Crack Willow, the latter being an important stabiliser of the river bank. In the Memorial Gardens we can enjoy the Lime avenue and the huge Horse Chestnut.

Sue showed us old photos of Brook St in the 1860s with no trees to be seen. Gradually the idea that trees are an agreeable addition to townscapes caught on and we now have, for example in the car park, trees like Pillar Apple, Silver Birch, Silver Maple and Bird Cherry. The list of who looks after our trees includes: Bradford Council, (The UN has awarded Bradford 'Tree City of the World' status), Climate Action Ilkley, and Friends of Riverside Parks. So what is happening to our trees? Some have diseases like Ash Dieback, some die of old age; some endure planned and permitted removal and some are the victims of neglect or wilful destruction. Sue concluded by suggesting that Ilkley does need a visionary and unified tree strategy. Would you like a new tree in your street? The cost of planting a new tree is around £500 but if you are willing to contribute £150 pounds and agree to water it, Bradford Council may be prepared to have one planted.

Peta Constable

12 October

Aldo Leopold – his life, work and legacy

Jim Butterfield

Hands up all those who have heard of Aldo Leopold? I confess that I hadn't so Jim's talk was enlightening and engaging. Jim first became aware of Aldo Leopold in 1968 when he read *A Sand County Almanac*. This prompted an interest in Aldo who was an early naturalist and environmentalist. His views then are as, or even more, relevant today as they were in his lifetime.

Aldo Leopold was born in 1887 in Iowa, both his grandfathers having emigrated to the USA from Germany. His successful family had a large mansion on the banks of the Mississippi from which Aldo had the freedom to explore the surrounding countryside, inheriting both his father's and grandfather's love of nature.

From the age of 11 Aldo studied, counted and recorded birds, adopting a more disciplined approach as he matured. His advice to himself: 'observe, record, understand and write up your experience before making a judgement'.

Aldo attended Yale School of Forestry which led to a career in forestry and land management. At that time this included shooting animals thought to be a threat to live stock. But a critical turning point came early in his working life when he had to shoot a female wolf. Aldo was transfixed by "the fierce green fire dying in her eyes". From then on Leopold began to promote the importance of predators as natural control. He suggested the reintroduction of wolves to Yellowstone National Park which happened a number of years later. Aldo became an early 'rewilder' becoming an expert on wildlife management and the concept of 'wildness'.

A decision to purchase 80 Acres of degraded land in the sand county of central Wisconsin allowed Aldo to test out his rewilding theories by allowing the land to revert to its original state. A shack on the land allowed Aldo and his family to experience nature first hand and these observations led to his writing *A Sand County Almanac*, a book full of thoughtful and lyrical writings about conservation, respect for the land and man's damage to the environment. The book was published by OUP in 1947. Aldo and his wife Estella had five children who all became successful conservationists.

Aldo Leopold died in 1948 while battling a wildfire on his neighbour's property. His thoughts and work on land ecology live on today.

Alison Roberts

October 26

Art, Science and Politics in Nature Conservation: Rachael Bice, CEO Yorkshire Wildlife Trust.

In an atmosphere of gloom in the run up to the COP 26 meeting in Glasgow this weekend and the continuing Covid 19 crisis it was a relief to have an inspiring talk by Rachael Bice in which she put our relationship with nature back on a positive trajectory. Rachael became CEO of Yorkshire Wildlife Trust in September 2019 and five months later the pandemic arrived. She did not belittle the challenges this imposed but also explored the positives that emerged. Many people engaged with the trust digitally, membership increased and many more people benefited from an increased awareness of what flora and fauna was in their area. The Great Yorkshire Creature Count in 2020 was indicative of this.

The task now was to face up to the triple crisis of biodiversity loss, climate change and pollution. Too often humans have thought just of themselves and do not ask the question, what can we do to help wildlife? She quoted from Inger Anderson, Executive Director UN Environment Programme, "The costs of our suicidal war against nature are growing at an alarming rate....making peace with nature is a defining task of the twenty first century. But we can now set a new course."

The new course for the Trust recognises that changing times demand changing outlooks. Diverse skills alongside naturalist knowledge are valued. Engaging with the public through the arts has increased on sites and through the media. Science and technology for monitoring and data analysis is diversifying. Political engagement, partnership and dialogue are encouraged.

When asked the question what can we do as individuals to support the Trust, the reply was, membership, volunteering and being proud to be green but above all to share one's love and knowledge of nature with others.

Polly Hosking

9 November

Wild Shetland: Wildlife of the Shetland Isles

Steve Race

Steve Race, an award-winning professional wildlife photographer and TV personality, presented an enthusiastic display of his portraits of birds and mammals of the Shetland Isles.

The Shetland Islands, the last UK foothold before Norway, are an archipelago known for sheer wilderness. They are reached by flight or ferry from Aberdeen, a 12 hour crossing to Lerwick. Noted for their soaring, rocky cliffs, home to thousands of nesting gannets, the islands also contain some grassland, beaches, and even a very few trees.

Here the common starling is very approachable. The same species as on the mainland, it differs in coloration and fewer speckles. The Shetland wren is also slightly different from its mainland counterpart. Ravens (*Corbie*), tend to be solitary and feed off carrion. Snipe, best seen in the early morning, are common. Sergeant major of the wader world, redshank are seen constantly calling their chicks. Steve showed stunning photographs of black guillemots (*Tysties*) with their white patches and red feet. He made the most of 23 hours of northern daylight to photograph shy otters at 2.30 am.

A true wilderness, the cliff faces of Hermaness Nature Reserve are covered with gannets perched one peck away from each other. Peregrine falcons nest on the lighthouse on Muckle Flugga, the last piece of land before Norway. We learnt that the fulmar (*Maali*) has an extraordinary sense of smell, allegedly detecting food up to 7 miles away. Puffins (*Tammie Nories*) also abound while on Saxa Vord, an old military base, great skuas (*Bonxies*) engage in their aggressive acrobatic flights to warn off competitors. The island of Noss too is home to bountiful flowers and birds, particularly puffins and gannets.

Steve experienced one of the highlights of his photographic career at the Loch of Funzie on Fetlar Nature Reserve, when he was able to witness three pairs of red-throated divers trying to scare off a seventh lone individual, diving under the water and surfacing to attack the solitary one. After using the cameraman as protection, the sole bird eventually flew off.

Phil Batman

23 November

If You Go Down to the Woods Today - Photography in the Boreal Forests of Finland

Richard Greenwood

How do you get close enough to take a picture of the fabled European brown bear? It is a challenge to capture the beauty of wildlife and at the same time ensure preservation of the wilderness. Staying safe is another consideration. Richard Greenwood, a talented local wildlife photographer showcased his stunning work from a 2018 visit to a remote centre in Vartiuss, Northern Finland, a place where there are more trees than people. Dense coniferous forest, a lake and cotton grass in bloom formed the idyllic backdrop for beautiful and reflective pictures. As well as species common in the UK, birdlife here included crested tits, crossbills, and redwings, the latter with their fledglings, something not seen in the UK. He saw red squirrels with their distinctive ear tufts and deeper in the woods a sleepy Great Grey Owl.

However it was the bears he came for and although sometimes surprised as they are quiet movers for their size, he wasn't disappointed. The European brown bear found mainly in Finland and Russia is Europe's largest land mammal, 100-350kg

in weight and 1.7-2m tall. With energy needs at 20,000 calories a day, their diet includes berries, insects and carrion. These bears are endangered in much of Europe, threats being deforestation, conflict with humans and hunting.

Richard's week was largely nocturnal, patiently waiting to see bears from the hides located in different parts of the conservation area. He usually avoids places where food is left out for wildlife to aid photography, a controversial ethical issue. He prefers to keep things natural. However, he felt this centre was responsible, using only small amounts of bait, just enough to ensure photo opportunities. Before he left, he was fortunate to get a picture of a wolverine, a ferocious mammal for its size. The wolves, though, remained hidden in woods.

Georgina Flynn

7 December

The Return of the White-tailed Eagle

Dr Tim Mackrill

Dr Tim Mackrill of the Roy Dennis Wildlife Foundation spoke about the white-tailed eagle, a 'flying barn door' of a bird with a wingspan up to 2.5 m. This apex predator had been absent from Britain for 240 years, its former presence recognisable from place-names and the archaeological record. It is now enjoying a welcome reintroduction. Four birds from Norway were released in Scotland in 1968, but none definitely returned. However, the reintroduction programme continued on Mull and Skye where there are now 150 breeding pairs. Their presence attracts millions in tourism to the economies of these islands.

Six juvenile birds translocated from Scotland to the Isle of Wight in 2019 were followed by others in subsequent years. The chicks are held out of sight of humans before being released tagged with the latest satellite tracking technology. The first bird to fly (G393) covered 5000 km over the British Isles, including a couple of months on the North York Moors. She subsequently returned to the island to establish a territory. G274 behaved differently, remaining largely in the Isle of Wight. She tended to sit in an estuary catching grey mullet and cuttlefish, and fished miles out to sea. G324 visited Northumberland and returned to the Isle of Wight to pair up and hopefully breed. The 2020 cohort migrated to Scotland, and one crossed the channel in a 40 minute flight, spent 8396 km exploring continental Europe and then returned.

These eagles tend to spend the large majority of their time perched in woods, although they may fly 100 kilometres in a day. It is possible to see the white-tailed eagle now in any area of Britain. A take-home message was that you may even be fortunate enough one day to witness this massive spectacle in flight over Ilkley Moor.

Phil Batman

21 December

The Twelve Plants of Christmas

Ian Brand

Ian Brand picked twelve festive plants based on symbolism, decoration, and food, taking us on a wonderful and cultural botanical journey. Here is a small taste of his talk.

The Norway spruce as a Christmas tree was introduced to the UK by Queen Charlotte, wife of King George III, and popularised by Prince Albert. However its Christian roots have been traced back to Germany in the 8th Century and St Boniface, its evergreen nature representing God's everlasting love. Holly and ivy, linked by the popular carol, are also good winter sources of nectar and berries. Wreaths of holly were placed on doors to ward off witches and evil spirits and are also

symbolic of Christ. Ivy is linked through Roman and Greek gods with alcohol. Mistletoe has connections with pagan celebrations, Roman and Greek myths, and Norse legends. We have been kissing under it for centuries, but no-one knows why.

The hardy but delicate snowdrop, called pierce-neige (snow piercer) in France, and the Christmas rose (hellebore) belonging to the buttercup family were included as winter flowering plants found in our gardens. Amaryllis bulbs and *Poinsettia* both red flowered and decorative came more recently to the Christmas scene. The latter, originally a tree but shaped by breeding to be the pot plant of today, was introduced to the US from Mexico by diplomat and botanist, Joel Robert Poinsett.

Then into the kitchen and Brussels sprouts. These we learnt originated from wild cabbage. Cranberries for our cranberry sauce come from a small plant that grows in damp areas and has lovely pink flowers in summer/early autumn. The blackthorn tree, native to this country produces fruit known as sloes and is used to flavour gin. Lastly the sweet chestnut, delicious roasted, we learnt was brought to the UK from the Mediterranean by the Romans to help feed their army.

Georgina Flynn

Ben Rhydding Gravel Pits Local Nature Reserve

Wildlife highlights

There were very regular sightings of up to 3 otters on the river, where we also saw successful breeding of kingfisher, sand martins and nearby to the reserve goosander and mandarin. Sadly, I witnessed a juvenile mandarin predated by a mink. Little egrets are now seen throughout the year with 1 or 2 birds present. 2 pairs of little grebes took up residence on the river at either end of the reserve from Sep - Dec.

Other notable sightings were a common lizard eating ants from the rotten wood of the far bench before we replaced with a new one. A few people managed to see an elephant hawk moth caterpillar but sadly only 1 white letter hairstreak in what was a generally disappointing year for butterflies. Local lapwings appear to have had a good breeding season with the post-breeding flock on the fields opposite reaching 600 birds at their peak and putting on stunning aerial displays. We were grateful for Bruce and the botanists visit in May where we were able to add quite a few 'lost' species, and observe a large patch of twayblade just over the fence on the angler's site.

The workgroup has been busy throughout the year and we made excellent progress in a number of areas.

Marshy grassland

We mowed this extensively in September. It took a good number of cuts. Our heavy-duty mower made light work of the brambles and some of the sedges that are beginning to take over. We fenced off an area to give the orchids some protection but rabbit numbers were down so it didn't really make a difference.

It was encouraging to see orchid numbers improving we were back up to about 60 flowering stems compared to last year's low point of 30. Fingers crossed for 2022.

Hawthorn clearance for wildflowers

The sowings we made in the Spring had limited success. Fingers crossed for the re-sowing we made in the autumn. If it is not successful we will try again.

Ponds and water habitats

We have somewhat neglected these areas so I invited Rick Battarbee for a walk around the site to discuss opportunities to

increase diversity. We ended 2021 creating 3 new small ponds in the marshy grassland to go with the pond we dug out about 10 years ago which had become smothered in moss. These will be seasonal ponds reliant on rainfall, so will dry up in the summer. We will do a limited amount of planting, but will largely leave them alone for wildlife to establish itself.

Lagoon mystery solved

With the help of the anglers and some local divers, we were finally able to confirm how deep the lagoon is. It is just under four metres in the middle, with good visibility down to about a metre after which it's a bit of a soup of decaying vegetation, mainly the leaves from the surrounding trees. Around the margins we found plenty of pond snails, mussels and invertebrates, with caddis flies making their casings out of tiny mussel shells only 1 or 2mm in size.

In 2022 we will do a more thorough survey.

Working like Beavers

Whilst it will be a few years before we get beavers back in Wharfedale, we plan to emulate them with a series of leaky dams and pools by remodelling the 'old ditch', a small beck that runs through the reserve and forms the boundary between Ilkley and Burley. The beck runs through a culvert under the road and then empties into the river through pipes under the riverside path. Over the years it has undercut the path and no longer holds water. By blocking the lower pipes, we will create a permanent water habitat up to a maximum depth of 1 metre, with the water level managed by a higher outflow pipe so we won't get flooding.

We will plant up with pond reed, water crowfoot, frogbit, flags, marsh marigold, etc. Unlike the large lagoon it will be free of large fish so will support more diversity.

New Signage

Thanks to support from our neighbours Moss & Moor we were able to purchase a new entrance sign. The original sign that I made from my old TV cabinet top had seen better days. We also erected the new dog control order signs from Bradford council that requires dogs to be on leads on all times. Thankfully most people comply, but it still amazes me that attitudes of some of the people I have challenged, a typical one is "I know where my dog is" to which I respond "Yes, but you don't know where the wildlife is". I was stumped with how to respond to one lady when I said there were otters about when she replied "my dog doesn't chase otters"!

Workgroups

A massive thank you to all of our volunteers. Since my retirement we have also been running workgroups in the week, often on Thursdays, in addition to the second Saturdays of the month. We would certainly welcome more volunteers if you're interested then please do get in touch.

Steve Parkes



BUTTERFLIES 2021

Historically we receive a lot more reports from lower down the Dale. We class the Upper Dale as anywhere from Barden Bridge upwards, into both Wharfedale and Littedale.

Most species didn't have a great year, especially any that emerge as adults early on in the year. All the Whites, Brimstone, and Green Hairstreak were significantly down on 2020, although not necessarily down on the 10 year average. It is also worth noting that 2020 was an exceptionally good year for all these species, so hopefully not a disaster in the long term.

The most dramatic increase of all was Purple Hairstreak with a massive 1080% increase on 2020. This was mainly due to Ric Else and Hazel Watson going out to specifically look for it, and finding it in new places all over the lower part of our area.

Painted Lady was up 340% after a dismal year in 2020, so this was good news for this gorgeous migrant.

Summary

The ups

Purple Hairstreak had a spectacular year perhaps mainly due to people specifically looking for it.

Wall significantly up in reports, and also at the number of sites it was seen.

Small Copper and Scotch Argus were both up, from both 2020 and the 10 year average.

The downs

Green Hairstreak was significantly down on both 2020 and the 10 year average.

Orange-tip and Small Tortoiseshell were both significantly down on 2020, but only marginally down on the 10 year average.

The Big Butterfly Count

In 2021 the Big Butterfly Count ran from 16 July to 8 August. The following comments are of the picture for species at a national level. The number of reports received each year continues to increase, yet worryingly this year had the lowest number of individuals reported since the Big Butterfly Count started in 12 years ago. Out of the 18 species of butterfly recorded in 2021, 12 of them were down on 2020 figures.

In general, the National picture was very similar to the WNS recording area, with all the Whites, Brimstone, Small Tortoiseshell, Peacock, and Comma all down on 2020. Ringlet, Meadow Brown, and Small Copper were all up on 2020. The one species that stands out as being startlingly different is the Holly Blue. Nationally it was down by 59% from 2020, whereas in the WNS recording area we had 75% more records than in 2020.

Transects

I am just going to explain a little bit about butterfly transects. 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 the 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. This year a full transect was walked at Sun Lane NR by Janet Kyriakides, and David and I, a species only transect for Northern Brown Argus was walked at Kilnsey by Paul, and David and I. Also, Paul, and David and I, both have separate WCBS's at Kilnsey. All the data from these transects is included in the figures for this report, but any other transects that are walked in the WNS recording area are not. There are full transects at Grass Wood, Lea Green, Long Ashes, and Yockenthwaite. There are WCBS's at Moor End above Starbotton, Cray High Pasture, and Beckermonds.

BEST PLACES TO SEE BUTTERFLIES

Locations of peak counts

Site	Butterfly peak count
Timble Ings	Dingy Skipper, Small Skipper, Speckled Wood, Ringlet, Meadow Brown
Burley, Sun Lane	Brimstone, Painted Lady, Peacock
Otley wetland NR	Large Skipper, Meadow Brown, Gatekeeper
Lindley wood Reservoir	Orange-tip
Addingham	Large White, Small White, Red Admiral
Stainburn Forest	Green-veined White
Beamsley Beacon	Wall
Threshfield and Malham Moor	Small Heath
Bastow Wood	Scotch Argus
Arncliffe	Dark Green Fritillary, Common Blue
Skyreholme	Red Admiral
Hawksworth, Odda Hill	Small Tortoiseshell
Farnley	Comma
Barden	Small Copper
Norwood Bottom	Purple Hairstreak
Burley Moor	Green Hairstreak
Leathley	White-letter Hairstreak
Burley	Holly Blue
Kilnsey	Northern Brown Argus

2021 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. There is also now more of a trend for people to enter their records directly onto on-line schemes, such as iRecord and The Big Butterfly Count. When people do this we don't get to see them unless they send them to us as well, which some people do. 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.

We received 2953 records this year, compared to 3559 in 2020, which is a relatively poor year. There have only been 3 other years in the past decade with less than 3000 records, 2012, 2016, and 2017.

One factor that may have caused a drop in the numbers of some species was the very cold, late spring. There was also some windy weather. David and I visited Burley Moor on several occasions in April, and there was always a brisk, cool wind. For double brooded species this will have affected the numbers of the second brood too. Several people commented to me that in late summer when the Buddleia was in flower that there was a distinct lack of butterflies.

28 species were recorded which is the same as 2020, and the same species too. There were 2 reports of possible Marbled White, but unfortunately neither could be confirmed.

Species to look out for in 2022 are Silver-washed Fritillary, which was seen in 2019, Essex Skipper, surely one will turn up sometime, and Clouded Yellow, there is always a possibility of this beautiful migrant. If you see anything that looks unusual then please try to get a photo, however bad the photo is it may confirm something special.

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 2021 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 forwarded to the VC recorder.

HESPERIDAE (SKIPPER)

Dingy Skipper *Erynnis tages* 1532 (57.001)

1 site, 1 observer, 1 individual

First sighting 28/06/21, Timble Ings (KS) when 1 was seen

Last sighting As above

Peak Count As above

We get very few records of this elusive spring flying butterfly, just the one this year, but it was very welcome, Kelvin photographed it at a new site. Timble Ings is eminently suitable and begs the question why it has not been seen here before? It is typical of the Dingy Skipper to pop up where you least expect it, and yet it can be absent from previously reliable sites for years on end. Clearly it disperses widely looking for the ideal habitat of bare ground with plenty of Birds-foot Trefoil. Despite many visits in ideal conditions it was not seen at its most recent locations at Thruscross Reservoir and Lea Green.

Small Skipper *Thymelicus sylvestris* 1526 (57.006)

83 records, DOWN 3.2%, 39 sites, 20 observers, 637 individuals

First sighting 11/06/2021, Timble Ings (DA) when 1 was seen

Last sighting 28/08/2021, Addingham (CG) when 1 was seen

Peak Count 21/07/2021, Timble Ings (DA) when 100 were seen

This was a much better year with reports up by 124% on 2020, and similar to the figure for the 10 year average. There were a lot more reports of double figures so people were seeing more of them at a time too which is encouraging, and also at almost twice as many sites as in 2020. The sites were widespread with sightings as far up the dales as Pen-y-Ghent Gill above Litton (NF), and Yockenthwaite (NF).

Large Skipper *Ochlodes sylvanus* 1531 (57.009)

33 records, 31% DOWN, 19 sites, 13 observers, 128 individuals

First sighting 13/06/2021, Stainburn Forest (NF). 2 were seen

Last sighting 08/08/2021, Ben Rhydding Gravel Pits (RE & HW) when 1 was seen

Peak Count 08/07/2021, Otley Wetlands NR (DA) 30 were seen

This was a better year than 2020 with reports up by 32%, but still significantly down on the 10 year average, so it hasn't fared as well as the Small Skipper. Apart from 6 seen near Arncliffe (RE & HW) the furthest up the dale that it was seen was at Addingham. So, there is huge scope to look out for it in 2022 in a large part of our recording area. Only 2 reports were of double figures. It is perhaps worth noting that in flight it can't easily be separated from the Small Skipper, and as the two species fly at roughly the same time there are probably quite a few sightings of both species that don't get reported due to unconfirmed identification.

PIERIDAE (WHITES)

Green-veined White was down on last year and the 10 year average, as was Orange-tip, although the Orange-tip was only marginally down on the 10 year average. Considering that 2020 was an exceptional year for Orange-tip it is probably still doing OK in general.

Both Large and Small White were over 30% down on 2020, but they were still both up on the 10 year average so it was most likely just a bad year for them in 2021. A possible cause could be the cold April weather when the first brood was emerging, which would also affect the Orange-tip.

It will be interesting to see what kind of Spring we have in 2022, and how the numbers fare then.

One final thing to say about all the Whites, with the exception of the male Orange-tip, is the problem of getting a positive identification. They can be impossible to tell apart in flight, and often they just won't stop. Even with persistent following, and the use of binoculars, we often can't get a certain identification. I am sure that no-one, not even very experienced observers, can get a positive identification on anywhere near all of the Whites that they see, so please don't worry if you can't. Please just send us in the records that you are sure of, as unfortunately we can't enter records of unidentified whites.

Orange Tip *Anthocharis cardamines* 1553 (58.003)

146 records, 8.3% DOWN, 47 sites, 36 observers, 245 individuals

First sighting 13/04/2021, Burley (PR) when 1 was seen

Last sighting 24/06/2021, Foxup (CH) when 1 was seen

Peak Count 24/04/2021, Lindley Wood Reservoir (RE & HW) when 17 were seen

Reports were down by over 50% from 2020, but 2020 was a spectacular year, with the highest number of reports ever for the WNS by quite some way. This year was only marginally down on the 10 year average. It was still a good year, although there were fewer numbers seen per report, with only 1 report of double figures. We only had 1 report of eggs, when 2 were seen at Menston (RE & HW), whereas last year numerous eggs were seen. We did however have reports of larvae this year, again at Menston (RE & HW), found on Garlic Mustard. It is a widespread species, yet we had only a single butterfly seen any further up than Grassington, which was at Foxup (CH). The Grassington report was only of a single butterfly too.

Large White *Pieris brassicae* 1549 (58.006)

182 records, 27.7% UP, 35 sites, 25 observers, 339 individuals

First sighting 15/04/2021, Otley (MC) when 1 was seen

Last sighting 26/09/2021, Addingham (MD) when 1 was seen

Peak Count 03/08/2021, Addingham (JP) when 12 were seen

This was another butterfly that had the greatest number of reports ever for the WNS in 2020, so although there were far fewer this year it was still the fifth best year. However it was only seen in low numbers, with the peak count of 12 being the only count in double figures. There were 15 records from the upper Dale, but 11 of these were from Skyreholme (PM).

Small White *Pieris rapae* 1550 (58.007)

263 records, 18.3% UP, 51 sites, 35 observers, 522 individuals

First sighting 30/03/2021, Burley (DA) when 1 was seen

Last sighting 07/10/2021, Farnley (NF) when 1 was seen

Peak Count 26/07/2021, Addingham (PMi) when 8 were seen

Although down by over a third on 2020, reports were still up on the 10 year average, so no real reason for concern, as all species will fluctuate depending on lots of factors, such as the weather. This is especially relevant when the adults are trying to mate and lay eggs, but also for the caterpillars if the foodplant is affected.

There were no counts in double figures this year, but it was seen over a wider area, with a record as far up as the path between Yockenthwaite and Deepdale (NF). There were also other records for the upper Dale at Barden (PM), Skyreholme (PM), Kilnsey (NF), Kettlewell (PM & NF), and Starbotton (PM). There were 112 records from Addingham and 64 records from Otley, by far the top hot spots. The flight period was very similar to the past couple of years.

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

164 records, 32.0% DOWN, 64 sites, 25 observers, 468 individuals

First sighting 17/04/2021, Nesfield (NF) when 1 was seen

Last sighting 17/09/2021, Otley Wetlands NR (PP) 1 was seen

Peak Count 16/05/2021, Stainburn Forest (NF) 27 were seen

It wasn't a good year at all for what I think is probably the easiest of the Whites to ID. If one actually stops and you get even a glimpse of the underwing, then the distinct veined markings make it certain for Green-veined White. Apart for 2016 with 133 records I have to go back as far as 2002 with 113 records to find a year with records lower than this year. It is also perhaps worth noting that prior to 2003, in general, there were fewer records of all species. Recording butterflies seems to have become more a more popular activity in recent years.

However, there were 9 counts in double figures, so that's better than any of the other Whites, and they were also more widespread with multiple records from the upper Dale, and a better range in the lower Dale than any other White.

Clouded Yellow *Colias croceus* 1545 (58.010)

No records.

Brimstone *Gonepteryx rhamni* 1546 (58.013)

68 Records, 18.1% UP, 30 sites, 27 observers, 85 individuals

First sighting 28/02/2021 Addingham where 2 were seen (AC)

Last sighting 08/10/2021 Skyreholme where 1 was seen (PM)

Peak Count 28/08/2021 Burley, Sun Lane 5 were seen (JK)

Records were down 25% from 2020, but 2020 was an exceptional year, with the second highest number of records in the past 20 years, only marginally less than in 2014. So this year was still a very good year. Almost all the records were only of 1

or 2 butterflies, with only 3 records of more than 2, but this butterfly is never really seen in large numbers. David and I found at least 12 eggs on Alder Buckthorn, but sadly none of them appeared to hatch, as there was no feeding damage or larvae, and the eggs were still present. However 3 larvae were seen in Skyreholme (PM).

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

Wall *Lasiommata megera* 1615 (59.002)

54 records, 137.9% UP, 36 sites, 21 observers, 88 individuals

First sighting 02/06/2021, Menston (RE & HW) when 1 was seen

Last sighting 20/09/2021, Skyreholme (PM) when 1 was seen

Peak Count 31/08/2021, Beamsley Beacon (PMi) when 10 were seen

It's been an excellent year for this pretty grassland butterfly. It is the best year since 2007, when it had had a good run of years between 2003 and 2007, the only years that were higher than this year. As well as being significantly higher on the 10 year average, it was also up by over 92% from 2020. It is never seen in large numbers, and the peak count of 10 was the only count in double figures. But it was seen at almost twice the number of sites as in 2020, popping up all over the place. In the upper Dale it was seen at Barden (JD), Skyreholme (PM) and Hawkswick (PP). Addingham, and the Lower Washburn Valley were the hot spots, with multiple sightings.

Speckled Wood *Pararge aegeria* 1614 (59.003)

190 records, 29.5% DOWN, 55 sites, 39 observers, 855 individuals

First sighting 19/04/2021, Grassington, Grass Wood (IB) when 1 was seen

Last sighting 15/10/2021, Thruscross Reservoir (NF) when 1 was seen

Peak Count 02/09/2021, Timble Ings (NF) when 51 were seen

This butterfly had a poor year for records. I have to go back to 2004 to find a year with a lower number of records. But on the definite plus side there were almost twice as many individuals seen as in 2020, so when it was seen it was in greater numbers. The peak count was much higher than last year, and this year we had 20 counts in double figures, compared to only 4 last year, so not all bad news. The furthest up the Dale that it was seen was at Grass Wood / Bastow Wood, where it is seen every year in good numbers, on multiple occasions. David and I looked further up both Wharfedale and Littondale with no success. Can anyone find it beyond this stronghold?

Small Heath *Coenonympha pamphilus* 1627 (59.005)

95 records, 18.3% DOWN, 48 sites, 19 observers, 1190 individuals

First sighting 03/06/2021 Hawkswick when 3 were seen (NF)

Last sighting 13/07/2021 Addingham when 1 was seen (DL)

Peak Count 19/07/2021 Threshfield and Malham Moor when 134 were seen (NF)

The cold wet spring caused a slight delay in the emergence of the first generation by about one week. Compared to 2020 we saw a great improvement in the fortunes of this nationally threatened butterfly. There were more observers, and a near doubling of the numbers of individuals seen. The ten-year trend was slightly down in terms of records made but a count of 100 plus individuals at one location still only counts as one record. There was a flourishing of the second generation where we saw several counts of over 100 individuals. How do we reconcile the problem of more recorder activity and therefore more observations making abundance comparisons year to year

difficult? We use formalised transects. We have several transects in Upper Wharfedale. This is a reliable method of monitoring abundance, and it is good to see that the local trends are moving very much against the national picture. It will not have been so troubled by the poor spring weather as many of our other species. The Small Heath is thriving in our upland habitats and continues to pop up regularly in low numbers in Lower Wharfedale. If climate change reverses it is from these upland sanctuaries that it will be able to recolonise the lowlands.

Scotch Argus *Erebia aethiops* 1618 (59.008)

12 records, 33% UP, 5 sites, 9 observers, 289 individuals (much better than the 55 seen in 2020)

First sighting 04/08/2021 Sleets Gill when 12 were seen (NF)

Last sighting 17/08/2021 Bastow Wood when 55 were seen (PR)

Peak Count as above

The good news is that we now have five established colonies of Scotch Argus in Upper Wharfedale. We have suspected for some time that there was a fifth colony somewhere between Kettlewell and Starbotton. This year the centre of the elusive fifth colony was located on 26 July when sixteen were observed in a very small area in suboptimal conditions. We had records from all five of our colonies in the year. They are here because of a series of unofficial re-introductions, the last natural records were from the 1930s but now that the colonies have been self-sustaining for more than five years, we can once again regard them as part of our natural fauna.

This was the target species for our annual butterfly walk and even though the weather was overcast and cool we were able to observe 43 in the main area of Bastow Wood with a further 12 at a separate location within the complex. The cool conditions meant that the butterflies were quite sedentary, and everyone managed to get a close look.

Ringlet *Aphantopus hyperantus* 1629 (59.009)

145 records, 31.0% DOWN, 58 sites, 34 observers, 1670 individuals

First sighting 11/06/2021, Burley, Sun Lane NR (JK) when 18 were seen

Last sighting 25/08/2021, Grassington, Grass Wood (NF) when 1 was seen, Timble Ings (RE & HW) when 1 was seen, and Timble Ings (DM) when 3 were seen

Peak Count 14/07/2021, Timble (KS) when 130 were seen

The Ringlet had a much better year than in 2020. It was seen at more sites, by more people, and the number of individuals was more than twice as many as in 2020. There were 5 records into triple figures. The flight period was longer too. It started only 5 days earlier than in 2020, but there were lots of August sightings this year, with the last sighting almost 3 weeks later than in 2020. This is one butterfly that is widespread throughout the whole of the WNS recording area, which is to be expected really as it is a grassland species, and there is plenty of suitable habitat all over.

Meadow Brown *Maniola jurtina* 1626 (59.010)

209 records, 9.2% DOWN, 78 sites, 31 observers, 1709 individuals

First sighting 11/06/2021, Burley, Sun Lane NR (JK) when 13 were seen

Last sighting 17/09/2021, Otley Wetlands NR (PP) when 4 were seen

Peak Count 08/07/2021, Otley wetlands NR (DA) when 100 were seen, and 21/07/2021 Timble Ings (DA) 100 again

Although records were slightly down on the 10 year average, they were up by 17% from 2020, with almost 700 more

individuals this year. There were 2 records of triple figures, and multiple records in double figures. It also had a much longer flight period with the first sighting being over a month earlier, and the last sighting being over 3 weeks later than in 2020. This is another widespread grassland species that was seen throughout the WNS recording area, as far up as the Greenfields Road beyond Beckermonds (NF), and with a lot more records this year in the upper Dale, including Littondale.

Gatekeeper *Pyronia tithonus* 1625 (59.011)

35 records, 8.9% DOWN, 14 sites, 15 observers, 80 individuals

First sighting 04/07/2021, Otley (MC) when 1 was seen

Last sighting 20/08/2021, Otley (MC) when 1 was seen

Peak Count 26/07/2021, Otley Wetlands (PP) 28 were seen

This was a reasonable year with more records than last year, and also a slight increase in the number of individuals. It is a species that can be confused with the Meadow Brown so some may get missed as they do fly together at roughly the same time. It isn't particularly widespread with records all from Otley, Farnley, Lindley, and Burley, apart from 1 at Dob Park (NF), 1 at Odda Hill, Hawksworth (RE & HW), 1 at Reva Reservoir, Menston (RE & HW), and 3 from Timble Ings (RE & HW, & DA). This is another species with a longer flight period than in 2020, the first sighting being almost a month earlier, and the last sighting being 2 weeks later than in 2020.

Marbled white *Melanargia galathea* 1620 (59.012)

No records

Dark Green Fritillary *Argynnis aglaja* 1607 (59.019)

44 records, 5.6% DOWN, 21 sites, 13 observers, 441 individuals

First sighting 26/06/2021 Low Ox pasture Kilnsey when 3 were seen on the transect (PM)

Last sighting 10/07/2021 when 78 were seen by RE and HW on a 1.5 km walk at Arncliffe.

Peak Count 78 as above

Strictly speaking the first observation was of two larvae by Richard Else and Hazel Watson sunning themselves in the open on 13 June at Arncliffe. This is an unusual observation but apparently the fully grown larvae were quite noticeable.

They are often abundant on the public footpath rising from Arncliffe walking up Cowside Beck toward Malham, this walk is a little steep at first but the rewards are immense with fabulous views and plenty of fritillaries zooming past at great speed.

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

No records

Red Admiral *Vanessa atalanta* 1590 (59.023)

197 records, 25.1% DOWN, 59 sites, 34 observers, 311 individuals

First sighting 31/05/2021, Riffa Farm (PP) when 1 was seen

Last sighting 03/11/2021, Skyreholme (PM) when 1 was seen

Peak Count 23/08/2021, Addingham (DM) when 9 were seen, and 17/09/2021, Skyreholme (PM) when 9 were seen

Records were up by 10% from 2020, but this was still not a good year for this large bright butterfly. The number of individuals was down from 356 in 2020, to 311 this year. The first sighting was 6 weeks later, and the last sighting 2 weeks later than in 2020. The peak count in 2020 was 17, compared to just 9 this year. In both years these were seen in Paul's garden, which he is developing with butterflies and other wildlife in mind. It was more widespread this year with multiple records from the upper Dale. It is a strong flier, and also a migrant, and sometimes it can be seen in good numbers flying with purpose in a single direction during September and October. Several

years ago, David and I were walking on the path between Malham Tarn and Hawkswick Cote in early Autumn and we saw one after the other, after the other, all flying at speed in the same direction. There weren't huge numbers, but it was quite a sight. We have also seen this same phenomenon in Scotland in October so it is definitely worth thinking about later in the year.

Painted Lady *Vanessa cardui* 1591 (59.024)

44 records, 46.1% DOWN, 23 sites, 26 observers, 56 individuals

First sighting 29/05/2021, Burley (PR) when 1 was seen

Last sighting 10/10/2021, Otley (PP) when 1 was seen

Peak Count 28/08/2021, Burley, Sun Lane Nature Reserve (JK) when 4 were seen

The Painted Lady is known to have a spectacular year, approximately every 10 years, and 2009, and 2019 were these years. Then 2020 was a total washout with only 13 individuals seen. So it was good to see improved numbers this year, putting it more in line with the usual numbers expected in the years in-between the boom years. The peak count of 4 was disappointing, indeed most of the records were only of single butterflies. There were 3 times as many sites as in 2020, but the furthest up the Dale that it was seen was at Grass Wood (KS). It is a butterfly that is dependent on conditions outside the UK, as it is another migrant, so we wait each year to see how many of this stunning butterfly will appear.

Peacock *Aglais io* 1597 (59.026)

242 records, 28.7% DOWN, 61 sites, 35 observers, 532 individuals

First sighting 18/03/2021, Otley (CH) when 1 was seen

Last sighting 14/10/2021, Otley (CH) when 1 was seen

Peak Count 28/08/2021, Burley, Sun Lane NR (JK) 27 were seen

After 2 excellent years in 2019 and 2020 records this year were the fifth lowest in the past 20 years. The poor weather in Spring could have affected the adults emerging from hibernation. It may have been too cold, wet, or windy for them to survive long enough to mate and lay eggs, which would of course affect the numbers emerging in the second brood. The first sighting was a staggering 2 months later than in 2020, and the last sighting was 5 weeks earlier than in 2020, so they had a dramatically shorter flight period. It is usually a widespread species, but this year apart from several records from Grass Wood / Bastow Wood, it was only seen as far up the Dale as Kilnsey (PM) and Kettlewell (PM & NF).

Small Tortoiseshell *Aglais urtica* 1593 (59.027)

346 records, 15.0% DOWN, 73 sites, 41 observers, 875 individuals

First sighting 28/02/201, Burley (DA) when 1 was seen

Last sighting 13/11/2021, Skyreholme (PM) when 1 was seen

Peak Count 04/07/2021, Hawksworth, Odda Hill (RE & HW) when 35 were seen

2020 had the highest number of records that we have ever had, 567, so although reports were 39% down on 2020 the drop in the 10 year average isn't too dramatic. There were almost half the number of individuals as in 2020, and it was reported from far fewer sites than in 2020. Same as the Peacock this is another butterfly that hibernates, and the same comments regarding the weather as I mentioned for the Peacock apply to the Small Tortoiseshell too. Let's hope that the Spring of 2022 is better, and that both species get the chance to bounce back. The vast majority of records came from the lower Dale, Menston, Otley, Burley, Ilkley, and Addingham all having numerous records. There were also multiple records from Paul's garden at Skyreholme. It is a species that is common in gardens, and mostly easy to identify, as it likes to stop and nectar on a whole

range of flowers. There were 7 records from Kilnsey (PM & NF), 1 from Kettlewell (PM), and 2 from near Litton (NF). In December David and I found 7 hibernating in a barn close to Litton, along with the remains of several more on the barn floor (single wings with the bodies eaten by bats or birds).

Comma *Polygonia c-album* 1598 (59.031)

66 records, 56.3% DOWN, 30 sites, 30 observers, 88 individuals

First sighting 16/03/2021, Addingham, Burns Hill (AC) 1 seen

Last sighting 21/10/2021, Farnley (NF) when 1 was seen

Peak Count 07/10/2021, Farnley (NF) when 12 were seen

It was a bad year for this attractive butterfly. Apart from 2016 with 48 records I have to go back as far as 2001 to find a year with fewer records. The number of individuals was also down from 135 in 2020 to just 88 this year. Again, this is another butterfly to emerge early in the year, and it would be affected by the foul weather at the time when the first adults were emerging from hibernation. The flight period was almost exactly the same as in 2020. Apart from the peak count of 12, the highest numbers seen at one time was only 3, both at Ben Rhydding Gravel Pits (DA & KS). There were just 3 records from Grass Wood (NF, IB & SM), and none any further up the Dale. Paul had 5 records, all of single butterflies, in his garden at Skyreholme (this was the furthest up the Dale that it was seen in 2020).

LYCAENIDAE (BLUES AND HAIRSTREAKS)

Small Copper *Lycaena phlaeas* 1561 (61.001)

79 records, 16.7% UP, 40 sites, 26 observers, 199 individuals

First sighting 25/04/2021, Thruscross (PM) when 1 was seen

Last sighting 21/10/2021, Farnley (NF) when 1 was seen

Peak Count 12/08/2021, Barden (JD) when 20 were seen

At last, some good news. Records of this gorgeous little butterfly were up by 49% from 2020, as well as being up on the 10 year average. It was its fifth best year in the past 20 years.

Individuals were up by just over 100% from 2020, and the peak count easily beat last year's peak count of 13. It is a widespread butterfly, but in my (NF) experience you can't really go to a site specifically to see it. It seems to just pop up anywhere, and it is always a joy to see. It is only a small butterfly but the brilliance of the orange colouration makes it quite easy to spot, even from a short distance. I love this exquisite little butterfly that can't fail to bring a smile to your face. It was seen right up the Dale, as far up as the path between Hubberholme and Yockenthwaite (NF). The best site this year was Timble Ings with 14 records.

Purple Hairstreak *Favonius quercus* 1557 (61.004)

59 records, 75.1% UP, 19 sites, 9 observers, 222 individuals

First sighting 16/07/2021, Fewston (KS) when 1 was seen

Last sighting 07/09/2021, Otley Chevin (RE & HW) 1 was seen

Peak Count 25/07/2021, Norwood Bottom (RE & HW) 25 seen

Well, what a fantastic year for this secretive butterfly that spends almost all its life high up in Oak trees. It is easily the highest number of records ever. 2005 had 29 records, and 2006 had 26 records which are the next best. Records were up 1080% from 2020, mainly due to the remarkable efforts of Ric Else and Hazel Watson, who went out specifically looking for it. We have always suspected that it was under recorded, and a comment from Ric and Hazel is that they believe that it could be anywhere with Oak trees present. The number of sites is up from 4 in 2020 to 19 this year. David and I also went out specifically looking for it, and we found a couple of new trees, that were within the same 1km square as previous records, but a little way apart. Otley Chevin, Ellar Ghyll, Otley, and High Royds, Menston had the most records. There was also a good area at Timble Ings with some smaller Oak trees as well as

larger ones. I am only aware that one record was from a garden (PR).

There were 3 counts in double figures (RE & HW), any of which would have usually been the total for the whole year. Unusually it is a butterfly that definitely prefers to fly later in the day, the peak time seems to be from around 17.00 – 19.00. On one occasion Ric and Hazel checked a site at 17.00 and saw none, but then saw at least 5 at the same site at 19.00. This butterfly requires binoculars even more than the White-letter Hairstreak. Certainly all of our sightings were through binoculars at first, although we did see some flying high up once we knew where to look. On one occasion at Dob Park David spotted one at the very top of a large Oak tree in dull, cool weather, and a brisk wind, clinging on for dear life, and swaying all over the place. We could see the little butterfly silhouette with the naked eye once it had been spotted. I suppose that the highest point is also the best vantage point.

Green Hairstreak *Callophrys rubi* 1555 (61.005)

34 records, 53.7% DOWN, 20 sites, 13 observers, 229 individuals

First sighting 12/04/2021, Otley Chevin (NF) when 3 were seen

Last sighting 04/06/2021, Cracoe (DA) when 1 was seen

Peak Count 17/04/2021, Burley Moor (RE & HW) 50 were seen

Unfortunately, it was one of the worst years for this beautiful jewel of a butterfly, the third lowest number of records in 20 years. What a change from 2020 when it had its third best ever year. After the lovely Spring weather in 2020 at the perfect flight time for this butterfly I had been hoping that lots of eggs would have been laid, and that we might have another bumper year. But this year the weather was the exact opposite, pretty grim during its peak flight period from mid-April, so perhaps many adults sadly perished. They were still flying though, even on cooler, windy days. It is also worth noting that David Leather, who is usually one of the main contributors for Green Hairstreak, and who made extensive forays specifically looking for it during the previous couple of years was away for most of its flight period, and only sent in 2 records this year.

There were several records from Burley Moor (NF, RE & HW, & DA) over a wide area, and the usual site at Manby Field on Otley Chevin (NF, RE & HW, & PP) produced good numbers, with 4 reports in double figures. Barden Moor (DM) is a good place to look too, although this year we had just 2 reports from there. We also had what I think may be a first. Paul found a Green Hairstreak egg on Rockrose in Trollers Gill. Unlike the similar Northern Brown Argus egg, which is often to be found on Rockrose, it was a very pale green and of course found too early in the season to have been the latter.

This is the easiest Hairstreak to see as it lives low down, mostly in areas of Bilberry. Although it is green, it is actually quite easy to spot once you have seen your first one, as it is a very bright green, different to the leaves on which it rests. It always lands with its wings closed so it is the green underwing that you see. The upper wing is brown, and in flight the butterfly tends to look brown. As it is a small butterfly it can look a bit like a dead leaf blowing in the wind, or a totally different insect. If you look for movement amongst the Bilberry, then try to follow it (often easier said than done!), and see it land then it will immediately be showing the bright green. And it's so pretty close up.

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

7 records, 70.5% DOWN, 4 sites, 6 observers, 11 individuals

First sighting 08/07/2021, Ben Rhydding Gravel Pits (RE & HW) when 1 was seen

Last sighting 25/07/2021, Norwood Bottom (RE & HW) 2 seen

Peak Count 21/07/2021, Track above Leathley (DA) 3 were seen

It wasn't a good year, despite the fact that there were more seen than last year. In 2020 we had just 4 records totalling 6 individuals. Compare 2020 and 2021, to 2014 and 2015 which both had over 50 records. Since 2004, every year has had at least 7 reports, apart from 2017 with 5 reports and 2020 with the 4 reports. The only plus side this year is that it was seen at one more site than last year. 3 of the 7 records were from Ben Rhydding Gravel Pits (RE & HW, KS, & DA). It is a tricky butterfly to spot, as it spends a lot of time high up in Elm trees, so there are probably more present than are actually recorded. This is a species for people to look out for in 2022. It would be good to find it at more sites other than the known sites where everyone goes to see it, such as Ben Rhydding Gravel Pits. In 2020 it was seen at Gallows Hill NR, but there were no records from there this year. Although it does come down to nectar on flowers occasionally it is definitely a case of binoculars required...

Holly Blue *Celastrina argiolus* 1580 (61.012)

60 records, 1.6% DOWN, 14 sites, 20 observers, 67 individuals

First sighting 16/04/2021, Burley (PR) when 1 was seen

Last sighting 20/09/2021, Menston (AG) when 1 was seen

Peak Count 13 & 14/08/2021, Burley (PR) 3 were seen each day

It was a much better year for this lovely butterfly. It tends to have good and bad years fluctuating with the cycle of a parasitic wasp. 2018 and 2019 were both excellent years, then 2020 was a poor year. However, it looks like it is back on the up again with 76% more reports this year, and almost double the number of individuals as in 2020. The second brood was far better than the first which is the opposite of 2019 and 2020. Only 12 of the 60 records were from the first brood, and all of those were just of single butterflies. It was seen from mid-April to mid-June (first brood), then from mid-July to mid-September (second brood). There were no records any further up than Addingham this year. I have noticed that most of the records are from gardens, in particular at Burley (PR) and Menston (AG), both with multiple records, but also in gardens in Otley (MC, ES, DJ, & DO) and Addingham (HB, DM, & JT). At our Nature Reserves it was seen at Otley Wetlands NR (PR) and Sun Lane NR (NF), which is an improvement on 2020 when it was only seen at Otley Wetlands NR. The larvae feed on Holly in the Spring and Ivy in the Autumn, so it's best to keep an eye out for it close to these plants.

Northern Brown Argus *Aricia Artaxerxes* 1573 (61.016)

34 records, 24.3% DOWN, 15 Sites, 14 Observers, 353 individuals

First sighting 03/06/2021, Long Ashes (KS) when two seen

Last sighting 20/07/2021, Threshfield Quarry (AG) four seen

Peak count 12/06/2021, Kilnsey Low Ox Pasture UKBMS Transect (PM, NF) 64

The cold wet spring brought the first emergence date back to a more normal early June, this is in contrast to the very early start in 2020. Once again we are pleased to note that the closely related Brown Argus has not been reported anywhere in the WNS recording area. The nearest record in 2021 was at the Trench Meadows SSSI in Baildon. That means that our population of the very similar Northern Brown Argus remains isolated and identification in the field is still without potential for confusion. The ten year trend of records is slightly down but there were twice as many records as in 2020 when observations of this upland insect was very much affected by lockdown. Transect records show that the Northern Brown Argus population is stable in our area. It is very much a habitat specialist reliant upon a healthy growth of its larval foodplant the Common rockrose *Helianthemum nummularium*. So as long

as this habitat is managed appropriately the butterfly should continue to thrive.

Common Blue *Polyommatus Icarus* 1574 (61.018)

60 records, 26.1% DOWN, 30 sites, 20 observers, 244 individuals

First sighting 27/05/2021, Otley Wetlands NR (PP) when 1 seen

Last sighting 28/08/2021, Burley, Sun Lane NR (JK) 1 seen

Peak Count 10/07/2021, Arncliffe, Cowside Beck (RE & HW) when 33 were seen

Records were up by 17% on 2020, but the number of individuals was less than half that of 2020. Last year the peak count was 93, so much higher than the peak count of 33 seen this year. It was seen at more sites, and by more observers this year, which means that it was more widespread. This species is the opposite of most species in distribution, in that the vast majority of records came from the upper Dale, with records from very high up in both Wharfedale and Littondale. Last year there were good counts from Swinsty Reservoir dam, but none this year. Yorkshire Water have been doing extensive work there in 2021, so it will be interesting to see if it returns in 2022. There was a count of 22 at Lindley Reservoir dam (NF), but shortly afterwards the whole embankment was mown, so who knows if any eggs survived to hatching, and if there was anything for the larvae to eat if they did. It can be seen anywhere close to the larval foodplant of Bird's-foot Trefoil, and it is very easy to identify the males, even in flight. The only other blue butterfly, the Holly Blue tends to live in a totally different habitat, so it would be very unlikely to have both species together.

FINALLY

Firstly, we would like to say a huge 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. 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 or 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 and farmers, reviewing planning applications, monitoring climate change and biodiversity, and looking at butterfly populations and distributions nationally, to name just a few.

For anyone reading this who has never sent in records, or who has just sent in perhaps the odd one, then we are very happy to help you in any way that we can. We are happy to look at photos, if you can get one and are unsure of the ID, and we can also advise you on what species you are likely to see depending on the habitat and the time of year.

We have an Excel spreadsheet for sending in records which is very easy to use, and as it is in the same format as our master spreadsheet we can copy and paste your records directly, saving us a huge amount of time, and also cutting down on us accidentally mistyping a record. But we are still very happy to receive records in any way that suits you, on a spreadsheet that you already use (Excel is preferred), in an email, or written records are all gratefully received.

All that we need is your name, where you saw it (ideally with a grid reference), date, what species, and how many.

With regards to where you saw it then ideally a 6 figure, or even a 4 figure grid reference, is preferred as this pinpoints the exact spot, and it is a requirement for the National database, so if you don't provide one then we have to provide one. We also enter the closest town or village as there could be people

looking at these records who aren't familiar with the area, and if this is provided by you, then it is also much easier for me to provide the grid reference if you haven't been able to do that.

With regards to how many you saw it is best if you can give an estimate if you aren't totally sure of the exact number. We get quite a few records each year with words such as 'several, lots, numerous', and these are open to individual interpretation. It can also depend on whether the species is common, or not. So if you can make an educated guess, e.g. 5, 20, 50, 100, then that is a huge help, as otherwise we probably enter less than you actually saw.

And to end, seeing butterflies, and recording them should be a joy, and a pleasure, and never a chore. Please just send in any records that you wish. You don't have to worry about trying to identify every one, or making a note of every one that you see. Sometimes you just enjoy being out at a good butterfly spot, on a nice day, and watching them flitting about.

I hope that any butterflies that you see in 2022 just bring a smile to your face, and make you feel happy, and more relaxed.

Nyree Fearnley and Paul Millard

Butterfly Recorders 2021.

OBSERVERS

Records were received from the following people:

Alder, Chris (CA); Alred, David, & Joan (DA); Andrews, Kay (KA); Arrowsmith, Sara (SA); Austin, Ann (AA); Batterby, Rick (RB); Bell, Christine (CB); Blomfield, Ian & Barbara (IB); Bodycote, Joe (JB); Borroff, Mick (MB); Burns, Peter & Janet (PJB); Burrow, Heather (HB); Clarke, Anne (AC); Clerk, Mike & Joyce (MC); Corry, Peter (PC); Dickinson, James (JD); Dunne, Mick (MD); Else, Richard (RE); Falls, Richard (RF); Fearnley, David & Nyree (NF); Godden, Claire (CG); Gramshaw, Audrey (AG); Hanson, Birgit (BH); Horner, Carmen & Fred (CH); Haycock, Gordon (GH); Jakeways, Diana (DJ); Kelly, Andrew (AK); Kyriakides, Janet (JK); Leather, David & Midge (DL); Longden, Margaret (ML); Maire, Jackie (JM); McMahon, Dave (DM); Lilley, Ros [RL], Millard, Paul (PM); Miller, Peter (PMi); Morgans, Sophia (SM); Morris, Diane (DM); O'Connor, Denis (DO); O'Donnell, Maire (MO); Olive, Jackie (JO); Penrose, Jessica (JP); Penny, Mark (MP); Prest, Charles & Fiona (CP); Purvis, Paul (PP); Riley, Peter & Anne (PR); Scarfe, Ernie (ES); Secrett, Malcolm (MS); Smith, Kelvin (KS); Summers, Peter (PS); Tomlinson, Julia (JT); Watson, Hazel (HW); Wiseman, Lee (LW); WNS Butterfly Walk, (WNSBW).

The Wharfedale Naturalists Society, the first 75 years

A letter from a Mr. C. Thompson Walker to the Ilkley Gazette in September 1945 suggesting that a Natural History Society should be formed in the District, prompted a Meeting to be held in an Ilkley Café and on 2nd October the Wharfedale Naturalists Society was formed. A Subscription of 5 shillings was agreed and by the end of the first year the Society had 40 adult and 16 junior members. By 1948 the bank balance stood at £13, twelve shillings and 10 pence but this included a financial loss through the year so the Subscription was raised to 7 shillings and sixpence! By 1950 membership was 50 adults and 12 juniors.

Throughout its history the Society has held winter indoor meetings (they used to be called 'Lantern Shows') and the 1951 Programme included, for the first time, an RSPB Colour Film entitled 'Orkney and Shetland Isles'. As the Society grew, the first Annual Dinner was held and this became an annual feature through to 2017 by which time attendance had reduced to a relatively small number, a sign of changing times and social priorities. Summer excursions were also, of course, regular events and Society birders had Bird Ringing nets at Esholt Sewage Works, later transferred to Ben Rhydding Gravel Pits.

In 1956 the subscription increased to 10 shillings and the Society had 99 members with the average attendance at Lectures at around 50. Meetings had at first been held in a Schoolroom on the Grove but with increased attendances it was necessary to move to the premises of the Bluebird Café.

The Society's Membership was growing all the time and by 1961 there was a total of 153 including 27 Juniors. There were just 4 Honorary Members all of whom were local Gamekeepers. How times have changed! The Guest Speaker at the Annual Dinner that year was I. J. Ferguson-Lees, a renowned Ornithologist in his day. The President in 1962 was Walter Flesher, a local Gamekeeper with a national reputation for his regular Home Service natural history broadcasts on radio in Children's Hour as Ted Brock the Gamekeeper, and regularly appearing with, among others, Peter Scott, on the television. He had a distinctive appearance in that he had lost an arm at the WW1 Battle of Passchendaele but was renowned for his strength in his remaining left arm.

By 1963 membership had grown substantially to 250 including 40 juniors. This meant that Meetings now had to be moved to the Winter Gardens with the increasingly popular RSPB films now in the Kings Hall (by 1968 these films were filling the Kings Hall to capacity). In 1965 the Winter Programme included a visit by the world-renowned Peter Scott – founder of the Wildfowl and Wetlands Trust, part-founder of the World Wildlife Fund and the initiator and presenter of a wide variety of TV Natural History Programmes.

In 1966 the President's gold-plated badge, with the Curlew logo, was presented to the Society by a Mr G W Pennock in memory of his late wife who designed the logo that we still use today. By 1970 membership had grown to 361 (36 juniors) and the 'Silver Jubilee' was published to celebrate the WNS 25th Anniversary. This included results from the meticulous botanical surveys of Middleton Woods and Ilkley Moor. The following year bird ringing at Ben Rhydding Gravel Pits ceased after many years' activity.

The Society had possessed a Library of natural history books since its inception but this was disbanded in 1981 because of storage space problems. In this same year the Society were treated to a lecture by John Busby, one of the foremost natural history artists of his generation, entitled 'Birds in Painting'.

By 1990 membership had declined, for reasons unknown, to just 206 with no junior members – perhaps a sign of the times. Interestingly a lot of the early Society activists were

schoolteachers who perhaps influenced the number of junior members but, sadly, this is no longer the case, no doubt to do with the fact that the teaching of natural history in schools has itself significantly declined.

The year of 1995 was the Society's Golden Jubilee and this was celebrated by another special publication and a Dinner at the Craiglands Hotel for which the Guest Speaker was Alan Titchmarsh who had been a Junior Member as a schoolboy in Ilkley (he is still a Member!).

The year 2005 was of course the 60th Anniversary which was celebrated in a variety of ways including a talk, rich in humorous anecdotes, by Alan Titchmarsh on 'Wildlife Gardening' given in the Kings Hall full to the rafters.

Moving into the new century, membership was growing and by 2009 had reached its highest ever figure of 511. Soon after this a subscription increase from £10 to £12-50 saw a loss of roughly 50 members in the following 1/2 years but in recent times the numbers have grown again. In 2010 this growth prompted a move for the winter indoor meetings from Clarke Foley to Christchurch to take advantage of the extra capacity in the Sanctuary area of the Church. Numbers attending Indoor Meetings had risen such that 150 + was not unusual. Membership increased back up to around 480 by 2021.

Throughout its history WNS has produced 'Annual Reviews' originally called 'Transactions' and by the end of the century these had grown into weighty tomes – veritable gold mines of what was happening in natural history in Wharfedale. These have always included annual weather reports and major weather events have always been a feature. These include: the severe winter of 1947; the summer drought of 1959 with 5 months of water restrictions; the coldest winter since 1740 in 1963; the heaviest autumn rainfall since 1727 in 1976 following a spectacular sunny summer and its accompanying drought; the severe cold winter of 1979.

These Reviews also show that concerns about threats to nature conservation and biodiversity (although this word was not used in the past) are nothing new. The 1966 Report referred to nature conservation threats and climate change was mentioned as a significant threat in 1990. These environmental changes were being drawn out by the Sightings Reports, the following being good examples; no Chiffchaffs in 1946; 2 Corncrake in the Washburn and a successful nest at Greenholme Mill in Burley in 1951; the collapse of rabbits populations through Myxomatosis in the mid-fifties; just 10 Butterfly species recorded in 1961 and Red Squirrels at Farnley in the same year; the total of records for Butterflies and Moths took just over half a page in 1969; 1971 produced the first Large Skipper record for the area and Wall Brown was common – also the start of Dragonfly recording; the first Greylag Goose records were in 1975; Tree Sparrows were common in 1977; the first winter records of Blackcap in 1981 and the first of Goosander in 1982; concern about the decline in Curlew numbers in 1993. More recently the biodiversity crisis is being reflected in our annual records provided mainly by members and thoroughly documented by our steadfast Recorders ever since the Society's foundation.

Finally, and very relevant to what is happening environmentally today, member Cliff Hanley reported on a 1995 visit to the London Natural History Museum and included a quote from an unnamed German Philosopher as follows: 'Modern man seems to think he is something apart from the forces of creation and that nature is an enemy to be fought against and conquered. If he wins this battle, he will find himself on the losing side'.

How very well put!

Peter Riley

Botany Report

The ups and downs of life under Covid continued through 2021. As more of us got vaccinated in the early months, restrictions gradually eased, so that by springtime we could start to meet up again, especially outdoors. Our first meeting since 2019 took place at Ben Rhydding Gravel Pits later in May with 18 members present, all keen to be out and about and together again. A further six meetings were held through to mid-August without problems. Some members were also involved with plant surveys during this period. Other people acting independently sent in records throughout the year.

SP/GH/BNB on behalf of the WNS attended a meeting with Bolton Abbey Estate (BAE) personnel to explore avenues for greater cooperation between the Estate and WNS. Botany members have carried out annual surveys in different BAE woodland sites for many years which hopefully will continue, although suspended for the last two years. At their request BNB volunteered to lead a botany survey of farm land at Storiths, which was carried out with the assistance of WNS members in June (see report). At our request it was also arranged for SP/SPe/BNB to make a day visit to check out some BAE fields adjacent to Grass Woods, Grassington to see what type of future conservation management might be beneficial there.

Joyce Hartley, whose death was reported last year, wished for her ashes to be scattered on Otley Chevin. As Covid restrictions eased this year it was possible to arrange this safely in August. Some botany members and friends close to Joyce met at Surprise View for this and ML read a poem fitting to the occasion. Also this year we lost another long-standing botany member, Anne Tupholme. Anne was active in conservation and restoration of historic gardens, and we miss her expertise and friendship at our meetings. And along with Anne we also note the passing of Olwen Middleton, another long-standing member who BNB remembers as an expert on Washburn valley plants and a keen Grass Wood supporter.

BNB with much help from CH continued with plant recording of tetrads in the WNS area through the year (tetrads are blocks of 4 x 1km grid squares on O.S. maps). Some were re-visits to last year's tetrads to add extra species, e.g. springtime plants, and another 20 were first visits. They are useful for updating our records, often in places not checked for many years, and all data is passed on to the BSBI database used to compile future national atlases and monitor vegetation change. It is nice to explore new places not knowing what might be found and often gives ideas for future meetings. Items of interest are mentioned in this report as we progress up the dale from the Huby area to the slopes of Penyghent.

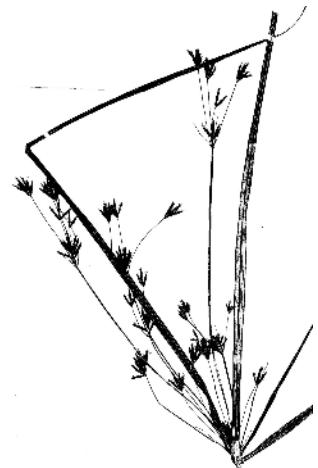
Huby to Castley

The countryside around Huby, Stainburn and Castley lies at the eastern end of our area and appears to have been less well recorded over the last 20 years than the more popular parts. CH and BNB made a start on the north Huby area last year, and in 2021 we extended our exploration to several further tetrads. These small villages or hamlets are linked by mostly quiet lanes and footpaths over generally pastoral or occasionally arable fields, many of which we'd never walked before, so interesting new country to explore. In Huby we admired the 20 plus plants of Rustyback fern *Asplenium ceterach* on a wall found by GH last year, and noted the white bells of Summer Snowflake *Leucojum aestivum* by the main road crossing, along with Opposite-leaved Golden-saxifrage *Chrysosplenium oppositifolium* in the ditch alongside. There were other springtime escapees along the roadside verges around Huby: bright blue-flowered Garden Grape-hyacinth *Muscari armeniacum* and Glory-of-the-snow *Scilla forbesii*, and the pink flowers of Eastern Sowbread *Cyclamen coum*. The

latter appears with its leaves in spring so is easily distinguished from the Common Sowbread or Ivy-leaved Cyclamen *C. hederifolium* which flowers in autumn before its leaves come up.

In the next tetrad further east near Dunkeswick Lodge we found a small stream covered by large beds of Fool's-water-cress *Helosciadium nodiflorum*. Nearby was a large vegetated 'tip' colonised by a collection of agricultural and horticultural casuals amongst native weeds. Just a few examples included Cabbage *Brassica oleracea*, Wild Radish *Raphanus raphanistrum*, Buddleja *Buddleja davidii*, Wild Carrot *Daucus carota* and Bristly Oxtongue *Helminthotheca echioides*. The latter is near its northern limit and quite rare in Wharfedale.

Moving to Stainburn, a steeply sloping bank at the laneside near the church is the habitat for a large colony of Common Polypody *Polypodium vulgare*, a good sighting as polypodies become much less common on the drier eastern edge of Wharfedale. A short path across the north end of Stainburn is interestingly part wild and part garden-like with plants such as Woodruff *Galium odoratum*, Hedge Bedstraw *Galium album*, and even a bamboo clump, all appearing naturalised. The nearby stream had a good colony of Watercress *Nasturtium officinale*, with Bog Stitchwort *Stellaria alsine* and Floating Sweet-grass *Glyceria fluitans*. Heading along Greenmires Lane we came across Sneezewort *Achillea ptarmica*, then a surprising heathy area of Bilberry *Vaccinium myrtillus* and Ling *Calluna vulgaris*. Further along was a huge clump of white-flowered Narrow-leaved Michaelmas-daisy *Symphytotrichum lanceolatum*. Going north up the bridleway from here a small pond was reached around which could be seen a few aquatics - Waterplantain *Alisma plantago-aquatica*, Round-leaved Water-crowfoot *Ranunculus omiophyllus* and Least Duckweed *Lemna minuta*. Returning west along the lane we noted Japanese Rose *Rosa rugosa* and Sweet Cicely *Myrrhis odorata* in the hedgerow, then most surprisingly a clump of Galingale *Cyperus longus*, normally a wet loving plant, but here on the roadside verge and happily in full flower.



Galingale flower head

Castley village has one side street which passes under the railway and ends at a farm entrance. Along here by the railway embankment we came across a good colony of Sweet Violet *Viola odorata* (purple flowered form), also Hedgerow Crane's-bill *Geranium pyrenaicum*, Fringecups *Tellima grandiflora*, clumps of Hart's-tongue *Asplenium scolopendrium* and nearby, Greater Burnet-saxifrage *Pimpinella major*. Castley Lane soon reaches the Wharfe and follows it for a half mile enabling us to explore the plant rich habitats of sand and shingles and well drained banks at the river edge, and home to a mix of natives and aliens such as Moschatel *Adoxa moschatelina*, Few-flowered Leek *Allium paradoxum*, Leopard's-bane *Doronicum pardalianches*, Greater Periwinkle *Vinca major*, Abraham-Isaac-Jacob *Trachystemon orientalis* and Water Figwort *Scrophularia auriculata* amongst many others.

Washburn Valley

On a winter's walk around Farnley BNB's attention was caught by a handsome conifer at the road bend next to the old school. On closer inspection it was identified as a Monterey Cypress *Cupressus macrocarpa* as its leaf branchlets spread in three dimensions, unlike the flat sprays of the common Lawson's

Cypress *C. lawsoniana* and more or less in-between *Leylandii* *C. x leylandii*. The Monterey cones are also larger, although none were seen on this tree, so maybe not fully mature yet. Along the path following the woodland edge by Farnley Lake a plant or two of Hard Shield-fern *Polystichum aculeatum* was spotted on the ditch bank. Being virtually evergreen it is easier to see in winter when much vegetation has died back.

NF reported several spring flowers doing well in the Dob Park to Lindley area. The Giant Butterbur *Petasites japonicus* was impressive with about 300 spikes on 24 February. Bluebells *Hyacinthoides non-scripta* were in flower on 26 March along Lindley Wood Reservoir, and Wood Anemones *Anemone nemorosa* in Lindley Wood. Then later on in July in Stainburn Forest NF found a 200 plant colony of Bog Asphodel *Narthecium ossifragum*, also a single plant of the purple blotched Common Spotted-orchid *Dactylorhiza fuchsii* var. *rhodochila*. By August a good sized drawdown zone was present at Lindley Wood Reservoir and NF recorded one of the speciality plants of this habitat, Trifid Bur-marigold *Bidens tripartita* with its distinctly lobed leaves. Its fruits or achenes have 2-4 bristles and many backward-pointing tiny barbs which aid the plant's dispersal. BNB also visited Lindley Wood in May - by Gill Beck there was a good colony of Leopard's-bane. Nearer the reservoir there was a population of Wood Melick grass *Melica uniflora*, lots of Great Bittercress *Cardamine amara* and the native form of Yellow Archangel *Lamiastrum galeobdolon* subsp. *montanum* without silvery leaves, also Soft Shield-fern *Polystichum setiferum* and Bird Cherry *Prunus padus*.

The tetrad on the east side of Swinsty Reservoir was visited by BNB to add extra springtime flora. Along Spinksburn Beck there were Marsh-marigold *Caltha palustris*, Large Bittercress, Moschatel, Wood Anemone and Primrose *Primula vulgaris*. Higher up at Bland Hill an area of waste ground with low walls gave Biting Stonecrop *Sedum acre*, Reflexed Stonecrop *S. rupestre*, Hedgerow Crane's-bill and Garden Arabis *Arabis caucasica*. BNB's route continued east along Broad Dubb Road to the turning onto Watson's Lane, by which point the terrain had become acid moorland dominated by Purple Moor-grass *Molinia caerulea* and the two Cottongrasses *Eriophorum angustifolium* and *E. vaginatum*. The wide roadside verge was quite heathy with Crowberry *Empetrum nigrum*, Cross-leaved Heath *Erica tetralix* and Cowberry *Vaccinium vitis-idaea*. On the path heading towards the Sun Inn was a marshy area with Lesser Pond-sedge *Carex acutiformis* and Cuckooflower *Cardamine pratensis*, then a wooded area with Early Dog-violet *Viola reichenbachiana* and Cowslip *Primula veris*. Fat Hen *Chenopodium album* was happily growing on a muck-heap.

Timble Ings was also revisited by CH/BNB to add earlier season records. In the High Wood area we came across Wood Anemone, Yellow Pimpernel *Lysimachia nemorum* and Moschatel. Near Anchor Farm where the road bridge crosses the beck, the wallside here was adorned with Wall Lettuce *Mycelis muralis* and Common Polypody, and Large Bitter-cress was doing well in the marshy stream environs nearby. In July JP recorded *Astrantia major* on Red Gate and Twayblade *Neottia ovata* along the track to Ellarcarr Pike. This is also an interesting area for Common Spotted-orchids and likely hybrids with Heath Spotted-orchid, and the botany members plan to return in 2022 to look more closely. Jo also reported that Bog Asphodel in the interior of Timble Ings Plantation was still doing well.

The Red Gate track starts at Timble crossroads and passes a few houses, so seeing a number of established garden escapes was not unexpected. At the crossroads was apple-scented Sweet-briar *Rosa rubiginosa* and Hemp-agrimony *Eupatorium cannabinum*, then CH/BNB noted a large population of a Mimulus or Monkeyflower in the ditch by the trackside. The

genus has now become *Erythranthe* and this plant was producing abundant fertile seeds so identified as Common Monkeyflower *E. guttatus* rather than the widespread hybrid. Taller vegetation along the trackside included Dotted Loosestrife *Lysimachia punctata*, Yellow Iris *Iris pseudacorus*, Druce's Crane's-bill *Geranium x oxonianum* and Blue Globe-thistle *Echinops bannaticus*, whilst at the road edge were a few persisting plants maybe from wild flower mixes - Common Poppy *Papaver rhoeas*, Cornflower *Centaurea cyanus*, Chives *Allium schoenoprasum* and an unidentified mint. We left the Ellarcarr Pike track onto a path heading for High Snowden. At one point the path broadened into a wide grassy lane with some Wild Cherry *Prunus avium*, Bay Willow *Salix pentandra* and roses, including Field Rose *Rosa arvensis*. At the crossing over Timble Gill Beck there was Alternate-leaved Golden-saxifrage *Chrysosplenium alternifolium*, Remote Sedge *Carex remota* and Ragged-robin *Silene flos-cuculi*, and under trees on the path into Timble, Three-nerved Sandwort *Moehringia trinervia*.

Higher up Washburndale, HMB led our August botany meeting over Thruscross Reservoir dam and onto the shoreline - see separate report by CH. Prior to this, HMB reported a small patch of Alternate-leaved Golden-saxifrage downstream from the dam, over the first bridge.

Pool to Otley

The old railway line running from Otley to Pool was botanised as far as East Busk Lane last year. So this April CH/BNB continued east from here as far as it was followable, another quarter of a mile. We soon came upon some plant rich turf with Bird's-foot-trefoil *Lotus corniculata*, Common Vetch *Vicia sativa*, Field Woodrush *Luzula campestris* and Wood Melick. More or less opposite was a very interesting wet ditch with Common Water-starwort *Callitriche stagnalis*, Brooklime *Veronica beccabunga*, Square-stalked St John's-wort *Hypericum tetrapterum* and two species that had to wait for June to be identified. One was Plicate Sweet-grass *Glyceria notata* with a tall much branched inflorescence; lemma and palea measurements were needed to confirm it. The other rather surprisingly turned out to be Greater Spearwort *Ranunculus lingua*, making up an extensive colony and obviously doing well here. Under a Crab Apple *Malus sylvestris* and other small trees, a woodland flora had developed - Wood Anemone, Pignut *Conopodium majus*, Common Dog-violet *Viola riviniana*, Red Campion *Silene dioica*, Water Avens *Geum rivale* and Pale Lady's-mantle *Alchemilla xanthochlora* amongst others. Further along the track was another sunny bank which in June was notable for Zigzag Clover *Trifolium medium*, Changing Forget-me-not *Myosotis discolor* and Trailing Tormentil *Potentilla anglica*.

Back to April, CH/BNB kept to the path passing Caley Hall and climbed up to Pool Bank. On steeper slopes just before reaching the main road we came across more enriched, possibly slightly calcareous grassland with Yarrow *Achillea millefolium*, Glaucous Sedge *Carex flacca*, Spring Sedge *C. caryophyllea* and Hairy Lady's-mantle *Alchemilla filicaulis*. At Pool Bank the main road passes through a wooded cutting and a minor road climbs up to Old Pool Bank Top passing houses so all of this area is home to a number of naturalised garden escapes including creeping plants like Lesser Periwinkle *Vinca minor*, Creeping Comfrey *Symphytum grandiflorum* and a variegated London-pride *Saxifraga x urbium*; taller flowers such as Perennial Cornflower *Centaurea montana*, Rock Crane's-bill *Geranium macrorrhizum* and Harpur-Crewe's Leopard's-bane *Doronicum x excelsum*; and shrubs Gooseberry *Ribes uva-crispa* and Bullate Cotoneaster *Cotoneaster rehderi*. Quarry Farm Road led us west and back in the Danefield and Otley direction. Typical ruderals along the pavement and ditch edge were Wall Speedwell *Veronica arvensis*, Aubretia *Aubrieta*

deltoidea, Soft Brome grass *Bromus hordeaceus*, tiny Buddleja plants and Greater Periwinkle. A large clump of Horse-radish *Armoracia rusticana* was doing well along with a good patch of Hidcote Comfrey *Symphytum x hidcotense*.

The riverside path on the north bank from Otley to Leathley is a good area to check for new plants brought in by the winter floods. In addition to the usual drifts of Snowdrops *Galanthus nivalis* and Daffodil cultivars *Narcissus* agg., BNB came across the marbled form of Italian Lords-and-Ladies *Arum italicum*, Goldilocks Buttercup *Ranunculus auricomus*, Early Dog-violet and best of all, on a sandy bank close to the river edge was a small group of Yellow Star-of-Bethlehem *Gagea lutea* (📷 p44). Its associates were Ground-elder *Aegopodium podagraria*, Celandine *Ficaria verna*, Dame's-violet *Hesperis matronalis* and an *Allium*, possibly Wild Onion *A. vineale*. The *Gagea* was first spotted on 13 March, just a couple of plants with tiny green buds. A period of heavy rain and flooding then occurred. But on returning on the 24 it was pleasing to see that the *Gagea* had not only survived, but had increased to 20 flowering spikes, albeit with well flattened outer leaves.

Otley Wetlands

NV passed on her Wetlands Nature Reserve file to BNB which lists botany records going back to 2001 compiled by NV and earlier recorders. The reserve has been separated into compartments A-L to assist with systematic recording. However the reserve boundary is somewhat artificial for practical purposes in that it runs halfway through the Conservation Lake, so NV added compartment N to cover the northern shoreline, and compartment O for a small parcel of land to the east of the Lake. Compartment M was assigned to the riverbank bordering the reserve.

NV, CH and BNB subsequently met on a lovely day at the Wetlands to tidy up the compartment boundaries. The old concrete mixing plant is now long gone and the land naturalising well so we decided to add this to compartment O and extend its northern boundary to the reserve fence. We added the carpark area to the south Lake shore compartment B, and for recording purposes the access road became compartment P. Whilst there we added a few more records including Japanese Knotweed *Reynoutria japonica* in the woodland at the SE end of the Lake. NF visited the reserve earlier in the year and noted 17 Coltsfoot *Tussilago farfara* in flower on 14 March.

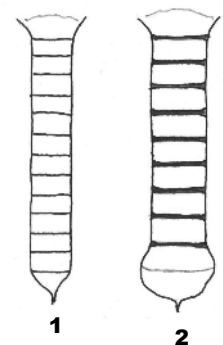
Otley

Ian Hunter from the BBG kindly passed on to BNB a plant list he'd compiled over May to June last year in his chosen O.S. grid square SE2044 which covers the central area of the Chevin between Otley bypass and Surprise View and Yorkgate. 170 plants were listed and will be added to WNS records. One plant of particular note mentioned by Ian was New Zealand Bittercress *Cardamine corymbosa* occurring in the cobbles on his street. This little annual is a horticultural alien which comes in as a soil contaminant in potted plants. Its seeds develop rapidly, resembling a smaller version of our native Hairy Bittercress *C. hirsuta*. AMG noted many white flowers of the tiny Common Whitlowgrass *Erophila verna* also liking cobbles, in this case on Bondgate in March. Other early season records made by BNB were Sticky Groundsel *Senecio viscosus* on Burras Lane; Winter Aconite *Eranthis hyemalis* and Balkan Anemone *Anemone blanda* in Otley cemetery; Eastern Sowbread, Lungwort *Pulmonaria officinalis* and Glory-of-the-snow on a path near Wharfemeadows Park; Common Sowbread and Hyacinth *Hyacinthus orientalis* on Station Top. CH found Darwin's Barberry *Berberis darwinii* and BNB Hard Shield-fern on Otley Golf Course. The garden escape Woolly Hawkweed *Hieracium lanatum* was also seen growing in the cracks of an electricity substation concrete base on the

Cambridge estate - a second WNS record, seen before by MW/BNB near Grassington Bridge in 2013.

In summer JP came across two clumps of Salsify *Tragopogon porrifolius* (📷 p44) at the side of Newall Carr Road, which was new to BNB so interesting to see how it compared with our native Goatbeard *T. pratensis*. Apart from its bright pink petals against Goatbeard's yellow, the plants appeared virtually identical. They both produce large 'clocks' after flowering and it would be easy to confuse the two. JP also recorded Prickly Lettuce *Lactuca serriola* in the same area. This weedy, often urban plant seems to be slowly spreading into lower Wharfedale from the east. In July SW mentioned seeing Giant Bellflower *Campanula latifolia* in profusion below Wharfebank Mills. BNB explored the Silver Mill area via the bypass footbridge off Leeds Road, finding Snow-in-summer *Cerastium tomentosum* on a wall, masses of Hedge Bedstraw around both sides of the footbridge, and Shining Crane's-bill *Geranium lucidum*. At the top of the Chevin on Yorkgate NF counted 50 plants of Garden Solomon's-seal *Polygonatum x hybridum*, and elsewhere JP came across a Southern Marsh-orchid *Dactylorhiza praetermissa*, which is known to grow in the little meadow near Yorkgate's smaller carpark.

Sometimes polypodies appear to spring up unexpectedly in places you regularly walk but haven't seen there before. One appeared on Otley Bridge, on the pavement side and overhanging the river. It was just possible to reach a mature pinna and confirm it to be Common Polypody. A tiny plant also grows on a fallen poplar further downstream in Wharfemeadows Park but has so far produced no sori. The second site was on West Chevin Road in the wall about halfway up the hill. Two large healthy looking clumps were checked, and under the microscope their sporangia confirmed them to be two separate species - Common Polypody (1) and Intermediate Polypody *Polypodium interjectum* (2). Sporangia are the sacs that hold the spores, and specific cell differences in the annulus are checked to identify the species present (see diagram). GH also came across a handsome polypody with fronds one foot long and partly jagged-edged pinnae whilst out moss hunting around the top of Avenue des Hirondelles at Pool Bank. The sporangia had plentiful bright yellow fertile spores and an annulus with two basal cells and 6-7 indurated (thickened) cells making it another Intermediate Polypody.



Menston

AMG found a Toadflax growing as a garden escape on a roadside wall in Cleasby Road, different from the common Ivy-leaved Toadflax *Cymbalaria muralis*, and which NV confirmed to be Italian Toadflax *C. pallida*. It has larger flowers with a longer spur and is more hairy. AMG also mentioned that the 'wild' Broad-leaved Helleborine *Epipactis helleborine* which appears in her garden has popped up again for the 5th year in a row. Also doing well is the large colony of Goldilocks Buttercup in Clarence Drive which SW reported in May to be 'absolutely amazing', so definitely worth seeing.

BNB returned to the High Royds complex in late April and approaching a recently landscaped area near the tennis courts, his attention was drawn to a bright crimson colour. This turned out to be many clumps of Red Deadnettle *Lamium purpureum* (📷 p44), with not just the petals but the whole plants suffused a dark red. A closer examination showed small rosettes of other species scattered about and starting to colonise the open ground, mainly Thyme-leaved Sandwort *Arenaria serpyllifolia*, Slender Speedwell *Veronica filiformis*,

Weld *Reseda luteola*, Lesser Trefoil *Trifolium dubium*, and interestingly, Bugloss *Lycopsis arvensis*, confirmed by BAT. This sky blue borage-type plant is normally found in more eastern arable areas of Yorkshire, so may well be our first record. Nearer the pond, also on open ground was Sun Spurge *Euphorbia helioscopia* and the bright blue variant of Ivy-leaved Speedwell *Veronica hederifolia* subsp. *hederifolia*. The latter likes disturbed ground and is only seen occasionally in our area, unlike its very common paler flowered relative - subspecies *leucorum* which is typically a hedgerow plant.

On the opposite side of the main road is High Royds Cemetery and its adjacent woodland dropping down to the railway line. Typical woodland natives such as Bluebells and Ramsons *Allium ursinum* are present, boosted by a few garden escapes that have become well naturalised now, e.g. Garden Hybrid Bluebells *Hyacinthoides x massartiana*, several *Narcissus* cultivars, and a saxifrage species of the Londonpride type. This one was considered to be False Londonpride *Saxifraga x polita*, a hybrid of St Patrick's-cabbage x Kidney Saxifrage. It is hairier than Londonpride and has more circular-shaped basal leaves with somewhat sharper teeth. Another escape growing by the stile onto Buckle Lane has puzzled a few of us for more than a year. Only basal leaves with wiry stems splitting into three leaflets have been seen, but at last we have managed to partly identify it as a species of *Epimedium* or Barrenwort. It also occurs in a hedgerow near Askwith.

After completing the Moorside Field survey (reported separately) SW, CH and BNB came upon some interesting plants near the junction of Moor Lane with the Burley Woodhead road which included Pale Persicaria *Persicaria lapathifolia*, Scentless Mayweed *Tripleurospermum inodorum*, Common Poppy, Scarlet Pimpernel *Lysimachia arvensis* and Field Pansy *Viola arvensis*. The last is another plant preferring arable habitats and so uncommon with us. In contrast, a plant with more liking for wetter western districts is Rustyback fern. BNB first noted two plants on the brick wall of the ginnel near Menston station in 2004. Checking this year there are now around 12 plants spreading along the pointing between the bricks, so clearly flourishing here.

Burley

Last year at Foster Hill the grass-like leaves of Yellow Star-of-Bethlehem were identified, but no flowers seen. On 14 March this year a search on the roadside bank revealed four plants in bud with a hint of yellow petal to come, so pleasing to get a final confirmation for this record. BNB followed the riverside path through the Holme fields towards Burley and then below the bypass to Greenholme, finding a good range of spring flowers along the river edge - Wood Anemone, Moschatel, Few-flowered Leek, Cowslip, Alternate-leaved Golden-saxifrage, Pignut and an escaped Grape-hyacinth. Near Greenholme was a nice group of Early Dog-violet along with the leaves of Wood Sedge *Carex sylvatica*, and near the bypass roundabout were several bushes of Wild Privet *Ligustrum vulgare*. The central reservation of the bypass was a continuous white strip of Danish Scurvygrass *Cochlearia danica*.

Mention was made last year of the Dog-rose aggregate being taxonomically split into several separate species, but unfortunately the boundary lines between these species are often blurred by variations in characters and a strong tendency towards hybridisation, so identification using available keys is not always fully reliable. Our VC64 recorder DAB gave details of a rose at Sun Lane Nature Reserve which although very similar to the Hairy Dog-rose *Rosa corymbifera* was actually the hybrid *R. x dumetorum*, a cross between *R. canina* and *R. tomentella* (Round-leaved Dog-rose). With directions BNB found the rose in the shingly gully at Sun Lane growing close

to a 'normal' dog-rose. David said the very neat overlapping hairy leaflets were a key character. The open flowers were more or less cupped, slightly smaller and paler pink than the 'normal' dog-rose. The prickles of the *dumetorum* were very hooked, semi-circular in outline, and with a more or less circular base, whereas the normal rose prickles were more shallowly hooked and with a thick elliptic base. To an untrained eye these are rather subtle differences, which just emphasises how difficult some roses can be to ID accurately.

NF likes to keep a look-out for Alder Buckthorn *Frangula alnus*, the food plant of Brimstone caterpillars, and reported around 6 trees at Sun Lane reserve. Later in the year DAB mentioned some hawthorns he'd come across at Sun Lane and identified them as the hybrid *Crataegus x subsphaerica* which is a cross of common Hawthorn *C. monogyna* with Large-sepalled Hawthorn *C. rhipidophylla*. Both the large-sepalled species and hybrid are apparently not rare amongst plantings made around 30-40 years ago. BNB found the trees inside the first entrance gate along the southern boundary and ditch. Its leaves were slightly larger than common hawthorn, more lobed or saw-toothed especially near the leaf base. The dark red haws were slightly larger with more or less patent sepals.

BNB has explored the woodland surrounding Scalebor Park (named on maps now as Moor Lane Centre) finding Ramsons, Wood Anemone, Highclere Holly *Ilex x altaclerensis*, Angelica *Angelica sylvestris*, Wood Sedge, and at the bottom of the wooded valley nearer to the railway line Three-nerved Sandwort and Ivy-leaved Speedwell. The road verge towards Colston House was a mass of Primroses in April, and there were lots of Shining Crane's-bill where it joins Moor Lane. Burley Cemetery has also been re-visited by CH and BNB who saw a number of spring bulbs growing in the grassland around graves. Of note were Wild Tulip *Tulipa sylvestris* and Green-leaved Snowdrop *Galanthus woronowii*. Unlike common snowdrops these have very broad bright green (not glaucous blue-green) leaves. There is a related species Greater Snowdrop *G. elwesii* which also has the broad leaves that are glaucous, and a good example can be seen under the horse chestnut on Beech Hill, Otley by the carpark entrance.

Stead and Ben Rhydding

In February BNB followed up IB's suggestion and found Winter Aconite in flower at the start of Ben Rhydding Drive, just through the gateway where there was a patch of about one square metre. Then in early April DAB asked if we could photograph a white daffodil he knew of near to Toll Bridge. CH and BNB called on their way to Ilkley and found two *Narcissus* taxa - an almost pure white form by the road edge which David identified as the variety 'Beersheba', and the second close to the river edge with white outer tepals and a slightly yellow trumpet was 'Ice Follies'. David pointed out that the species ID key in Stace is not really viable, as most cultivars found are probably triple hybrids and cannot be accurately keyed out as species or simple hybrids, but need to be recorded as their cultivar names. This is difficult with a plethora of modern cultivars used nowadays in plantings, but along riverbanks it is still possible to find older varieties persisting which have a better chance of being identified. I suspect that *Narcissus* agg. will still continue to be the commonest record!

A picture of American Skunk-cabbage *Lysichiton americanus* at Stead appeared in the local paper, an excuse for BNB to go and find it. It is quite a prominent plant with its large leaves, yellow spathe-like flowers and colonial habit, so was easily found with around 20 plants spreading along a small stream, probably an escape from a nearby garden. Further along the path in another wet area it was interesting to discover 22 spikes of a purple Marsh-orchid. NB kindly visited a few days later to confirm them as Southern Marsh-orchid, a species spreading northwards and becoming more

common in our part of Yorkshire. But further good news was that Neil had explored a nearby path and where it passed through a marshy area were lots of other orchids - Common Spotted-orchid, Northern Marsh-orchid *Dactylorhiza purpurella* and the hybrid between the two *D. x venusta*, and also nearer to Stead Hall Farm some Bee Orchids *Ophrys apifera*. Northern Marsh-orchids are definitely uncommon in Lower Wharfedale so good finds, and we intend to return for a meeting here in 2022.

The wooded area stretching south from Ben Rhydding Road up to the moor edge below the Cow and Calf is known as Wheatley Rakes. It is surrounded by house gardens and has become a haven for aliens, garden throw-outs and escapes, now happily growing wild. So maybe not a place for purists looking for native species, but for others it is a fascinating, almost foreign place to explore, with plenty of space for large spreading species that have outgrown the confines of gardens, such as Broad-leaved Bamboo *Sasa palmata* and Giant-rhubarb *Gunnera tinctoria* (📷 p43). There are carpets of Creeping and Hidcote Comfrey, Coralroot *Cardamine bulbifera*, Abraham-Isaac-Jacob and silvery-leaved Yellow Archangel *Lamiastrum galeobdolon* subsp. *argentatum*. DAB visited in June and recorded Lesser Knotweed *Koenigia campanulata* (which BNB saw still in flower in October), several named cultivars of Rock Crane's-bill and Honey Garlic *Allium siculum*. Also present was Peppermint *Mentha x piperata*, Apple Mint *M. x villosa*, Dotted Loosetrife and the large distinctive leaves of Japanese Rodgersia *Rodgersia podophylla*. Fern species included Common Polypody and Ostrich Fern *Matteuccia struthiopteris*. No doubt there will be more to find in future years.

Clifton, Askwith & Denton

Several tetrads covering this area have been explored over the year. CH and BNB followed Newall Carr Road north of Otley, passing Clifton, and noted Black Bryony *Tamus communis*, Black Medick *Medicago lupulina*, Field Scabious *Knautia arvensis*, and Wild Pear *Pyrus communis* at the Clifton road junction. At a farm access track the roadside wall was adorned with White Stonecrop *Sedum album* and many rosettes of House-leek *Sempervivum tectorum*. Further on was Zigzag Clover, a Bay Willow and Northern Dock *Rumex longifolius*. The bridleway off Dob Park Lane passed through a wet area with two Water-crowfoots, Round-leaved and Ivy-leaved *Ranunculus hederaceus*, also Blinks *Montia fontana*, Small Sweet-grass *Glyceria declinata* and Marsh Cudweed *Gnaphalium uliginosum*. Further down Dob Park Lane were re-generating saplings of two conifers, Western Hemlock-spruce *Tsuga heterophylla* and Wester Red-cedar *Thuja plicata*, along with some fern stands of Scaly Male *Dryopteris affinis* subsp. *borreri*, Lemon-scented *Oreopteris limbosperma* and Hard Fern *Blechnum spicant*.

On Weston Moor Road some striped green leaves caught our eye so we pulled into a layby to find a substantial clump of variegated Reed Canary-grass *Phalaris arundinacea* cv. 'Picta' or 'Gardener's Garters'. On Snowden Carr Road BNB noticed a rushy area with Marsh Ragwort *Jacobaea aquatica* and Common Spotted-orchid. Adjacent moorland had Early Hair-grass *Aira praecox* on boulders and a nice sphagnum bog with lots of Bog Asphodel, Cross-leaved Heath, Velvet Bent *Agrostis canina*, Marsh Foxtail *Alopecurus geniculatus* etc. Some of these boulders are adorned with 'cup and ring' rock art.

The derivation of Askwith is apparently 'ash wood', so maybe not surprising that ash trees are common and a number of large trees can be found in the area. Along Hallam Lane by Mill Dam Beck was a huge tree that has fairly recently shed a large limb, but otherwise continues to look very healthy, (📷 P44). Its girth was measured giving a circumference of 7.3 metres, so no doubt a few hundred years old. In Askwith village by the road bridge over East Beck a large plant of Soft

Shield-fern was spotted, and more by the path upstream along with Hart's-tongue fern.

Denton Moor was also explored. The path to Ellarcarr Pike is clear to follow but the surrounding moorland is becoming more overgrown, with little management following the end of shooting there. As well as the usual moorland species, there was an interesting wetter area with Sneezewort, Marsh Pennywort *Hydrocotyle vulgaris*, Greater Bird's-foot-trefoil *Lotus pedunculatus* and Fen Bedstraw *Galium uliginosum*. Below Dunkirk a path crosses Hundwith Beck where there were a few bushes of Alder Buckthorn. On Smithy lane there was a fine-looking rose with large ripe hips, identified as Sherard's Downy-rose *Rosa sherardii*. Its hip shape, downy leaves and curved prickles are key features.

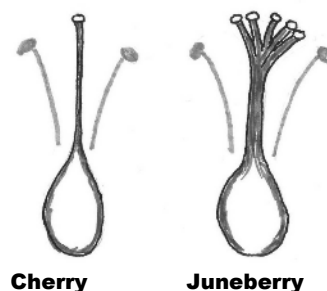
Ilkley and Ilkley Moor

In January SW and HMB saw Winter Heliotrope *Petasites pyrenaicus* in flower in its known site by the public toilets near the Old Bridge, but also found it had become established on the opposite (north) bank too. SW also mentioned Thale Cress *Arabidopsis thaliana* in flower by the tennis courts at the Lido. On the same north bank just upstream of the Old Bridge SS noted a pine with the distinctive umbrella outline and large cones of Stone Pine *Pinus pinea*. It has obviously been there a number of years but not previously noticed, and is our second WNS record, the other above Menston on the Dick Hudson's road. CH and BNB looked in Ilkley Cemetery in April finding two naturalised *Scillas*, Siberian Squill *S. siberica* and Boissier's Glory-of-the-snow *S. lucilliae*. The former has pendant flowers with its tepals split almost to the base; the other paler blue flowers, just 1 or 2 per stem, its tepals partly fused into a tube. Also a big patch of Winter Aconite was seen, but flowers now gone over. On the path off Middleton Avenue a Barberry was noticed, with 1-3 spines and broad finely-toothed leaves indicating Common Barberry *Berberis vulgaris*. It will be checked for yellow flowers next year.

SS, CH and BNB met up in May to explore Middleton Woods and add extra species to Sue's list compiled last year. Starting from the Lido carpark we saw Wood Melick and Hairy Wood-rush *Luzula pilosa*. The alien Large-leaved Avens *Geum macrophyllum* was still present but not in flower so too early to check for its hybrid with Wood Avens. Further on Wood Stitchwort *Stellaria nemorum* and Thin-spiked Wood-sedge *Carex strigosa* were still doing well - the latter is a rare plant for us but ironically flourishes by the muddy path-side churned up by walkers. Also still present from earlier records were Yellow Archangel, Soft Shield-fern, Common Polypody, Killarney Fern *Trichomanes speciosum* in its gametophyte form, Spurge-laurel *Daphne laureola*, Small-leaved Elm *Ulmus minor*, Large Bittercress and Field Rose. The veteran twin-trunked Crab Apple nearer to Curly Hill has now become a single trunk after one had succumbed to old age and gravity.

Last year ML mentioned a tree on the moor above the Panorama path by Intake Beck which looked glorious when full of white flowers in spring. Indeed it was when BNB visited it this April. Our initial thoughts were a species of cherry.

However on checking its flowers more closely, 5 stigmas were present whereas cherries only have 1 stigma. So it turns out to be a Juneberry *Amelanchier lamarckii* which eventually should produce purplish-black fruits. Its isolated location suggests spread by berry-eating birds from garden trees. SS came across another small tree on the path between White Wells and The Tarn.



In 2020 SS with husband Neil produced an illustrated Ilkley Tree Trail made available free from local bookshops or online. Such was its popularity that not only has it been reprinted but further tree trails have been published during the year. A Winter Trail came out in February based on a similar riverside route to the first trail but concentrating on features easy to see in winter such as buds, twigs, residual fruits, etc. In April a third trail was published visiting 34 trees around Ilkley Town Centre. Then finally in August a fourth trail was produced which covers 35 trees in Darwin Gardens and on the moor up to White Wells and back around The Tarn, sponsored by WNS. All the trails give detailed notes and recognition features for each tree with multiple close up images of leaves, fruits etc. They are an excellent way to learn more, and to encourage the general public to become more interested in their local trees. Sue and Neil say this will be their last trail booklet but are keen to build up an active group of local people to celebrate and protect our local trees and encourage new plantings.

The re-appearance of a large colony of Chickweed Wintergreen *Lysimachia europaea* on the moor near the Pancake Stone was reviewed last year. ML returned this year and reported it to be equally prolific, and when BNB passed by in mid-June there were still plenty of flowers left. DAB also came to visit and then moved on to the nearby Cow and Calf, finding a well-established bush of Tree Heather *Erica arborea* near the top of the Cow. It was the variety 'Estrella Gold' with yellowish-green foliage, so it does stand out well and rather surprising that it's not been reported before; it is our first record.

ML reported a wet rushy area on the moor east of Spicey Gill and above Barmishaw Hole with sphagnum, Cottongrasses and lots of Cranberry *Vaccinium oxycoccus* leaves. This tied in with one of Mary Dalby's old bryological sites of the 1970's where she recorded a pH of up to 6.7 and six sphagnum species. Works by the Environment Agency and others have been ongoing during 2021 to improve the moor's wetland and bog habitats, especially around the catchment areas of Crawshaw Moss and Backstone Beck. Slowing down drainage from the moors improves the habitats and helps to reduce the impacts of flash flooding in Ilkley below. 70,000 small sphagnum plugs have been planted out in various places, hopefully to expand and absorb more water and build up carbon in time. Leaky stone dams have appeared in the area and more substantial works carried out at the head of Backstone Beck using stacked conifer trunks to slow down the beck's water flow. After a year or two it will be interesting to see what effects this has on the local flora.

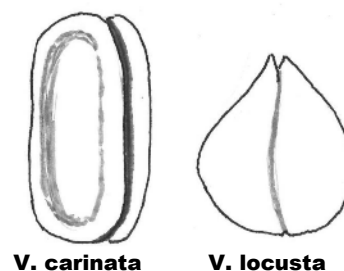
Addingham area

HMB reported more records from Bracken Ghyll Golf Course, Snowdrops in January and Cuckooflower in May. CH and NV visited Addingham churchyard in February noting Eastern Sowbread, Chinese Ragwort *Sinocalia tangutica* and Glastonbury Thorn *Crataegus monogyna* 'Biflora'. The latter is a variety of hawthorn distinguished by its flowering twice a year, in December and then in May. It originated as a wild plant in the Glastonbury area and has been propagated by grafting since ancient times. Legends associate it with the arrival of Christianity in Britain. The 'original' thorn was cut down and burned as a relic of superstition during the English Civil War and its replacements have occasionally been subject to vandalism. Thanks to CH for this information.

The Cornsalad growing on NV's street was not identified to species last year, so a specimen with fruits was examined by NV and BNB. We both agreed the fruits were oblong in outline with a deep groove down one side, which signifies Keeled-fruited Cornsalad *Valerianella carinata*. There are only sparse Cornsalad reports from our area, so a good record. IB provided another one in Burley last year, which was Common Cornsalad

V. locusta. Comparing the fruits of both, this has more of an onion shape with only a very shallow groove.

Lumb Gill Wood lies south of the village and bypass on the lower slopes of Addingham Moorside. HMB



informed us that there is documentary evidence of it being woodland in the 1200's along with School Wood and Stegg Holes, so ancient woodland without question. Following wartime felling it was replanted with beech, sycamore and larch but still retains native sessile oak, hazel, ash, holly, wych elm and rowan. In conjunction with the Addingham Environment Group NV and HMB have been surveying the wood and adjacent fields of Lumb Gill Farm, and BNB joined them for one survey meeting in June. We walked west from the farm along a field to access the wood at the public footpath. Lumb Beck runs through the wood and work to clear Himalayan Balsam *Impatiens glandulifera* has been largely successful, just a few plants remaining. We recorded around 60 species inside the wood, not a huge total, but it did include 19 Ancient Woodland Indicator species, a significant number. Just to mention a few, there were Wood Anemone, Bluebell, Hairy-brome *Bromopsis ramosa*, Remote Sedge, Scaly Male-fern *Dryopteris affinis* subsp. *borreri*, Bearded Couch *Elymus caninus*, Yellow Pimpernel, Wood Stitchwort and Wood Speedwell *Veronica montana*.

HMB walked the narrow lane from West Hall up to Langbar noting Alternate-leaved Golden-saxifrage, Greater Stitchwort *Stellaria holostea* and a small patch of Moschatel. SW reported climbing up Beamsley Beacon to see the heather, fully out in mid-August and looking incredible. On the way they saw a mass of yellow Mimulus-like flowers in a ditch outside Beamsley House, which turned out to be Musk *Erythranthe moschata*. There are very few WNS records of this so a nice find. CH and BNB explored a tetrad on the east side of Langbar recording around 150 species, including a good range of moorland plants such as Cranberry, Common Spikerush *Eleocharis palustris*, Marsh Valerian *Valeriana dioica*, Bristle Clubrush *Isolepis setacea*, Marsh Cudweed and Western Gorse *Ulex gallii*.

A tetrad between Draughton and Halton East was checked out by CH and BNB using a convenient layby on the A59 as a start point. A good range of species was found. Of particular note was an unusual looking willow in a marshy area next to the Embsay railway line. It was rather osier-like but had shiny glabrous leaves with blunt tips and glands on the petiole and persisting stipules. It was confirmed by MW to be Almond Willow *Salix triandra* which is rare in our area. Although originally used for basketry, its fragrant scent makes it more likely to be a garden plant nowadays, and our find an escape.

The other interesting find on this visit was a very strange Greater Plantain *Plantago major* (☑ p43), on a grassy bridleway at Halton East. It was somewhat of a monstrosity - instead of the usual flower spikes at the stem tops there were multiple rosettes of small leaves with virtually no flowers at all. Whether this is an example of fasciation or a gall attack we do not know - any suggestions are welcomed! In June RE did report an example of fasciation in a Cowslip at Grass Wood. The single plant had a flattened stem topped with a head of around 40 tiny but apparently well-formed flowers. Such aberrations do occasionally occur, more often with dandelions.

Mid-Wharfedale

KB whilst walking on Barden Moor beyond Lower Barden Reservoir came across a few sites for Common Cowwheat *Melampyrum pratense*. This plant likes heathy areas but is only recorded occasionally and Barden Moor is a new Wharfedale location for it. BNB led a BBG meeting at Burnsall in August along the riverside past Loup Scar and back via field paths. The riverbank in particular is very rich in flowers and well over 200 species were recorded. We did a similar WNS botany walk in 2018.

A few tetrads in the Troller's Gill and Grimwith area were recorded this year. One near our boundary at Greenhow and just north of Stump Cross Caverns had received no plant records whatsoever in past years, so interesting for BNB to see what might be found, starting with a blank canvas so to speak. It was largely heather moorland so not rich in species variety, but an area of old mine-workings and many shakeholes added interest with Spring Sandwort *Sabulina verna* and Autumn Gentian *Gentianella amarella*. CH and BNB visited the less explored west side of Grimwith Reservoir finding the drawdown zone at the reservoir edge to be of greatest interest, where we found Water-purslane *Lythrum portula*, Water Pepper *Persicaria hydropiper*, Marsh Speedwell *Veronica scutellata*, carpets of alien New Zealand Pygmyweed *Crassula helmsii* and one plant of Mudwort *Limosella aquatica*. On another day at the roadside by Dibble's Bridge there was Japanese Rose, Goatbeard and Good-King-Henry *Blitum bonus-henricus*. Over the stile, limestone outcrops gave more calcareous loving species such as Burnet-saxifrage *Pimpinella saxifraga*, Thyme-leaved Sandwort, Bird's-foot-trefoil, Thyme *Thymus drucei* and Dove's-foot Crane's-bill *Geranium molle*.

We also explored the top end of Troller's Gill from the Fancarl direction. The limestone crags and old mine had the usual calcareous species like Spring Sandwort and Rock-rose *Helianthemum nummularium*, but of particular interest was a sedge species found growing at the foot of an outcrop. This looked rather like Spiked Sedge *Carex spicata* and BNB sent photos to Mike Porter, the BSBI *Carex* referee who partly agreed but did not completely rule out other rarer possibilities. So a specimen was sent for a detailed examination of its ligule length and size and shape of fruits. Mike subsequently ruled it to be Prickly Sedge *C. muricata* subsp. *pairae* which is much rarer and likely to be the first WNS record, so glad we followed it up. The other subspecies of Prickly Sedge *C. muricata* subsp. *muricata* is rarer still and only known from two places, Gordale Scar and Ribblehead in Yorkshire. But for now we are happy to settle for *pairae*!

Grassington area

NF found two locations at Skirethorns near Threshfield for Sweet Violet in April. Both sites were the white flowered variety with 200 plants along Wood Lane and 50 more nearby. A WNS botany meeting along these Skirethorns lanes was held later in the year and is reported separately. CH and BNB covered a couple of tetrads in the old lead mining areas above Hebden and up onto Grassington Moor. Plants specialising in this metal-rich 'calaminarian' habitat include Spring Sandwort and Alpine Pennycress *Noccaea caerulea*, both quite numerous here, along with a few Moonwort *Botrychium lunaria* and good patches of Mountain Pansy *Viola lutea*. But in general terms the numbers and variety of plant species are sparse, as many plants find residual metallic salts in the soil to be toxic, especially in the higher concentrations often prevalent around old mines and their spoil heaps.

In Grass Wood NF noted Cowslips and False Oxlips *Primula x polyantha* in April and Goldilocks Buttercup in May. On a YWT work party day in the Wood, Marsh Valerian was found, a new record here and rather surprising as the terrain is not

marshy. Common Bent and Creeping Bent are not uncommon in Grass Wood, but another Bent grass was found by BNB and confirmed by MW to be Brown Bent *Agrostis vinealis*, recognisable by its rhizomatous spread, awned spikelets and preference for dryish non-peaty soils. The large grassy clearing in the centre of the Wood is strimmed annually to reduce the dominance of coarse tussocky grass species and help herbaceous plants to compete. This year a new orchid popped up, but clearly different to the Common Spotted-orchids growing each year nearby. A hybrid of it was suspected, but with which other parent was not able to be confirmed by NB. So let's hope it returns next year and enables a closer inspection.

Lady's-mantles *Alchemilla* are a critical genus with many apomictic forms which can be difficult to determine to species level. A number of years ago the expert Margaret Bradshaw confirmed the rare species *A. wichurae* to be present in Grass Wood, but later on had second thoughts and decided it was another taxon not identified then. More recently Mark Lynes has studied *Alchemilla* species in Britain and Scandinavia, and in 2021 formally described the Grass Wood taxon as a new species, named False-toothed Lady's-mantle *A. falsadenta*. The plant prefers path sides where the vegetation is fairly short, so it is hoped that YWT's strimming programme will be beneficial for it. Mark kindly sent a map showing its known locations; it is not uncommon alongside several paths. So far all records are restricted to Grass Wood with a couple of outliers in Bastow and Lower Grass Wood, so it is quite exciting to have a new endemic species in our area.

Upper Wharfedale

NF's records for this area included over 50 plants of Marsh-marigold in the beck below Kilnsey Crag; 70 Early-purple Orchids *Orchis mascula*, at least 100 Cowslips, also False Oxlip, Bugle *Ajuga reptans* and Giant Bellflower all above Strans Wood near Yockenthwaite; and 30 Autumn Gentian at Park Rash above Kettlewell. A further interesting find was a hybrid plant of Common Spotted x Fragrant Orchid at Yockenthwaite (confirmed by NB).

CH and BNB also visited a tetrad at Park Rash, exploring up the valley of Fears Gill Beck and totalling a good number of calcareous grassland and beck-side species, including Grass-of-Parnassus *Parnassia palustris*, Wild Basil *Clinopodium vulgare*, Marjoram *Origanum vulgare* and Green Spleenwort. Of particular note was the scarce plant Flat Sedge *Blysmus compressus* in a patch 4 x 2 metres near to the beck-side. Whilst BNB detoured up to a small waterfall finding Least Clubmoss *Selaginella selaginoides* and Butterwort *Pinguicula vulgaris*, CH sat by the beck and was surprised to get a glimpse of a dark otter-like creature, probably a mink.

Two tetrads east of Kettlewell were also explored later in summer, following the valley of Dowber Gill Beck to Providence Pot. The steep grassy slopes were an excellent calcareous grassland habitat and we intend to return for a botany meeting in 2022, but earlier in summer to catch the flowering time of Fragrant Orchids etc. The wetter beck-side flushes and limestone outcrops had Bird's-eye Primrose *Primula farinosa*, Lesser Meadow-rue *Thalictrum minus*, Stone Bramble *Rubus saxatilis*, Flea Sedge *Carex pulicaris*, Goldenrod *Solidago virgaurea* and much else. A mine spoil area further up was home to the usual Spring Sandwort and Alpine Pennycress. Around Providence Pot at the valley fork was Mossy Saxifrage *Saxifraga hypnoides*, Soft Downy-rose *Rosa mollis*, New Zealand Willowherb *Epilobium brunnescens* and Bearded Couch. The pothole itself looked rather disappointing from the surface - not much more than a dustbin lid by the beck-side.

Littondale

BNB joined GH and YNU bryologists for an exploration of Brown Scar and Scoska Woods (📍 p43) near Arncliffe on what turned out to be a pretty wet day in early May. So not great for us but ideal for the mosses and liverworts, and also for polypody ferns, growing plentifully on the steep scars and around tree roots, which BNB checked out. The majority were Common Polypody with a couple of Common x Intermediate hybrids *P. x mantoniae*. We reached Scoska Cave for lunch, allowing a respite from the rain above, but water rushing out of the cave was lapping round our boots and the stones on which we sat. Other plants of note were Baneberry *Actaea spicata* and Herb Paris *Paris quadrifolia*.

Also in Scoska Wood NF reported over 200 plants of Melancholy Thistle *Cirsium heterophyllum*. Around Dowkabottom Cave nearer Hawkswick were 40 plants of Opposite-leaved Golden-saxifrage, 30 Hart's-tongue ferns and 30 Maidenhair Spleenwort *Asplenium trichomanes* subsp. *quadrivalens*. Mountain Pansy was seen on the Darnbrook road leaving Arncliffe, and two Moonworts by the shooting hut on Hawkswick Moor. All are NF records. Our June botany meeting in this area is reported separately. Dark-red Helleborines *Epipactis atrorubens* are quite rare in Wharfedale, so it is always great to receive records of them. HMB reported two plants near Sleets Gill Cave in late July, followed by 5 plants in the same location by NF/PM in mid-August.

The side valley of Hesleden Beck above Litton becomes a steep-sided ravine named Penyghent Gill higher up and is a fascinating place to explore. At Litton footbridge NF counted 100 plants of Giant Bellflower, near Hesleden 400 orange spotted Monkeyflower *Erythranthe x robertsii*, and higher up the gill 20 Grass-of-Parnassus. BNB also explored the gill for extra records noting hundreds of Bird's-eye Primroses, with Carline Thistle *Carlina vulgaris*, Common Milkwort *Polygala vulgaris* and Rough Hawkbit *Leontodon hispidus* on the steep grassy slopes, along with Tawny Sedge *Carex hostiana*, Early Purple-orchid and Pyrenean Scurvygrass *Cochlearia pyrenaica* by the gill-side.

Botany Section Outings

Ben Rhydding Gravel Pits, 20 May

Leader: Steve Parkes

This was our first botany meeting of the year, and indeed the first since 2019. It would have been a good opportunity for carrying out an updated plant survey but the weather had other ideas - a gloomy start with the rain holding off for an hour, then it gradually set in, becoming steadily heavier. Despite this 18 people turned up, a mix of botany members and BRGP volunteers, no doubt eager to be able to meet up again. SP kindly agreed to give us a conducted tour around the reserve and to explain their site management and ongoing work.

The big surprise of the day was the large colony of Twayblade (📍 p44) that had sprung up at the path-side between the entrance gate and the riverbank. A few weeks earlier Alice Gingall and the Bradford Bees had visited and reported seeing a few twin basal leaves, characteristic of the plant; these had now developed into a colony of around 80 plants, not quite at flowering stage yet. Steve said it was an unmanaged area, so what prompted their sudden development 'en masse' was a mystery. Odd plants have been recorded before on the reserve - once in 2006, and then one plant by David Howson around 2017 which disappeared.

At the entrance gate were a couple of plants of Common Stork's-bill *Erodium cicutarium* and Weld. The colony of Caper Spurge *Euphorbia lathyris* which has appeared in recent years was still expanding. We worked our way southeast along the riverside path, noting a number of plant species but not

recording a comprehensive list. A fallen crack willow had a carpet of White Stonecrop growing along an aerial bough, no doubt established when flood levels reached this height. We passed an area of cleared hawthorn scrub, once a rich habitat for wild flowers that became gradually shaded out. Now they have the chance to re-grow aided by sowing a woodland seed mix, so let's see what comes up over the next year or so. The sea-holly species Tall Eryngo *Eryngium giganteum* on the bank above the lagoon has been there many years and still doing well; this year's shoots were growing strongly. Before leaving the riverbank Alice showed us a little patch of Alternate-leaved Golden-saxifrage which they had spotted on their earlier visit, going over now and being topped by more vigorous new vegetation.

Moving away from the riverside we came upon a rabbit-protected mini-meadow established three years ago. Back in 2007 up to 1800 orchids were present around here, but numbers crashed. With management, some comeback is beginning to occur with around 20-30 spikes last year, a mix of Common Spotted-orchid, Southern Marsh-orchid and their hybrids. Typical meadow grassland species have been planted including some Yellow Rattle *Rhinanthus minor* to control grass dominance. The grass is cut at the end of summer and cuttings removed, which also helps to reduce soil fertility and lower grass species supremacy in favour of herbaceous plants. This year's orchid basal rosettes were starting to show. The increase in wild flower numbers is beneficial for butterflies, and nearby were a few Alder Buckthorn trees planted about 10 years ago, which now attract Brimstone butterflies.

Despite the now persistent rain some of us stayed on to visit the angler's lagoon where floating islands have been developed to provide protection for aquatic life. A swan was nesting at the north corner so we headed anticlockwise to avoid any disturbance. We saw the Summer Snowflake and the area where Galingale grows, although hadn't appeared yet. Similarly, there was no sign yet of the Broad-leaved Helleborine which had been seen in numbers in recent years. We followed the river side of the lagoon to the far end where the Marsh Fern *Thelypteris palustris* grows, and discussed possible tree cutting back to give it more light. The Ostrich Fern here was still doing well with multiple crowns. By now everyone was getting decidedly soggy so time to return to the entrance and thank Steve for showing us round the reserve and discussing the excellent conservation work carried out by their volunteer team.

Hawkswick, Littondale, 3 June

Leader: Carmen Horner

Fourteen members met at the Warren House layby on the Arncliffe road. The weather was fine and mild and mostly cloudy but brighter in the afternoon. We checked some plants by the layby and along the roadside to our footpath turn-off for Hawkswick Bridge. Melancholy Thistle and Twayblade were looking good, also Downy Oat-grass, Angelica and Marsh Valerian. The path slopes downhill and by a field gate it becomes wet and boggy if there has been rain recently. Here we found Few-flowered Spike-rush *Eleocharis quinquefolia*. In the meadow beyond were Bulbous Buttercup, Black Medick and three Speedwells, Slender, Germander and Thyme-leaved. Around the bridge Perforated St John's-wort grows, also a profusion of Sweet Cicely by the walls at either side of the bridge. This sweet tasting plant is loved by sheep. We used to help on the farm nearby and it was a struggle getting them to move past and into the field. It is also used as a sweetener for fruit. In the village we noted Greater Celandine *Chelidonium majus* and Dusky Crane's-bill *Geranium phaeum* in flower, along with Large-leaved Avens and Rough Meadow-grass. A nice find was Intermediate Polypody on a wall in the village. On the corner by the footpath turn-off was a small grassy area

with Yellow Rattle. A broad-leaved Allium was seen but not identified.

We were now climbing up the path towards the Moor. To the west the ground dropped steeply down to Hawkswick village, to the east it went steeply upwards eventually crossing over into Wharfedale. We began to see the calcareous loving plants on the bank and by the pathside. This area is a botanist's paradise! We noted Parsley-piert *Aphanes arvensis*, Thyme-leaved sandwort, Hairy Lady's-mantle, Field Madder *Sherardia arvensis*, Wild Thyme, Spring Sedge and Rock-rose. The moor is yellow with flowers when the Rock-rose is in full flower. Making it to the shooting box for lunch, it was amazing to see carpets of Mountain Pansy, I had never seen so many in one place or so beautiful. Some of us had a late lunch, we were too busy taking photos and admiring the flowers, Spring Sandwort is a lead tolerant plant and it was just as prolific and beautiful as the Pansy. Leadwort and Spring Sandwort are both lead hyper-accumulators, unusual plants that can accumulate particular metals or metalloids in their living tissues to levels that may be hundreds or thousands of times greater than is normal or maybe toxic for most plants. Following the Scar top we came upon Early-purple Orchids, seeing at first one on its own, then two close together later on. Also spotted were Rue-leaved saxifrage, Wall Speedwell, Twayblade and Pill Sedge. NF found an Emperor Moth pupa case. Going through a gate we reached an extensive area of lead mining spoil. Leadwort was doing well, as its name suggests, seeing approximately five colonies, but away from this habitat it becomes rare. Some bluebells in a mining pit were of interest to see, then AS spotted the first Moonwort; up to twenty were eventually found (📷 p43).

Returning to Hawkswick, the views over Littondale as we dropped down the path were fantastic and enjoyed by all. There was time to go through the village and over the footbridge and back via the south lane to the main bridge and re-join our outward path to the cars, stopping to see a few plants by the riverside on the way - Large Bitter-cress, Marsh Hawk's-beard, red flowered Tartarian Honeysuckle *Lonicera tartarica*. There was Scurvygrass at the footbridge and masses of Sweet Cicely along the lane. A few insects were checked by NF, including a Forester Moth.

Report by Carmen Horner

Halton Gill to Foxup, Littondale, 24 June

Leader: Bruce Brown

Late June is probably the perfect time to visit the upper Dales with most wild flowers at their best and the upland hay meadows outstanding, and full of colour. Foxup lies at the head of Littondale and we have not held a botany meeting there since 2003, before some of us had been regular members, so it was an eagerly awaited return. CH and BNB had made a late summer visit to the area in 2020 but were keen to add some earlier season species to our records.

We decided to start at the nearby hamlet of Halton Gill where there is a good layby for parking, and we managed with sharing to squeeze in our cars here. So 12 of us set off in mild sunny weather to walk along the road to Foxup about half a mile distant. Some interesting plants were seen along the way, including Common Bistort *Bistorta officinalis*, Hairy Rock-cress *Arabis hirsuta*, Ramsons and a favourite with many, Melancholy Thistle. Approaching Foxup Bridge there was a splendid mature Lime tree *Tilia x europaea* and some bushes of Mountain Currant *Ribes alpinum* by the parapet. Just visible in the vegetation beyond were the bright blue flowers of the garden escapee Great Forget-me-not *Brunnera macrophylla*. We walked west alongside Foxup Beck past farms towards High Foxup. The bed of the beck being limestone was mostly

dry here and easy to explore for plants, finding Wood Crane's-bill *Geranium sylvaticum* and Good-King-Henry amongst many others.

Beyond the last houses we dropped back to the beck-side where there was some good calcareous grassland with Blue Moor-grass *Sesleria caerulea*, Downy Oat-grass *Avenula pubescens*, Spring Sedge, Flea Sedge, Field Woodrush and much else. The valley narrowed further up and became quite rough going but with such a wealth of flowers to see our progress was inevitably slow anyway. Bird's-eye Primroses were everywhere in their hundreds, along with Grass-of-Parnassus, Thyme, Long-bracted Yellow-sedge *Carex lepidocarpa*, Lady's Bedstraw *Galium verum*, Rough Hawkbit plus many more. Orchids started to appear, mostly Northern Marsh-orchid (📷 p43), but an old Early-purple was found, plus Common Spotted and a good hybrid of Common x Northern, which NB later confirmed.

After lunch we made some further progress up the steep-sided valley to reach a rocky area with a small waterfall, and close to here was a small population of Yellow Saxifrage *Saxifraga aizoides* just about to come into flower. This arctic/alpine plant normally prefers higher altitudes such as the upper slopes of Ingleborough, so good to re-find it here (a known site since at least 1969).

We returned to Foxup Bridge then took the riverside path back to Halton Gill. Some conservation tree plantings had been carried out by the beck-side, fenced off from the adjacent fields, but many of which were now growing as hay meadows. The colourfulness of the flowering plants looked amazing, enhanced by their density in the sward, not much grass to be seen at all. There were lots of Yellow Rattle, with Buttercups, Bird's-foot-trefoil, Red Clover etc. and spilling out through the fence onto the path-side. CH spotted Changing Forget-me-not, one of the typical hay meadow plants which we hadn't yet seen. Wetter areas held a few sedges - Lesser Pond-sedge, Hairy Sedge *Carex hirta*, Star Sedge *C. echinata*, and there was Large Bitter-cress, Great Burnet *Sanguisorba officinalis* and more Melancholy Thistle. Our list for the Foxup tetrad has now increased to 276 species.

Burley Woodhead, 15 July

Leader: Ian Brand

This meeting was put back from 2020 but once again IB kindly agreed to lead the walk and afterwards to invite us to their house for a tour around the garden and fern collection. 14 members met on a lovely summer's day at the grassy triangle where the road down to Burley forks, including John Webb who came by train and walked up from Burley station.

We started south towards the Hermit pub noting much Sticky Groundsel along the roadside and other typical weedy species. The pavement ran out on us so it was a relief to escape the busy traffic onto a footpath heading south across some fields and reaching a lane accessing some outlying houses and farms. A number of grass species were conveniently close together in the first field, giving a revision opportunity - Couch Grass *Elymus repens*, Crested Dog's-tail *Cynosurus cristatus*, Common Bent *Agrostis capillaris*, Red Fescue *Festuca rubra*, Rye-grass *Lolium perenne* and Sweet Vernal-grass. Along the lane was Bird's-foot-trefoil, Germander Speedwell *Veronica chamaedrys*, Lady's Bedstraw, Ox-eye Daisy *Leucanthemum vulgare* and Smaller Cat's-tail grass *Phleum bertolonii*, which we christened 'Little Bertie'. It is a smaller version of the common Timothy grass *P. pratense* and can persist in unmanaged grassland such as lane-sides or unimproved pastures.

We exited the lane onto a narrow footpath with a bank of wild flowers on one side and a couple of curious ponies on the other taking an interest in our presence. The next field was

partly horticultural with a colourful Red-berried Elder *Sambucus racemosa*, Flowering Currant *Ribes sanguineum* and red roses. Pink Purslane *Claytonia sibirica* was spotted, then an unusual labiate, which from its smell and IB's phone app was pronounced to be Black Horehound *Ballota nigra*, and later confirmed in Stace. This plant is quite common further east and south but very rare in our area, probably our first record. The path continued through a dark holly thicket, over a small stream and through rougher pasture leading up to the moor and the shooting track. Moorland plants now took over with Wavy Hair-grass *Avenella flexuosa*, Heath Rush *Juncus squarrosus* and other Rush species, and Watercress in stream flushes and Knotted Pearlwort *Sagina nodosa* by the track-sides. Higher up was Bilberry, Crowberry, Ling and Bell Heather *Erica cinerea*. We reached the shooting hut and rocks beyond for lunch.

Next to the hut was an area of gravel and short turf used for parking by shooting parties. This was botanically interesting but involved a close search for tiny species on hands and knees, finding Thyme-leaved Speedwell *Veronica serpyllifolia*, Wall Speedwell, Lesser Trefoil, Fairy Flax *Linum catharticum*, Early Hair-grass and New Zealand Willowherb. But the star attraction was an alien plant from SE Australia, Upland Leptinella *Cotula alpina*. Just a few clumps of its tiny rosettes were present with button-like yellow flowers coming into bud. We took a more direct path back to Woodhead passing by Little Lanshaw Reservoir. Wetter ground hereabouts had Cross-leaved Heath, Hare's-tail Cottongrass, Bulbous Rush *Juncus bulbosus* and a couple of sedges. Further down, SW led us into a boggy hollow of sphagnum moss with Round-leaved Sundew *Drosera rotundifolia* and masses of Cranberry. And for a finale Sarah also spotted the yellow flowers of Common Cowwheat mixed in with bilberry.

We gathered together at Ian and Huw's for a welcome cuppa, and then Ian showed us his excellent fern collection, all neatly planted out and labelled on a bank behind the house. They were mostly British natives and ideal for learning fern identification. Large species like Male-fern, Lady Fern and Shield-ferns were interspersed with smaller species such as Beech Fern, Oak Fern and spleenworts, including Rustyback. Shuttlecocks of Ostrich Ferns were looking good as were a few primitive looking Royal Ferns. After seeing the rest of their lovely garden, we thanked Ian and Huw for their hospitality and a great day out. Burley Woodhead and the moor edge have not been that well botanised in recent years, but today gave us 150 species and some lovely paths to follow.

Ilkley Moor around The Tarn, 29 July

Leader: Bruce Brown

8 members met at Darwin Gardens carpark on a rather cool and showery day, but amounts of rain were quite small so we managed OK. We started along the moor boundary wall at the back of the big houses on Crossbeck Road. Typical wall species seen included three spleenworts, Wall-rue *Asplenium rutamuraria*, Maidenhair and Black Spleenwort *A. adiantum-nigrum*, plus Ivy-leaved Toadflax and Adria Bellflower *Campanula portenschlagiana*. A bright red flowered bush on the wall top escaping from a garden was identified by SW as Red Jasmine *Jasminium beesianum*.

In a while we reached a small copse of willows and sycamore and explored its shady interior covered in brambles plus some Enchanter's-nightshade *Circaea lutetiana* and bluebell seed heads. The object of our search though was Broad-leaved Helleborine. Initially about 5 orchids in full flower were admired, but with 8 people looking, we soon found a few more, then more still, with eventually at least 30 plants spotted in various stages of development. (📷 p43)

They obviously like this gloomy habitat, but might benefit from a little cutback of some bramble during the winter months.

We threaded our way along paths through rampant head-high bracken to the 'Narthecium bog', more or less above Craiglands. This is a splendid example of a sphagnum bog dominated by the bright orange spikes of Bog Asphodel, a few hundred metres square and surrounded by bracken. Higher up the mire a few bracken fronds were trying to encroach, but their rhizomes do not like to be permanently wet, so the only way to maintain these bogs with their special plants is to restrict their drainage as much as possible. We contoured the asphodel edge to gain the top zone where there were large colonies of sprawling Cranberry.

The Tarn was soon reached and we toured round its perimeter path, using the shelter as a break from the fine drizzle. Mention has been made of the American Skunk-cabbage that has a foothold here, but currently exists as a couple of leaves at the tarn edge. Richard Perham from Bradford Met was seen during BNB's recce, and he intends to keep an eye on it to make sure it doesn't become a problem. Two lime trees were of interest. In the eastern corner is a large Common Lime recognisable by its fruits hanging down below the leaves. Further west is another lime with smaller leaves and its fruits rising up above them - this is a Small-leaved Lime *Tilia cordata*. Unfortunately it had a number of bare branches suggesting either it was rather old, or maybe it has suffered damage during the 2020 moorland fires, so may have to grow back some new branches. Time will tell, but it is worth preserving if possible.

Beyond the west end of the Tarn there was a small miry area with rushes and meadowsweet. We examined it more closely to find a few more wetland plants - Common Spotted-orchid, Marsh Violet *Viola palustris*, Marsh Pennywort, Marsh Bedstraw *Galium palustre*, and a couple of sedges, Star and Carnation *Carex panicea*. Three horsetails were present - Field *Equisetum arvense*, Marsh *E. palustre* with some residual cones, and the hollow-stemmed Water Horsetail *E. fluviatile*. Returning to the Tarn we took some steps up onto a small path on the moor, which soon petered out into a wet flush running down the hillside. We squelched our way up here noting some more Bog Asphodel and Mat-grass *Nardus stricta*, and soon coming across a magnificent population of Round-leaved Sundew in flower, although the white petals were mostly closed against the cool inclement weather. Two other moorland plants here were Green-ribbed Sedge *C. binervis* and Heath Grass *Danthonia decumbens*.

After lunching in the Tarn's shelter we headed towards the carpark via a side path passing a huge clump of the alien shrub Prickly Heath *Gaultheria mucronata*. Later in the season its fat pink berries are attractive to birds which aid its spread. Close by was a patch of moorland heath with some Cowberry. This is quite rare on Ilkley Moor, only known elsewhere below the Crocodile Rock in the Backstone Beck ravine.

Thruscross Reservoir, 5 August

Leader: Heather Burrow

11 members met at Thruscross Dam carpark in warm sunshine. As the forecast was for rain later, we set off promptly to explore the first of several habitats. We dropped down the steps and crossed the dam to the east side of the reservoir. A small alcove by the dam edge is of known botanical interest and did not disappoint today. It was well covered with Common Centaury *Centaureum erythraea*, and also seen were some Broad-leaved Helleborines and a number of small species such as Fairy Flax, Red Clover, Knotted Pearlwort, Selfheal, Smooth Lady's-mantle and Soft Lady's-mantle. The taller vegetation round the edge included Common Spotted-orchid, Marsh Thistle and

three Cotoneasters, Wall *C. horizontalis*, Bullate and the hybrid Waterer's *C. x watereri*.

Moving along, the roadside here was a tree-lined rocky bank with Bilberry and a few ferns, Male *Dryopteris filix-mas*, Lady *Athyrium filix-femina*, Hard, Broad Buckler *D. dilatata* and Golden-scaled Male-fern *D. affinis*. Wood Sage *Teucrium scorodonia* was also seen. We now left the road into forestry; the raspberries were ripe, small and delicious. Amongst them were plants of Climbing Corydalis *Ceratocarpus claviculata* and Great Willowherb *Epilobium hirsutum*; also tall stands of Angelica with characteristic inflated sheathes at the leaf bases which distinguish it from the other umbellifers. Soft Downy-rose, Dog-rose and Glaucous Dog-rose *Rosa vosagiaca* were displaying red hips, necessary for confirming their exact species identity. Creeping Forget-me-not and Yellow-rattle was in this area, also a Comma butterfly was seen. Water Figwort, Reed Canary grass and Whorled Mint *Mentha x verticillata* grew in drains leading from the road to the reservoir.

Just into the shoreline path we had a wonderful find of several Adder's-tongue ferns *Ophioglossum vulgatum* hiding in the tall vegetation, late in the season meaning their apple green colour had faded to a yellowish green but some retained their spore heads. We couldn't resist looking out for plants in the drawdown zone. This is the area between high water levels and lower summer water levels. It looks rather bare, especially near the water surface, but tiny plants grow in the mud and



Lepidodendron (CH)

between the stones. We found Bifid Hemp-nettle *Galeopsis bifida*, Mudwort and Trifid Bur-marigold amongst other things.

Later we came across a man pottering along the drawdown zone, who seeing BNB and I (CH) doing the same, struck up a conversation about looking for interesting things on the shoreline. He showed us a fossil that he had just found that he thought might be a plant (I was really envious). We took a photo of it then asked David Leather if he had time to look at it. His reply: It's a lovely hand specimen of a *Lepidodendron*, the leaf scars on the trunk of the Carboniferous giant Club-moss. Estimated at about 320 million years old.

Between the reservoir and footpath was a colourful display of hundreds of Betony clumps and Ragwort complete with Cinnabar moth caterpillars. It was a day with lots of variety and a number of rare plants and ferns. As a finale, near the car park John Webb spotted a Common Twayblade orchid.

Joint report by Carmen Horner and Heather Burrow

Skirethorns Lanes, 19 August

Leader: Bruce Brown

Previous botany meets in this area have concentrated on an exploration of Threshfield Quarry, so this time we turned our attention to the lanes leading up to Threshfield Moor, and also the recently made interpretative trail through the Threshfield Limeworks. 8 members met on Skirethorns Lane by the old quarry entrance road (now no longer a direct route into the Quarry). It was a sunny start with some cloud building later, but more or less kept dry.

We left Skirethorns Lane along a ginnel heading north. Some weedy species were noted including a fumitory which on examination was identified as Common Fumitory *Fumaria officinalis*, also Common Field-speedwell *Veronica persica*, Bittersweet *Solanum dulcamara*, Bearded Couch and a small polypody on a tree. The first limekiln encountered was the typical Dales kiln, maybe over 150 years old and which would have produced enough lime for local use in its day. Further on we would reach the industrial scale Limeworks built in 1902 and consisting of four huge kilns in tunnels cut into the solid limestone scar, brick-lined and fed from above by large pipes cut through. The limestone was dug out from the quarry, converted to lime in the heated kilns, and then transported onwards by rail around the country. The information boards at various points give details and the site is well worth exploring.

Passing the quarry entrance, which we ignored today, we followed the Limeworks Trail to reach a renovated kiln top. Close by was a flourishing colony of garden forms of blue spiked speedwells. Different leaf shapes suggested more than one species or possibly hybrids between *Veronica spicata* and *V. longifolia*. At the kiln top members spotted Hairy Rockcress and Wild Basil. We dropped down steps to the base of the kilns passing a splendid clump of Brittle Bladder-fern *Cystopteris fragilis*.

An area apparently used to dump garden weeds and throw-outs provided some interest - Redshank *Persicaria maculosa*, Columbine *Aquilegia vulgaris*, Creeping Jenny *Lysimachia nummularia*, Snow-in-summer, and even a struggling Potato *Solanum tuberosum* and a Hosta. The best find was Pale *Persicaria*. Having crossed a field we joined the first of the Skirethorns lanes and followed it to the crossroads, passing a naturalised garden willow with twisted branches, probably Corkscrew Willow *Salix babylonica* f. *pekinensis* 'Tortuosa'. Near a cottage on the next lane the hedgerow was lined with Spotted Deadnettle *Lamium maculatum*, Blue Globe-thistle, Sweet Violet etc. On an old tree stump was Yellow Corydalis *Pseudofumaria lutea* and the lane-side beyond was colourful with Harebells *Campanula rotundifolia*, Bladder Campion *Silene vulgaris*, Fox-and-cubs *Pilosella auriantica*, Borage *Borago officinalis*, and even a small Common Poppy. Further up the lane were Gooseberry bushes, fluttering Aspen *Populus tremula* and clumps of Giant Bellflower. These gooseberries tasted really sweet, and other fruits enjoyed along the way included raspberries, blackberries and wild strawberries, but not the sour sloes.

We headed up another lane, appropriately named Green Lane, a soft grassy carpet all the way to the moorland above. A steeper slope crossing a band of limestone was indicated by a sudden change from Greater Plantain to the prettier pink flowered Hoary Plantain *Plantago media*. Eyebright *Euphrasia* agg., Lady's Bedstraw and Crested Hair-grass *Koeleria macrantha* were now present, but the tiny heads of Spring Sedge seen on BNB's earlier recce were hard to re-find. Soon we were through the gate onto open moorland seeing typical acid loving plants such as Deergrass *Tricophorum germanicum*, Cross-leaved Heath, Tormentil *Potentilla erecta* and Heath Bedstraw *Galium saxatile*. There were bright purple expanses

of heather and the breeze blowing over the open moor was fresh and exhilarating. We followed a rush-lined stream runnel down the moor seeing Marsh Violet, Marsh Bedstraw, Bog Pondweed *Potamogeton polygonifolius* and Round Water-crowfoot. A vegetated mound was a relic from coal mining carried out in late eighteenth century days with scattered remains over Threshfield Moor. Here was Pill Sedge *Carex pilulifera* growing on the well-drained mound along with heather, bilberry and moorland grasses.

We exited the moorland onto Moor Lane. A grassy bank had some botanical interest with Blue Moor-grass, Burnet Saxifrage and Hedge Bedstraw. We reached a fire site used for burning rubbish, rather weedy with Fat Hen, Shepherd's Purse *Capsella bursa-pastoris* and Hedge Mustard *Sisymbrium officinale*. A left turn was made onto Grysdale Lane, and SW spotted Sand Leek *Allium scorodoprasum* by the lane edge. There was also Hairy Brome, a Lilac bush *Syringa vulgaris* growing wild, and a good colony of Reflexed Stonecrop on the bridge over a stream. Skirethorns Lane was our last leg back to the start, and for a finale we came across a healthy clump of Rustyback fern on the wall amongst many polypodies, and the almost dead remains of a Rue-leaved Saxifrage *Saxifraga tridactylites* was still identifiable.

Surveys

Grass Wood - Quadrat Surveys to monitor vegetation change, May

Kew Millennium Seedbank personnel visited Grass Wood in November 2015 to collect fertile ash keys from 12 trees. At that time ash-dieback disease was something we had heard about elsewhere, but had very little idea of how it would eventually affect Grass Wood. Then later in 2016 we noted likely effects on a few saplings - leaves dying back and lesions and discoloration on some small twigs. By summer 2017 this became prevalent on much young regeneration. Larger trees started to show bare twig ends, becoming more obvious in 2018 and serious in 2019 with virtually all trees showing at least some effects.

Once the outer twigs had died the infection continued to spread down into the larger branches and eventually the main trunk. A consequence of the outer branches losing their leaves is that the tree sprouts leaves on short shoots off its large limbs and trunk (epicormic growth), almost looking like the tree is clothed in ivy, and a clear sign of a sick tree that is unlikely to recover. So this was the state of play with many trees within just 5 years. A less visible effect of the disease was the internal rot taking place within the tree branches and trunks making them unstable and likely to suddenly drop limbs in windy conditions. These safety concerns resulted in YWT's decision to fell severely diseased trees within falling distance of the most widely used tracks and roadside. Felling started in winter 2019 and is still continuing on selected trees.

This presented the opportunity to begin a monitoring programme to study the effects of ash-dieback and tree felling on the vegetation of the woodland floor beneath, looking to see what changes might occur in the ground flora and tree and shrub regeneration. To this end 14 quadrats, 5 x 5 metres in size, were set up, mainly along track sides where felling was due to occur. The numbers of ground flora plant species and their abundance within the quadrats were recorded, along with any regeneration of tree species. Photographs of the quadrats and surrounding tree canopy were taken. Monitoring was carried out by WNS members BNB, CH and SW.

The first survey was carried out in summer 2019 before felling commenced, then annually, with the 2021 survey in

May, by which time three surveys had been completed, and this was considered to provide a good base-line for future monitoring. It was established that surveying in mid-season, end of June to early July, would be the optimum time for future re-surveys, both for identification of ground flora and photography of the tree canopy. It became clear that ash regeneration in the quadrats was much reduced, with both recent regeneration and established saplings dying back. Also by 2021 the majority of the larger ash trees within the quadrats or close by had either been felled or were displaying signs of disease with decreased leaf coverage. In some quadrats other tree species were regenerating - in descending order of abundance these were observed to be hazel, birch, sycamore, and then hawthorn, rowan, bird cherry, beech, oak and guelder-rose.

The number of ground flora species recorded in each quadrat averaged around 22, varying slightly with the time of year recorded. Grasses tended to dominate, in particular False-brome *Brachypodium sylvaticum* and Tufted Hair-grass *Deschampsia cespitosa*, which were abundant in every quadrat, with to a lesser extent Wood Sedge and other grass species. The most abundant herbaceous plants were Wild Strawberry *Fragaria vesca*, Bluebell, Barren Strawberry *Potentilla sterilis* and Common Dog-violet, often fairly inconspicuous apart from bluebells in spring. Primroses, and Lord's-and-ladies also showed up well in spring; and Quadrat 14 in particular had sheets of Bugle in flower in spring (📷 p44). By mid-season plants were growing taller, so becoming more obvious by then were Raspberry, Male-fern, Water and Wood Avens, Dog's Mercury, and in some quadrats bracken. Four quadrats had frequent Honeysuckle.

Over the 14 quadrats the number of different plant species recorded was 75, some only appearing in one or two quadrats. Some interesting examples included Herb Paris in quadrat 2, Goldilocks Buttercup in quadrat 5, Brown Bent grass in quadrat 8, and Wood Anemone in quadrat 11. Several quadrats contained areas of limestone outcrops or pavement which tended to have shorter vegetation on the rock surface throughout the season. Examples included bryophytes, Herb-Robert, St John's-worts and sometimes Heath Speedwell, with Dog's Mercury in the grikes.

Time and future monitoring will tell what the next few years bring. Kew Millennium Seedbank personnel returned in September this year to check the ash trees collected from previously - 2 had been felled and the other 10 had developed severe ash-dieback. They had hoped to be able to collect new seed from any other trees showing good resistance, but none were found.

Ilkley Playhouse Slope - Baseline Plant Survey, 27 May

This piece of land, mostly a grassy slope, drops down from the Playhouse and Castle Road allotments to the riverside footpath on the east side of New Brook Street. It was identified by Climate Action Ilkley (CAI) as an area that could be enhanced as a community asset for people and wildlife, and to raise awareness of issues related to loss of biodiversity and climate change. SS and BNB volunteered to carry out an initial plant survey on the site which could then act as a baseline for assessment of future actions. We were assisted on the day by Anne Eady of CAI. The Council had delayed grass mowing to make it easier to identify species with their flower heads still present.

We split the site into four habitats. The northern slopes covered the largest area, mostly open grassland, slightly acidic to neutral and slightly damp in places, and subject to occasional mowing (cuttings probably not removed). At least nine grass species were recorded with the common associates - dandelions, daisies, White Clover, docks and plantains. Plants

of greater interest included the legumes Red Clover and Bush Vetch, Germander and Slender Speedwells, and a nice population of Bulbous Buttercup *Ranunculus bulbosus*. Damper areas had Creeping Buttercup and a good smattering of Cuckooflower. Steps crossing the slope appeared to have been treated with weed-killer, with the resulting open ground attracting annual weeds. Total 49 species.

The amenity area at the top of the slope by Castle Road was more intensively managed as an urban park with only a few common species dominating, and generally species poor with only 17 records. The allotment boundary was a much more tree shaded habitat and contained a greater variety of ground flora species, often typical hedgerow plants, usually with individually lower abundance. The overhead shade reduces grass dominance allowing more species to seed and develop. Taller species such as raspberry, currants and young tree seedlings also occurred. The north-east corner had three nice Limes. Total 60 species.

The last section adjacent to New Brook Street consisted mostly of shrubbery and small trees, including evergreens, managed by occasional pruning back. Ground flora diversity was low with the shrubs densely covering the ground until cut back, and then the bare ground was available for weedy species to flourish whilst the shrubbery re-grew. The closely planted evergreen conifers and holly also restricted ground flora diversity. Total 28 species.

In total 84 different species were recorded which should leave some scope for improvement.

Bolton Abbey Estate - Survey of Back o' th' Hill Farm, Storiths, June/July

This survey originated at the early June meeting between WNS and BAE personnel. The farm was currently unoccupied and the Estate was considering future options including Stewardship, so were interested in what results a botanical survey would give. As no other botany visit with BAE had been arranged this year it fitted into our programme and we volunteered to carry out the survey as it gives us the opportunity to record in areas not normally accessible and maintains our good relationship with the Estate. The survey was carried out over several dates in late June and early July with the assistance of a number of WNS members. The weather remained mostly dry and was quite hot on some days, but was very pleasant and peaceful, with excellent views to enjoy over the moors and down to the Priory and Wharfe valley woodlands.

41 fields and woodland were checked, recording 233 plant species overall (along with their DAFOR abundance), which we considered to be a surprisingly high number and an indication of the species diversity here. The farm buildings were sited on the Storiths road with fields situated on both sides of the road and dropping down to the woodlands by the riverside. Habitats included neutral and acidic grassland with some hillier areas containing rock outcrops (gritstone); also some woodland and wetter flushes or small streams added to plant diversity. Another feature was the number of veteran trees, mostly oaks, looking to be a few hundred years old and with girths we measured at 3 to 5 metres circumference.

The previous tenant had not carried out any major grassland improvements or spread high fertiliser concentrations, as evidenced by many fields consisting of more 'natural' grass species such as Sweet Vernal, Bents, Red Fescue and Yorkshire Fog *Holcus lanatus*, rather than high concentrations of Rye-grass or Timothy, although Meadow Foxtail *Alopecurus pratensis* was prevalent in some fields. Some fields were coloured white with Pignut, and Bluebells were often present by shady walls and under trees. In wetter areas Meadowsweet, Greater Bird's-foot-trefoil and

Cuckooflower often occurred. Drier and more acidic areas typically had Wavy Hair-grass, Tormentil and Heath Bedstraw, or more occasionally Mouse-ear Hawkweed *Pilosella officinarum*, Sheep's-sorrel *Rumex acetosella*, Field Woodrush, or maybe Common Bird's-foot-trefoil or Bilberry.

Areas with ditches, wet flushes or rush pasture also contained one or two sedges, Opposite-leaved Golden-saxifrage, Bugle, Marsh Bedstraw or Sharp-flowered Rush *Juncus acutiflorus*. In some fields cattle were observed to have poached the wet ground exposing bare earth and enabling seeds to germinate resulting in more species diversity. Hillier fields or those with gritstone outcrops could not be farmed intensively so tended to have more herbaceous plants present. Examples included Early Hair-grass, Harebell, Sheep's Fescue, Mat-grass, Ox-eye Daisy, Heath Speedwell *Veronica officinalis* plus occasional colonies of heather or bilberry.

The richest areas were in woodland and grassland closer to the Wharfe and along Ravens Gill Dike, with added woodland and wetland species such as Wood Anemone, Angelica, Ramsons, Water Avens, Primrose, Salad Burnet *Poterium sanguisorba* and Common Dog-violet. Overall it was a very interesting exercise to be able to survey a whole farm, and hopefully it will provide a good baseline of plant species present at Back o' th' Hill Farm and assist BAE with their future plans.

Bolton Abbey Estate - Fields adjacent to Grass Woods Survey, 16 August

The Estate sold Grass Woods in the 1950's but retained a block of 16-17 fields adjacent to the eastern boundary of Grass Wood and Lower Grass Wood, and split by Grass Wood Lane. They are currently tenanted out for cattle and sheep grazing, but the Estate want to explore their future ecological potential, especially with their proximity to SSSI woodland, with maybe some wood pasture development an option. Arrangements were made for SP/SPE/BNB to visit the fields and assess their biodiversity value.

The fields bordering Grass Wood Lane were considered to be grass-rich neutral grassland with Crested Dog's-tail grass, Yorkshire Fog and some Rye-grass. Of much greater interest were the more northerly fields neighbouring Grass Wood, containing abundant herbaceous species and with a more calcareous influence. Many old anthill mounds were present which is a key ecological feature, and needs to be retained. A few areas with shallow limestone pavement reaching the surface were wooded and contained some typical woodland plants, but were accessible to sheep so well enriched, with nettles as the main beneficiary at present.

Below the road and closer to the River Wharfe was a steep bank of superb calcareous grassland and very plant rich with Blue Moor-grass, Rock-rose, Salad Burnet, Thyme, Limestone Bedstraw, etc. The river edge fields were flatter and became rockier with limestone pavement at Ghaistrills, all a herb rich area. Some dead trees (possibly elms) by the riverbank could well be replaced. Our overall opinion was that some areas are high diversity old pasture and should be retained as such. Some other fields might be more amenable to future planting to make wood pasture and it is planned to discuss this further with the Estate.

Menston, Moorside Field Plant Survey, 26 August

Menston Area Nature Trust (MANT) was set up during 2021 by local residents with the aim of developing more nature friendly gardens and outdoor areas in and around Menston. One of their members owned a field about an acre in size which they planned to improve - it had previously been used to keep horses but was currently left fallow. CH, SW and BNB volunteered to carry out a baseline plant survey and were

joined on the day by MANT members including Francesca Bridgwater and Candy, the owner.

The field had not been grazed or mown for a few years so its vegetation was dominated by robust grasses with their dead remains and a relatively small number of herbaceous plants. Most abundant was Yorkshire Fog and Creeping Buttercup, indicating rather damp grassland. A small colony of Greater Bird's-foot-trefoil was an interesting find. Nearer the house garden and drive was a smaller area where the ground and vegetation had been disturbed, so currently had shorter vegetation growing back. Greater species variety was noticeable here, but in small quantities. Marsh Cudweed was of interest, but likes disturbed damp habitats so possibly will not persist.

Around the field boundary were hedging shrubs and trees including some large ash, along with typical hedgerow species that appreciate more shade. Locally frequent beds of nettles, bramble and raspberry tended to congregate here. Three apple trees near the garden boundary were present and the grass underneath was occasionally strimmed, so shorter in height and less dense. In total 61 species were recorded along with their DAFOR abundance, which should be useful as a baseline to help with future management of the field.

Later in the year SW helped Francesca with a small plant species survey in an area within Menston Park that the council had left uncut. 17 species were recorded. Although the Park is mostly used for recreational purposes and thus regularly mown, it would be beneficial if a small area could be reserved for nature. BNB, on passing through during the year, noted a bed with wild flower mix plantings to encourage insects, a small Dawn Redwood tree *Metasequoia glyptostroboides* planted and which should develop nicely in time; also a group of big mature Black Poplars which look to be the native *Populus nigra* subsp. *betulifolia*, with leaning well-burred trunks and hairy leaf stalks, very good to see!

Bruce Brown

Bankside Balsam Bashers 2021.

As The Ilkley Clean River Group had to have insurance to run projects such as The iWharfe one, which was achieved by using volunteers from communities along the length of the Wharfe to test for pollution hotspots, we decided to make the most of the cover and run a series of Monday evening Himalayan Balsam Bashing sessions in Ilkley along the riverbank.

Because it's such a large undertaking, we teamed up with volunteers from The Wharfedale Naturalist's Society, Climate Action Ilkley, Friends of Ilkley Moor and last, but by no means least, an army of local, keen, effective and expertly led, Scout, Guide and Brownie groups, who cleared large areas in a short space of time and gave me the opportunity to explain to the youngsters how important it was to clear the area of non-native invasive species, which were crowding out our native wildflowers and adding to erosion problems by leaving large areas of riverbank bare in winter when they die off, which then get washed away by high waters.

It was my first time leading such groups, so was a bit of a foot-finding exercise for me. We tackled areas downstream of the Swingbridge but mostly concentrated our efforts on Ilkley Golf Club who granted us access and where we found large swathes of balsam which, if left to reseed, would contaminate areas further downstream. (The Club were so pleased they kindly donated £150 to The Ilkley Clean River Group).

In July we teamed up with Addingham Environment Group for a special Big Balsam Bash, meeting on Ilkley Old Road at

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 AS Alan Schofield

BAE Bolton Abbey Estate

BAT Jesse Tregale

BBG Bradford Botany Group

BNB Bruce Brown

CH Carmen and Fred Horner

DAB David Broughton VC64 BSBI Recorder

GH Gordon Haycock

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

RE Richard Else SP Steve Parkes

SPe Steve Peel SS Sue Stevens

SW Sarah Ward

YNU Yorkshire Naturalists Union

YWT Yorkshire Wildlife Trust

Addingham where the Dalesway Footpath emerges. This was a great success with many hands working together to clear a large area downstream along the footpath towards Ilkley Tennis Club.

It was a wet, but satisfying day and we intend to repeat it this year on Saturday 9th July. A date for your diaries should you wish to join us.

As the Monday evenings were coming to an end, it was heartening to see native species of wildflowers begin to re-establish themselves in areas we'd earlier cleared of balsam. Hopefully there will be even more wildflowers this year to increase the biodiversity of Wharfedale.

Because Ilkley Clean River Group still have the insurance and last year was such a success, I will again be running Monday evening sessions to meet at 6.45 on Denton Road side of Ilkley Old Bridge beginning June 13th. If you'd like to join our merry group of bashers please feel free to email me at karenshackleton@hotmail.com

with your telephone number and I will add you to our WhatsApp group.

I would like to add a special word of thanks to stalwart WNS volunteers Richard Rundle, Philippa Higgins and one of our youngest members Isobel Tate-Smith, who completed her Duke of Edinburgh Award with us. All of whom were a great help and support to me.

Karen Shackleton
Ilkley Clean River Group
WNS committee member

Getting your eye in:

Learning to identify thistles in Wharfedale



Creeping thistle

'It's easy, when you get your eye in'. Not the most useful advice when you're trying to identify wildlife, whether birds, flowers, whatever interests you or has caught your eye. How do you 'get your eye in'?

A few years ago we were staying at a holiday let in Upper Wharfedale, a few miles walking along the Dales Way until you come to the water-shed over into

Ribblesdale. Bird-watching is usually my thing but I'd been thinking that I should be able to identify more of the flowers I see in the Dales. Thistles were most obvious during that holiday, so that seemed a good place to start. There were a mix of different colours and lots of them, a great opportunity to ID a few species I thought.

After a few days, between walks and birding, even with the identification field guide and the plants in front of me, I wasn't confident that I had any identification correct. This was a little frustrating because I can identify most British birds, often from brief views. What was so different?

This problem bounced around my brain ever since. Out walking I would often look at any thistles. I bought a selection of identification guides and spent some time doing my homework learning what to look for. There are three very common species, I read, creeping thistle, marsh thistle and spear thistle.

One day in August this year, again in Wharfedale, things started to fall into place. We were out walking, above Conistone, the one near Kilnsey. Again lots of thistles and different colours. I spent some time looking at them, hoping to not get left too far behind.

As we walked off the moor and down a grassy green lane, I realised that almost all the thistles in front of me were now the same thing, all with the same pinky-purple flower. Creeping thistle seemed a good match. On a roll now, I picked out a few spear thistle among the creeping thistles. They were both different from the thistles only just a little higher on the marshy ground on the moor. I walked back up the hill to take another look at the mixture of colours. I remembered a line in the description of marsh thistle 'flowers purple, more frequently white than other thistles which is what I now realised I had in front of me. The ferociously spiny stems were clearly different from the creeping thistles. Probably this is the one I had been looking at years ago, further up the Dale when I was confused. Not different species, but a variable species.

My brain now seemed happy to group similar things as the same thing. Recognising colours of flowers, colour of leaves and how spiny the stems are, happy to accept not everything looked identical.

Having dozens of plants to compare rather than the one picture in the field guide was important. Armed with some information and being in the right place at the right time was key to getting my eye in.

With more experience, perhaps unconsciously we use lots of information to make an ID. We've learned what species we can expect where, in what habitat. This is local knowledge often, not in a field guide.

A few weeks later we spotted melancholy thistle, an uncommon species, in wonderful flower meadows along the valley between Buckden and Hubberholme. Somehow, I was now confident there was a clear match to the information in the book, even as it was distant, in the middle of a field.

I've not got all the answers, but looking forward to the summer and getting my eye in for some

unusual species, when plants such as the rosette (right) now dormant in November, are flowering again.

Iain Manfield



Spear thistle

Thistle winter rosette



Three varieties of marsh thistle

Obituary - Jenny Dixon



Jenny Dixon (nee Leach), well-known local English teacher and naturalist, passed away at the age of 86.

Jenny lived nearly all her life in the local area and attended Ilkley Grammar School. After securing an English Degree, Jenny attended the London Institute for her teacher education qualification and in 1957 joined the English Department at Lawnswood Girls' Grammar School in north Leeds, eventually succeeding to Head of Department around 1965. This coincided with the introduction by the Education Department of an experimental GCE in English Language, making use of course work, involving 10 schools, including Lawnswood, linked to Northern Universities. This was very successful and helped Jenny develop a number of contacts in other schools especially in Bradford and Keighley.

Around the end of the 1960s, Jenny moved to Margaret McMillan College of Education in Bradford and became their specialist in Children's Literature. Her reputation was growing and this led to her becoming involved in an International Conference on the teaching of English at York University where her involvement, including the presentation of an individual student's work, was deemed a great success. It was here that she

first met her future husband, John, although it was not until 1996 that they married.

Around the mid-seventies, Jenny joined Bradford's Education Department as Inspector for English and this gave her many happy years as part of a team working with First and Middle Schools on curriculum development.

Jenny retired in 1990 and this gave her the opportunity to enjoy her many other interests whilst never losing her abiding love of the English language. Jenny and John threw themselves into many local voluntary groups including Wharfedale Poets and the Ilkley U3A where they became involved in a number of groups, making many friends in the process. Latterly they joined the U3A Environment Forum where her knowledgeable and perceptive contributions, her engaging talks and unique style of writing and, most of all, her gentle and reassuring presence, will be sorely missed.

Jenny joined the Wharfedale Naturalists Society in 1977. This was an obvious thing for her to do as she had been interested in natural history all her life. However, given she was still in full time employment at this time, she was only able to participate in a limited manner but, after retirement, she quickly became more active culminating in her becoming Vice President in 1997 succeeding to President in 1998 for one year. In addition, she served as Secretary and as a Committee member for a number of years. Her natural history expertise became well known in the local area through her weekly 'Nature Notes' which featured in the Ilkley Gazette and Wharfedale Observer from 2002. Eventually this workload needed to be shared but Jenny continued to contribute an article once a month until her final illness. These 'Notes' were distinguished by her command of English but, perhaps above all, her ability to tell a story which never failed to wholly engage the reader. Given her wide range of interests, enquiring mind and engaging personality it is not surprising that Jenny developed a wide circle of friends and acquaintances in the local area and beyond. She will be much missed.

Peter Riley

OLD GANGLY

Silent sentient wanderer

Dew-decked meadow ponderer

Succulent leaf to fragrant flower

Sunrise signals, a time to cower

Hunker by day hidden of form

Shelter from sight not from storm

A gentle life of open air

Wild amber eyes that ancient stare

Kelvin Smith



KS

Dragonfly and Damselfly Report

LARGE RED DAMSELFLY (*Pyrrhosoma nymphula*)

Recorded between 24 April and 2 August at , Otley, Otley Wetlands (OWNR), Otley Chevin, Burley, Burley Moor, Timble Ings (Timble), Ben Rhydding Gravel Pits (BRGP), Gallows Hill, Lindley Wood, Low Dam and Lindley Pond

Largest count 18 May OWRN 20

BLUE TAILED DAMSELFLY (*Ischnura elegans*)

Recorded between 4 June and 20 July at Gallows Hill and BRGP.

Largest count 30 June Gallows Hill 2

AZURE DAMSELFLY (*Coenagrion puella*)

Recorded between 18 May and 8 August at Timble, Lindley Wood Reservoir, Low Dam, Lindley Pond ,OWNR, BRGP and Gallows Hill.

Largest counts 8 June BRGP 650

COMMON BLUE DAMSELFLY (*Enallagma cyathigerum*)

Recorded between 27 May and 30 September at Otley Chevin, Otley, OWRN, Farnley Lake area, BRGP, Timble, Lindley Wood Reservoir and Gallows Hill.

Largest counts 12 June Gallows Hill 'Large Numbers' and Timble 50+

EMERALD DAMSELFLY (*Lestes sponsa*)

Recorded between 31 July and 7 September at OWRN and Timble.

Largest count 26 July Timble 100+.

BANDED DEMOISELLE (*Calopteryx splendens*)

Recorded between 29 May and 16 July at OWRN, Otley, Gallows Hill, Pool, BRGP and Timble.

Largest count 8 June Pool 50+.

BROWN HAWKER (*Aeshna grandis*)

Recorded between 15 July and 17 September at Timble, Stainburn Forest, Leathley, Lindley, OWRN, Gallows Hill, Burley, BRGP, Menston and Kelcliffe.

Largest count 26 July OWRN 19.

COMMON HAWKER (*Aeshna juncea*)

Recorded between 10 July and 10 October at Timble, Lindley Wood, Low Dam, BRGP, Otley and Cowside Beck.

Largest count 27 August Timble 8

SOUTHERN HAWKER (*Aeshna cyanea*)

Recorded between 23 July and 10 October at Timble, Thruscross, Low Dam, Gallows Hill, Otley, OWRN, Menston, Burley, Sun Lane and Norwood Bottom.

Largest Count 23 July Timble 6, and an emergence over 3 days 26/28 June Otley 12.

MIGRANT HAWKER (*Aeshna mixta*)

Recorded between 5 September and 13 October at OWRN and Burley..

Largest count 9 OWRN 6 September



Four spotted chaser (KS)

COMMON DARTER (*Sympetrum striolatum*)

Recorded between 8 July and 13 October at Timble, Otley, OWRN and Leathley.

Largest count 5 September OWRN 50+.



Broadbodied chaser (DoC)

BLACK DARTER (*Sympetrum danae*)

Recorded between 14 July and 10 October at Timble, Low Dam and OWRN

Largest count 26 July Timble 100+.

RUDDY DARTER (*Sympetrum sanguineum*)

No records this year.

BLACK TAILED SKIMMER (*Orthetrum cancellatum*)

Recorded between 16 July and 26 July at OWRN and Lindley Wood Reservoir

Largest counts 16 and 26 July OWRN 2.

GOLDEN RINGED DRAGONFLY (*Cordulegaster boltonii*)

Recorded between 16 June and 3 August at Timble, Lindley Pond area, Mid Washburn and Burley Moor.

Largest count 22 July Timble 6.

EMPEROR DRAGONFLY (*Anax imperator*)

Recorded between 16 June and 3 August at OWRN and Timble.

Largest count 14 July Timble 5.

FOUR SPOTTED CHASER (*Libellula quadrimaculata*)

Recorded between 5 June and 3 August at Timble, Low Dam and OWRN.

Largest count 16 June Timble 28.

BROAD BODIED CHASER (*Libellula depressa*)

Recorded between 18 May and 8 July at Timble, Gallows Hill OWRN, Otley and BRGP.

Largest Count 16 June Timble 3.

Delighted that we should have a record of Golden Ringed from Burley Moor and Banded Demoiselle at Timble Ings.

Of interest that there should be 2 records of male damselflies coupled to females of another species. Something I had not seen previously over many years of observation.

Another year that we have not recorded Ruddy Darter. In the past we have only had very, very few individuals at a part of OWRN where much vegetational change has taken place.

Another species where numbers have always been low is Black Tailed Skimmer so of interest that we have a record from Lindley Wood Reservoir. Blue Tailed Damselfly records are surprisingly low.

Records received from:

D & J Alred, R. Else, P & K Limb, H. Watson, D. McMahon, P Purvis, D O'Connor, A & P Riley.

David Alred

Ladybirds

There was a total of 223 records of all native species representing 568 individual ladybirds. There were 83 records of Harlequin representing 1244 individuals. HOWEVER, in addition to records submitted by the usual contributors, this year between April and July I received many records from two very enthusiastic new members, Hazel Watson and Ric Else (HRW). Whilst extra records are very welcome, it makes any interpretation of trends very difficult! For each species I have included 3 sets of figures (records/individuals) – records from the ‘usual’ people, records from HRW, and total records. This year saw the addition of two new species to the Wharfedale list – Cream-streaked and Striped, both conifer specialists.

7-SPOT LADYBIRD *Coccinella 7-punctata* (60/139; 35/160; 95/299)



Despite the extra records, this was not a particularly good year for numbers of the 7-spot with no really big counts – HRW recorded 61

individuals at Ben Rhydding Gravel Pits (BRGP) on 25 April, mostly on sunny patches of nettles and hawthorn. I recorded 11 in the garden at Woodhill on a sunny day on 29 March.

The first record of the year was on 27 January on a fence near Scalector in Burley (AR). Peter Riley (PR) accidentally brought one into the house (Woodhill) on 29 January. Several records in February from AR and PR, Woodhill and Scalector. Paul Purvis (PP) found his first in his Otley garden on 18 March. HRW's first record was from their Menston garden on 4 April (4 individuals), and then submitted many more records through April from far and wide in Wharfedale. On 29 May on Otley Chevin HRW observed an egg-laying female. PP spotted a mating pair on a fence post in Green Lane, Otley on 10 June, and on 23 June larvae and pupae at OWNR. I noted 10 newly emerged adults on the Bull Farm Path (BFP) on 4 July. HRW started reporting larvae around Menston from the beginning of July. On 25 August I spent ages photographing a ladybird munching aphids on a hawkweed in the garden. I had a mating pair at Woodhill on 9 September. Mike and Joyce Clerk (MJC) found one in their Otley garden on 15 September and another in their moth trap on 26 September. Karen Bullimore and MJC reported one from Beaverdyke reservoir on 20 September.

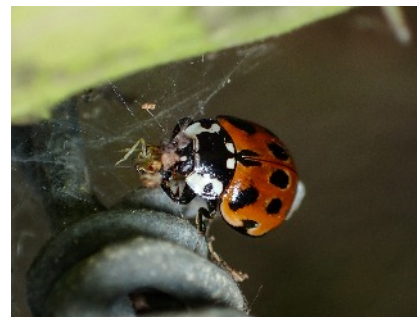


7-spot in knapweed head

Through October I was finding 5's and 6's scattered in knapweed seedheads around the garden (must feel nice and warm!) and also on fence posts around Stead Wood. My last record was of one I rescued from a head of broccoli in Waitrose, Otley on 19 November (I put it in my empty hearing aid case and brought it home where I hid it, I hope safely, amongst ivy leaves!)

EYED LADYBIRD *Anatis ocellata* (4/6; 2/5; 6/11)

A good year for this large, handsome ladybird (7–8.5mm). It is a conifer specialist and these records come from areas with pine trees. HRW found specimens around Timble in May and June. I had several sightings through May to August on the 'pine path' SE152458 near Scalector. On 23 June I watched one tread delicately onto a spider web to retrieve and eat a fly.



CREAM SPOT LADYBIRD *Calvia 14-guttata* (6/6; 12/17; 18/23)

An excellent year for this species, thanks largely to records from HRW from May through July. PP had sightings in May and in August on the runner beans in his garden. I found several May through August around Scalector.

2-SPOT LADYBIRD *Adalia 2-punctata* (18/28; 17/72; 35/100)

A huge increase in the number of records this year compared to last. PP had ten records, I had eight, but HRW had 17 records of 72 individuals. Many of these were sighted on a hawthorn tree viewed from indoors through a window of their Menston home! Careful searching in sunny hedgerows was also very productive – just shows what you can find if you really look! The first record was from PP on 28 March on his bathroom window, and the last record from me on the Bull Farm Path (SE156457) on 7 October.

ADONIS LADYBIRD *Hippodamia variegata*

No records this year.

10-SPOT LADYBIRD *Adalia 10-punctata* (6/7; 16/35; 22/42)

This small ladybird (~4mm) is very variable in colour and pattern. It has brown legs whereas the 2-spot has black legs.

Good numbers of records this year with the majority coming from HRW widely round our area.

The first record was of two ladybirds on a sunny hawthorn in Menston (HRW) and a maximum count of six on 19 April on hawthorn viewed from the second floor window of their home. PP had two sightings in May at Gallows Hill. I had two sightings in Burley along the Pine Path in July and one in our garden at Woodhill on 24 August (beaten from oak).

14-SPOT LADYBIRD *Propylea 14-punctata* (11/15; 3/4; 14/19)

The first record was on 16 May, one in Burley (HRW), and I found my first a day later in our garden. Several more garden records through May and June. The peak count was four on the Bull Farm Path on 10 June and the last record on 30 June at Gallows Hill (HRW).

22-SPOT LADYBIRD *Psyllobora 22-punctata* (3/4; 4/5; 7/9)

A relatively poor year for this species. After the big numbers I found last year on the Bull Farm Path, I could only find one! HRW found a mating pair at Nell Bank on 13 May. Mike and Joyce Clerk (MJC) found two in their Otley garden on 6 September.

ORANGE LADYBIRD *Halysia 16-guttata* (6/14; 6/29; 12/43)

Lots of records from HRW starting with five on 13 April in Otley – all on the undersides of cherry laurel leaves. On 22 May they counted 10 on a sycamore at Burley Woodhead (by looking at the undersides of leaves). On 6 October Nyree and David Fearnley (NDF) reported one from Lindley reservoir. I started finding individuals through October into November on the fence alongside Stead Wood – the last record was 23 November.

LARCH LADYBIRD *Aphidecta obliterata* (1/1; 2/7; 3/8)

Never many records for this rather drab brown ladybird, but HRW found two at Timble on 9 May and five on 31 July. I had a single record from the Pine Path on 16 August.

PINE LADYBIRD *Exochomus 4-pustulatus*

No records this year.

KIDNEY SPOT LADYBIRD *Chilocorus renipustulatus* (6/8; 0/0; 6/8)

PP discovered just three on ash trunks at Gallows Hill on 29 April compared with big numbers last year. I started noticing odd ones regularly on the Pine Path on fence posts – 5 records between August and October. It's a small (4-5mm) ladybird that could easily be overlooked, or, mistaken for a 2-spot (or even a Harlequin *f. conspicua* but much smaller and an all-black pronotum).

18-SPOT LADYBIRD *Myrrha octodecimguttata* (4/5)



Only one previous record for this species which looks superficially very similar to a cream-spot and has probably just been missed in previous years. All records (AR) from the Pine Path July – September.

STRIPED LADYBIRD *Myzia oblongoguttata* (1/1)



Just one record for this large, handsome conifer specialist – on the Pine Path on 31 July. I'd had a record from a non-member and searched very carefully for a couple of weeks before I found my own!



CREAM-STREAKED LADYBIRD *Harmonia quadripunctata* (6/7)

A new ladybird (above) for our area – all records (AR) from the Pine Path (it's a conifer specialist) from mid-June to mid-September. First recorded in 1937 in Suffolk, it probably spread to the UK naturally from continental Europe. It's a close relative of the Harlequin which is an introduced alien.

HARLEQUIN LADYBIRD *Harmonia axyridis* (56/1148; 27/96; 83/1244)

Lots of records this year – even without those from HRW, but the total numbers are heavily influenced by my finding of big aggregations on the fence alongside Stead Wood through October. The first record was from PP who found a *spectabilis* form on his kitchen table on 28 February. He then submitted regular sightings of one or two individuals round and about Otley until October when aggregations started to form. He had 50 on his bathroom ceiling on 1k on 9 November. HRW recorded mostly small numbers, but lots of larvae and pupae from the end of June. NDF counted 126 larvae, pupae and adults on a wall at Lindley reservoir on 6 October. I started finding odd ones in the garden through March, and also round Scalebor. On 10 October I found 20 on the fence alongside Stead Wood and over the next couple of weeks the numbers built to a peak of 200+ on 22 October – every one of twenty-odd fence posts seemed to have around 10 harlequins! By mid-November the numbers had fallen to around 30. There were a few other species mixed in with these groups, notably orange ladybird, but only the occasional 7-spot. The Harlequin ladybird is known for its tendency to form large aggregations in the late autumn – sometimes in houses – and has been called the Halloween Ladybird. There are three main colour forms in the UK – *conspicua* (2 red spots on black) *spectabilis* (4 red spots) and *succinea* which has many black spots on red – this is by far the most numerous and the form and number of spots are very variable, but it's still *succinea*. I noticed that these late individuals were overall much blacker generally (i.e. many spots were fused) than individuals through the summer. I wondered if it might have something to do with colder temperatures. I contacted Helen Roy, UK ladybird expert and she confirmed this – it is possible that this an adaptation for thermal warming with darker ladybirds warming at cooler temperatures.

Records were also received from Audrey Gramshaw and Mike and Joyce Clerk. Apologies to anyone not mentioned.

Anne Riley

Not quite a lek

I suspect most naturalists have an assortment of wildlife displays they would like to witness and possibly photograph; starling murmurations, grebe weed dances, red deer ruts and harrier sky dances are a few of the reasonably accessible ones. Professional guides and hides are available for those that need help in locating their subject matter and for some of the more glamorous species, where special licences are required, may be the only means of experiencing these spectacles first-hand. However, paying to erect a tripod where hundreds have before, to photograph a kingfisher diving into a tank or to have access to other suitably attenuated wildlife has little appeal to me. I find the most rewarding wildlife photography comes about when you identify, locate and explore suitable habitat for your chosen subject and then produce an image that portrays that subject as picturesquely as possible.

The commercial venture and the independent research approach are both possible routes to a picture but there is other help available for those in pursuit of that mind's-eye image. Natural history society reports, as well as being priceless tools for monitoring the regional 'State of Nature,' are wonderful sources of information, as is word of mouth. I listen attentively to sightings by fellow naturalists and indeed other members of the public who, although they may not consider natural history as anything other than pleasantly coincidental to their own pursuits, often make valuable observations. So, on hearing from an acquaintance of an acquaintance that a black, turkey-like bird had been seen crossing a road, fanning its tail and squawking I was all ears; it could only be a black grouse. One bird hardly constitutes a lek but there may be more; perhaps he was just practising while the others weren't watching! More importantly reference to a road meant the possible use of the car as a hide so avoiding unnecessary disturbance of this now uncommon species which, rather perversely, can still legally be shot by those of that questionable persuasion.

I found the location and saw plenty of grouse, but of the red variety. With a little more research I built up a picture of the type of habitat that their black cousins need; partially improved grassland adjoining the moor edge preferably to include traditional hay meadows and successional forestry. It sounded familiar and much like Upper Wharfedale which would be a more appropriate area to research and indeed a quick check of the Annual Review revealed reports of an occasional tantalising sighting in that part of our realm. A more than mild aversion to early mornings meant I spend a couple of pleasant evenings watching in the area around Oughtershaw; but to no avail. Chatting with locals revealed that sightings were infrequent and therefore unreliable for photographic purposes and I reluctantly decided to concentrate on the area which had yielded the original sighting which, although not quite in Wharfedale, was not far away as the blackcock flies.

The area also looked suitable for cuckoo, merlin and short eared owl so there could be other photographic opportunities. I visited later that week, watched a shortie hunting the moor edge, and managed a quick photo when it landed briefly on a post. No sooner had it flown away than I spotted not the showy gamecock I was looking for but a grey hen, the subtly beautiful, better camouflaged female of the species. She was feeding on the roadside verge and I grabbed another quick photo before

she flew away across the moor. Later when I processed the image I noticed a tracking device attached round her neck and suitably intrigued returned a couple of days later.

This time I was spotted and politely asked if I had seen anything interesting; country parlance for what are you up to. My behaviour had attracted the interest of the local gamekeeper



who I realised, after an exchange of observations on the wildlife seen that evening, was more knowledgeable and empathetic about natural history than some in his profession. As our conversation strayed to the various branches of so-called country sports I found we shared a contempt for the pheasant and red legged partridge brigade, and their policy of flooding the countryside with captive bred alien birds, but moderated my views on his own particular speciality, that of grouse shoot management.

As we continued to enjoy the drumming snipe, wheeling lapwing and other waders that thrive in the habitats under his supervision I remarked that I had recently seen a grey hen with a collar. A release programme he replied and, when I reassured him as a lone photographer I did not broadcast locations, he disclosed that at present there were just two cocks and two hens which were rather too closely related for his liking. In a gesture somewhere between good faith and gentle bribery I promised him a print of the bird he seemed most proud to have visiting his moor, the short eared owl; also known, arguably more appropriately, as moor owl by old school natural historians. With that he said I was welcome to photograph the black grouse from the track across the moor; providing I was sensible.

Making a supreme effort I returned at dawn a few days later. Crouched behind a wall, I was thrilled to witness two blackcock in earnest combat. Making hissing noises and an utterance somewhere between a coo and a gargle the birds strutted and fluttered in a manner reminiscent of wild-west gunslingers. Lapwing tumbled, curlew piped and cuckoo floated their fluted call across the morning; a truly magical experience which will live long in the memory. As the light levels improved I managed some souvenir shots of the black cock's performance before they dispersed presumably for a well-earned breakfast; and I did the same.

It was a thrill and privilege to have witnessed this fledgling lek, added a tick to my metaphorical bucket list and concluded that, although scattered and at low density, black grouse are returning and, with targeted habitat management, may once again grace the dales in good numbers and delight us all with their idiosyncratic daybreak displays.

Kelvin Smith

Hedgehogs (and more) in the garden

Towards the end of last year, just before lockdown, my wife saw a hedgehog in the garden. We later had another visit or two and were certain that the hedgehog was fairly local, though not actually residing in our garden.



To give it some encouragement we installed a hedgehog house and started to leave food for it. Then we realised that, in addition to the hedgehog, a large brown rat was also helping itself. The rat, incidentally, was quite agile and adept at climbing up the pole of our bird feeder until I put vaseline on the pole!

To find out exactly what was happening, I bought a trail camera - not expensive at only £30, particularly as it was still in China when I ordered it. But eventually it arrived and I recorded videos and still pictures which gave us a lot of information and pleasure. What we found was that we had more than one hedgehog and also a large brown rat and some wood mice who also benefited from the food supply. Blackbirds also like hedgehog food, as do magpies, pigeons and starlings.

We realised from the behaviour of the hedgehogs that we had a pair - the male being significantly bigger than the female and very attentive to her. There was also what appeared to be a third one that wandered in and out occasionally. One night the



camera picked up an additional male who was interested in the female, but who was quickly chased off by the original one.

We recorded a lot of movement of the hedgehogs on most nights and then one night there was what appeared to be a young one who couldn't quite pluck up the courage to feed while the big male was feeding and kept approaching the food bowl and retreating until the big one had gone. A short while later we recorded two hedgehogs of similar size that gave the appearance of being twins who arrived together, ate from the bowl together and then left together on a number of occasions. Later again, I had the pleasure of seeing a baby hedgehog in broad daylight, feeding from the bowl. All in all, I think we have at least seven different hedgehogs and have been able to spot different markings on the faces of some of them.



So what about the other visitors? Mr Rat was around for a few weeks but hasn't been seen of late. The wood mice have taken up residence in the hedgehog house (which doesn't appear to interest the hedgehogs) and were recorded emptying the feeding bowl and taking the contents back inside so they should have a good food supply for the cold weather. Various garden birds are captured on camera from time to time and we have a couple of grey squirrels.

Other captures on the trail camera, which we took on holiday to the Isle of Arran, included a very inquisitive hare and a badger.

Not a bad return on £30!

Ian Watt

Only a small patch of water

Living through a global pandemic that has cost many lives is not something we wanted or expected. However, the restrictions on travel and movement have meant that people have been required to refocus on their immediate environment. Living in Wharfedale, most of us have been very fortunate to be able to explore our local area more regularly and consistently.

I have been amazed to discover the variety of birds using a small expanse of water close to Hebden. The water is located near a very busy footpath close to the River Wharfe. It is a beautiful place to visit on a summer evening when swallows and sand martins will be swooping over the surface. It provides a drinking area for livestock and is fed by a beck. Its size is dictated by the weather, and it provides the scrape conditions often seen in nature reserves which have been developed to support wading birds.



flight together. Smaller birds include pied wagtail, song thrush and meadow pipit.

Those of us who enjoy this stretch of water know that, intermittently, from the end of March to the beginning of August, you might spot as many as three beautiful little ringed plovers at the pool edge. And this year a pair of shelduck, so unmistakable, had us wondering if we would see signs of breeding. [We didn't]

In August a little egret breezed in, just as I passed by. I still can't quite get used to seeing these birds in Yorkshire.

And finally, the most exceptional bird for this location, first spotted in 2020. For a week in March 2021, three black-tailed godwit joined the usual wading species. One male was already in breeding plumage. Who could have guessed birdwatching so close to home would be so exciting?

Ros Lilley



1 Willow warbler (juv)

2 Little ringed plover

3 Shelduck

4 Little egret

5 Black-tailed godwits



In winter you may be rewarded with only a group of black-headed gulls, a few mallards and a couple of moorhen. But in spring and summer, things get exciting. Calls may reach you from nuthatch, willow warbler, and green woodpecker. Not far away on the river, there may be kingfisher, grey wagtail and common sandpiper. At the start of spring there may be as many as 120 oystercatchers. A couple of oystercatchers breed in the fields here, as well as lapwings. Curlew visit regularly and there are lesser black-backed gulls. Redshanks look magnificent reflected in the water. Once five grey herons were discovered here, lifting off in



New signal crayfish population detected in local becks



Not that long ago, perhaps as recently as 2007, Britain's only native crayfish, the white-clawed crayfish, was abundant in the River Wharfe and its becks. However, populations of the highly invasive American signal crayfish (*left*) have been steadily spreading

throughout British watercourses since their introduction in 1976. Headwater streams, such as the many becks located in the Yorkshire Dales, are particularly vulnerable to signal crayfish. Due to the becks' small size, which can amplify the negative effects of signal crayfish invasion, dramatic declines in macroinvertebrates and benthic fishes can occur.

A better understanding of where signal crayfish populations are, and where they are spreading, is crucial for guiding local conservation efforts and helping to reduce native freshwater biodiversity loss. In September 2021, I helped lead a survey to map the distribution of signal crayfish in the becks in and around Addingham. We have known for a long time that signal crayfish have been invading Town Beck and Back Beck from the River Wharfe, but we wanted to find out how far up the becks the crayfish have moved, and if they had invaded any new becks.

Armed with fluorescent hand nets purchased from the local BOYES department store (perfect for manipulating into the nooks and crannies underneath rocks where crayfish hide) we systematically searched for the crayfish using a conventional 'hand-searching' technique. We also used a new method called environmental DNA (eDNA), which, rather incredibly, can detect individual fragments of signal crayfish DNA present in river water. Crayfish constantly release DNA fragments into the water as they move and grow and these can be captured by filling a bottle with river water. Like a detective at a crime scene dusting for prints, it's possible to compare the known genetic fingerprint of signal crayfish DNA with DNA fragments suspended in water collected from the becks and confirm their presence.

The survey, recently published in *Environmental DNA*, enabled the creation of a detailed map showing the extent of signal crayfish invasion in each beck sampled. We detected signal crayfish eDNA at all sites where crayfish were found by hand-searching in both Town Beck and Back Beck. However, no

signal crayfish, and no signal crayfish eDNA, were found in samples collected above the Townhead Trading Estate on Town Beck or above Bridge 55 on Back Beck. In addition, modelling showed that the likelihood of signal crayfish detection decreased as distance upstream from the River Wharfe increased. Taken together, the lack of detection in the most upstream sites, and a decreased detection probability further from the River Wharfe show the extent of signal crayfish advance upstream.

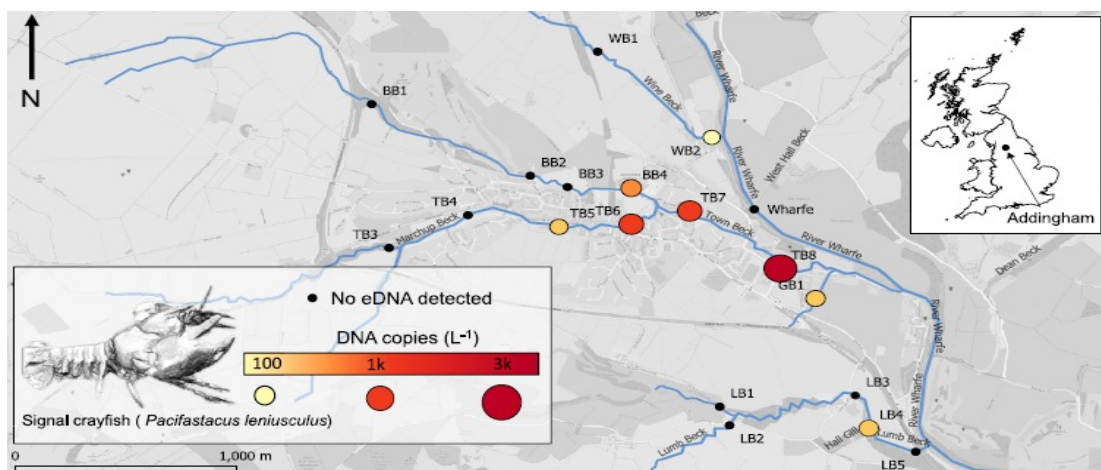
Unfortunately, we also discovered the presence of signal crayfish eDNA in Lumb Beck, providing the first evidence that this beck is being invaded by signal crayfish from the Wharfe. This presence is particularly worrying because there are no barriers that could slow the advance of the crayfish upstream. However, this research does show that environmental DNA-based surveys can paint a more accurate picture of current signal crayfish populations than hand searching alone.

We were joined in the field by Rick Battarbee, Lesley Loughlin, Jan Hindle, and Maire O'Donnell, members of the Addingham Environment Group. It was a lot of fun to get to know and work with people from the group, who spoke about its importance:

"As someone who has always been interested in Nature, I love being part of the Addingham Environment Group, and it has become very important to me. I find it very satisfying working outside with a team of like-minded people of all ages and seeing what can be achieved on a variety of projects at a local level." - Lesley Loughlin.

"I now know more about the village geography, especially the becks, and even fellow villagers, now friends. It is great to continue learning and feels a privilege to be doing something so useful for the environment and the village" - Maire O'Donnell.

Although small headwater streams are vulnerable to signal crayfish invasion, conservation actions to protect them are easier to implement and have a higher potential for success. By keeping a close eye on the spread of invasive crayfish populations in our rivers, hopefully we can help turn the tide and save native species from the snapping pincers and maxillipeds of signal crayfish.



Jack Greenhalgh
University of Bristol

Reference: Greenhalgh, J. A., Collins, R. A., Edgley, D. E., Genner, M. J., Hindle, J., Jones, G., Loughlin, L., O'Donnell, M., Sweet, M. J., & Battarbee, R. W. (2022). Environmental DNA-based methods detect the invasion front of an advancing signal crayfish population. *Environmental DNA*. doi:

<http://doi.org/10.1002/edn.3.280>

Butterfly Walk

17 people met at the bottom of the track in Grass Wood, on a less than ideal day for butterflies, but Paul and I knew that Scotch Argus had been seen recently in good numbers at Bastow Wood, so we were hopeful for some sightings.

As we all walked up the steep track it was dull, but at least fine, and reasonably warm.

When we finally made it into Bastow Wood David Fearnley soon found a Scotch Argus, our target species for the day, hiding in the

grass, which was great as one couple who needed to leave very early did at least get to see one.

We were soon having sightings of more Scotch Argus, and because it was still dull and fairly cool, they weren't too lively, meaning that everyone had the chance for good close views of them. Several also posed very nicely on Devil's-bit Scabious making for excellent photo opportunities. People were dashing all over, and cries of Scotch Argus were soon to be heard all over, as more were added to the total for the day.

After dinner by the sheltered old Dewpond we stayed on that side of the path and headed across the grass to a good track. The weather had both brightened up and warmed up, and we were spotting Scotch Argus all over. There were also two stunning Red Admirals which stayed around nectaring for ages, allowing everyone amazing views.

The butterflies, the warm sun at last coming out, and the views across towards Kilmsey, all made for a wonderful end to the day, and everyone left feeling very happy.

9 species of butterfly were seen during the day, Scotch Argus x 55, Red Admiral x 9, Small Heath x 2, Speckled Wood x 2, and one each of Green-veined White, Small Skipper, Peacock, Dark Green Fritillary, and Meadow Brown.

Nyree Fearnley



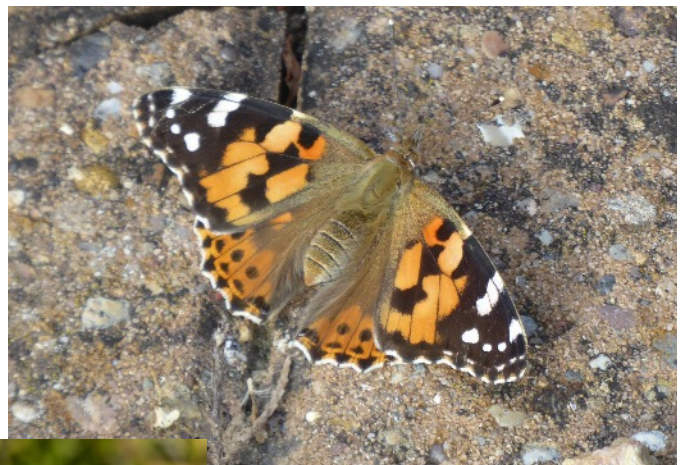
Green-veined Whites obtaining minerals (KS)



▲ Orange tip (DoC)

Green hairstreak (NF) ►

▼ Dingy skipper (KS)

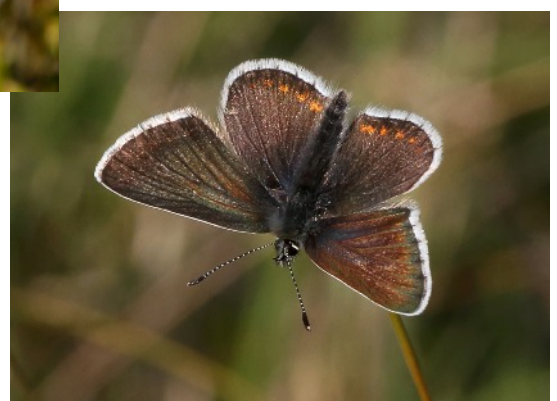


▲ Painted lady (DoC)

▼ Northern brown argus (KS)



Some Wharfedale butterflies seen in 2021 (but not on the Butterfly Walk)





Bugle (BB)



Gunnera (BB)



Greater plantain (BB)



Looking for broad-leaved helleborine (BB)



Mimulus (NF)

Scoska Wood view (BB)



Moonwort (BB)



Marsh orchid hybrid (BB)





Salsify (BB)



Yellow star-of-Bethlehem (BB)



Pussy willow (NF)



Twayblades (BB)



◀ **Red deadnettle (BB)**

Veteran ash at Askwith (BB) ▶





Adder (DoC)



Badgers (DoC)



Cuckoo mobbed by meadow pipits (KS)



Buzzard (KS)



Little egret (KS)



Palmate newt (DoC)



Kestrel (KS)



Starling (PW)



Short-eared owl (KS)



Ring ouzel (TF)



Peacock caterpillar (DV)

**1 to 4
Emergence
of emperor
moth from
cocoon.
In just two
minutes !
(NF)**



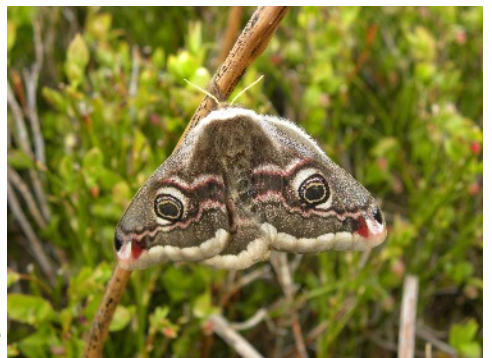
1



2



3



4



Bumble bee collecting pollen from heather (JS)
'Tongue' gall on alder produced by fungus (AR)



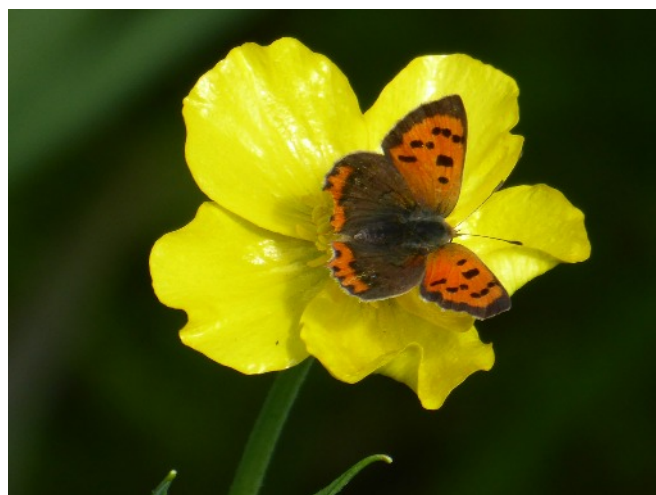
Spring on the Wharfe near Addingham (NF)



Early dog violet (NF)



Egghead mottlegill (KS)



Gatekeeper (DoC)



Pear rust fungus (AR)

Kestrel (PW)



Wharfedale Weather Summary 2021

Rainfall

Total rainfall for the year was 1059 mm which is higher than the average for any decade but over 230 mm lower than last year

This compares with annual average rainfall of 940mm since 1926 & 1002mm this century

What is surprising was that there was only 10 mm in April & there was only 16mm in April 2020

The highest monthly rainfall was recorded in January with 183mm with 158mm in May

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



Addingham sunrise (JR)

Temperature

The coldest months were January (average 1.37°C) & February 3.54°C

The warmest month was July at 17.7°C & the highest daily temperature was 31°C recorded in July

The average daily temperature was 9.48°C (9.59°C for 2020) compared to the average since 1936 of 9.03°C & 9.70°C for this century.

The coolest year was 1986 at an average of 7.1°C & the warmest was in 2004 & 2007 at 10.4°C. The only year above 10°C

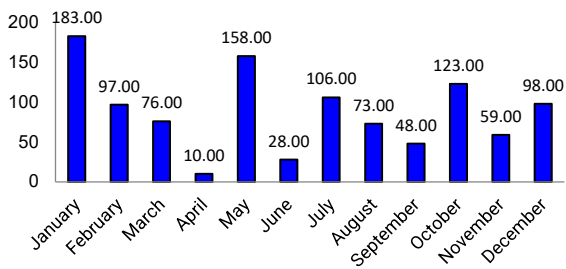
outside this century was 1959 at 10.1°C

Temperatures of zero & below were recorded in 7 months of the year with -1°C as late as 6 May

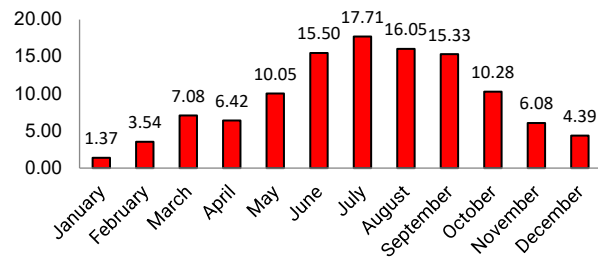
The lowest recorded temperature was -6°C which occurred on 11 February

Peter & Sheila Bancroft

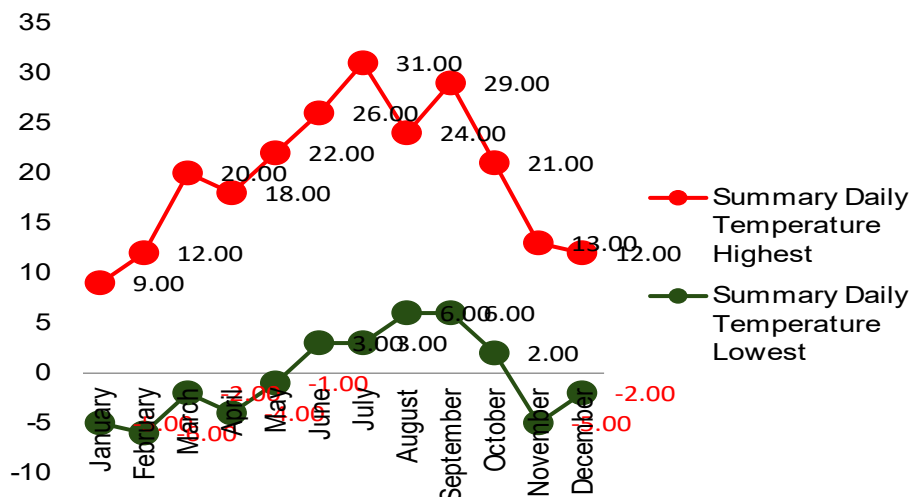
Monthly Rainfall mm



Average Monthly Temperature



Maximum & Minimum Monthly Temperature



MAMMAL REPORT

INSECTIVORES - INSECTIVORA

Hedgehog Erinaceus europaeus

Perhaps inevitably for an animal that is largely nocturnal and which travels one or two kilometres per night, while retaining an instinctive response to danger of curling up, there were more records of dead than living hedgehogs. 28 road deaths were reported with about 15 records of live animals.

The first hedgehog out of hibernation was reported by Jenny Dixon in her Ilkley garden on 15 March with up to four then seen together, encouraged by her feeding them with hedgehog food as well as peanuts and peanut butter sandwiches. An excellent account of hedgehog interactions appeared as one of Jenny's last 'Nature Notes' columns on April 22.

They were widely reported throughout Wharfedale with the furthest north at Nethergill Farm near Oughtershaw.

Hedgehog numbers have declined drastically in recent years, from an estimated population of 30 million in the 1950s to 1.5 million in 1995 to a mere 500,000 in 2018 (Mammal Society population review). They are now categorised as Vulnerable to extinction with reasons including road deaths, loss of habitat and food sources due to intensive farming and use of chemicals in farming and gardens. They can be particularly susceptible to slug pellets ingested by slugs and snails which form part of their diet.

They benefit from natural corners left in gardens and will make nests from leaves tucked under a log pile, bush or garden shed.

Using a trail camera is an excellent way of recording their night-time activities.

Mole Talpa europea

Present throughout Wharfedale with molehills obvious. They are present everywhere soil is deep enough for tunnelling although likely to be less common in coniferous forests and on moorland where their prey, mainly earthworms, is scarce.

More molehills are likely to appear in spring as a result of males constructing new tunnels as they search for females and in autumn as they extend tunnels to find less plentiful worms.

Females give birth to three to four young in the spring which, after about six weeks, disperse from their mother's range, travelling above ground when they are at greatest danger of predation from owls, buzzards, stoats, cats and dogs.

Mole numbers are difficult to estimate but they are thought to number between 30 and 40 million.

Common and Pygmy Shrews Sorex araneus and Sorex minutus

Difficult to tell apart with common shrews being larger and tricoloured with a light yellow-brown stripe between the brown upperparts and the white underside while the pygmy is simply brown above and white below – characteristics that are not easy to spot! Pygmy shrews are more likely to occur on moorland and rarely within woodland.

A shrew found under a piece of corrugated iron at OWRN was thought to be a common as were the remains of a shrew found in a barn owl pellet in Weston churchyard (RP). Dead common shrews were found at Burley and near Stainburn.

On 30 May, "Grassland NE of Bastow Wood appeared to be bristling with shrews with movements in the grass, a lot of squeaking and a brief glimpse of a common shrew sized body" (HW).

BATS - CHIROPTERA

There are 17 species of bat in the UK with ten recorded in Yorkshire. With their calls at a frequency above our hearing range, a bat detector is crucial to pick out the peak frequency of their calls and transform it to within our audio range.

Identifying bats also relies on size, flight pattern, habitat and emergence time after sunset.

Our few records are likely to underestimate the species present in our area.

Common Pipistrelle Pipistrellus pipistrellus

Reported from several sites around Otley, Menston, Ben Rhydding Gravel Pits and the edge of Ilkley Moor. The biggest numbers were recorded from the wood edge at Tumble Ings on 31 March, Lindley Bridge on 20 July and around St Oswald's Church at Leathley on 21 July.

Soprano Pipistrelle Pipistrellus pygmaeus

Only separated from common pipistrelle in 1999, based on a higher peak frequency of its echolocation call (55 compared to 45 kHz). Identified from one site in Otley, at Lindley Bridge, Menston and Ben Rhydding Gravel Pits,

Brown Long-eared Bat Plecotus auritus

Said to be the most common bat after the two pipistrelles but difficult to pick up on a detector because their calls are so quiet. They are thought to often hunt by hearing and sight without using echolocation and will take large moths, at times picking them off vegetation. Large yellow underwings (the most abundant moth in our area in 2020 with 257 records totalling 6837 moths) are a favourite with just the wings left behind.

Only recorded this year from Lindley Bridge.

Daubenton's Bat Myotis daubentonii

They typically live in buildings or under bridges close to rivers and lakes, emerging to fly low over the water, at times picking insects off the water surface with their feet.

They were recorded from Otley Bridge, Lindley Bridge and two of the small bridges on the Washburn upstream from Lindley Wood Reservoir. A probable Daubenton's was seen over the Wharfe towards Pool.

Noctule Bat Nyctylua noctula

The largest bat found in Yorkshire, one of the first species to emerge in the evening and one that occasionally flies by day.

On 31 March, one of the warmest March days for years, eight large bats, presumed to be noctules, were feeding in broad daylight over the southern end of Lindley Wood Reservoir, presumably attracted by emerging insects (AJ).

They were also recorded from two sites in Otley, at Leathley and at Ben Rhydding Gravel Pits.

RABBITS AND HARES - LAGOMORPHA

Rabbit Oryctolagus cuniculus

Rabbits were widely reported from the length and breadth of Wharfedale, from Menston and Otley in the south up to Oughtershaw in the north. However, several observers commented that they seemed less common than previously although, because people have got so used to seeing them, often in large numbers, they have been underreported in the past so there is no baseline for comparison. There certainly seem to be deserted warrens in a number of locations.

The effect of myxomatosis on rabbit numbers has been well documented with the introduction of the disease in 1953 killing

off 99% of the UK population of 100 million. It continues to kill off many rabbits today. In 1995 a government survey estimated numbers were back up to 37 million before rabbit viral haemorrhagic disease (RVHD1) caused another fall-off in numbers. The population recovered again but a new and more deadly strain of haemorrhagic disease (RVHD2) has been spreading through the UK since emerging from commercial rabbit farms in France in 2010 and is being blamed for a huge decline in the wild rabbit population. A vaccine for the disease is available for domestic rabbits.

Rabbits are considered a pest for the damage they do to crops but they play an important part in the food chain for many predators.

Black rabbits, a melanistic colour phase regularly seen in the wild population, were reported from High Royds.

On 33 May a rabbit was seen chasing a stoat across the hillside at Conistone Dib, a rare example of the tables being turned (HW).

An internet search came up with dozens of examples of stoats chasing and usually killing rabbits but only two of a rabbit attacking a stoat. One from 2007 described a buck rabbit harassing a whole family of stoats. Another was shown on BBC Springwatch from 1/6/2016 and is well worth a watch!

During the breeding season, buck rabbits can become aggressive with one another over territory and breeding rights so maybe they occasionally vent their aggression towards other opponents.

Brown Hare Lepus capensis

Hares appear to be doing well in our area with 57 records received from a variety of open habitats. The most sightings came from OWNR and adjacent fields and other reports from Menston, Leathley and Weston. From more upland areas there were records from Hawksworth, Rocking, Burley, Middleton, Draughton, Yockenthwaite, Barden and Grassington Moors, Hawksworth Clowder as well as around Timble Ings. Most were of one or two animals but with others of three to six and the biggest number recorded nine at Ellercarr Pike (P&AR).

Brown hares arrived in Britain about the time of the Romans but their numbers have fallen by 80% in the last century as a result of pesticide use, intensive farming, hunting and disease.

There is recent cause for concern about their numbers with over 1100 dying since 2018 from a 'viral cocktail' thought to consist of a form of myxomatosis as well as the more virulent form of rabbit haemorrhagic disease (RHDV2) with both diseases jumping from rabbits.

A hare with large tumour-like swellings on its face and neck was seen opposite Ben Rhydding (HW).

On the continent other viruses have emerged to threaten brown hares in both France and Spain. Researchers have pointed out that there has been a proliferation of dangerous viruses jumping from industrially farmed animals into wild species with the potential to transfer across species including into humans as has happened in the coronavirus pandemic.

RODENTS - RODENTIA

Grey Squirrel Sciurus carolinensis

Common in deciduous and mixed woodland and in many gardens especially in the south of our area. They are so numerous as to be underreported. The maximum was six at OWNR (PP).

The UK population is estimated to be 2.7 million and still increasing. In the north of our area in 2004 red squirrels were found to be present alongside greys in Greenfield Forest in

Langstrothdale. With the conifer habitat much better suited to reds, a grey squirrel control programme was instituted in 2009 with the result that there is no longer a resident population of greys at Greenfield. Occasional records of greys are thought to be of animals moving in from upper Wharfedale.

Although their main diet is large seeds from a variety of trees they find the easy pickings from bird feeders irresistible and show themselves to be excellent problem solvers in thwarting obstacles placed in their way.

During the early summer when their supplies of stored seeds, usually buried underground, run low they are likely to turn to a variety of other food from flowers, buds and birds' eggs and nestlings. In one Ilkley garden they were noted as having a taste for strawberries and columbine heads (D&ML).

In another garden, when presented with a less familiar food item, a Malteser, a squirrel licked off the chocolate coating but abandoned the honeycomb centre.

Red Squirrel Sciurus vulgaris

According to WNS records, "Between 1949 and 1955 red squirrels were still being seen around our area. By 1969 however, grey squirrels were being seen in all areas and reds had virtually vanished."

They have been back in our area since 2004 in Greenfield Forest which was designated as England's seventeenth Red Squirrel Reserve in 2008. An exclusion zone of 5 km is maintained around the reserve within which greys are culled to prevent contact between the two species.

A fascinating account of the setting up of the Greenfield Reserve, the challenges it faced and how they were overcome, is related in the Greenfield Red Squirrel Report 2020 which can be found online.

Greys carry a viral disease, squirrelpox, to which they have developed immunity. The reds have no such immunity and the disease is swiftly passed on when reds and greys come together. The reds are usually dead within five days.

Last year there was a southward expansion of red squirrels with six records following roughly the path of the Wharfe from Kettlewell to Ilkley with several backed up with photographic evidence. Ominously, one photo showed a red squirrel on a bird feeder with a grey looking on from an adjacent wall. There were no records after 2 September.

This year there has been just one record of a red squirrel in the south of our area, of one photographed in a garden at Norwood Edge, with the exact location not disclosed by the householder (record passed on by RS, Harrogate mammal recorder). There is a large conifer plantation nearby and it is possible that this individual was a survivor from the 2020 expansion. However, with greys in the area, a red would inevitably come into contact with them once it abandoned the sanctuary of the pines for the easier pickings of bird feeders and it would be unlikely to survive for long.

To see wild squirrels within our area it is probably easier to see them at Nethergill Farm at Oughtershaw which welcomes visitors. It is adjacent to Greenfield and reds have been encouraged on the farm by the previous and present owners and they are still seen there regularly (H&MT).

A little further north, in Wensleydale, there is a red squirrel viewing area at Snaizholme, part of the Widdale Red Squirrel Reserve, just three miles southwest of Hawes.

Captive reds can be seen further south at Kilnsey Country Park where there is a captive breeding programme.

Wood Mouse Apodemus sylvaticus

Also called Field Mouse or Long-tailed Field Mouse in some books.

The UK's most common and widespread mouse but mainly nocturnal so not seen as often as its population numbers (38 million) might suggest.

Recorded from gardens in Otley, Burley and Ilkley, sometimes during the day but more often by a trail camera set up to focus on sunflower seeds to lure them out of hiding. In one garden a ten second video sequence shortly after dawn picked up both a wood mouse and a bank vole.

While their main habitats are woodland, fields and gardens they will enter houses. They occurred occasionally in one Otley house although having been caught and returned to the garden they did not usually return.

House Mouse Mus musculus

Only one record: A greyish coloured mouse in a garden at Appletreewick was assumed to be a house mouse rather than a wood mouse (HW).

They are most commonly found in buildings and apparently have a stable UK population of about 5 million, well below that of the wood mouse. However, they at times experience a 'boom and bust' cycle so numbers can be difficult to estimate.

Field Vole Microtis agrestis

Perhaps our most common small mammal with an estimated population of 75 million but seldom seen. It can be difficult to distinguish between field and bank voles, the field vole having a greyish-brown back and a shorter tail. They are more likely to be found in grassland and moorland but the two voles can overlap.

Barn owl pellets from Weston Churchyard in March contained remains thought to be of field voles (RP). One was found dead at Menston while a pellet on Burley Moor contained remains thought to be of a field vole. Another, flattened on the pavement at Menston was identified by its teeth and tail length.

Two voles glimpsed on 27 May while searching for adders in the Upper Washburn valley were likely to be field voles.

Voies are a very important food source for many predators especially for owls with their pellets providing important evidence of their diet. Back in 2008 the remains of 64 were found in long-eared owl pellets from Timble Ings and in 2010 Nevil Bowland analysed 33 barn owl pellets and found the remains of 99 small mammals reckoned to comprise 94 field voles, two common shrews and three wood mice.

Bank Vole Clethrionomys glareolus

More reddish-brown on the back and nape with a longer tail than the field vole but also seldom seen despite its large population.

One was found under a corrugated iron sheet at OWRN (PP), one was dead in a garden at the edge of Ilkley Moor (D&ML), while a trail camera in an Otley garden recorded them occasionally. One that appeared with a wood mouse was smaller and darker with slower, more jerky movements than the mouse.

Water Vole Arvicola amphibius

Once quite common along the Wharfe and on streams from Ilkley to Pool, their disappearance by 1988 has been linked to the arrival in the wild of American mink. Pollution and habitat destruction have also played a part.

They are now classified as Endangered (one rank below Critically Endangered and two below Extinct on the Red List for Britain's mammals).

They have been successfully introduced at Malham Tarn and, in September 2020, 100 were released to the ponds and ditches of Timble Ings by Yorkshire Water after studies to make sure there were no mink in the area. This summer, 100 more were released not far from the first site. They had been bred in captivity from northern and Scottish animals, these being judged to be of sterner stuff than their softie southern counterparts and better able to withstand Yorkshire conditions.

On 24 September eight WNS volunteers attended a training day at Timble Ings, run by Phil Tennyson of Yorkshire Water, to learn how to detect the presence of the voles by finding their burrows, feeding signs and latrines. Despite a morning of drizzle, several burrows were found although no voles were seen. A lot was learned about them, so for instance: they are roughly the size of a brown rat but with a blunter nose and much less prominent ears, that they swim with heads and backs above the water (rats swim well with only heads above the surface), that they do not swim around like small beavers but tend to enter the water to escape predators, that males are fiercely territorial and will fight to retain their rights.

On 8 October a trail camera left for two nights beside a ditch where burrows had been found, picked up no voles. It did record a couple of dogs despite notices asking owners to keep their pets on a lead.

Water voles are certainly elusive although hopefully as they become better established they will be seen more often.

It is hoped to run another training day in 2022 at Timble Ings in conjunction with Nidderdale AONB.

Brown Rat Rattus norvegicus

Brown rats originated in central Asia and arrived in the UK in the 1700s since when they have settled down to live alongside us while mainly staying out of sight. As a major pest of stored food and the carrier of human diseases, such as plague and Weil's disease, they are persecuted. (The black rat, introduced to the UK in Roman times tends to live only in buildings and has been almost totally eradicated.)

In the absence of humans, brown rats prefer damp environments such as river banks and this year there were several records of them along the Wharfe from both Ilkley and Otley.

A tiny number are thought to live in houses (0.5%) while perhaps 3% live outside in gardens and compost heaps. There were reports of them seen in gardens, allotments and in Wharfemeadows Park in Otley as well as in gardens in Burley and Ilkley..

The total population of urban rats is estimated at about 3 million with 7 million more found around farms. The grand total for the UK comes to about 10 million so only one rat for every six people!

CARNIVORES - CARNIVORA

Fox Vulpes vulpes

There were ten records of foxes in the southeast of our area with single animals seen at OWRN,

Otley Golf Course, Farnley Hall Woods, and near Lindley Wood dam. Another was caught on a trail camera at a badger sett in the Washburn valley, either just passing through or emerging from a burrow (Foxes will sometimes live in part of a badger sett not being used by badgers at the time).

Their smell was picked up at OWRN and near Leathley by RP (Fox urine and liquid produced by their musk gland used for scent marking has a 'pungent skunk-like odour'), who also

noted fox tracks in the snow and evidence of a pheasant eaten by a fox.

One was dead at the roadside near Knotford Nook.

There was one sighting from a little further west, from Askwith, another from Thruscross crossroads but none from around Burley or Ilkley. The only other record was from the far north of our area with one seen at Nethergill Farm in Langstrothdale.

The preponderance of records from the extreme southeast of Wharfedale raises the question as to whether this is because many of these foxes are overspill from north Leeds, just a few miles away, where there is a high concentration of urban foxes as a result of the number of fast food outlets and restaurants. Fox families in urban areas can hold territories as small as 0.2 sq km, compared to up to 40 sq km in open country. This urban concentration must inevitably put young animals under pressure to move out. Perhaps most of our foxes these days are semi-urban. Drivers heading into Leeds in the early morning have sometimes met foxes trotting in the opposite direction, oblivious to the traffic and presumably heading home after a night on the town!

There was a similar pattern last year with only one record from upper Wharfedale, one seen at Grass Wood by CH who commented that neither she nor other people on the working party had seen one there before.

Statistics suggest that the fox population is stable at about 430,000 animals of which 150,000 live in towns and cities.

Stoat Mustela erminea

There were a dozen records from lower Wharfedale with five of them from different parts of the Washburn Valley including one report of two animals, two sightings from OWNR, one from Sun Lane, one from near Nell Bank, one from near Menston and others from West End and Askwith Moor.

There was an unconfirmed report of a stoat seen regularly next to the children's play area in Wharfemeadows Park, Otley.

Further north there was one at Nesfield while in upper Wharfedale one was near Kettlewell while stoats were seen regularly at Nethergill Farm.

A stoat was seen on Burley Moor by HW scampering about in the heath and leaping after grouse. She also reported the rabbit chasing a stoat that has already been mentioned under the section on rabbits.

Weasel Mustela nivalis

Despite stoats and weasels having similar British populations, thought to be between 400 and 500,000 for each, weasels are typically reported less often, perhaps because their hunting methods take them more into the enclosed spaces of stone walls and burrows and less into the open.

They tend to be seen most often streaking across roads as was the case with one seen near Stump Cross Caverns (JW). Others were reported from West End and Askwith Moor Road (KW) and from Nethergill Farm.

One found dead beside a track from Red Gate to Harden Gill in the upper Washburn had a squashed abdomen and, with almost no motor traffic, could only have been run over by a bicycle speeding down the slope, a bizarre end for a creature normally so quick and alert.

American Mink Mustela vison

Mink have been present in Wharfedale since at least 1988. There were a few sightings this year.

One was seen close to the suspension bridge below Hebden on 22 July eating a crayfish, a photo showing it to be all dark

with a touch of white on the chin and a pointed face. It was thought to be smaller than an otter (Otters are much larger with much more white down the front and a snub-nosed look) (P&SW). Otters are regularly seen along the same stretch of river.

Another was seen running along the side of a beck at Menston on 9 November, the alert to its presence being sounded by wren and robin alarm calls (AD).

One was seen occasionally along the river at Ilkley (SW).

A trail camera set up overnight at OWNR on 11 November at an otter spraint point recorded a mink but no otters. The previous year the trail camera at the same place picked up a fox sniffing round before otters appeared later. Many predators are keen to investigate scent markings left by their competitors.

There was an unconfirmed sighting passed to SC of an adult and a young mink in the Castley area.

It is interesting that, in two of the sightings mentioned above, mink were not put off by the presence of otters in the same area although there are reports of otters displacing and in rare cases killing mink in direct combat. There is a theory that mink are less likely to hunt fish and to stick to terrestrial prey to avoid confrontation with otters where the two occur side by side.

It is thought that one of the factors behind the expansion of mink was the collapse of otter numbers in the 1950s and 60s when they were almost wiped out by the build up of toxic chemical pesticides in the food chain.

Recent research has shown that, for the first time in 40 years, otters are displacing mink with the decline in mink numbers in southern England estimated to be as high as 50%. From a peak of 110,000 in the 1980s mink may now number as few as 40,000.

Polecat/ Ferret/ Polecat-ferret Mustela putorius

A ferret is a small, half-domesticated polecat bred to catch rabbits and rats, originally derived from the wild European polecat. The ferret is sometimes regarded as a subspecies of the polecat, *Mustela putorius furo*, although the domesticated ferret and the polecat are genetically identical and should therefore be treated as one species. Most captive ferrets are albinos although feral animals often revert to the more natural colouring.

Polecats and escaped ferrets will interbreed giving rise to polecat-ferret hybrids which often closely resemble pure polecats although often with cream patches on the throat.

Over the last 13 years there have been just four records from our area: one dead animal on the A65 near Chelker Reservoir in 2017, verified as a polecat by a national expert, three polecat-ferrets (two in 2008 – one at Grassington and one at Beamsley, one in 2012 near Leathley) and two dead ferrets together near Burnsall in 2011.

This year there have been two records. A polecat-ferret was caught in a trap set for grey squirrels at Nethergill Farm, identified by a conservation officer and released (H&MT). The second was of a blond feral/escapee ferret on Askwith Moor (KW).

Polecats were almost exterminated in Britain by 1915, killed for their fur and persecuted by gamekeepers. The population was reduced to about 5000 but has recovered to more than 46,000. There is a population, originally reintroduced, in Cumbria, not far from our area. They can occur anywhere so watch out for a mustelid with whitish ears, eyebrows and muzzle giving a 'bandit-mask' appearance.

Otter Lutra lutra

From 1948 to 1998 no otters were recorded in Wharfedale at a time when their numbers nationally dropped catastrophically as a result of poisoning by organochlorine and organophosphorus pesticides. Their numbers have since gradually increased until now they are widespread along the Wharfe.

At OOWNR, the first sighting was of two, probably cubs, on 4 January (AK) followed by three on 25 January (AJ) as well as other sightings of single animals and otter spraint and tracks. There was a report of a dead otter cub found at OOWNR in February which had been removed by the next day (RM).

A trail camera left overnight at OOWNR on 1 March twice picked up a single animal.

Along the Wharfe at Otley excellent photos were taken by SC on eight occasions: a mother with two cubs twice with the others of single animals, the sightings being spread from Otley Mills down to Gallows Hill with most around the weir.

Since the construction of the Garnett Mill housing estate and the riverside walkway at Otley many other people have seen otters on a regular basis.

Around Ilkley, RH who recorded otters on multiple occasions last year downstream of Ilkley Bridge, did so again with 15 sightings of a single animal in August and September, the first one being of a female collecting and carrying grass, probably as bedding for a natal holt. There were no sightings after heavy rain and the river rising in early October so she was hoping that the mother had moved any cubs to a more secure holt.

Also at Ilkley, SW saw a couple regularly in the second half of the year which he thought from their size could be siblings or a small mother with a well grown cub. They were last seen on 11 December.

Otter prints were seen beside the river at Bolton Abbey on 23 February (GH).

Further up the valley, otters were seen regularly on the Wharfe at Hebden close to the suspension bridge which has been a popular site for some years (P&SW) and there were reports of them from the beck at Linton and below Grassington Bridge.

While otters are re-established along the Wharfe, there is no room for complacency in view of the continuing scandal of the discharge of raw sewage from water treatment plants. When combined with agricultural run-off heavy in fertilisers and pesticides, this is in danger of sending our rivers back to the bad old days with disastrous effects on everything from microorganisms to top predators.

Badger Meles meles

In lower Wharfedale, regular visits were made to six badger setts. All were active with at least five of them producing cubs, usually two or three.

Three trail cameras set up at one of them for two nights recorded a lot of activity with the badgers displaying interest in the cameras. One camera ended up pointing at the sky while another recorded extreme close-ups and was smeared with earth from a muddy nose.

At one sett, SW photographed a badger carrying a dead bird, probably a crow, into the sett – unusual behaviour for badgers rarely carry food back. They are opportunistic feeders, usually eating food where they find it and will eat many dead animals they encounter with the main source probably being roadkill.

Away from the setts, an adult and two cubs were seen near Askwith (KW). One was dead on the road between Pool and Riffa close to where one was found dead in 2020 (PP).

Further up Wharfedale, at Burnsall, a sett had fresh bedding outside indicating it was active. Close to the sett a badger had drowned in a beck (GH).

A badger was seen crossing the road at night near Appletreewick (HW). Badger prints were noted at Grass Wood (D&NF).

The national badger cull continues although so far Yorkshire has been spared. It has been in progress since 2013 and, with new licences issued this year which run until 2025, the total number killed could go beyond 200,000 out of an estimated UK population of 485,000. This is despite the most comprehensive study of the effect of badger culling on bovine TB in cattle, commissioned by the government and which ran from 1998 to 2006, concluding that “badger culling can make no meaningful contribution to cattle TB control in Britain.”

The general public, hundreds of politicians, dozens of leading scientists and every wildlife charity oppose it. Parliamentary debates in 2012 and 2014 to stop the cull were passed by 147 to 28 in the first and by 219 to 1 in the second but both were ignored by the government.

The most easily understood summary of the main arguments for and against the badger cull is probably the ‘Badger Cull FAQs’ on the Wildlife Trust website.

DEER - CERVIDAE

Roe Deer Capreolus capreolus

There were 70 sightings this year, slightly up from 61 in 2020 and far more than the 31 in 2019.

Records were spread throughout the year with most (60) from lower Wharfedale, distributed between the Washburn Valley, OOWNR, Farnley Hall Woods and other areas around Otley, Leathley, Menston, Timble Ings. There was just one record from Ilkley.

The largest groups seen were 5 on the Chevin, 4 on Otley Golf Course, 4 at Rougemont Carr at the most easterly point of our recording area, 4 at Dob Park Wood and 4 regularly in a field at Menston.

There was just one report of fawns, a female with two small young, at OOWNR on 23 June (PP).

Further up Wharfedale, there were three sightings at Grass Wood, one at Skirethorns and one at Cowside Beck in Langstrothdale.

Other deer species

There were no confirmed reports of other deer species but KW reported rumours of red deer being seen above the Valley of Desolation and of an occasional sika deer around Bolton Abbey.

A probable red deer was seen on Denton Moor last year and a possible muntjac opposite Ilkley with a skull found in 2012.

Feral herds of fallow and red deer have been introduced at various places not too far outside Wharfedale. Muntjac have been confirmed in other parts of Yorkshire and there is a feral population of sika in the Forest of Bowland. It would be worth paying attention to any deer bigger (red, fallow and sika) or smaller (muntjac) than our familiar roe deer or spotted (fallow and sika).

AMPHIBIAN REPORT

CAUDATA – NEWTS

Great Crested Newt Triturus cristatus

The only reports this year were from Otley with two different populations, one south of the river at Gallows Hill NR and the other north of the river in a garden pond at Riverside Park.

At Gallows Hill, eggs were seen on 7 March, then small numbers of the newts themselves on subsequent dates in March and early April with a maximum of 6 males and 2 females (GH).

The numbers were greatly reduced from 2020 when 32 males and 4 females were counted on 6 April.

Disturbance by dog walkers could be a factor.

In the Riverside Park pond, 3 males and 2 females were present on 22 March.

There have been no surveys since 2018 at Nell Bank where they were introduced from 2009 to 2011.

Palmate Newt Lissotriton helveticus

Dozens of palmates appeared in all four ponds in a Riverside Park garden on 5 March with ice having just melted at the end of a very cold spell. With the adults were a few newt tadpoles which had overwintered in the ponds, not having completed their metamorphosis to adults by the previous autumn.

Numbers in these ponds peaked at 160 on 22 March with many clustered around frogspawn laid by about 30 frogs. The newts were nibbling through the jelly, which they left, to eat the eggs and tadpoles.

Newts and frogs can have a boom-bust relationship so ponds with lots of newts tend to have fewer frogs.

Another pond in a Riverside Park garden also had lots of palmates.

Across the river, smaller numbers were counted at Gallows Hill NR with a maximum of 7 males and 2 females. They were also reported from a garden pond in Burley and one was found under a log at Timble Ings.

Smooth or Common Newt Lissotriton vulgaris

Found at four different locations around Otley but only in small numbers with a maximum of 6 in a garden pond at St David's Road on 30 March while, at Riverside Park single males were seen in two gardens.

At Gallows Hill a maximum of 7 was counted on 15 March.

They were also reported from a garden in Burley.

Alpine Newt Ichthyosaura alpestris

An introduced species which seems to coexist happily alongside our native species. They are now common in ponds mainly south of the river.

In one Burley garden they were the main species (P&AR) while small numbers were reported from Gallows Hill NR with a maximum of 7.

ANURA – FROGS AND TOADS

Common Toad Bufo bufo

The only record of mass breeding was at Timble Ings on 31 March with hundreds spread over three ponds with lots of 'mating balls' and females on land carrying males on their backs heading for the water.

Given that these ponds are at higher altitude (250m) and presumably colder than those at what was another important site at Gallows Hill NR (altitude 50m) where mass breeding events have been recorded in the past, it is possible that breeding had taken place there earlier and was missed during

visits in mid and late February when only 2 and 4 toads were seen. On 1 April, 26 toads were counted, all males.

Another possibility is that Gallows Hill is being affected by disturbance as, since the completion of the nearby Garnett Mill housing development, the number of dog walkers has increased with most dogs being allowed to roam free despite notices explaining it is a nature reserve and asking for dogs to be kept on a lead.

Two mating pairs were on a pond at Stainburn Forest on 4 April and lots were recorded there at night on the road over the summer.

There were no reports from other known breeding sites at Low Dam in the Washburn Valley, High Royds in Guiseley and Owllet Park Road in Ilkley from which large numbers have been recorded in the past.

Single toads were recorded later in the year from Otley, Burley Moor, Ilkley and Grass Wood with ones and twos at Timble Ings.

Common Frog Rana temporaria

The first frogs with spawn were reported from Otley Chevin on 7 March with frogs and spawn then widely recorded from other areas around Otley including OWNR, Gallows Hill NR, Farnley, Dob Park As well as Timble Ings.

There was plenty of frogspawn on Ilkley Moor "with some laid in silly dry places."

Further up the dale frogs and spawn were reported from Yockenthwaite, Fountains Fell and Nethergill Farm.

In the summer, lots of frogs were on a track at Stainburn Forest after rain.

On 12 September, an enterprising frog in search of a cosy hibernation site hopped through PP's basement window in Otley only to be ejected.

REPTILE REPORT

Common Lizard Zootica vivipera

The UK's most common reptile, usually found on moors and grasslands, emerging from hibernation and most easily seen basking on sunny days.

They were widely reported by WNS members with other records courtesy of the Nidderdale AONB Adder Watch Survey.

On Burley Moor there was one on 10 April followed by 2 on 17th and 2 on 19th. Singles were also reported from Rocking Moor and the upper Washburn at three different locations. There were 2 at Thruscross Reservoir.

At Timble Ings, where pond construction linked to the water vole introduction is opening up the habitat to the lizards' advantage, singles and two doubles were seen at different locations with one of the doubles being photographed by DMCM. The largest number reported was also at Timble Ings where, on 18 August, 7 were together on rocks as well as one on a tree (HW).

Further up Wharfedale, on 3 April a total of 6 were counted on Yockenthwaite Moor with 3 on Fountains Fell, 3 at Barden Fell and one near Parceval Hall (GH).

Adder Vipera berus

Adder conservation in our area received welcome publicity when the BBC's Countryfile programme on 25 April included an item from the Nidderdale AONB Adder Watch Survey around parts of the upper Washburn.

Interviewed on the programme, WNS's adder expert David Alred described how on one day some years previously he had found 37 adders, while during a search the previous week he



had found just one. The interviewer and Kelly Harmar from the AONB survey were filmed searching a south facing slope and did eventually locate just one adder.

Some of the sightings detailed below were from WNS members with others courtesy of the Nidderdale AONB survey.

At a hibernation site near Thruscross, the first adder was seen on 7 March followed by 3 females on 17th, then three intertwined basking adders on 30 March. They were all adults with estimated lengths of about 60cm. Possibly the same 3 were in the same general area on 10 April, still basking but no longer together and much faster moving. A male and a female were seen at the same site on 25 April and three sloughed skins were found (AM). Single adders were seen around the site several times during the summer.

North of Thruscross in the moorland around the Washburn Valley, the Nidderdale AONB survey recorded adders on four visits with a population estimated to be at least 7 comprising 6 males and one female. A search in the same general area on 26 February 2020 by GH had found 6 males and 2 females.

In two visits to a patch of moorland towards Greenhow they saw no adders but did pick up 3 sloughed skins.

Adders are declining nationally and DA says that the fall in their numbers in Wharfedale has been noticeable from the 1990s onwards. Some of this is attributable to habitat destruction and fragmentation with conifer planting on south-facing slopes, eg. along parts of the edge of Thruscross Reservoir and at Timble Ings. However, this is not the only factor.

Adders hibernate, clustering together in groups, usually from October to March, but as the climate has become warmer they have tended to emerge earlier, making them susceptible if cold weather returns.

Nidderdale AONB covers a wide area and overlaps with the WNS recording area. More research into the state of the adder population is needed and the AONB Adder Watch Survey will run again in 2022. They would welcome more volunteers and anyone interested in joining is asked to contact Kelly Harmar at Kelly.harmar@harrogate.gov.uk. They will always be paired with another volunteer so would not be asked to work alone.

Slow Worm Anguis fragilis

Slow worms look like snakes but are actually legless lizards. They tend to be found in damp and boggy places on the edge of woodland or in tufty grasslands. They will bask in the sun occasionally but are mostly active at twilight and are often found hiding beneath rocks or logs and occasionally in garden compost heaps. They eat garden pests like slugs but many are killed by cats.

There were just two records this year. One was found in the upper Washburn area while searching for adders (AM). A very large one, possibly a pregnant female, was disturbed while strimming by a work party at Grass Wood (D&NF).

CONTRIBUTORS

Much as I would like to, it is not possible to acknowledge every individual record, especially for species where there have been multiple sightings. I am very grateful to the following individuals or couples who sent in records for the year:

David Alred (DA), Simon Carey (SC), Mike & Joyce Clerk (M&JC), Alison Davies (AD), Jenny Dixon (JD), Richard Falls (RF), David & Nyree Fearnley (D&NF), Gordon Haycock (GH), Carmen & Fred Horner (C&FH), Andy Jowett (AJ), Andrew Kelly (AK), David & Midge Leather (A&ML), Ros Lilley (RL), Richard Marsh (RM), Dave McMahon (DMcM), Alan Moore (AM), Denis & Margaret O'Connor (D&MOC), Ruth Paynter (RP), Paul Purvis (PP), Peter & Ann Riley (P&AR), Richard Stubbs (RS), Helen & Malcom Thomas (H&MT), Hazel Watson (HW), Jenny Watson (JW), Steve Westerman (SW), Patrick & Sally Wiegand (P&SW), Keith Wilson (KW).

Special thanks are due to Kelly Harmar for passing on reptile records from the Nidderdale AONB Adder Watch Survey.

Given that mammals, amphibians and reptiles are often seen infrequently, many contributors may have just a few records. I am happy to receive them by email, post, phone or conversation with paper records or spreadsheets equally acceptable.

Denis O'Connor

BIRD REPORT

Introduction

This year's report sees one very significant change. For the first time, data from the BTO's Bird Track and Breeding Bird Survey projects have been fully incorporated into the database and this review. This has led to a huge improvement in the coverage. Up to last year, we were averaging around 7-8000 records a year. Last year, a partial integration of BTO data, and a large increase in records from members, took that number to just under 13000. This year, even though members' submissions have dropped back again, the overall figure is now almost 20,000 at the time of writing, and is likely to be well over by the time all the year's records are in.

Whilst this will in the short term inevitably distort year on year comparisons (so any in here should be treated with caution), that's a minor caveat compared to the advantages this will bring, enabling a better picture of what species we have in our area, where they are, and how they are faring. It will still be anything but perfect, but it's a big step in the right direction.

It certainly goes a long way to offset one recent concern, that of the serious decline in records from the northern region, particularly since the loss of the Upper Wharfedale bird recorder, in spite of some much appreciated efforts by local members. Looking at the table below, what really stands out is how the species and record counts for the north and Bolton Abbey estates have leapt forward. As something of a contrast, whilst Washburn records have almost doubled, the species count has barely changed, suggesting previously reasonably solid coverage. A slightly different picture comes from Otley Wetland: relatively little change in trends for both record numbers and species (which have both been gradually upwards), probably not surprising given the access limitations which means that there will be few people reporting to BTO who don't already report via WNS or through other channels.

Input to the database thus now comes from four main areas. Aside from the BTO, these are:

1. Records submitted directly by Wharfedale Nats members. Sadly, after a large pickup last year, the number has declined again this year, but they still represent the heart of the database, reflecting members' experiences and observations. In particular, there are about half a dozen or so individuals who submit a substantial amount of data regularly that provides important continuity and in-depth local information - indeed it's the loss of one or two of these stalwarts that has partly led to the decline this year (it should be noted that additional data are also received indirectly from other members who contribute to BirdTrack, saving the recorder a fair amount of work in some instances!).

2. Records from other local organisations. At the time of writing, this year's are almost exclusively from those kindly provided by the Addingham Environment Group. They are invaluable, providing in depth data for a local area. Addingham features a lot in this review!

3. Records gleaned from social media. Most of these are from local WhatsApp groups, who have kindly agreed to allow relevant sightings to be extracted. They are particularly valuable for providing records of scarcer birds, their value far outweighing the pure number of records derived.

At the time of writing the relative contribution of each source is:

BTO : 55%

WNS members: 25%

AEG: 13%

Social media: 7%

Please note that records are processed to try and avoid overlap. In particular, the BTO records go through quite a lot of filtering to ensure that data is specific to our catchment, and that records from other sources aren't duplicated.

And as a final note to this introduction: please read the notes on submitting data. This is at the heart of this report. No data = no report (and no knowledge!).

Some highlights

It's harder than usual this year to pick out highlights (and lowlights!), as year on year numbers are so affected by the change in coverage, so I haven't even tried except for the following:

161 is the highest species count since 2008.

Curlew were recorded in 90 locations, buzzard in 85 jackdaw in 84. These are the highest numbers for any species since locations were standardised in 2009, an illustration almost certainly of the increased coverage discussed above.

Species seen for the first time in over 5 years (with last year of sighting in brackets): quail (2012), ruff (pre-2010), sanderling (2010), jack snipe (2015), great northern diver (1999), water pipit (pre-2010), black redstart (2015).

Other species returning to the list again this year after an absence (year last seen in brackets): ringed plover (2019), Mediterranean gull (2019), yellow-legged gull (2018). white stork (2019), great white egret (2016), lesser spotted woodpecker (2019), yellow-browed warbler (2019), hawfinch (2018)

Species missing this year that were recorded in 2020: Egyptian goose, pintail, pochard, honey-buzzard, whimbrel, knot, spotted redshank, kittiwake, sandwich tern, Cetti's warbler

A 'lowlight' that unfortunately can be picked out: three species where numbers, both locations and records, have continued to decline in spite of the increase in data available: goldeneye, hobby and long-eared owl, bucking the trends for ducks, raptors and owls.

Species and sighting numbers

	Species	Sightings
North	118 (97,101)	4188 (1267,1289)
Upper Wharfe	68 (44,50)	360 (118,159)
Littondale	78 (45,47)	518 (126,138)
Grassington	112 (78,84)	1948 (512,444)
Grimwith	68 (48,53)	258 (100,115)
South	158 (153,149)	15499 (7458,5761)
Bolton Abbey Estate	113 (95,94)	2723 (633,666)
Washburn Valley	134 (132,128)	3097 (1347,1380)
Otley Wetland	104 (95,90)	2020 (1132,883)
South Wharfedale	148 (131,131)	7659 (4346,2832)
Overall	161 (155,152)	19687 (8725,7050)

The numbers of species and records for 2021 are summarised in the table above. For each region, North and South, figures are also given for four areas which have been historically tracked within each regions (those in the south make up the whole - they don't in the north as they don't include a couple sections of Wharfedale immediately north and south of the Grassington area). 3-year rolling averages for 2018-20 and 2017-19

respectively are in brackets, providing an approximate guide to recent trends).

Most commonly recorded species

Three species each recorded more than 3% of total record: blackbird, woodpigeon, and blue tit in that order. The next six were over 2%: robin, jackdaw, carrion crow, wren, curlew and mallard. Great tit made up the top ten, with chaffinch just behind. The top two raptors were next: buzzard then red kite.

Most widely recorded species

As last year, curlew and buzzard were the two most widely recorded species (90 and 85 locations). In order after that: jackdaw, woodpigeon equal with wren, carrion crow, blackbird equal with chaffinch, mallard and swallow made up the top 10, with another five at 70+ locations: oystercatcher, lapwing, black-headed gull, red kite and robin.

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).

Locations: Locations have been standardised for some years, so are comparable year on year. For each species, they for this year, with the last two year's figures in brackets, except for the most common. They are intended to give an indication of the strength and spatial diversity of the species population.

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.

Sources: The Society has been exchanging records with the Bradford Ornithological Group since 2011. The report also includes data provided by the Addingham Environment Group. The Society would like to thank these organisations and/or members for their contributions and advice.

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, 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.

BBS: The BTO's Breeding Bird Survey. Each survey is of a specific OS grid survey. The surveyor walks two defined transects across the square, and species are totalled. This is the count given. Surveyors carry out an 'early' survey, usually in late Apr/May, and a 'late' survey in June/early Jul.

Months are all abbreviated to their first 3 letters.

Notes on submissions

Contributions are welcome, and much appreciated, this report would be impossible without them! Please bear the following, mostly long standing, notes in mind, but do feel free to email the recorder to discuss any aspect!

The best single way of contributing bird records is via the British Trust for Ornithology's BirdTrack system - either online at home or via their app on one's mobile phone. This guarantees that the BTO receive this valuable information, and ensure that the data comes through to WNS in a reasonably easy format to process. 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.

Other formats are welcome, but please bear in mind that these will require manual transference into the records database. Please still bear in mind the submission notes with the templates: every year there are records submitted which cannot be incorporated into the records as they don't include sufficient or the appropriate information to enable their use. Voluminous handwritten notes can take a VERY long time to transcribe, whilst customised spreadsheets are a regular source of major headaches, in particular formats, functions and scripts! In fact, it's often easier to print out and re-enter data than try to reconfigure a complex spreadsheet!

Regular garden recorders please note that regular visiting birds will be concentrated into records of quarterly or monthly maximums, with indications of frequency plus any commentary notes.

Records and this review are forwarded to the Yorkshire Naturalists' Union and incorporated into their annual bird report; records are also submitted to the relevant environmental data archivists in North and West Yorkshire. If you generate a lot of records, you can greatly assist by submitting as soon after the event as possible, or in batches preferably monthly or quarterly. Please avoid submitting large amounts all at the end of the year.

Please submit reports from sightings prior to 31 October before the end of November at the latest, and sightings from November and December by Sunday 9 January, 2023. Inclusion in the report of any records received after these dates cannot be guaranteed. Sadly, every year records arrive too late to be included in the review, although they are later added to the database for future reference.

Acknowledgements

My huge thanks to everybody who contributed, either directly or indirectly. As said in previous years (but it definitely bears repeating), this report is only possible because of the work and commitment of many volunteers. As a small acknowledgement of that contribution, I have tried to list here all the names of those who contributed either directly and who have been referenced in the species reports (references use initials, except for those with abbreviations in brackets after their names). My apologies if you contributed via AEG or BirdTrack, but my whole-hearted thanks nonetheless.

Avril & David Benson, Aidan Smith, Andy Jowett, Andrew Kelly, Alan Tremethick, Chris & Joan Alder, Catherine Burton, Colin Harrison, Carmen Horner (Chr), David & Nyree Fearnley, David Dimmock, Darren Shepherd, Gordon Haycock, Helen Steward, Ian Condiff, John Armstrong, John Flood, Jon Middleton, John Mather (JMr), Karen Shackleton, Kevin Trigg, Mike & Joyce Clerk, Morgan Caygill, Philip Galtry, Peter Miller, Paul Purves, Peter Riley, Paul Singleton, Paul Wheatley, Richard Else & Hazel Watson, Richard Falls, Richard Greenwood, Ros Lilley, Steve & Juliet Amos, Susan Barton, Sarah Mumford, Steve Parkes, Tom & Ruth Paynter, Theo Keuchel.

BTO indicates a record sourced from BirdTrack, BBS refers to the Breeding Bird Survey (see nomenclature above). Grateful acknowledgement to both projects for the data received and used in this review. BirdTrack is organised by the BTO for the BTO, RSPB, BirdWatch Ireland, SOC and WOS. The BTO/JNCC/RSPB Breeding Bird Survey is a partnership jointly funded by the British Trust for Ornithology (BTO), Royal Society for the Protection of Birds (RSPB) and the Joint Nature Conservation Committee (JNCC), with fieldwork conducted by volunteers (including WNS members).

Species Reports

CANADA GOOSE *Branta canadensis*

28 locations (18,20) Common resident breeder and visitor

Otley Wetland remains the main site in our area, with the Washburn and Grimwith reservoirs also attracting numbers. All records in the north came from between Grass Wood and Hebden, with peak counts at Grimwith of 66 on 4 Mar and 50 on 8 Aug. At Bolton Abbey, up to 20 were seen throughout the first 7 months of the year, the last on 30 Jul. Birds were seen on all the main stretches of water in the Washburn throughout



Canada goose (PW)

the year, mostly in small numbers, but with high counts of 100+ at Thruscross on 19 Aug and 86 at Scargill on 16 Jun. There was a presence at Otley Wetland throughout the year; quarterly highs were 78 (10 Feb), 101 (23 Jun), 108 (26 Jul), and just 8 (15 Dec). Small numbers were seen at Knotford Nook, High Royds pond and Riffa pond, very occasionally on the Wharfe.

BARNACLE GOOSE *Branta leucopsis*

3 locations (1,1) Scarce

As many as three sightings is unusual in our area: a single bird was seen amongst other geese at Otley Wetland on 15 Mar (MC); a dead bird was found in fields between Burley and Menston on 4 Apr; and a small flock of 6 were recorded on Barden Moor on 28 Jun..

GREYLAG GOOSE *Anser anser*

44 locations (23,34) Common resident breeder and visitor

Widely distributed throughout our area, with extensive breeding, from Threshfield-Grimwith southwards, often in significant numbers. Present throughout the year on most reservoirs and larger lakes. In the north, the highest count of 143 was at Grimwith on 22 May, less than half the peak here last year. Peak counts in the Washburn reached 830 at Lindley Wood in Jul, whilst flocks of 150+ were seen overflying the autumn migration watchpoint at Snowden Moor. 500+ were recorded at Otley Wetland in Jan and Jun (both PP). Other spring/summer counts included 140 at Hawksworth Moor on 7 May, including 'an impressive creche' of 72 goslings with 13 adults (RE&HW), and 80 on Lower Barden in Apr.

PINK-FOOTED GOOSE *Anser brachyrhynchus*

15 locations (8,14) Regular passage migrant

Overhead skeins of this species were seen regularly throughout the spring and autumn migration seasons, often in the hundreds, from a number of locations, mostly along the southernmost edge of our area and over Stainburn and Sandwith Moors. Over 1000 were noted at the last on 27 Oct, and nine skeins of 1330 birds over Snowden Moor on 10 Oct. Sightings of landed birds were limited to small groups of up to

three birds at Knotford Nook and Otley Wetland at various times throughout the first quarter.

MUTE SWAN *Cygnus olor*

12 locations (10,13) Locally common resident breeder

A species very much of the southern end of our area. Otley Wetland and the adjacent river continue to see the largest numbers and most successful breeding. One pair was recorded in the north at Grimwith on 4 Mar, whilst the Washburn saw a single bird at Sandwith Moor (overflying?) on 6 Nov. Up to 17 birds were seen throughout the year at Otley Wetland, and 7 at Knotford Nook, with recordings of individuals upstream to Addingham and down to Pool Bridge. An initial 8 cygnets, later down to 1 or 2, were noted at Wharfebank Mills and Otley bridge in Apr-Jun. The pair at BRGS were slightly more successful this year after the canine deprecation of 2020; whilst most of the brood succumbed to otter or mink, survivors were noted (SP).

WHOOOPER SWAN *Cygnus cygnus*

16 locations (7,7) Uncommon but regular passage migrant

19 birds were seen overhead at Pool on 24 Jan, otherwise all sightings were during peak periods of movement in Mar-early Apr and Oct-early Nov, mostly over the Washburn and/or southern Wharfedale; 34 above Halton Gill on 1 Apr was the only northern sighting. A flock of 39 was seen on the water at Fewston on 23 Mar (JF), another smaller number later on in the week on Swinsty, and 8 at Thruscross on 3 Apr, the last of the spring. The only autumn 'landing' was 8 birds at Chelker on 23 Oct.

SHELDUCK *Tadorna tadorna*

7 locations (3,5) Uncommon passage /winter visitor

As in 2020, all but one record for this species were in the first half. Unlike last year, birds were recorded in the north, up to 2 birds at Mossy Moor throughout Apr, and a pair near Linton stepping stones from Apr to Jun. A singleton was also seen at Bolton Abbey on the last day of Apr. In the Washburn, up to 5 birds were seen at Kex Gill throughout Apr-Jun, but no breeding recorded this year. Southwards, Riffa pond continued as the most productive location, up to 2 pairs seen on several occasions throughout the spring. Similar numbers were at Otley Wetland in Feb-May, and a single bird on 13 Oct.

MANDARIN DUCK *Aix galericulata*

35 locations (20,26) Common resident breeder, winter visitor

This species continues to expand its range in our area, with the most northerly recording yet of a pair at Hubberholme on 6 Mar (JF). Bolton Abbey remains a centre of population, 30+ birds noted on several occasions, 59 on 10 Oct. In recent years, winter flocks have built up on Lindley Wood Rsr, although this year numbers were slightly down: 40 on 10 Feb, 44 on 10 Nov. Smaller numbers appear regularly on lowland stretches elsewhere throughout our area, whilst breeding is widespread; most notable were 13 fledglings seen jumping from a crack in an old ash tree at Bolton Abbey on 29 May, a pair with 12 ducklings at Burley on 16 May, and a female with 6 young at Otley 5 Jun (GH)..

SHOVELER *Spatula clypeata*

3 locations (2,3) Uncommon passage/winter visitor

Appearances are geographically varied and intermittent in our area, although there are usually one or two records each year. 2021 saw an immature drake at Knotford Nook from 24 Jan to 5 Feb (AJ), another drake at Otley Wetland for most of Mar (T&RP), and a third unusually far north at Hebden on 15 Apr.

GADWALL *Mareca strepera*

5 locations (3,6) Uncommon passage/winter visitor

This species seems to be steadily establishing a more consistent presence in our area. Up to 14 birds were recorded throughout Jan-Feb at Knotford Nook, with 15 returning at the end of Dec. At Otley Wetland, no more than 5 were recorded for most of the first third of the year, although there were 12 briefly around 24 Apr (T&RP). High Royds pond also saw a regular presence throughout the first 5 and last 3 months of the year, peaking at 8 at the beginning of Oct. A single female was seen on the Wharfe at Pool on Aug 30th, and 2 were at John O'Gaunts on 4 Oct (PR).

WIGEON *Mareca penelope*

14 locations (8,9) Common winter visitor, passage migrant

Otley Wetland continues to be our stronghold for this species, early winter numbers peaking at 216 in mid-Feb. Birds were late returning in the autumn, just 13 on 11 Nov, 64 on the 29 Nov, and 134 by the year end. Knotford Nook saw stronger numbers than in 2020, reaching 82 in Jan counts; there were 32 on Boxing Day. In the north, early/late season counts reached 88/30 at Grimwith Rsr, and 50/30 at Lindley Wood Rsr, whilst 40 were at John O'Gaunts in Oct. Individuals were also seen early season at Farnley Lake, and later at BRGP, Fewston and Thruscross Rsr. The only summer bird was a singleton at Scargill on 14 Jul (AJ).

MALLARD *Anas platyrhynchos*

(C - 76 locations) Common resident breeder, passage migrant, winter visitor

This species continues to be the ubiquitous year round water bird in our area. Highest counts were 100+ at Thruscross on 19 Aug, 94 at Hebden on 27 Dec, and 84 at Otley Wetland on 16 Jul. High Royds (42) and Saw Mill in Addingham (45) continued to show high numbers, bolstered by public feeding. Extensive breeding was also evident all along the Wharfe.

TEAL *Anas crecca*

15 locations (8,11) Common passage/winter visitor, occasional breeder

Whilst location numbers continued to rise after recent lows, most sightings remained in single digits, almost all outside the summer. Peak count was, however, 60 at Farnley Lake on 10 Feb (AJ), where there were otherwise 14 at most. Next highest was 16 at Kex Gill on 28 Feb. Northwards, up to 10 wintering birds were recorded at Grimwith, with single digit numbers also at Mossy Moor as late as 9 Aug. Almost all the larger stretches of water in the Washburn saw small numbers at various times, with 11 at Fewston on 23 Mar. Up to 9 birds were at Otley Wetland up to 26 Apr, 4 returning in late Nov. High Royds pond saw regular counts of up to 8, with 1 summer female on 7 Jul. Other sightings of up to 4 included Chelker Rsr, Knotford Nook, Lower Barden Rsr, and Strid Woods.

TUFTED DUCK *Aythya fuligula*

19 locations (13,17) Common resident, winter visitor; occasional breeder

In the north, 20 birds were seen at Kilnsey in Apr, with smaller numbers at Grimwith, Mossy Moor Rsr, Skirethornes and Grassington Moor throughout the first five months. Washburn sightings were recorded on most stretches above Fewston dam throughout the year, the highest being 16 at Kex Gill on 23 Mar, 10 at John O'Gaunts (Jun) and Scargill Rsr (Apr). Otley Wetland had a presence throughout the year, peaking at 38 on 26 Jan, whilst, at Knotford Nook, there were up to 41 birds (Jan) during the first 4 months. Other locations with small numbers included Chelker (14 on 31 May), Burley

Moor reservoirs (Apr-Jun), and Ilkley Moor (15 Mar).

SCAUP *Aythya marila*

1 locations (0,1) Rare passage migrant

Continuing on from the recording last year of a 1st winter male drake at Otley Wetland over the last 3 days of the year, this individual stayed on site well into Apr, last reported on the 21 Apr. It was joined by a similarly aged female 16-30 Jan. This is the first record for the species in our area since 2016.

COMMON SCOTER *Melanitta nigra*

3 locations (1,7) Scarce passage migrant

After the bumper year in 2020, a dip in 2021 was almost inevitable, although three records remain well above average. Birds were heard overhead in Otley on the night of 21 Mar, whilst one was briefly seen at Otley Wetland on 13 Apr (both MC). Four were reported on the water at Fewston on 9 Nov (BTO).

GOLDENEYE *Bucephala clangula*

4 locations (6,6) Locally common winter visitor, passage migrant

Both Knotford Nook and Otley Wetland support a regular population each winter. Knotford reached an unusually high count of 47 (15 Feb, AJ) just before the last sightings on 23 Feb. First returners were recorded on 26 Dec, with 14 on New Year's Eve. Otley numbers continued the lower trend noted last year, with counts in the first 4 months only once exceeding 18, 30 on 14 Feb (BTO). A single over-summering male was all that was seen between 17 Apr and 11 Nov, with 20 the late year high on 19 Dec. The only other sightings in our area were a female at Chelker on 15 Jan (PG), and a small group of 6 at Swinsty on 14 Oct (JA).

GOOSANDER *Mergus merganser*

35 locations (29,29) Common resident breeder, winter visitor

Widely present along the main river, with limited sightings elsewhere. Furthest north was a single bird near Hubberholme on May 1st, other individuals also seen in Littondale in Jan and Jun. 3 were seen at Mossy Moor in Apr. From Kettlewell southwards, up to 7 at a time were observed frequently throughout the year, with 10 at Grass Wood on 30 Mar (BTO). A pair was recorded on Lindley Wood throughout Q1; up to 8 were recorded over the Snowden Moor watchpoint Sep-Oct. Further south, birds were present throughout the year all the way down to Rougemont Carr (3 on 2 Feb) and on adjacent lakes, the highest count being 16 at Knotford Nook on 15 Feb (AJ). Breeding was noted at Strid Woods, BRGP (1 female with 9 young, SP) and Gallows Hill.

RED-BREASTED MERGANSER *Mergus serrator*

1 location (1,1) Rare visitor

Once a fairly regular visitor to our area, the only records since 2003 have been 4 birds at Grimwith in 2011, and a single drake at Otley Wetland at the end of 2019. Last year, a single bird was seen overhead from Snowden Moor during autumn movements. This year a single male was seen at Knotford Nook on 23 Jan (AJ).

RED GROUSE *Lagopus lagopus*

(C - 41 locations) Common resident breeder

This species tends to be taken for granted in our area, and is without doubt significantly under-reported, particularly actual numbers. With the decline/removal of shooting in the southern part of our area, highest numbers inevitably occur on the Devonshire Estate, with up to 100 noted mainly in the spring and early summer on Barden Moor.

BLACK GROUSE *Lyrurus tetrix*

2 locations (1,1) Scarce resident breeder

Records from the extremities of our catchment continue with one or two each year, and 2021 was no exception. A single bird was seen on Barden Fell on 8 Mar (PMr), whilst a distant male was heard displaying on High Green Field Knott above Foxup on 14 Apr (BTO).

GREY PARTRIDGE *Perdix perdix*

7 locations (4,2) Uncommon resident breeder

11 sightings represent a distinct increase on recent years. In the north, individuals were seen at Wood Nook and Stump Cross within 2 days of each other on 12 & 14 May. 2 birds were noted during a BBS count at Rocking Moor on 5 Jun, the same day another was seen on Stainburn Moor (AJ). Up to 7 birds were recorded on several occasions Apr-Sep on Burley and Hawksworth Moors (AK/RE&HW), whilst up to 2 birds were seen in Mar and Jun near Huby.

PHEASANT *Phasianus colchicus*

(C - 68 locations) Common resident breeder subject to extensive rearing/releases

This species is common in all varieties of habitats, including gardens, numbers artificially boosted by importation, artificial rearing and mass releases. Highest numbers continue to be reported from Grimwith, with 47 on 22 May and 37 on 4 Mar. 25 were reported from a garden in Ilkley on 9 Sep(A&DB)!

QUAIL *Coturnix coturnix*

1 location (0,0) Rare visitor and passage migrant

A quail was heard passing over Otley on the evening of 10 Jul (MC), the first record of this bird in Wharfedale since 2012.

RED-LEGGED PARTRIDGE *Alectoris rufa*

(C - 35 locations) Common resident breeder, all from released birds.

For a bird artificially introduced in such large numbers in our area, counts tend on the small side, although widely spread geographically, suggesting extensive under-reporting. The highest count recorded this year was 9 on Conistone Moor on 19 Dec. An unusual garden sighting was reported in Ilkley on 19 Mar (KS).

NIGHTJAR *Caprimulgus europaeus*

3 locations (2,5) Scarce migrant breeder

As in previous years, the large majority of reports were from Stainburn Forest, the first on 2 Jun. Up to 4 birds were then noted in a series of records to as late as 30 Aug, well beyond those in 2020. Up to 6 birds were at Barden Moor 31 May - 1 Aug, whilst a single bird was reported from Timble Ings on 16 Jul (BTO).

SWIFT *Apus apus*

(C - 51 locations) Common migrant breeder, passage visitor

First records were generally a week later than 2020, even more so compared to longer term averages; numbers remained low throughout the summer. The first sighting was on 30 Apr at Bolton Abbey (BTO), followed by another over East Otley the next day (TK). There was then a 4 day gap before several records on 5 May, including 6 over a Hebden garden (RL) and 7 at Otley Wetland (JM). Records were then almost daily until 16 Aug, when 20 were seen over Grassington. After that, 15 were over Pool on 30 Aug, one over the Chevin on 7 Sep, with another over Snowden Moor the next day being the last in our area.

CUCKOO *Cuculus canorus*

39 locations (16,30) Migrant breeder

The number of recorded locations has more than doubled in the past 2 years, probably reflecting better coverage rather than increased numbers. First 2020 records were on 23 Apr, 3 days later than last year but exactly on average and the same date as in 2019. One was heard on Burley Moor, the other seen on Barden Moor, both regular locations. In the north, individuals were heard throughout, as far up valleys as Greenfield, and Dawson Close and Cosh. There were recordings at both Bolton Moor and Fell 23 Apr to 12 Jun, up to 2 at a time. In the Washburn, aside from one bird heard early in May along Low Snowden-Norwood Bottom, records ranged only from 20 May to 7 Jun, birds being heard at Kex Gill, Thruscross, Fewston, Folly Hall Woods, and Timble Ings. 4 were heard across several of these in one walk on 2 Jun (PR). In the main valley, there were reports from north-eastern slopes between 26 Apr at March Ghyll and 18 Jun at Beamsley Beacon. Along the south-western side, in addition to that heard on Burley Moor throughout the season, others were noted at Addingham Moorside, above Heber's Ghyll, at Hawksworth Moor, and on the Chevin, where a juvenile on 4 Aug was the only post-Jun record of the year (RE&HW).

FERAL PIGEON *Columba livia*

(C - 20 locations) Common resident breeder

Records suggest that this species is under-recorded, but 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 Oughtershaw, Hawkswick and Kettlewell. Up to 14 birds were seen at Grimwith through the spring, whilst 30 were at Bolton Abbey on 7 Mar. Echoing 2020, all three Washburn records were of a handful (up to 5) resident at Long Liberty Farm near John O'Gaunts. By far the largest proportion of records were in the southern main valley with sightings throughout the year, almost all from gardens in Addingham, Menston, Ilkley and Otley, up to 30 in the first two. A population of 100+ birds is resident by the bridge at Otley.

STOCK DOVE *Columba oenas*

32 locations (12,17) Common resident breeder

Birds were seen right across our area, generally in single-digit numbers, with the exception of a flock of 22 recorded throughout the early months on Hawksworth Moor (AK). Recorded locations in the north rose from 4 to 16, and extended as far as Pen-y-Ghent and Hubberholme, the highest count being 7 at Halton Gill in Feb. Washburn records were limited to Apr-Jun at Kex Gill, Thruscross, Lindley Wood and Timble Ings, and the autumn migration watch at Snowden Moor (up to 9 birds). In the main valley, aside from the Hawksworth Moor flock, this was primarily a bird of garden sightings seen in most settlements, as well as at Otley Wetland.

WOODPIGEON *Columba palumbus*

(C - 81 locations) Common resident breeder

One of the most ubiquitous birds in our area; records increased from 150 or so to 368 last year, to 622 this year, which suggest perhaps how much this bird has been underreported! Most of these were of small numbers, but autumn migration watches in the Washburn reported into the thousands, with the Sandwith Moor daily count reaching 49000 on 2 Nov, another 27000 the day after, and 5000 on the 4 Nov. 12000 were seen at Snowden Moor on 22 Oct, with other days exceeding 1000 at both sites. Aside from these, largest numbers were 100 around Grimwith on 3 Aug, and 53 at Otley Wetland on 17 Mar. Present in virtually all reporting gardens, 10 proved the highest count, in Otley in Oct.

COLLARED DOVE *Streptopelia decaocto*

(C - 26 locations) Common resident breeder

First arriving in the 1950s, numbers peaked in the UK in 1999, since when there has been a steady decline. Generally reported in ones and twos, highest northern count was 5 at Kettlewell in May, all sites being along the Wharfe between Buckden and Burnsall, including Grimwith Rsr. On the Bolton Abbey estates, up to 2 birds were reported in 3 locations in Q2, whilst, in the Washburn, a single bird was seen at Timble Ings on 31 Jul. Most records were in the southern Wharfe valley, recorded predominantly in gardens in low single digits down as far as Weeton.

WATER RAIL *Rallus aquaticus*

1 location (1,1) Scarce resident breeder, uncommon passage/winter visitor

For the third year running, this species was only recorded at Otley Wetland, where up to 2 birds were reported most months. An adult was seen carrying food across the main reedbed on 6 May (AJ).

MOORHEN *Gallinula chloropus*

34 locations (16,27) Common resident breeder, passage visitor

Recorded all along the Wharfe up to Conistone Bridge, no more than 3 at a time north of Bolton Bridge, and highest counts of 20 at Addingham Low Mill and 9 at Otley Wetland. A well observed presence at High Royds pond peaked at 15, with young seen. In the Washburn, up to 3 birds were recorded on all major stretches, with successful breeding seen at John O'Gaunt's Rsr.

COOT *Fulica atra*

12 locations (5,5) Locally common resident breeder, passage/winter visitor

After two record low years, recorded locations more than doubled in 2021. Otley Wetland and Knotford Nook continued to be the main centres. The high of 45 at the latter was up on last year's 28, but still only half of the 2019 figure. The former's Aug high of 21 was a closer match to previous figures. Other sites included Threshfield (9), John O'Gaunts (8 and successful breeding, PR), various points between Barden and Bolton Bridges (up to 10), Riffa pond (4), and Kex Gill and Lindley Wood (singles).

LITTLE GREBE *Tachybaptus ruficollis*

16 locations (9,7) Uncommon resident, winter visitor; occasional breeder

Up to 5 birds were seen throughout the year at Otley Wetlands, and at John O'Gaunts in greater numbers, 14 on 10 Oct. As last year, the most northerly was at Grassington Bridge, birds seen on 9 Feb and Christmas Eve, with another reported on the Wharfe at Hebden throughout the first week of Nov. Others along the main river were at Low Mill Addingham on 10 Feb (AK), Burley, and regularly at BRGP. In the Washburn, 2 were at Farnley Lake in Apr, up to 4 at Kex Gill throughout the year, and individuals at Low Dam, Swinsty and Scargill Rsr during the spring. Elsewhere, there were reports from Burley Moor in Jun (RE&HW), and Chelker in Sep (AEG).

GREAT CRESTED GREBE *Podiceps cristatus*

7 locations (5,6) Common resident breeder, winter visitor

All records this year came from this species' regular sites at Knotford Nook, Otley Wetland, the Washburn reservoirs and Chelker. As usual, largest counts were at Knotford Nook, but only up to 4 this year, none after Apr. 1-3 birds were at Otley Wetland throughout the year. Up to 2 were seen on all of the

main Washburn reservoirs south of the A59, most regularly at Lindley Wood. Chelker produced a single sighting, on 9 Jun (AEG).

OYSTERCATCHER *Haematopus ostralegus*

72 locations (36,55) Locally common migrant breeder

Recorded the full extent of our area for the first 8 months of the year, an early assemblage at Hawkswick Jan-Feb reached 56; 48 were also seen at Kex Gill on 28 Feb. Mar saw a year



Oystercatcher (DoC)

high of 124 at Grimwith on the 4 Mar, almost matched by a regular grouping at Linton stepping stones, which reached 120. Numbers tailed off southwards: the Bolton Abbey maximum was 43, also in Mar, the Washburn's 35 at Thruscross in May, whilst south of the A59 there were 25 at Otley Wetland at the end of Feb. The only post-Aug record was an individual at Otley Wetland on 19 Dec (JA). Breeding was noted at Threshfield, Bolton Abbey and Low Mill Addingham.

LAPWING *Vanellus vanellus*

72 locations (34,50) Common resident breeder, winter visitor

Widespread throughout our area for the first 8 months, post-Aug records in the main valley were largely restricted to south of the A59. In the north, up to 32 (inc young) were at Threshfield at various times pre-Aug, whilst further south up to 100 were seen on Barden Moor in Jul-Aug. The only northerly post-Aug records were here (55, 20 Dec) and at Grimwith (10 in Nov). In the Washburn, the highest pre-Aug figure was 42 at Rocking Moor, but winter/autumn flocks along Sandy Gate and on Sandwith Moor were measured at 1000+ on several occasions. In the southern Wharfe valley, Jan-Feb numbers reached 240 at Knotford Nook, 150 at Denton and 280 at Otley Wetland; summer counts here were up to 150, autumn counts 250+. Large post-breeding counts were recorded on fields north of BRGP in Aug-Sep, up to 1000+ (SP).

GOLDEN PLOVER *Pluvialis apricaria*

37 locations (15,20) Locally common resident breeder, passage/winter visitor

First quarter records were largely limited to the south of our area, with flocks of 100-300 seen on Ilkley, Hawksworth, Middleton and Sandwith Moors, and 60 briefly on the Chevin; 250 at Greenhow on 9 Mar was the one exception. Apr-Jun records, mostly in single digits, extended through upper Wharfedale and Littondale, an exception being 50 at Cosh on 14 Apr. Last northern record was at Kettlewell on 11 Jul, last for the Devonshire estates on the 16 July. Southern numbers started to build up into the autumn, the daily count at

Snowden Moor reaching 2000 on 10 Oct. Large flocks were seen in Nov along Sandy Gate (1000+) and around Scargill (600), smaller ones of up to 50 on higher land along the southern Wharfe.

RINGED PLOVER *Charadrius hiaticula*

3 locations (1,0) Uncommon passage visitor, occasional breeder

Most sightings, up to 4 birds, centred on Grimwith 15 Apr to 3 Aug, 2 of those being at Mossy Moor Rsr, the others at the main reservoir (HS,DD). A single dead specimen was recovered from the roadside on the Chevin on 30 Marh.

LITTLE RINGED PLOVER *Charadrius dubius*

6 locations (5,6) Uncommon migrant breeder, passage visitor

As in 2020, the first and most northerly record was at the pool near Linton Church stepping stones, this year on 29 Mar, with up to 3 seen to 2 Aug (RL). 2 were also at Lower Barden 16 Apr to 8 May, another 2 at Grimwith (also 8 May, HS). In the Washburn, 2 were also seen at Swinsty 9 Apr to 22 May, at Fewston (14 Apr) and at Kex Gill (18 Jun),

CURLEW *Numenius arquata*

90 locations (48,66) Common resident breeder, passage visitor

We are fortunate in Wharfedale to be able to describe the curlew as 'common' and to have such a strong, widely spread population, although it's disturbing to see regular feeding areas so threatened with development. Early year counts were lower than in 2020: 105+ throughout Feb at East Otley (under threat) was the largest. During the summer, birds were scattered more thinly across the moors, counts rarely into double figures, although 45 were seen on Grassington Moor and 39 on Rocking Moor in Jun; little breeding was noted. The first larger autumn gathering, of 80-90 from 13 Jul onwards, was seen in Ings fields, nr Menston (under threat). The highest year count, 400 in fields north of BRGP, was recorded on 8 Aug, with 300+ regularly in fields between Denton bridge and Manor Park (some under threat) through the autumn.

BLACK-TAILED GODWIT *Limosa limosa*

1 location (1,1) Rare passage migrant

Following on from the sighting at the pool by Linton Church stepping stones last year (only the third in our area since 2012), up to 3 birds were seen in the same location 24 Mar to 1 Apr (RL).

RUFF *Calidris pugnax*

1 location (0,0) Rare passage migrant

This species has not been recorded in our area for over a decade. An individual was recorded passing the Snowden Moor watchpoint on 4 Sep (BTO). See Sanderling report below.

SANDERLING *Calidris alba*

1 location (0,0) Rare passage migrant

This species was last recorded in our area in 2010. An individual was recorded passing the Snowden Moor watchpoint on 4 Sep (BTO). The observer noted: "Low over the sheep field by the watch point a few seconds ahead of the Ruff, both new birds for the site".

DUNLIN *Calidris alpina*

4 locations (2,2) Uncommon passage migrant

This species consistently averaged 3-4 locations up to 2016. That dropped to just 1-2, but this year reverted to pre-2016 levels. Most records refer to up to 6 birds seen in the Grimwith area 15 - 24 Apr, several at Mossy Moor Rsr. Otherwise, 3 were seen over Norwood Edge on 20 Mar, whilst a flock of c40 was recorded at the Snowden Moor watchpoint on 5 Sep: "fast and

low over the ridge with Golden Plover in tow. Amazing record - poss flushed off one of the reservoirs to the NE"

WOODCOCK *Scolopax rusticola*

17 locations (6,6) Resident breeder, passage migrant, winter visitor

After 2 years with few records, locations trebled this year, up to 2018 levels. The Washburn continues to be the main centre for records, over half those received, Almost all were in Jun-Jul at Stainburn Forest (3 roding), exceptions being 2-4 at Timble Ings in Feb and Oct, and a late Dec bird on Askwith Moor which "flew up from under my feet" (PR). Elsewhere, up to 8 were seen round Barden Bridge through Jun-Jul, individuals at Otley Wetland (all Feb), Chevin (21 Apr), Grass Wood (various) and, furthest north, Conistone Dib (19 Nov). Two unusual contexts were one flying down the Leeds Road into Otley from the east on 3 Feb (the earliest record, AS), and another sat on the bridge wall at Blubberhouses Hall at midday!

JACK SNIBE *Lymnocyptes minimus*

2 locations (0,0) Scarce passage migrant/winter visitor

Having not been seen in our area since 2015, just like buses, two were seen in 3 days at the back end of the year. The first, a probable, was at Knotford Nook on 27 Dec (MC), the other, positively identified, was at Otley Wetland on the 30 Dec (JM).

SNIPE *Gallinago gallinago*

35 locations (13,15) Resident breeder, passage migrant/winter visitor

Early counts were largely restricted to Otley Wetland (6 max) and High Royds pond (3 max). The first of a steady stream of upland sightings was on 21 Mar at Hawksworth Moor, the first northern birds at Threshfield Moor 9 days later. Birds were widespread across our upland areas, as far as valley head slopes at Oughtershaw, Fountains Fell, Pen-y-Ghent and Cosh. Highest count was 8 on Denton Moor in Aug (AJ), whilst the last bird north of the A59 was recorded on 30 Jun at Cosh. Daily autumn migration numbers at Snowden Moor were largely in single figures, but topped out at 31 on 25 Sep. Other autumn sightings were limited to 2 back at High Royds pond in Oct, and occasional individuals/pairs at John O'Gaunts and Timble Ings.

COMMON SANDPIPER *Actitis hypoleucos*

39 locations (18,37) Common migrant breeder, passage visitor

Widely distributed, the first sighting was on 6 Apr at Barden Bridge, after which records were returned almost daily, until mid-Jul. 12 were at Grimwith on 23 Apr, 10 at Strid Woods on 5 May. Most northerly was one seen at Greenfield on 9 Jun. Birds were still widely seen, if less frequently, through to mid-Aug. After 22 Aug, the only record was a single bird at Otley Wetland on 6 Oct (JA), echoing the one seen throughout autumn last year.

GREEN SANDPIPER *Tringa ochropus*

4 locations (2,3) Uncommon passage migrant

2021 partially mirrored the past 2 years with records at Otley Wetland and in the Washburn area, with the addition this year of a sighting at Addingham. First up was at Otley Wetland 28 Feb to 7 Mar (MC). One was seen at Farnley Lake (AJ) on the 12 Apr, a first for this site - and the one at Addingham, on the 26 Apr (AEG). One was observed over Swinsty on 26 Jul (DS). Finally, one was seen at Otley Wetland 1 to 14 Aug, with another in the same location on 28 Nov.

REDSHANK *Tringa totanus*

26 locations (15,15) Uncommon migrant breeder, passage visitor

First of the year was recorded on 17 Feb at Otley Wetland (AJ), the next on 28 Feb at Barden Bridge, after which birds were seen almost daily until mid-Jun in all areas from Beckermounds to Otley, in small numbers (4-). 8 were at Mossy Moor in Apr. Later sightings were limited to a single bird at Grassington through the first half of Aug, and a flock of c50 at Stack Point, Swinsty Rsr, on 2 Sep "presumably passing through" (PR).

GREENSHANK *Tringa nebularia*

1 location (0,2) Scarce passage migrant

A single bird was seen flying over Otley Park on 22 Aug (AJ).

BLACK-HEADED GULL *Chroicocephalus ridibundus*

(C - 71 locations) Common resident breeder, passage/winter visitor

Easily the most common gull in our area, this species is widespread in large numbers throughout the year, and often ignored by observers. Significant counts included 400 at Otley Wetland (26 Jan), c160 at Hawkswick (28 Jan), 280 at Lindley Wood (16 Feb), 580 at Sandwith Moor (22 Mar), 400 on Barden Moor (15 Apr, inc nesting at Upper Rsr), 200 at Lindley Wood (10 Nov), 300 at Otley Wetland (15 Dec), 154 at Linton Mills (28 Dec). Large flocks are, however, also seen regularly at other locations (eg Knotford Nook), but are rarely recorded.

MEDITERRANEAN GULL *Ichthyaetus melanocephalus*

1 locations (2,0) Scarce passage/winter visitor

Most recent years have produced one or two sightings, although there was a break in 2020. However, 2021 reverted to the norm with a single adult at Otley Wetland on 13 Jan (AJ).

COMMON GULL *Larus canus*

26 locations (25,20) Common passage/winter visitor

Widespread in large numbers during winter months, this species occurs in only occasional single figure counts in the summer. Indeed, there were only 2 records in Jun (Addingham, Barden Bridge), 2 in Jul (Addingham, Threshfield), and 3 in Aug (Barden Bridge, Mossy Moor Rsr, Menston), never more than 2 birds. Early on, larger numbers were at Clifton (50+, Jan-Feb), Hawkswick (c40, Jan), Lindley Wood (80, Feb), Wescoe Hill, Castley (300+, Mar 2nd) and Sandwith Moor (900 max, Mar). The largest autumn counts, all smaller, were in the same areas, except the largest, 65 at Burnsall on 28 Dec.

GREAT BLACK-BACKED GULL *Larus marinus*

3 locations (1,3) Uncommon passage/winter visitor

Single birds were seen on 4 occasions through the year: 15 Apr near Grimwith Rsr; 11 Aug at Barden Moor; twice at Sandwith Moor, on 21 Oct and 2 Nov, possibly the same bird (all sightings BTO).

HERRING GULL *Larus argentatus*

25 locations (8,14) Uncommon visitor

Sightings appear to have increased in recent years, particularly in the north, where 7 locations produced reports (0 and 1 the past 2 years). mostly between Grass Wood-Lea Green and Appletreewick, but one seen on Pen-y-Ghent on 27 May. Most though remained in the south, with the largest concentration of records at Otley Wetland. Here there was a year round presence mostly 7 or less; exceptionally, there were 43 on 15 Feb (AJ) - probably the highest yet recorded here - and 16 on 25 Mar. An even higher 52 were at Knotford Nook on 29 Dec (AJ again). The only other double digit count was 12 at Wescoe

Hill on 2 Mar, mixed in with a large flock of common gulls. Small numbers were recorded throughout migration watch at Snowden Moor.

YELLOW-LEGGED GULL *Larus michahellis*

2 locations (0,0) Scarce visitor

Not seen in our area since 2018, one was near the year end on 28 Dec, an immature, in the fields next to Knotford Nook amongst other gulls (AJ).

LESSER BLACK-BACKED GULL *Larus fuscus*

58 locations (16,32) Common resident, passage visitor; has bred.

Recorded in every month except Dec across the full extent of our region. Most were in low single digits, although peak count reached 79 at John O'Gaunts on 16 Jun. Other larger sightings included 20 at Mossy Moor (22 Apr), 30 at Grassington (2 May), 50 at Swinden Quarry on 22 Jun (including many incubating), and 37 at Scargill (14 Jul).

COMMON TERN *Sterna hirundo*

2 locations (2,4) Uncommon passage/summer visitor; occasionally breeds

1-2 birds were seen at Otley Wetland on several occasions in May, whilst an adult and juvenile were recorded together here later, on 10 Aug. After a sighting of 2 birds at Swinsty in 2020 for the first time this century, 2 more were seen flying north here on 5 May, for the only sighting outside Otley Wetland (PR).

GREAT NORTHERN DIVER *Gavia immer*

1 locations (0,0) Rare passage/winter visitor

An immature was first seen on the southern lake at Knotford Nook on Boxing Day (AJ), and remained well into the New Year (so will feature in next year's review too!). The first in our area since 1999, and unusually confiding, it remained long enough to be seen and recorded by many during its stay.

WHITE STORK *Ciconia ciconia*

1 locations (1,0) Rare passage migrant / escapee

A single bird was seen at Otley Wetland 26-27 Feb by several observers (D&NF,CHR,T&RP). Later on 27 Feb, it was reported over Castley Lane near Pool (BTO). Once seen regularly in our area, usually as an escapee from Harewood House but no longer kept there, this is the 4th record here since 2008, and the earliest (others all Apr-May). All have been in the Otley-Burley area.

CORMORANT *Phalacrocorax carbo*

30 locations (13,25) Common resident/visitor; occasional breeder

After several years of decline, recorded location numbers continued to recover, with sightings spread evenly along the Wharfe from Grass Wood southwards. Six birds were seen on Lower Barden late Aug - early Sep, otherwise single birds were generally the rule. Up to 7 birds were at Lindley Wood Rsr, well down on previous years, with occasional sightings at Fewston and John O'Gaunts. A year round presence at Otley Wetland, stronger in winter, peaked at 36 in Dec (PP). 6 were at Addingham on 14 Feb (AEG).

GREY HERON *Ardea cinerea*

39 locations (26,33) Common resident breeder

This species continues to be one of the more widely distributed across our area, mostly singly or in pairs, although up to 5 were noted several times at Grassington. Regularly recorded along the Wharfe between Kettlewell and Knotford Nook, and up tributary valleys, the only garden sighting was in Menston, with several overflights. One bird was recorded

on the side of Fountains Fell during a BBS count.

GREAT WHITE EGRET *Ardea alba*

2 locations (0,0) Common resident breeder

Two Individuals were seen in our area this year, the first since 2016, and not otherwise seen for over a decade. One was at Otley Wetland on 14 Aug (MC), another flew over High Snowden on 19 Sep (AJ).

LITTLE EGRET *Egretta garzetta*

28 locations (8,16) Increasingly common visitor

The local range of this increasingly common bird has more than trebled in the past three years, as sightings of mostly singles or pairs continue to grow and extend into winter months. Last year's furthest north report came from Grassington Bridge, this year's was from Kilnsey in Jan, with another at Conistone in Feb; there were reports from the Grassington area Aug-Dec, and 2 at Grimwith on 22 May. Further south, sightings now occur throughout the year the length of the main valley, with a high of 5 at Otley Wetland on 22 Jul. There were two sightings on Washburn reservoirs: 12 Sep at John O'Gaunts and 15 Dec at Lindley Wood (PR).

OSPREY *Pandion haliaetus*

11 locations (6,4) Scarce but regular passage migrant

The first bird of the year was seen over Knotford Nook on 17 Apr. Two were seen in May, one over Guiseley Gap on the 1 May, another fishing in Lindley Wood on 16 May. Through Jun and Jul there were a series of sightings over Bolton Abbey (6, 10 Jun; 1, 10 Jul) and in the Washburn (13 Jun, 1-4 Jul). Later, 22-25 Jul, at least 2 different individuals were recorded in the same area, with one (or possibly a third) seen at Otley Wetland, one identified through ringing as a 2019 female from Rutland Water. There were further sightings at Otley Wetland 1-3 Aug, with a different bird seen at Lindley Wood on 5 Aug. A last sighting was over BRGP on 18 Aug (BTO).

SPARROWHAWK *Accipiter nisus*

37 locations (26,36) Common resident breeder

Sightings of this small raptor continue to increase in our area, location numbers doubling in the past 3 years. The most northerly seen was at Kettlewell on 8 Jun, catching a swift in a flock and then forced to drop it through mobbing by other swifts (T&RP). All northern birds were seen between here and Hebden, one in a Grassington garden. Further south there were a scattering of sightings in the Strid Woods-Bolton Abbey area Feb-Jun, and one on Barden Moor at the end of Aug. All Washburn records were from south of the A59, widespread throughout the year. Records were widespread in the main valley, including regular garden sightings at Addingham, Ilkley, Menston, Otley and Pool. Two adults with at least 3 young were seen at Otley Wetland on 1 Aug, several food passes noted (AJ).

GOSHAWK *Accipiter gentilis*

5 locations (1,5) Scarce passage migrant

A decade high in sightings in 2020 for this scarce species, was matched this year. Most were along the southern Washburn 27 Jan (S&JA) to 30 Mar, with 4 birds (3 males) seen at the end of Feb, and a female tussling with 2 buzzards on 9 Mar (both AJ). Elsewhere, there was an additional Feb sighting above Addingham Moorside. One was also seen in Oct being mobbed by a raven over Snowden Moor.

MARSH HARRIER *Circus aeruginosus*

8 locations (3,6) Uncommon passage migrant/visitor

2021 was a relatively good year for sightings in our area. An early individual was over Ilkley Moor on 3 Mar, the next in the Barden Moor area mid-Apr, followed by one seen in the weeks

either side of 1 Jun on Askwith Moor. Up to 2 were seen between Barden Bridge and Grimwith through Jul-early Aug; another, a creamcrown, in the Washburn late Aug. Two migrating birds were over Snowden Moor on 19 Sep. Finally, at least two, male and female immatures, and possibly 3 birds were seen in the Washburn valley end Oct-early Nov (AJ).

HEN HARRIER *Circus cyaneus*

12 locations (12,14) Uncommon passage/winter visitor

Up to 2 were seen regularly throughout Q1 in the Washburn, with other sightings on the Chevin, Hawksworth Moor and Barden Fell. An individual on Pen-y-Ghent was the only Apr sighting. Brood-managed birds were seen on the Devonshire estates throughout the summer. The first autumn sighting in the Washburn was on 17 Oct, although these were only intermittent, markedly down on 2020. One was spotted south of the Ilkley Moor ridge on 11 Oct, whilst another was seen above Addingham on 8 Nov (CA).

RED KITE *Milvus milvus*

70 locations (45,61) Common resident breeder

This species has become so commonly seen in the southern part of our area that, in spite of the ongoing rise in recorded locations, it remains almost certainly under-reported. Most sightings were of ones and twos, but there were occasional larger gatherings, if not matching the high of 56 seen last year: 20 were over the old Wool Secretariat buildings in Ilkley on 29 Nov (KS), 10 the next day over nearby Ben Rhydding church, 18 at Snowden Moor on 12 Sep. Double figures were regularly reported in the Washburn valley, with evidence of breeding. Numbers remain lower in the north, although there more reports from north of Grassington than the single record last year, from Kettlewell, Kilnsey, Grass Wood, Grassington Moor, and into Littondale, a single bird at Halton Gill on 26 Feb. 6 were recorded at Greenhow on 22 Aug (RE&HW).



Red kite (PW)

BUZZARD *Buteo buteo*

85 locations (45,64) Common resident breeder, passage migrant, winter visitor

Another year of increased sightings after the 2019 low keeps the species as the most recorded and widespread raptor in our area. Most sightings (almost 400) were of 1-2 birds, but significant numbers (6+) were regularly seen in the Washburn valley, occasionally into double figures, as was evidence of breeding. 6-7 were seen on three occasions over Barden Moor, all Aug-Oct, whilst 8 were seen at Otley on 20 Mar. Other breeding was noted near March Ghyll Rsr, at Barden Moor (both AJ) and Scoska Wood (GH).

BARN OWL *Tyto alba*

48 locations (30,40) Resident breeder

This species continues to show healthy expansion in our area; it is only 12 years since there was only one recorded location locally! It is now widespread throughout the south, particularly between Addingham and East Otley. All Washburn records, bar a handful at Kex Gill, were from south of the A59. This year saw the furthest north record yet, one at Oughtershaw on May 5th. Another was also seen in Littondale, at Litton, on 1 Dec. Others were seen throughout the north along the main valley south of Kettlewell, and at Grimwith and Greenhow (regularly).

LITTLE OWL *Athene noctua*

19 locations (8,10) Resident breeder

After a complete blank north of the A59 last year, there were sightings in 2021 at Halton Gill, Starbotton, Grassington Moor, Threshfield, Threshfield, Barden Fell, and at Rocking Moor in the Washburn. Reports also came from Swinsty, Leathley and Farnley in the southern part of the Washburn, compared to the sole Snowden Moor return last year. Most reports in the main valley were from around Otley, including up to 3 seen at the Wetlands throughout the year, and from farmland to north and south of Menston. Others were reported at Addingham, Addingham Moorside, and Weeton (2 Feb).

LONG-EARED OWL *Asio otus*

1 location (3,2) Uncommon migrant breeder

Records for this bird in our area have declined steadily in recent years, and there was just one sighting in 2021, a single bird caught by a camera trap on Ilkley Moor on 10 Oct, almost exactly a year after the last sighting for 2020, in exactly the same place, with the same trap (RG)!

SHORT-EARED OWL *Asio flammeus*

16 locations (4,5) Uncommon resident /migrant breeder

After 2 poor years, 2021 was even better than the exceptional 2018, especially in the north, where just 2 were seen in 2020. This year reports came from as far up as Kettlewell-Starbotton (including one on Great Whernside, another on Buckden Pike, both on 7 Jun), and into Littondale at Yew Cogar Scar (23 Jan), Hesleden and Pen-y-Ghent (both Apr). There were others at Grassington Moor, Greenhow and Barden Moor. In the Washburn, there were multiple sightings around Scargill throughout the year, mainly at either end, whilst in the main valley, there were regular sightings of up to 2 birds along the Rombalds ridge throughout Q2.

TAWNY OWL *Strix aluco*

31 locations (11,21) Common resident breeder

Record numbers continue to recover after the 2019 low. Including those from Hubberholme, Buckden and Litton, they are now probably a more accurate reflection of the range of this bird than those seen in the past couple of years, with others recorded throughout the main valley south from

Kettlewell, including one stuck in a chimney for 24 hours in Hebden! As last year, there were only a handful of records from around Bolton Abbey (4 this year), all during Q2, but southwards a presence was recorded in all the main settlements, mostly heard and mostly from or in gardens. In the Washburn, up to 4 were seen at Sandwith Moor, breeding was noted at Stainburn Plantation, whilst smaller numbers were also at Timble Ings, Lindley Wood and Leathley.

KINGFISHER *Alcedo atthis*

26 locations (15,24) Resident breeder

Sightings featured every month of the year, the continued milder winter conditions helping survival rates. Birds were reported the length of the Wharfe from Yockenthwaite (25 Jul) to Weeton (2 Mar, AK), including one in Littondale at Arncliffe (7 Oct, GH). Most were in ones and twos, although 4 were seen at Otley Wetland on 15 Mar (MC). All four sightings in the Washburn were south of Swinsty Dam. Only recorded breeding was at BRGP, where it was well-observed (RE&HW, SP).

LESSER SPOTTED WOODPECKER *Dryobates minor*

1 location (3,0) Scarce resident breeder

The only confirmed reports came from the single site where breeding has been recorded in recent years, a private woodland in the Washburn valley, on 2 Jan and 14 Apr.

GREAT SPOTTED WOODPECKER *Dendrocopos major*

46 locations (31,41) Common resident breeder

A species that is widespread in our area, seen as far up as Yockenthwaite, and Foxup in Littondale, and all the way down to Rougemont Carr. Last year, all Washburn records were below Thruscross, this year they included 3 from the woods above the dam. Inevitably, more 'sightings' were noted during the earlier parts of the year, when birds are easily identified by their distinctive drumming, but there were records in every month. Most were of 1-2, although 6 were recorded at Heber's Ghyll in Mar (KS), where a pair were also seen feeding young in Jul (AK), and 5 at Grass Wood in Apr. Garden visitors were noted in Hebden, Addingham, Ilkley, Otley and Menston.



Great spotted woodpecker (JV)

GREEN WOODPECKER *Picus viridis*

38 locations (28,28) Common resident breeder

Geographically well spread although few were recorded downstream of Ilkley. Most records were of single birds, most in the spring when more readily heard. 4 were recorded at Conistone on 18 Apr, others as far up as Yockenthwaite and Arncliffe. Almost all reports in the Bolton Abbey area were in the first six months. Birds were recorded in the Washburn throughout the year below Thruscross Dam, mostly in the Stainburn Forest-Norwood Bottom area. In the main valley,

the only records south of Denton Bridge were on the edge of Burley Moor on 23 Sep, and on the Chevin in Jan, May and Dec. Breeding was noted at March Ghyll and at Norwood Edge.

KESTREL *Falco tinnunculus*

68 locations (34,52) Common resident breeder, passage migrant.

Recorded throughout almost the full extent of our area, from Yockenthwaite and Pen-y-Ghent down to Pool, and along the full length of the Washburn. Sightings were mostly of single birds, occasionally pairs, although there were some larger counts in moorland areas. 8 were recorded at Hunter's Sleet on 19 Aug, a family of 5 at March Ghyll on 13 Jul. Mating was observed at Hebden Ghyll (RL) and Burley Moor (AJ), both in Apr. There were garden sightings in only Addingham and Otley, emphasising perhaps this species' preference for open fields and moors.

MERLIN *Falco columbarius*

19 locations (7,6) Uncommon resident breeder, passage migrant, winter visitor

After a lower than average year, a distinctly above-average year, with 3 times as many locations recorded as in 2020, all in the middle 8 months of the year, almost all singles. In particular, birds were recorded at the top ends of both Wharfedale and Littondale: Oughtershaw (Mar), Hesleden (2 birds in May), High Green Field Knott (Jun), Pen-y-Ghent (Aug), with another in May at Grassington Moor. Further south, there were sightings throughout spring and summer at Barden Moor, one on Barden Fell in Apr, and occasional reports along Rombald's Moor including the only Q4 record, on Addingham Low Moor. There were more frequent sightings on the upland areas either side of the Washburn during the spring, with later birds at Kex Gill (23 Jul, PR) and John O'Gaunts (15 Sep, BTO).

HOBBY *Falco subbuteo*

10 locations (11,17) Uncommon but regular summer visitor

After a couple of years of increased sightings, something of a dip in 2021, back to 2019 levels, with the earliest bird not seen until 29 May, at John O'Gaunts Rsr, and all in ones or twos. Records continued to come exclusively from the south, the most northerly again being in the Barden Moor/Fell areas 31 May-10 Aug. There were sightings of single birds in the Washburn in Jul at Lippersley Pike and Norwood Edge, and at Snowden Moor in Sep, the latter including the latest record on the 25 Sep. There were just 3 records in the main valley this year, the first by Ling Bar Plantation on 4 Jun, then 2 garden reports from Otley (the next day) and Pool on 17 Jul (AJ).

PEREGRINE *Falco peregrinus*

15 locations (13,4) Resident breeder, passage migrant

The poor returns of 2020 hopefully looked to be just a dip in sightings, as record numbers more closely matched the improvements shown in 2017-2019. In particular, after the northern blank in 2020, there were sightings in Apr at Mossy Moor and Grass Wood (3 birds), and in Aug, again at Mossy Moor Rsr, and at Skyreholme and Greenhow (a juvenile). However, most sightings were scattered throughout the Washburn: Norwood Edge (Feb, 2 adults), Farnley Lake and Timble Ings (Mar), Kex Gill (Apr) Leathley (Oct), Snowden Moor (Sep-Oct) and Sandwith Moor (latest record, 27 Oct). Two were over the southern end of Rombald's Moor on 27 Apr and 31 May, the latter an adult hunting starlings (both RE&HW), and 2 at Otley Wetland, an adult in Jan and a juvenile in Jul (both AJ), whilst the most southerly record was on 24 Oct over fields near Gallows Hill (JA).

RING-NECKED PARAKEET *Psittacula krameri*

1 location (1,2) Possible escapee

With a population now established as close as Yeadon and regular sightings in Nunroyd Park, it's almost inevitable that records in our area will increase. Even so, there was just the one sighting this year, of a single bird at Sun Lane NR on 2 Jan (RG).

JAY *Garrulus glandarius*

40 locations (17,26) Common resident breeder

Reports continue to suggest a northern limit in our area for this species at Grass Wood. 3 over a Grassington garden on 3 Oct was the first record of this species there (C&JA). Numbers rose southwards, with 4 seen at Howgill Lodge in Jun and various records from Burnsall and the Bolton Abbey estates, most in the autumn. Most reports came from between Addingham and Otley, with garden sightings in pretty much all settlements along that stretch, and from the Washburn. 6 were seen together in trees on Bradford Road, Otley, in Apr, another 6 at Farnley Lake in Mar, whilst the autumn migration watchpoint at Snowden Moor peaked at 22 on 25 Sep.

MAGPIE *Pica pica*

(C - 36 locations) Common resident breeder

A species that is pretty much ubiquitous in southern lowlands of our area, but rather less common further north and in the Washburn. Furthest north sightings were at Grass Wood and Threshfield Moor; the only count north of the A59 of more than one was 4 at Skyreholme on 9 Jul. In the main valley, counts reached double figures at High Royds (11 in Jan) and Otley Wetland (13 in Mar). There were many garden counts from all settlements from Addingham to Otley, the highest being 8 in Otley (M&JC).

JACKDAW *Coloeus monedula*

(C - 84 locations) Common resident breeder

The Jackdaw remained one of the most widespread species throughout our region, reported from all areas in large numbers. Largest counts by far were at Menston, where over 1000 were reported roosting at High Royds (RE&HW), and 200+ were seen over gardens flying to roost (AK).

ROOK *Corvus frugilegus*

52 locations (18,30) Common resident breeder

A bird whose presence in some areas is often taken for granted, with counts of well-established rookeries often missing from annual records; a higher than average 25% of records just record a 'presence', and no number. Largest counts were 85 at Hawkswick in Littondale (Feb), 79 at Thorpe during a BBS count in Jun, 45 at John O'Gaunts in Oct, 44 at Buckden in Mar, and 41 during another Jun BBS at Addingham (all BTO). Up to 30 were seen on several occasions from a garden on the edge of Otley (M&JC).

CARRION CROW *Corvus corone*

(C - 79 locations) Common resident breeder

Widespread throughout the whole of our area, yet still almost certainly underreported even though this species represents almost 3% of all records in 2021. 30% simply record a 'presence', and actual counts remain lower than in previous years. As last year, the largest was again in the fifties, 54 at Addingham during a BBS count. Thirty was the largest garden count, on the edge of Otley (M&JC), although that was actually lower than the equivalent from last year.

RAVEN *Corvus corax*

40 locations (16,33) Resident, scarce breeder

Widespread across uplands in our area, mostly in ones or twos, reports came from as far north-west as Oughtershaw (May-Jun) and Pen-y-Ghent (Apr-May). Other northerly records were all from the main valley below Kettlewell, including 5 at Mossy Moor on 16 Aug. Regular sightings on Barden Moor peaked at 5 in Sep, with a similar pattern in the Washburn, where breeding was noted and 6 were seen the same month at Snowden Moor. In the main valley, 7 were at Denton Moor on 12 Aug. On the other side of the valley, there were regular sightings of up to 2 birds along the Rombald's ridge as far down as Odda Hill, 1 being seen over a garden in the extreme south, near Guiseley on 22 Oct.

COAL TIT *Periparus ater*

39 locations (21,33) Common breeding resident

An individual recorded at Greenfield during a Jun BBS count suggests that this species is more widely distributed in our area than usually reported. A family party seen at Cray the same month was evidence of breeding as far north too. As last year, individuals were also seen in Littondale (Hawkswick) and at Grimwith, although most were in the main valley from Kettlewell southwards, particularly at Grass Wood. Further south, regular reports in the Bolton Abbey woods included a peak count of 19 during a late BBS (3 Jul). In the Washburn, 9 was the highest, along the length of Lindley Wood in Mar, with lower counts in woodlands elsewhere in the valley. Wharfedale counts, mostly in gardens and nature reserves, were never more than 4.

MARSH TIT *Poecile palustris*

3 locations (0,1) Scarce resident

This increasingly scarce species in our area, reported once in the past 2 years, was observed 3 times in 2021: one at Rougemont Carr on 5 Apr (PS), another at Bolton Abbey on 30 April (BTO), and a third from the migration watchpoint at Snowden Moor on 5 Sep.

WILLOW TIT *Poecile montanus*

1 locations (1,2) Scarce resident

Willow tits have suffered a 99% decline nationally in recent years, and are very scarce in our area now. However, one was seen (and heard!) regularly on feeders in a garden on the edge of Menston from 10 Sep to the end of the year (CS).

BLUE TIT *Cyanistes caeruleus*

(C - 64 locations) Common resident breeder

For such an apparently common and widespread species, count numbers remained surprisingly modest, but this may well be more due to under-reporting than any other factor. Highest were: 36 along the length of Lindley Wood in Mar (AK); 22 from a BBS report in the Valley of Desolation in Jul; 21 in a walk round High Royds in Jan. Almost all garden reports included this species, and there were numerous reports of birds breeding, many in garden nest-boxes.

GREAT TIT *Parus major*

(C - 57 locations) Common resident breeder

Counts for this widely and commonly reported species were generally in single figures, exceptions being 24 at High Royds on 7 Jan, 15 twice in May at Strid Woods, and 2 garden counts of 10, at Addingham in Feb and Ilkley in Dec. The only noted evidence for breeding was at Yew Cogar Scar (fledglings), BRGP (feeding), and in gardens in Ilkley and Otley.

SKYLARK *Alauda arvensis*

55 locations (13,26) Common resident breeder, passage migrant



Skylark (JT)

By far and away the highest number of locations reported since at least 2009, birds were reported in every month except Jan on higher land throughout the full extent of our area. Watchpoints at Snowden and Sandwith Moors recorded the highest numbers, including c50 landing near Little Almscliff on 6 Apr, whilst the largest count 'in situ' was the first double-digit count of the year, 30 at Threshfield in mid-Mar. After, the only counts were at the watchpoints, apart from one seen on the edge of Farnley Moor on 9 Dec (PR).

SAND MARTIN *Riparia riparia*

33 locations (17,34) Common migrant breeder, passage visitor

One of the earliest hirundines to return, first birds were seen at Otley Wetland on 25 Mar (JA), almost a fortnight earlier than in 2020, but more in line with previous years. There was a 4 day hiatus, then 20 at Burnsall (D&NF), after which sightings were almost daily through to mid-Aug, with significant counts (maximums) at Littondale (200 at Scoska Wood, 25 Apr), Hebden (30, 21 May), BRGP (12, 3 May), Burnsall (20, 14 Jul), Barden Bridge-Strid Woods (80, 30 May), Addingham Low Mill (30+, 20 Aug, HS), Otley Wetland (50, 5 Apr), Lindley Wood (30), Thruscross (c30, 9 Apr), and Castley (30+, 16 May), almost all associated with nest sites. After Aug, the only sightings were at Snowden Moor, 5 on 5 Sep, 1 on the 16 Sep, and the last on 26 Sep.

SWALLOW *Hirundo rustica*

(C - 75 locations) Common migrant breeder, passage visitor

First sightings of the year were on Mar 30th, close to average, with multiple reports from each of Burley, Lindley Wood and Sandwith Moor, others coming in thick and fast in the days after, just in time for the last snows in the first week of Apr! The first northern bird wasn't seen until 8 Apr (Hebden). Whilst widespread throughout the breeding season, seen from Hubberholme and Pen-y-Ghent to Weeton, numbers kept generally low, with pre-migration counts peaking with 30 at Strid Woods in May, 24 at Hebden in Jun, and 20 at Tumble Ings in Jul. Towards summer end, 40 were seen gathering on wires at Addingham on 26 Aug, whilst counts at the Snowden Moor watchpoint were into 3 figures most days during the first half of Sep, peaking at 358 on 8 Sep, 357 on the 12 Sep. After 323 on 26 Sep, the only sightings were: 2 at Threshfield on 29 Sep and at Addingham on 30 Sep; one at Grassington on 4 Oct (C&JA); a final 9 at Snowden Moor on 9 Oct.

HOUSE MARTIN *Delichon urbicum*

38 locations (12,34) Common migrant breeder, passage migrant

First sightings were just one day earlier than the swallows this year, on 29 Mar, a single bird seen over Otley (MC). Unlike swallow, subsequent sightings were initially intermittent: 1 on 5 Apr at Otley Wetland, 6 at Ilkley on 11 Apr. Two just outside Menston on the 23 Apr grew to 20+ over their village centre nesting site by the 26 Apr, after which the first of the almost daily reports came on 29 Apr: 3 at Denton Moor and 20 at Bolton Abbey. Counts stayed mostly in single digits for the rest of the season, although the species was present the full length of Littondale (inc 10 at Hawkswick on 2 Jun), and along Wharfedale from Yockenthwaite to Pool, where 50 were seen over a garden on 18 Jul. The only other double digit records were up to 16 throughout the summer at High Royds. The first autumn gathering was seen on 19 Aug, 50 feeding over Thruscross Rsr, followed by a steady stream of sightings through early Sep at Snowden Moor, peaking at 727 on 12 Sep. Latest reports were of 2 at Addingham on the 30 Sep, and c20 above the Storiths Rd at Barden Fell on 3 Oct (DD).

LONG-TAILED TIT *Aegithalus caudatus*

45 locations (25,32) Common resident breeder

North of the A59, most records were along the Wharfe from Kettlewell southwards, the exceptions being a single bird at Hawkswick on 28 Jan and 28 Feb, and 4 at Scoska Wood on 19 May. In the Washburn, Lindley Wood and Timble Ings remained the main centres, but small groups were also seen in elsewhere along the valley and at Stainburn. South and westwards, reports were mainly from lower level woodland and gardens, with 20 at Otley Wetland in Jan the peak count.

WOOD WARBLER *Phylloscopus sibilatrix*

4 locations (2,2) Uncommon migrant breeder

Sightings of this increasingly scarce bird were recorded at four sites this year, up on the past 3 years. Strid Woods had the earliest record this year on 29 Apr, with another on 16 May. Just one sighting was confirmed at Heber's Ghyll, a female on 11 May (JA), a complete contrast to last year's good numbers. The only other in the south of our area was one at the eastern end of the Chevin on 10 May (JA). Most sightings, and all those after 16 May, were at Grass Wood, including the last in our area on 19 Jun, the first records here since 2017.

YELLOW-BROWED WARBLER *Phylloscopus inornatus*

1 locations (1,0) Scarce passage migrant

Individuals have been recorded in our area every odd year since 2013, and 2021 was no exception, with one reported at Threshfield on 31 Oct (BTO).

WILLOW WARBLER *Phylloscopus trochilus*

68 locations (30,59) Common migrant breeder / passage visitor

The first returners were reported on the same day as last year, 3 Apr, at Ben Rhydding, after which there were almost daily records until mid-Aug. Counts then tailed off to the last sighting on 12 Sep at Snowden Moor. Northernmost location was a BBS square at Greenfield (SD8479), where 17 were counted in May and 12 in early Jun. Others were present the full length of the valley to Pool, including 50 at Grass Wood on 25 Apr. Birds were also seen throughout Littondale and the Washburn valley too, peaking with 10 at Hawkswick (2 Jun) and 40 at Stainburn Forest (19 Apr) respectively. Garden records came from Hebden, Addingham and Menston.

CHIFFCHAFF *Phylloscopus collybita*

53 locations (32,42) Common migrant breeder, passage / winter visitor

Overwintering birds were present in Otley and at the Wetlands throughout Jan-Feb. The first elsewhere were 2 on Ilkley Moor on 3 Mar, and one on 16 Mar at Addingham. This started a steady stream of almost daily records until early Aug, including double-digit peak counts at Dob Park Wood (15, 30 Mar), BRGP (10, 5 Apr), and Stainburn Forest (20, 19 Apr). In the north, the only individuals noted upstream of Grass Wood were at Yockenthwaite (1 May), and Kettlewell (5 May), whilst Grass Wood saw the peak count of 6 on 25 Apr. Garden records came from Ilkley, Menston, Otley and Pool. Up to 20 birds daily were recorded on autumn migration at Snowden Moor, the last of which were on 9 Oct. A single overwintering bird was recorded at Knotford Nook on Boxing Day.

SEDGE WARBLER *Acrocephalus schoenobaenus*

3 locations (5,5) Uncommon, increasingly scarce, migrant breeder

First of the year was recorded on a BBS count in Ben Rhydding on 28 Apr (SE1446). Up to 2 were heard at Otley Wetland 1-6 May, and again on 27 May, the year's last. The only other was heard in a garden near the Guiseley Gap on 13 May.

REED WARBLER *Acrocephalus scirpaceus*

1 locations (3,2) Scarce migrant breeder, passage visitor

Otley Wetlands remains our stronghold for this species, confirmed by a series of sightings 21 Apr (one day later than last year) - 25 Aug, peaking with 10 heard on 27 May (PP). Sadly, after 3 consecutive years, none were recorded at High Royds pond, leaving Otley Wetland on its own.

GRASSHOPPER WARBLER *Locustella naevia*

3 locations (2,3) Scarce visitor, very occasional breeder

Two birds were first seen at Norwood Edge on 16 May. One was heard reeling at Hawksworth Moor on 31 May (RE&HW), two at Askwith Moor on 10 Jun (AJ).

BLACKCAP *Sylvia atricapilla*

45 locations (15,52) Common migrant breeder, passage / winter visitor

Aside from 2020, this was the largest number of recorded locations since 2011. Overwinterers were seen in gardens in Pool (2 females) and Menston (2 males) throughout Jan-Feb. The first other bird was at Otley Wetland on 6 Mar, the next at Lindley Wood on 30 Mar, after which almost daily sightings were reported the full length of all three main valleys. 13 were recorded in a BBS count at Valley of Desolation on 3 Jul. Reports tailed off after 8 Aug, late returns including a family of 4 at Thruscross on 19 Aug, an individual over Snowden Moor on 7 Sep, and another at Timble Ings on 9 Oct. Overwinterers were reported in Dec from gardens in Ilkley (A&DB) and Burley, the latter "the first garden sighting in 19 years" (SB).

GARDEN WARBLER *Sylvia borin*

13 locations (5,20) Common migrant breeder / passage visitor

The first bird, and only one in Apr, was recorded on 1 Apr at BRGP (S&JA). After the next on 1 May at Swinsty Rsr, there was a steady stream of sightings until mid-Jun, after which there were just 2 reports, one at Grass Wood on 30 Jun, the last on 8 Jul back at BRGP, an adult observed feeding fledglings (RE&HW). Reports were widespread, the most northerly being near Hubberholme, others at Starbotton and Hawkswick, the most southerly on the Chevin. Highest numbers were in the Washburn valley, where 4, including 3 singing males, were recorded in May, and 6 in a walk round Fewston in Jun (PR).

LESSER WHITETHROAT *Sylvia curruca*

3 locations (3,4) Scarce migrant, passage visitor

A pair of birds were at Eastfield Lane between Burley and Otley, 13-16 May. Late on, another was seen on a fence at Thruscross on 25 Aug "presumably moving through" (PR), whilst the last was seen passing over Snowden Moor watchpoint on 8 Sep.

WHITETHROAT *Sylvia communis*

9 locations (4,8) Increasingly uncommon migrant breeder, passage visitor

Very much a bird of the south in our area, the earliest was a singing bird at Fewston on 1 May; the regulars on the Chevin were first noted the day after. Other seen in early May were on Hawksworth Moor, at Odda Hill, Menston, and at Otley Wetland. Later weeks were the preserve of Washburn sightings: Sandwith Moor and Lindley Wood in Jun, Timble Ings in Jul. There were also 3 sightings of up to 2 birds at Snowden Moor watchpoint, 7-11 Sep.

GOLDCREST *Regulus regulus*

36 locations (16,22) Common resident breeder, passage / winter visitor

90% of records came from the south, with all but three northern sightings in the Grassington-Grass Wood area. Exceptions were a very northerly individual in a May BBS count at Greenfield, another at High Green Field Knott in mid-Apr, and a third at Grimwith in Aug, suggesting this species may be more widespread than most records suggest. Further south, counts were widespread and usually in low single digits, although 14 were part of a Jul BBS count at Valley of Desolation, and "a noisy flock" of 20 "moving through the trees" were at Timble Ings on Sep 21st (BTO). There were garden sightings at Hebden, Addingham, Ilkley, Menston and Otley.

WREN *Troglodytes troglodytes*

(C - 81 locations) Common resident breeder

Our commonest species nationally, and one of the most common locally, in spite its nature meaning that it's not as readily visible as many other species. Once familiar with its distinctive sounds, its ubiquity rapidly becomes apparent! Reported the length and breadth of our area, as far up as Greenfield (15 in a May BBS count, 13 in Jun) and Pen-y-Ghent, and down to Pool, as well as the full length of the Washburn. Most records were just of a 'presence', but notable were 17 at Grass Wood in May, 10 at Hawkswick in Jun, 15 and 22 in BBS counts at Valley of Desolation, 12 at Otley Wetland in Mar, 15 at Norwood Bottom in Jun, all underlining its spread. Garden records came from Addingham, Ilkley, Burley (inc young), Menston, and Otley, mostly regular sightings.

NUTHATCH *Sitta europaea*

44 locations (22,32) Common resident breeder

Birds were seen as far up as Yockenthwaite, and Foxup in Littondale, extensively along the valleys southwards, including that of the Washburn below Fewston, with one in Nov at Timble Ings. Counts were mostly ones and twos, although 5-7 were seen along the river between Barden and Bolton Bridges throughout the year, and 8 at Grass Wood in Apr. Garden sightings were numerous at Hebden, Addingham, Ilkley and Otley, whilst in Menston a first appearance in 25 years was celebrated in one garden (AK)!

TREECREEPER *Certhia familiaris*

30 locations (17,22) Common resident breeder

In line with recent years, birds were only seen southwards from Grass and Bastow Woods, including occasional sightings

in a Hebden garden; 5 were seen on one Grass Wood visit in Apr. Sightings were common along the Bolton Abbey section of the river, up to 4 birds, as well as in the lower Washburn valley; there was one at Thruscross in May. Records were extensive elsewhere, particularly in the leafless months; the only garden records were in Addingham.

STARLING *Sturnus vulgaris*

61 locations (28,48) Common resident breeder

Only recorded as far north as Kettlewell this year. More extensive Littondale records included 80 at Halton Gill and 50 at Dawson Close within 2 days in Feb. Largest main valley counts were 100 (Grassington Moor, 9 Jun) and 64 (Burnsall, 20 Mar). In the south, the largest Q1 count was 2000+ at Low Dam on 9 Mar (TK), with 2 500+ flocks seen at Sandwith Moor the day before (PG). Midyear counts reached 700 at Hawksworth Moor in May, including many juveniles, 2-300 in Aug at Castley Lane, Pool. Towards the year end, the Otley Wetland roost reached 1500+ (PP), Over 4000 birds passed Sandwith Moor watchpoint 2-6 Nov. Garden sightings included 10 separate gardens in Addingham at the end of Jan, including a peak count of 24. A Jun BBS count in Addingham reported 85. Other garden records included Ilkley, Menston and Otley, where counts in adjacent fields from one peaked at 50 in Feb and May (M&JC).

SONG THRUSH *Turdus philomelas*

69 locations (29,53) Common resident breeder, winter visitor

This species remains one of the most widespread in our area, recorded in the north in most valleys as far as Greenfield and Cosh, with 7 at Grass Wood on 27 May. In the Washburn, all but 2 records were in Mar-Jun or during migration watch, with a high of 8 at Norwood Bottom on 10 May. Elsewhere in the south, birds were reported extensively Jan-Jul, less than 10% at other times, up to 4 at a time.

MISTLE THRUSH *Turdus viscivorus*

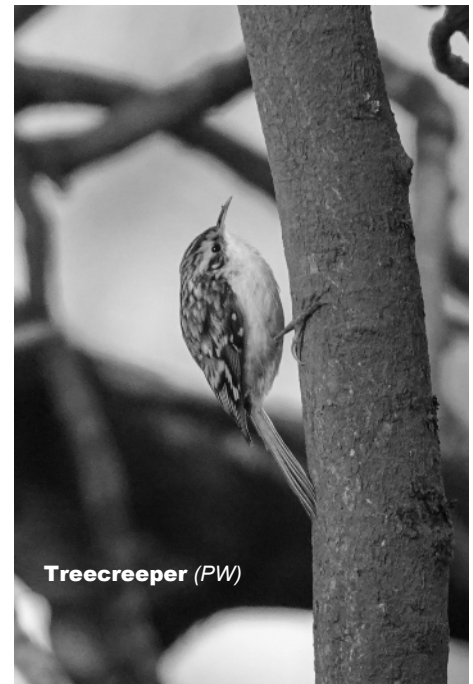
51 locations (25,31) Common resident breeder, passage migrant

Reporting locations were almost the 2019 low, and indicate the wide spread of this species in our area. Unreported in Upper Wharfedale or Littondale last year, records this year came from as far north as Greenfield, and Birks Fell, Hesleden and Scoska Woods in Littondale, as well as along the full lengths of the Washburn, and the Wharfe to Otley. Most were of lower single digits, aside from small flocks seen over Snowden Moor in the autumn (up to 36), the exception being a flock of 18 on Odda Hill at Menston on 14 Aug.

REDWING *Turdus iliacus*

26 locations (12,16) Common winter visitor

Small numbers were recorded throughout the early months, the last being on 20 Apr at Menston, where up to 60 at a time had been seen in surrounding fields throughout this period.



Other, one-off counts were at Timble Ings (50, 1 Feb), Weston (50, 8 Feb), Stainburn (15, 15 Feb), although smaller numbers were reported as far north as Halton Gill. The first of the autumn returners was recorded on 8 Oct, again at Menston, reaching 60 later in the month, 100+ over Ilkley on 14 Oct (PG). Large numbers were seen overflying Snowden Moor 13 Oct 1280, 20 Oct 3230. 1500 were over Sandwith Moor on 3 Nov, 5120 on 4 Nov, and 1500 on 5 Nov. 'Landed' flocks were at Addingham (40), Threshfield (40), Bolton Abbey (60), Linton (30) and Burnsall (20) throughout the rest of the year. Peak garden count was 8 at Grassington on 3 Nov (C&JA).

BLACKBIRD *Turdus merula*

(C - 77 locations) Common resident breeder, winter visitor

This species remains common and widespread across the area, representing over 3% of all records. As expected most high counts were in winter months, the peak being 24 in a Pool garden in Jan. Others included 21 at Otley Wetland and 12 in an Ilkley garden, both also in Jan, 13 at Hawkswick in Feb. The highest non-winter count was also here: 21 on 2 Jun.

FIELDFARE *Turdus pilaris*

30 locations (17,23) Common winter / passage visitor

Flocks were seen throughout the first 4 months, including 150 at Weeton and at Stainburn Forest, both in the first week of Mar. 300+ were near Middleton Woods on 10 Apr, whilst 200 were in fields on Guiseley Moor next day, and 100 at Weston on 18 Apr (T&RP). Smaller flocks were noted at Menston, Ilkley, Burley Moor, Farnley Lake and Bolton Abbey. The last southern bird was seen at Ben Rhydding on 28 Apr, whilst 70 were at Thorpe on 2 May and 30 at Yockenthwaite on 6 May. Autumn sightings started with 14 at Addingham on 13 Oct. The Sandwith Moor watchpoint noted huge numbers passing through in early Nov, including 5700 on the 4 Nov and 3050 on 5 Nov. Landed flocks included 20 at Farfield Hall on 6 Nov, 60 at Threshfield on 7 Nov, with smaller numbers south of here for the rest of the year.

RING OUZEL *Turdus torquatus*

13 locations (5,5) Uncommon migrant breeder, passage visitor

Earliest 2021 record was one at Yarnbury on 22 Mar (also here in May), the only other in Mar being at Barden Moor on 31 Mar. Most northern sightings were at Hebden Beck, where up to 3 birds were seen throughout Apr. Elsewhere, multiple recordings were made at Grassington Moor, mid-Apr to mid-May. Individuals were also noted at Pen-y-Ghent (14 Apr), Grimwith (19 May) and Old Cote Moor (22 May). The regular location at Barden Moor produced records throughout Apr, as well as the only post-May report, on 27 Aug (BTO). There were also multiple sightings at Addingham Moorside, up to 4 birds, 17-30 Apr (JM), whilst one was seen on Burley Moor on 10 Apr and 27 Apr. One was also at Little Almscliff on 22 Apr (JA), the only Washburn record in recent years.

SPOTTED FLYCATCHER *Muscicapa striata*

28 locations (10,18) Migrant breeder, passage visitor

Recorded numbers continued to improve after the 2019 low. The earliest was seen at Barden Moor on 23 Apr, the only other that month being at Bolton Abbey. Whilst several were seen in this area during early May, it wasn't until the 16 May that one was seen elsewhere, at Fewston. Birds were then reported widely, as far up as Yockenthwaite, into Littondale at Hawkswick and Yew Cogar Scar (visiting nest site), and as far down as Menston (rare here) and the Chevin. Evidence of breeding was also observed at Hubberholme, Buckden, and Hebden (fledged 4 Jul). Last sightings were at Threshfield railway bridge (C&JA), and in a Burley garden, on 9 Sep (RG).



Spotted flycatcher (PW)

ROBIN *Erithacus rubecula*

(C - 70 locations) Common resident breeder / winter visitor

This remains one of the most commonly reported resident species throughout our area. Highest count was exactly as last year, albeit earlier: 17 at Otley Wetland on 30 Mar (PP). 15 were noted at Strid Woods on 14 May, 14 in fields north of Menston on 15 Mar. All these areas saw similar, if slightly lower, counts at other times too. It remained widely and frequently reported from gardens, young being seen in Ilkley and Otley.

PIED FLYCATCHER *Ficedula hypoleuca*

12 locations (6,10) Migrant breeder, passage visitor

Sightings were split across three main areas. The earliest was in the lower Washburn on 6 Apr, with recordings until at least 22 May. Breeding here was reported as "doing well", with a total of at least 30 nesting pairs producing 141 ringed young (CH). Another 3 nests in boxes at Low Moor were recorded in Jun, although no young specified (JM). At Strid Woods, birds were seen 15 Apr - 11 Jun (joint latest date), 11 birds singing on 23 Apr and 22 pairs reported on 31 May. 4 singing males at Grass Wood on 25 Apr were the first and highest count here, with a presence until at least 2 Jun. Other sightings came from Denton Moor in May and Jun, whilst last and furthest north was a female by the river at Hubberholme on 11 Jun.

BLACK REDSTART *Phoenicurus ochruros*

1 locations (0,0) Scarce passage visitor

Not seen in our area since 2015, an individual was reported from Burley Moor on 19 Apr (JG).

REDSTART *Phoenicurus phoenicurus*

38 locations (14,29) Common migrant breeder / passage visitor

First sighting this year was on 5 Apr in Menston, after which, as so often, there was a short hiatus, with the next not until 13 Apr, at Sandwith Moor. This was the first of a regular stream of reports until one on 10 Aug at Strid Woods. Just 2 individuals were subsequently recorded, at the Snowden Moor watchpoint on 7 and 10 Sep. Predominantly reported in the

north, there were sightings all along the valley to Beckermonds, and in woodland in Littondale and below Grimwith Rsr. Up to 8 were at Kettlewell, 6 at Grass/Bastow Woods. Further south, there were numerous sightings in woodland around the Strid and around the lower Washburn, but elsewhere they were more limited: 2 at Addingham Moorside and at Heber's Ghyll, 1 at Odda Hill, Menston, all in May. Breeding was noted at Low Dam, Stainburn Forest and Bastow Wood.

WHINCHAT *Saxicola rubetra*

4 locations (4,4) Uncommon migrant breeder, passage visitor

This is the fourth consecutive year this species has been seen at 4 locations, although they vary each year. Unlike 2020, there were 2 pre-Aug records, with the first, a female, at Odda Hill, Menston on May 8th (RE&HW). The next was on 19 Jun at Yockenthwaite. Barden Moor was the only repeat location from last year, with 3 sightings in Aug, including a family group on the 20 Aug (DD), whilst there was a final individual over Snowden Moor on 8 Sep.

STONECHAT *Saxicola torquata*

30 locations (10,15) Resident breeder, passage / winter visitor

Recorded location numbers were up substantially this year, particularly notable in the north, where last year's 2 sightings at Grimwith were replaced with a series as far north as Oughtershaw (5 Mar) and along Littondale to Cosh, with fledglings seen at Yew Cogar Scar. There were, however, none at Grimwith! Q2-3 saw frequent sightings on Barden Moor until 9 Sep of up to 6 individuals and of family groups. Counts up to 10 were reported through the summer from along the Rombald's ridge and on the moors opposite (inc young here), whilst lower numbers were seen on open land around the Washburn valley. 15 were also recorded flying up the valley at Snowden Moor on 26 Sep. Most southerly was a single overwinterer at East Otley on 23 Jan.

WHEATEAR *Oenanthe oenanthe*

49 locations (16,22) Common migrant breeder / passage visitor

Increases in recorded locations were similar to Stonechat. First individuals were seen on Ilkley Moor on 3 Mar, then on 29 Mar at Hawksworth Moor, whilst 3 at Hebden on 30 Mar were the first in the north. Birds were then seen widespread across all upland areas, if mostly in the north. Numbers were mostly lower single digits, but higher counts were recorded at Barden Scale (10, 6 Apr), Hebden Beck (12, 14 Apr), Kettlewell (10, 5 May), and Giant's Grave on Pen-y-Ghent (14, 7 Aug). Small numbers were seen at Snowden Moor watchpoint throughout Sep, but the last record was of one at Clifton on 13 Oct (JMr).

DIPPER *Cinclus cinclus*

38 locations (18,27) Common resident breeder

Almost always in ones or twos, this species was seen along the Wharfe from Beckermonds to Pool, and the full length of the Skirfare, as well as on some of larger tributaries, such as Cowside and Hebden Becks. In the Washburn, there were sightings at Farnley Lake and Lindley Trout Farm, plus single views on the stream through Beecroft Plantation, and in the overflow at Thruscross Rsr. 10 were seen on a walk through Strid Woods in Apr, with evidence of breeding at Cowside Beck, Barden Bridge, Strid Woods and Ilkley Old Bridge.

TREE SPARROW *Passer montanus*

11 locations (7,8) Resident breeder

Reports remain few, although there has been a welcome tick upwards in the number of locations in the past 2 years. As last year, none were recorded north of the A59. Southern sightings

were predominantly of the breeding population at Sun Lane reserve, plus gardens in Addingham (successful breeding), Menston and Ilkley, the latter two mixed with House Sparrows. In Apr, there were several sightings of 2 birds in the Chevin End area and another at Otley Wetland. Washburn sightings, all Apr-Jul and up to 2 in number, were at John O'Gaunts Rsr, Scargill Rsr, Stainburn and Timble Ings (breeding here), mostly in association with farms.

HOUSE SPARROW *Passer domesticus*

41 locations (15,23) Locally common resident breeder

This species remains widespread in our area, with colonies in most settlements from Buckden and Arncliffe southwards, and a presence as far upstream as Yockenthwaite and Foxup, as well as in most reporting gardens. Numbers in these colonies are significantly underreported, but, of counts available, the highest were 40 in Ilkley (PG) and Hebden (RL) gardens, and 38 in Hawkswick. Last year reported the first sighting of this species for 2 years at John O'Gaunts. One was seen there this year too, and others at Timble Ings and Bland Hill (group of 8) where the observer commented "just hanging on in the Washburn" (PR). Widespread breeding was noted.

DUNNOCK *Prunella modularis*

(C - 52 locations) Common resident breeder.

The population of this species appears stable and widely spread across our area, sightings extending into the upper reaches of the three main river valleys and down to Pool. 6 was the highest count, at a garden in Otley, with a significant proportion of sightings from gardens.

YELLOW WAGTAIL *Motacilla flava*

4 locations (1,6) Uncommon migrant breeder, passage visitor

Sightings in 3 adjacent locations may have given a false impression last year, and it looks like this year was actually similarly productive. Earliest was a male seen at Gallows Hill on 13 and 29 Apr, in the same area as most of last year's sightings. Another was then seen over Hawksworth Moor on 2 May, a third at Otley Wetland 3 days later, whilst in the Washburn there were 2 at Leathley on 1 May and 2 Jun.

GREY WAGTAIL *Motacilla cinerea*

53 locations (17,42) Common resident breeder, winter visitor

Report numbers continued to recover after declines to 2019. The species remains well distributed along the Wharfe/Skirfare from Beckermonds and Cosh down to Pool. There were also reports all along the Washburn from Thruscross down. Highest counts were several of 10 along the Strid. There were garden sightings at Hebden, Addingham, and East Otley (garden first here, AS).

PIED WAGTAIL *Motacilla alba*

55 locations (20,49) Common resident breeder, passage migrant, winter visitor

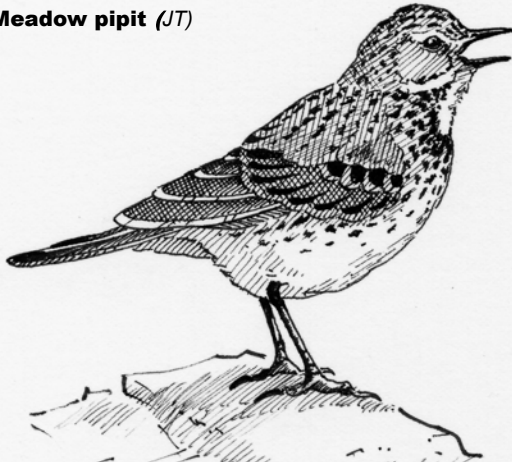
There was a good spread of this species along the course of all three main river valleys, numerous tributary streams and at Grimwith Rsr, with most sightings of up to 4 birds. 17 were at Odda Hill Menston on 13 Jan, 10 at Linton on 7 Apr, whilst an adult was seen feeding 4 young at Arncliffe on 20 Jun (PP). A steady stream of mostly single digit numbers was seen most days at the Snowden Moor autumn migration watchpoint, peaking at 28 on 9 Oct.

MEADOW PIPIT *Anthus pratensis*

68 locations (11,29) Common resident/migrant breeder, passage visitor

The huge rise in location numbers is almost certainly due to previous under-reporting rather than any increase in distribution. Even so, it's likely that this species remains one of

Meadow pipit (JT)



our more under-reported birds. A very early one was at Otley Wetland on 7 Jan (AJ), otherwise 16 first returners were reported on 3 Mar at Ilkley Moor, with flocks of 150+ seen over Sandwith Moor later in the month. Significant numbers were on most uplands through the summer, with high counts of 80 (Barden Moor, 13 Apr), 70 (Pen-y-Ghent, 29 Apr), 44 (Fountains Fell BBS, 22 Apr), 46 (Low Dam, 2 Jun), 54 (Lea Green, 30 Jun), and smaller numbers elsewhere, if counted. Autumn migration watch at Snowden Moor recorded counts of 200+ regularly throughout Sep, with over 1000 each day 16-17 Sep, and peaking at 2100+ on the 25 Sep.

TREE PIPIT *Anthus trivialis*

15 locations (4,4) Uncommon migrant breeder, passage visitor

Earliest was a northerly individual at Beckermonds on 17 Apr. As many as 8 were seen in May and Jun BBS counts at Greenfield, whilst those at Kettlewell each recorded one. Up to 6 were seen throughout the summer at Grass and Bastow Woods whilst, further south, another BBS count picked up one at Valley of Desolation in May. Most sightings were, as ever, at Stainburn Forest, with a peak of 8 in May, including 6 singing males. Further west, there were sightings at Fewston Rsr, Timble Ings and, most substantial, Denton Moor, with 5 singing birds in regenerating birch. On the Rombalds Ridge, one was noted at Addingham Moorside on 28 May.

WATER PIPIT *Anthus spinoletta*

1 locations (0,0) Rare passage visitor

An individual was recorded at March Ghyll on 14 Nov "seen well, feeding in nearby field and perched on the reservoir wall" (AJ). This was the first sighting in our area in over a decade.

ROCK PIPIT *Anthus petrosus*

1 locations (0,1) Rare passage visitor

An unconfirmed individual was reported at Lea Green on 29 May (BTO). One on Barden Moor last year was the first recorded in our area in over a decade.

CHAFFINCH *Fringilla coelebs*

77 locations (39,62) Common resident breeder, passage/winter visitor

Whilst sightings for this species have bounced back over the last couple of years, peak counts continued to decline, with no large flocks observed at all other than during autumn movement. It remained widespread, present throughout the full extent of our area. 192 were seen moving through Sandwith Moor on 2 Nov ("a record count here"), whilst highest at Snowden Moor was 73 on 26 Sep. Elsewhere, several counts of 20-25 were recorded throughout the spring

months along the Wharfe between Buckden and Bolton Abbey, and at Hawkswick and Grimwith Rsr. Gardens birds were recorded at Addingham, Ilkley and Otley, all with peak counts of 6-7.

BRAMBLING *Fringilla montifringilla*

11 locations (8,6) Uncommon winter visitor

Early sightings were at Farnley, Chevin, Denton Moor and Threshfield (unusually far north), with a flock of c40 at Bolton Abbey on 5 Apr. First in the autumn was at Addingham Moorside on 8 Oct. Others were at Norwood Edge, an Addingham garden and Timble Ings ("10 feeding quietly at the edge of the plantation", RE&HW). Larger numbers were counted passing through Snowden Moor, a flock of 32 on 16 Oct being the maximum.

HAWFINCH *Coccothraustes coccothraustes*

1 locations (0,0) Rare winter visitor

Last seen in our area in Feb 2018 at Ilkley cemetery, three were reported there on 14 Nov (BirdGuides.com).

BULLFINCH *Pyrrhula pyrrhula*

24 locations (13,22) Common resident breeder

Northern sightings continue to decline, the only records this year at Grass Wood. There were just 2 sightings in the

Devonshire estate woods, in May and Dec. On the other hand, this species was widespread in the south, with good counts at all the reserves, and in and around the main settlements, particularly gardens in Addingham, Ilkley, Menston, Otley and Pool.

Washburn records were restricted to south of a line from Timble Ings to Stainburn Forest, but were plentiful within that area.



Bullfinch (BOG)

GREENFINCH *Chloris chloris*

33 locations (15,24) Common resident breeder, passage/winter visitor

The distribution of this nationally vulnerable species in our area is wide, reaching as far up as Buckden and Arncliffe, and down to Pool. Almost all counts were in lower single-digits, although 10 were in a Menston garden on 2 Feb (AK). Numerous other garden sightings were also recorded in Hebden, Addingham, Ilkley, Burley, Otley and Pool. Counts at Snowden Moor, the only Washburn site, in Sep-Oct were regular but also low, the most being 16 on 13 Oct.

LINNET *Linaria cannabina*

19 locations (7,7) Uncommon migrant breeder, passage migrant

First sighting was on 30 Mar at Sandwith Moor, the next not until 10 Apr, at Ilkley Moor. 20 were in an Ilkley garden on the 14 Apr (A&DB). Later reports extended up to Greenfield and Foxup, mostly in lower single-digits, but up to 24 at Threshfield in Sep. The only sighting on the Devonshire estates were 2 at Barden Moor on 11 Aug, whilst Washburn records were almost entirely limited to those on passage: 128 on 12 Sep, 161 on 25 Sep, otherwise regular but lower

numbers. Elsewhere, small numbers were recorded through spring-summer at the Chevin, Odda Hill Menston, Hawksworth-Burley Moors, Addingham Low Moor, and Ilkley Moor, where a camera trap near the Cow and Calf recorded successful breeding.

LESSER REDPOLL *Acanthis cabaret*
29 locations (12,10) Resident breeder, passage/winter visitor

After 3 consecutive years of decline, it was good to see location numbers rise back up to pre-2017 levels. These also showed that this species is distributed throughout our area from Pool all the way to the Wharfe and Skirgill headwaters. Whilst almost all records were in low single digits, 10 were at Denton Moor on 31 Mar, 13 on Hawksworth Moor on 15 May, and over 40 were ringed at Timble Ings on 8 Oct (JM). There were garden sightings in Hebden, Addingham, Ilkley, Menston (first in 25 years), and Pool.

CROSSBILL *Laxia curvirostra*
11 locations (12,13) Passage/winter visitor, occasional resident / breeder

The Norwood Edge-Timble Ings axis remain the main area of concentration for this species, particularly those two locations themselves, but also between and around. 17 were seen at the former on 7 Mar (AJ). Elsewhere up to 13 were seen in 2 sightings at Addingham Moorside at the end of Apr, 8 were recorded in a Jul BBS count at Valley of Desolation, and others were heard overhead in the Guiseley Gap twice in the autumn.

GOLDFINCH *Carduelis carduelis*
64 locations (27,39) Common resident breeder, passage visitor

Once regarded as at least unusual, this species has become almost ubiquitous, especially in gardens; it featured in every region within our catchment. Flock counts remained on the low side, although the ubiquity may well be leading to some under-reporting. 60 were seen feeding on thistles at Odda Hill Menston on 10 Aug, 50 at Grimwith a week earlier, 20 at Hunter's Slets on 19 Aug. Up to 50 were recorded in winter months in an Ilkley garden (PG), 40+ in another (A&DB), whilst a flock of 50+ was resident in one plantation at High Royds.

SISKIN *Spinus spinus*
40 locations (17,13) Resident breeder, passage / winter visitor

2021 saw a significant hike in reports, with locations trebling compared to last year, and showing a wide distribution throughout the lower altitudes of our area. Winter flocks at Otley Wetland peaked at 100 in Jan and 50 in Dec (PP), whilst c150 were recorded at Knotford Nook in Dec (AJ). Smaller numbers, 50 max, were recorded on passage at Sandwith Moor in the autumn, whilst flocks of 15-20 were seen early in the year at Heber's Ghyll, north Menston, Middleton Woods, Farnley Lake, and late on in a Pool garden and at Bolton Abbey. Other garden sightings were at Hebden, Addingham, Ilkley (up to 13, HS), Menston, Otley and East Otley.



Snow bunting (KS)

LAPLAND BUNTING *Calcarius lapponicus*
1 location (0,1) Rare passage migrant, winter visitor

Only the second recording in our area since 2010, one was seen over Sandwith Moor on 30 Mar (BTO). The only other this past decade was over Burley Moor in Sep 2020.

SNOW BUNTING *Plectrophenax nivalis*
2 locations (1,2) Scarce passage migrant, winter visitor

Up to 2 were seen on Fleet Moss at Oughtershaw 3 times 18 Feb - 5 Mar. A single male in winter plumage was seen briefly on 15 Dec, "landing on a track, feeding for 2 minutes, and then flying off high and into distance" (all BTO).

YELLOWHAMMER *Emberiza citrinella*
2 locations (1,1) Scarce resident, probable breeder

A small population in the Weeton area continues to sustain the recording of this increasingly scarce species in our area: individuals were recorded on 4 occasions Feb-Jul. An unusual sighting of 4 was recorded in Mile Field at Leathley on 10 May (D&NF), the first this far up the valley for 3 years.

REED BUNTING *Emberiza schoeniclus*
23 locations (7,16) Resident breeder, passage visitor

After 2 years of the only northern records being from Grimwith Rsr, it was good to see elsewhere in the Grassington area featuring again, with individuals seen at Hebden (inc a garden sighting), Linton and Threshfield Moor. For the first time in at least 5 years, one was reported outside this area, at Cosh (High Green Field Knott) on 14 Apr. Numbers in the Bolton Abbey area remained low, with up to 2 seen on Barden Moor throughout the second third of the year. It was a similar story in the Washburn, the only sightings being 1-3 at John O'Gaunts twice in Q3, and 2 on the edge of Denton Moor on 9 Dec. In the main valley, there were more, most centring on Otley Wetland, although there was at least one pair seen most months at High Royds. Others were seen on Hawksworth-Burley-Ilkley Moors, briefly at Chelker Rsr, whilst the most southerly was at Castley on 19 Mar. 1-2 birds were almost daily visitors in a Burley garden until the start of May (PR), with other one-off garden sightings in Ilkley, Otley and Pool.

MOTHS

Moths have been regularly recorded throughout 2021 in Wharfedale, part of the larger vice-county recording area Mid-west Yorkshire (VC64). First records of the year were in February: March Moth (70.245 - *Alsophila aescularia* - 1663), Pale Brindled Beauty (70.247 - *Phigalia pilosaria* - 1926) and Chestnut (73.194 - *Conistra vaccinii* - 2258). March: (49.044 - *Tortricodes alternella* - 1025), Brown House Moth (28.010 - *Hofmannophila pseudospretella* - 647), (29.001 - *Diurnea fagella* - 663), Grey Shoulder-knot (73.202 - *Lithophane ornitopus* - 2237), Oak Beauty (70.251 - *Biston strataria* - 1930) and Common Quaker (73.244 - *Orthosia cerasi* - 2187). The latest moths sighted were in October: Apple Leaf Miner (21.001 - *Lyonetia clerkella* - 0263), (32.017 - *Agonopterix arenella* - 0697), Brindled Ochre (73.234 - *Dasypolia templi* - 2229), Yellow-line Quaker (73.190 - *Agrochola macilentata* - 2264), and Black Rustic (73.223 - *Aporophyla nigra* - 2232). November: Beautiful Plume (45.010 - *Amblyptilia acanthadactyla* - 1497); (49.069 - *Acleris sparsana* - 1041), Silver Y (73.015 - *Autographa gamma* - 2441), Red-green Carpet (70.095 - *Chloroclysta siterata* - 1760), Dark Chestnut (73.195 - *Conistra ligula* - 2259), Red-line Quaker (73.189 - *Agrochola lota* - 2263), Blair's Shoulder-knot (73.206 - *Lithophane leautieri* - 2240), Scarce Umber (70.250 - *Agriopis aurantiaria* - 1933) then finally Winter Moth (m & f) (70.106 - *Operophtera brumata* - 1799) and December Moth (66.001 - *Poecilocampa populi* - 1631) before cold late Nov/ December weather ended trapping. Some sites in Burley-in-Wharfedale, Skyreholme, Ilkley, Menston, Otley and Pool-in-Wharfedale were regularly monitored using light trapping and wine roping. The busiest months for moth sightings were June - 967 records (206 micro, 761 macro), July - 1,723 records (326 micro, 1397 macro) and August - 893 records (209 micro, 684 macro). A total of 4,640 records (932 micro and 3,708 macro) were received for 477 species (190 micro and 287 macro). The sightings and species recorded in any year always fluctuates according to the weather patterns, abundance of common species and the opportunities for regular trapping by WNS moth recorders.

Some photographs of moths regularly seen can be viewed on the Wharfedale Naturalists' Society website <http://www.wharfedale-nats.org.uk/moths/> Many of the moths selected for this website can be seen without a moth trap. Every year we get some 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.

A very cold start to the year with frequent sub-zero temperatures during January so no species recorded. The following often wet and windy February only gave 37 adult moths of 6 species. These included Mottled Grey (70.101 - *Colostygia multistrigaria* - 1775), Satellite (73.210 - *Eupsilia transversa* - 2256) and Dotted Border (70.255 - *Agriopis marginaria* - 1934). With warmer evenings more moths were flying in March so trapping gave 126 records for 345 adults of 19 species including Twin-spotted Quaker (73.250 - *Anorthoa munda* - 2189), Clouded Drab (73.242 - *Orthosia incerta* - 2188), Early Grey (73.069 - *Xylocampa areola* - 2243). Again good numbers of hibernating adult Tissue (70.123 - *Triphosa dubitata* - 1790) and Herald (72.001 - *Scoliopteryx libatrix* - 2469) were found in local caves in early April, Sept, Oct and Dec. Two Heralds were also overwintering in a local garden shed from Sept. Often the sunny warm days of early April became rather cold overnight but later and through to mid October gave excellent moth sightings including: Nettle-tap (48.001 - *Anthophila fabriciana* - 385), Honeysuckle Moth (17.003 - *Ypsolopha dentella* - 0453), Diamond-back Moth (18.001 - *Plutella xylostella* - 0464), (31.001 - *Carcina quercana* - 0658), (41.002 - *Blastobasis adustella* - 0873), (49.091 -

Pseudargyrotoza conwagana - 1011), (49.066/49.065 - *Acleris laterana/comariana* - 1038/1039), (49.166 - *Celypha lacunana* - 1076), Garden Rose Tortrix (49.077 - *Acleris variegana* - 1048), Holly Tortrix (49.223 - *Rhopobota naevana* - 1159), (63.086 - *Crambus lathoniellus* - 1301), (63.074 - *Eudonia mercurella* - 1344), (63.064 - *Scoparia ambigua* - 1334), Small Magpie (63.025 - *Anania hortulata* - 1376), Brown China-mark (63.114 - *Elophila nymphaeata* - 1345), (37.063 - *Coleophora albicosta* - 0544), (28.024 - *Tachystola acroxantha* - 0656), (49.109 - *Agapeta hamana* - 937): Silver-ground Carpet (70.054 - *Xanthorhoe montanata* - 1727), Chimney Sweeper (70.130 - *Odezia atrata* - 1870), Garden Carpet (70.049 - *Xanthorhoe fluctuata* - 1728), Knot Grass (73.045 - *Acronicta rumicis* - 2289), Canary-shouldered Thorn (70.234 - *Ennomos alniaria* - 1913), Ghost Moth (3.005 - *Hepialus humuli* - 0014), Common Swift (3.002 - *Korscheltellus lupulina* - 0017 - *Hepialus lupulinus*), Buff-tip (71.025 - *Phalera bucephala* - 1994), Brown Silver-line (70.222 - *Petrophora chlorosata* - 1902), Early Thorn (70.237 - *Selenia dentaria* - 1917), Foxglove Pug (70.151 - *Eupithecia pulchellata* - 1817), Fan-foot (72.053 - *Herminia tarsipennalis* - 2489 - *Zanclognatha tarsipennalis*) and Dotted Clay (73.353 - *Xestia baja* - 2130). Usual annual sightings of Mint Moth (63.006 - *Pyrausta aurata* - 1361), Emperor Moth (68.001 - *Saturnia pavonia* - 1643), Speckled Yellow (70.229 - *Pseudopanthera macularia* - 1909), Red-necked Footman (72.042 - *Atolmis rubricollis* - 2039), Humming-bird Hawk-moth (69.010 - *Macroglossum stellatarum* - 1984) and Mullein-larval only (73.058 - *Shargacucullia verbasci* - 2221). Adults and caterpillars recorded in gardens and on walks for: Scalloped Oak (70.241 - *Crocallis elinguaris* - 1921), Common Footman (72.045 - *Eilema lurideola* - 2050), Alder Moth (73.036 - *Acronicta alni* - 2281), Angle Shades (73.113 - *Phlogophora meticulosa* - 2306), Mother of Pearl (63.038 - *Patania ruralis* - 1405 - *Pleuroptya ruralis*), True Lover's Knot (73.338 - *Lycophotia porphyrea* - 2118), White Ermine (72.020 - *Spilosoma lubricipeda* - 2060) and Mottled Umber (70.256 - *Erannis defoliaria* - 1935).

The most abundant micro-moths over the 2021 season were:

(63.067 - *Eudonia lacustrata* - 1338) 40 records for 120 moths (30 June to 29 Aug);

Light Brown Apple Moth (49.039 - *Epiphyas postvittana* - 998) 37 records - 64 moths (30 May - 13 Nov);

Garden Grass-veneer (63.080 - *Chrysoteuchia culmella* - 1293) 34 records - 130 moths (09 Jun to 25 Jul); (63.089 - *Agriphila tristella* - 1305) 33 records for 72 moths (05 July to 27 Aug);

Bird-cherry Ermine (16.001 - *Yponomeuta evonymella* - 424) 32 records for 135 moths (09 Jun to 29 Aug);

Straw Grass-veneer (63.093 - *Agriphila straminella* - 1304) 29 records for 67 moths (16 June to 14 Aug).

The most abundant macro-moths over the 2021 season were:

Large Yellow Underwing (73.342 - *Noctua pronuba* - 2107) 163 records - 2,759 moths (20 Jun to 09 Nov);

Common Marbled Carpet (70.097 - *Dysstroma truncata* - 1764) 84 records - 270 moths (28 May to 08 Nov);

Brimstone Moth (70.226 - *Opisthagraptis luteolata* - 1906) 81 records for 174 moths (28 May to 11 Sept);

Willow Beauty (70.258 - *Peribatodes rhomboidaria* - 1937) 77 records for 148 moths (09 June to 26 Sept);

Hebrew Character (73.249 - *Orthosia gothica* - 2190) 68 records for 135 moths (18 Mar to 14 May);

Lesser Yellow Underwing (73.345 - *Noctua comes* - 2109) 65 records for 442 moths (13 July to 14 Oct).

Photographs and further details of the moths highlighted in this report are available on the following websites:

<http://www.yorkshiremoths.info/> or <http://ukmoths.org.uk/>

(<http://www.yorkshiremoths.info/> -includes some recent photographs and County Recorder species comments but only shows record distribution until end of 2014. Unfortunately this website has not been updated with the latest National Moth Recording Scheme (NMRS) data).

Highlights from 2021 were:

1.005 *Micropterix calthella* (0005)

5 records for 15 individuals between 29 May and 14 July at Grass Wood, Bastow Wood, Lindley Wood and near Kilnsey for a thinly distributed Common moth. A tiny species, with a wingspan of 8 to 10mm, yellowish head, metallic bronzy forewings and distinctly purple patch at base. Day-flying, avoiding hot sun, May to Jul, feeding on pollen of Creeping buttercup (*Ranunculus repens*) & Sedges (*Carex sylvatica*).

3.004 Gold Swift *Phymatopus hecta* (0016)

3 male moths displaying on edge of Burley Moor on 29 June. This uncommon Local moth flies at dusk and seldom comes to light traps. The female deposits the eggs in flight, and the larvae feed on Bracken (*Pteridium aquilinum*), mainly internally until fully grown, then they feed on the young shoots.

7.012 *Nematopogon schwarziellus* (0141)

1 individual on 15 May at Grass Wood for a thinly distributed Common moth occupying woodland, heathland and acid grassland. The larva constructs a case from detritus, within which it lives, feeding on dead leaves throughout the winter and all the following year until the succeeding Spring. Adults hatch in May and Jun, and fly early morning and from late afternoon till dusk.

8.001 *Incurvaria pectinea* (0129) & 8.002 *Incurvaria masculella* (0130)

4 individuals between 9 May and 5 June at Timble Ings, Menston and Hawksworth for scarce thinly distributed Local & Common moths. The males have the unusual feature of 'comb-like' antennae and these moths when viewed from certain angles show a purplish metallic sheen.

13.002 *Roeslerstammia erxebella* (0447)

1 individual on 29 July at Dob Park for a very rare distinctive metallic-golden Local moth. It has a purplish-bronze tinge to the base of the forewings, a noticeably yellow crown and a white band close to the tip of the antennae. The larvae mine and feed on the leaves of Lime (*Tilia*) and Birch (*Betula*).

15.067 *Phyllonorycter rajella* (0345)

2 individuals on 1 May and 29 Jul at Fewston Reservoir and Dob Park. This Common moth varies from very dark to much paler specimens, however, a broad whitish basal streak is usually quite obvious. Larvae feed on Alder (*Alnus*) and create small triangular blotch mines on the underside of the leaves.

16.007 *Yponomeuta plumbella* (0430)

1 individual on 30 Jul in Grass Wood for a rare Local resident moth with few County records. One of the more recognisable *Yponomeuta* species, with a distinct black spot centrally on the forewing and blackish patch at the wingtip. The caterpillars mine the leaves of Spindle (*Euonymus europaeus*) before living gregariously in a silken web.

17.002 *Ypsolopha nemorella* (0452)

1 individual on 3 July in Grass Wood for a rare Local resident moth. A larger species of the genus *Ypsolopha* with a distinct dark spot on the creamy forewing. Distributed locally across

most of Britain and usually in a woodland habitat. The larvae feed on Honeysuckle (*Lonicera*) and fly during Jul and Aug.

19.003 *Glyphipterix fuscoviridella* (0396)

2 individuals on 30 May at Coniston for a rare Common moth with only occasional records in VC64 since 2004. A relatively plain species with a slight metallic sheen. It occupies dry grassland habitats and the larvae feed in the stems of Wood-rush (*Luzula* spp.) during early spring.

20.005 *Argyresthia trifasciata* (0409a)

11 individuals on 16 and 18 June at Menston and Ilkley for a scarce Local moth. A tiny distinctive moth which is quite noticeable as it flies slowly against the dark backdrop of Conifer trees. It is easily caught and then closer investigation reveals the diagnostic three white cross-lines. The larvae feed on Juniper (*Juniperus*) and Leyland cypress (*Cupressocyparis leylandii*), causing tips of shoots to turn brown.

20.019 Apple Fruit Moth *Argyresthia conjugella* (0418)

1 individual on 28 Jun in Otley for a scarce Common local resident moth. One of the larger and more distinctive *Argyresthia* species with adults on the wing between May and Jul. The larvae feed on Rowan (*Sorbus aucuparia*) and Apple (*Malus*), boring into berries or fruit.

32.010 *Agonopterix conterminella* (0710)

1 individual on 29 July at Dob Park for a rare Local moth found flying in woodlands and marshy places during Aug/Sept. Earlier in May/June the larvae feed on the terminal shoots of Sallow (*Salix* spp.).

38.004 *Elachista argentella* 0610, 38.025 *Elachista atricomella* 0597, 38.032 *Elachista apicipunctella* 0602

14 records for 19 individuals of *Elachista* species between 13 May and 28 Aug at Otley, Grass Wood and Skyreholme. *E. argentella* (a small, all white species) and *E. atricomella* (with dark grey head (m) or yellowish head (f)) are both Common thinly distributed moths and *E. apicipunctella* (white head & extra white subapical spot on the forewing is a scarce Local moth of woodland clearings. The larvae feed on various Grasses (*Gramineae* spp.), including Cock's-foot (*Dactylis glomerata*).

40.011 *Mompha langiella* (0880), 40.012 *Mompha miscella* (0884), 40.015 *Mompha raschkiella* (0883)

1 individual of the rare Local *M. langiella* at Burley in Wharfedale on Jun, and mines found on Enchanter's Nightshade (*Circaea lutetiana*) at Threshfield & Strid Wood in July. The Local scarce *M. miscella* was recorded as mines on Common rockrose (*Helianthemum* spp.) at Threshfield and Kilnsey between 12 Jun and 15 Aug. Also the mines of the Common thinly distributed *M. raschkiella* were found on Rosebay willowherb (*Epilobium angustifolium*) at Threshfield & Grass Wood in July/Aug.

43.001 *Scythris fallacella* (0913)

2 individuals (** gen. det.) on 12 Jun and 31 Jul near Kilnsey. Possible Red Data Book1 (pRDB1) moth only previously recorded at Grassington and Kilnsey in 2020 and Grass Wood in 1984 and 1882.

49.008 *Philedone gerningana* (1008) Local & 49.010 *Philedonides lunana* (1009) Nationally Scarce B (Nb)

3 records for 6 individuals between 10 and 31 Jul in the Burley Moor area for these rare moths with few County records since 1883. Day flying male *P. gerningana* are usually found in wild uncultivated places, often, but not always, upland, including bogs, acid heaths and limestone outcrops. *P. lunana* is a species of moorland and heathland, with males day flying from Mar to May, and larvae feeding on Heather (*Calluna*

- vulgaris*) and Bilberry (*Vaccinium myrtillus*), before spinning together leaves or flowers.
- 49.035 *Clepsis senecionana* (0991)
1 individual on 27 Apr and 2 May on Burley Moor for this rare Local moth. A relatively small species, notable for its lack of patterning, except for a slight reticulated appearance which is sometimes barely visible. Adult moths fly on sunny afternoons in May and Jun.
- 49.060 *Aleimma loeflingiana* (1032)
2 individuals on 28 Jun and 17 Jul in Otley area for this Common woodland moth thinly distributed in the North. The darker markings on the forewings can be somewhat variable, but are usually fairly diagnostic of the species. Flying from dusk into the night, its larvae feed mainly on Oak (*Quercus*).
- 49.174 *Phiaris palustrana* -1074 - *Olethreutes palustrana*)
1 individual on 14 July in the Kilnsey area for a rare local Nationally Scarce B (Nb) with few County records since 1917. It frequents heathland with scattered trees, and flies from the end of May to Aug, sometimes on sunny afternoons, but more typically towards dusk. The larvae feed on mosses, living in a silken tube or gallery.
- 49.194 *Bactra lancealana* (1111)
5 records for 8 individuals between 22 May and 27 Aug at Ben Rhydding, Burley Moor and Skyreholme for a Common moth which occupies marshes and heaths. Quite a variable species, with some individuals being almost unicolorous, others with a pale streak along the fore edge of the darker brown wing, and some with obvious darker patches on a mottled forewing.
- 49.254 *Epinotia bilunana* (1133)
1 individual on 5 Jun at Otley of this Common thinly distributed moth. Frequenting woodland, this species is fairly distinctive with its creamy or pale greyish ground colour and diffuse blackish markings. The larvae feed internally on the catkins of Birch (*Betula spp.*) throughout the winter period.
- 49.320 *Dichrorampha alpinana* (1274)
1 individual on 2 Aug at Otley for a rare Local moth of grassy meadows and rough pasture. Often day flying, between June and August, and found resting on flowers of the food plant. Larvae feed Oxeye daisy (*Leucanthemum vulgare*) roots.
- 49.325 *Cydia ulicetana* (1255)
2 records for 3 individuals on 8 May and 20 Jun at Hawksworth and Timble Ings for a Common thinly distributed moth of heathland and moorland. The males fly in sunshine, but the females prefer twilight. The larvae feed internally in the seedpods of plants such as Gorse (*Ulex*) and Broom (*Cytisus*).
- 49.363 *Pammene argyrana* (1228) & 49.363 *Pammene fasciana* (1236)
One *P. argyrana* on 25 May at Hawksworth and *P. fasciana* on 17 Jul in Otley for scarce thinly distributed Local & Common moths. *P. argyrana* rest on Oak trunks in the crevices of bark during April and May. Larvae live in galls, often of another hymenopterous insect, and feed internally. In Jun and Jul *P. fasciana* flies with its attractive bluish metallic/tawny markings on rosy flushed whitish ground colour. Larvae feed internally in the acorns of Oak (*Quercus spp.*) and nuts of Sweet Chestnut (*Castanea sativa*).
- 52.003 Lunar Hornet Moth *Sesia bembeciformis* (0371)
1 individual (via Pheromone lure) on 15 Jul at Ben Rhydding for a Common scarce moth. One of several similar 'mimic' species, known as Clearwings, this is one of the largest, and presents a fearsome sight to the uninitiated. Best looked for in Jul, as the adults emerge and rest low down on the trunks of Sallow and Willow (*Salix spp.*). Eggs are laid on the bark, then the larvae burrow into the wood and feed internally.
- 54.003 *Cistus Forester Adscita geryon* (0164)
388 individuals were seen between 30 May and 25 Jun in the Kilnsey, Grass Wood and Arncliffe areas for a Nationally Scarce B (Nb) moth. Larvae feed on Common Rock-rose (*Helianthemum nummularium*).
- 62.027 *Dioryctria simplicella* (1455) & 62.028 *Dioryctria abietella* (1454)
1 individual of each scarce Dioryctria species: the Local *D. simplicella* on 12 Jul at Skyreholme and the Common *D. abietella* on 12 Aug in Otley. Visually *D. simplicella* tends to have less contrast on the forewing markings, and is usually smaller than *D. abietella*. These *Dioryctria* species however are difficult to tell apart and both feed on *Pinus sylvestris*, including cones, shoots and buds.
- 62.042 Thistle Ermine *Myelois circumvoluta* (1458)
1 individual on 13 Jul at Hawkswick for this Common very distinctive moth, rather like a larger version of a *Yponomeutidae* species. The larval food plants are various types of Thistle (*Cynareae*).
- 63.003 *Pyrausta cingulata* (1367)
3 records of 29 individuals on 12 Jun in Kilnsey/Hawkswick area for a rare Nationally Scarce B (Nb). A quite distinctive day-flying species which is attracted to wild Thyme (*Thymus polytrichus*).
- 63.005 *Pyrausta despicata* (1365)
2 records of 3 individuals between 10 and 14 Jul in Kilnsey/Arncliffe area for a rare Common moth with few VC64 records. Larvae feed, often in groups in silken galleries, on Ribwort plantain (*Plantago lanceolata*) and Greater plantain (*P. major*).
- 63.008 *Pyrausta ostrinalis* (1363)
5 records of 15 individuals seen between 8 May and 13 Jun in Kilnsey area for this Nationally Scarce B (Nb) moth.
- 63.077 *Chilo phragmitella* (1290)
1 individual on 20 Jul at Dob Park for this Local uncommon moth. A sexually dimorphic species, with the females paler in colour and generally larger than the males. Both sexes have distinctively long labial palps and fly in Jun and Jul in fens and other wet places where large reedbeds occur. The caterpillars feed inside the stems of Common reed (*Phragmites australis*) and Reed sweet-grass (*Glyceria maxima*).
- 65.013 Common Lutestring *Ochropacha duplaris* (1657)
2 individuals on 15 Jul at Grass Wood for this Local thinly distributed moth. A relatively poorly-marked species, with a range of variants, some tending towards the melanic form *obscura*. Often however the remnants of a darker spot and pale band across the wing is still visible. Adults fly at night from Jun to Aug, and inhabit woodland where the larval food plant, Birch (*Betula*), occurs.
- 70.037 Clay Triple-lines *Cyclophora linearia* (1681)
A second brood scarce Local moth on 1 Sep at Otley. Larvae feed on Beech (*Fagus spp.*) & overwinter as pupa.
- 70.048 Red Carpet *Xanthorhoe decoloraria* (1723)
1 individual on 25 Jul at Skyreholme for this scarce Common moth. Adult moths are on the wing from mid-Jun to Aug, and are attracted to light traps. The preferred habitat is rocky moorland. The larvae feed on Lady's mantle (*Alchemilla*).

- 70.071 Yellow-ringed Carpet *Entephria flavicinctata* (1743)
2 records of 10 individuals on 14 and 28 Aug in the Kilnsey area for this rare upland Nationally Scarce B (Nb) species. One very similar scarce Common Grey Mountain Carpet (70.072 *E. caesiata* 1744) was also caught however this moth does not have orange/yellowish scales like the *E. flavicinctata*.
- 70.098 Dark Marbled Carpet *Dysstroma citrata* (1762 - *Chloroclysta citrata*)
49 individuals between 15 July and 31 Aug at Grass Wood, Kilnsey and Burley-in-Wharfedale for a Common moth which only flies in Jul and Aug. Similar to the Common Marbled Carpet (70.097- *Dysstroma truncata* -1764) there are subtle separation characteristics based on the shape of the postmedian line on underwings, more angular in this species.
- 70.115 Welsh Wave *Venusia cambrica* (1873)
3 individuals on 3 and 28 Aug in Grass Wood for a scarce Local moth of hilly localities. Adult moths fly in July and August and often rest on tree-trunks during the day. Larvae, which are greenish and marked with brown blotches, feed on the leaves of Rowan (*Sorbus aucuparia*).
- 70.135 Heath Rivulet *Perizoma minorata* (1805)
2 individuals on 28 Aug in Grass Wood for a very rare Nationally Scarce B (Nb) distinctive moth which inhabits moorland and other upland habitats. Flying during the day in the Jul and sunshine, its larvae live within the seed capsules of Eyebright (*Euphrasia* spp.) and feed on the developing seeds.
- 70.139 Barred Carpet *Martania taeniata* (1801 - *Perizoma taeniata*)
6 records for 16 individuals between 15 Jul and 3 Aug in Grass Wood. This rare Nationally Scarce A (Na) moth flies as a single generation, from late Jun to early Sep, in damp woodland and similar habitats.
- 70.201 Barred Tooth-striped *Trichopteryx polyommata* (1880)
6 records for 18 individuals between 20 Apr and 12 May for this Nationally Scarce A (Na) moth in the Grass Wood, Kilnsey, Arncliffe and Litton areas. A moth distributed in scattered localities in woodland, limestone and scrubby areas in Yorkshire near its main larvae food plant Wild Privet (*Ligustrum vulgare*).
- 70.235 Dusky Thorn* *Ennomos fuscantaria* (1914)
6 individuals between 30 Jul and 5 Sep at Burley-in-Wharfedale and Otley for this Common moth.
- 70.236 September Thorn* *Ennomos erosaria* (1915)
2 individuals on 12 Aug and 5 Sep at Otley for this scarce thinly distributed Common moth.
- 70.238 Lunar Thorn *Selenia lunularia* (1918)
1 individual on 3 June at Kilnsey for this scarce Local moth which has largely disappeared from lowland Yorkshire, but is still caught in upland woodland. It has a 'lunar' or moon-shaped white mark on the wings and distinctive single deep scallop on the hindwing.
- 70.244 Feathered Thorn *Colotois pennaria* (1923)
7 individuals between 8 Oct and 13 Nov at Otley and Skyreholme. This single generation Common moth flies in Autumn, from Sep to Nov. Only the males have the feathery antennae. Possibly less recorded at light due to its later flight period but larvae, which feed on a number of deciduous trees and shrubs are widely reported over the County in Spring.
- 70.299 Large Emerald *Geometra papilionaria* (1666)
4 individuals between 23 Jul and 3 Aug at Grass Wood, Otley and Skyreholme. This scarce Common moth inhabits woods, heaths and moors. The caterpillar is brown at first, but after overwintering becomes green with brownish 'warts', and feeds mainly on Birch (*Betula* spp.).
- 71.003 Puss Moth *Cerura vinula* (1995)
1 individual on 13 May at Otley for this scarce Common moth. Recorded very sparsely at light and rarely entering traps, it may be found at rest nearby. Its striking caterpillar feeds on Aspen (*Populus tremula*), Poplar (*Populus*) and Willow (*Salix*). When disturbed the larval raises its head and waves the twin tails, which have pinkish extendable flagellae.
- 71.012 Iron Prominent *Notodonta dromedarius* (2000)
9 individuals between 5 Jun and 22 Aug at Otley, Grass Wood, Burley-in-Wharfedale and Skyreholme. for this occasional Common moth. The greenish caterpillar, in common with many of the 'prominents', has several humps on the back and lives mainly on Birch (*Betula*).
- 71.020 Pale Prominent *Pterostoma palpina* (2011)
1 individual on 11 Jun at Otley for this occasional Common moth. A distinctive moth when at rest, though well camouflaged, it has long labial palps and tufts on the tail segment, creating an elongated appearance. The larval food plants are Poplar (*Populus* spp.), and Sallow (*Salix*).
- 72.036 Muslin Footman *Nudaria mundana* (2038)
25 individuals between 26 Jun and 25 Jul at Otley, Grass Wood, Ilkley, Burley-in-Wharfedale and Skyreholme for a Common delicate thinly distributed moth. Its overwintering larvae, which are strikingly marked and hairy, feed on lichens growing on bushes, fences and gateposts, and dry stone walls.
- 73.039 Sycamore *Acronicta aceris* (2279) & 73.040 Miller *Acronicta leporina* (2280)
1 individual on 13 Jun at Burley-in-Wharfedale for the rare Local *A. aceris*. 7 individuals between 5 Jun and 1 Sep for the infrequent Common *A. leporina* at Otley and Burley-in-Wharfedale. Larvae of these *Acronicta* are very distinctive with long hairs. *A. aceris* - bright orange with a row of black-edged white blotches along its back & feeding on Horse-chestnut (*Aesculus hippocastanum*) and Sycamore (*Acer pseudoplatanus*). *A. leporina* - pale green, feather-like appearance & feeds mainly on Birch (*Betula*).
- 73.061 Anomalous *Stilbia anomala* (2394)
3 individuals on 14 and 28 Aug in Grass Wood for a scarce Local fairly distinctive greyish moth of upland grassland and moorland. The larvae feed on Deschampsia species, Tufted and Wavy Hair-grass.
- 73.146 Least Minor *Photedes captiuncula* (2344)
3 individuals from 25 Jun to 14 Jul in Kilnsey/Arncliffe area for a scarce Red Data Book 3 (RDB3).
- 73.211 Angle-striped Sallow *Enargia paleacea* (2313)
1 individual on 19 Jul at Burley-in-Wharfedale was the only sighting of this Nationally Scarce B (Nb).
- 73.257 Beautiful Yellow Underwing *Anarta myrtilli* (2142)
2 adults and 1 larval during Jul in the Denton Moor area and another larval on Barden Moor for this scarce distinctive Common moth. A small species, with a wingspan of around 25mm, which is a diurnal moth, flying freely in warm sunshine on acid moorland but resting when the sun goes in.
- 73.365 Autumnal Rustic* *Eugnorisma glareosa* (2117)
Common
Larval (Thruscross -23 May) 10 adults between 22 Aug and 12 Sept at Kilnsey, Otley and Skyreholme.

* International Union for Conservation of Nature (IUCN) - Category - Endangered

Species with populations which have declined by between 92% and 98% over the last 35 years.

(extract from Page 9 - Butterfly Conservation - The state of Britain's Larger Moths)

<https://butterfly-conservation.org/sites/default/files/sobm-final-version.pdf>

***gen.det. - some moths require examination of a specimen's genitalia to determine to species level.*

Conservation status of species categories:

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.

BRC '1945 to 65': Biological Records Centre scheme (run by John Heath)-with inclusive dates for sightings.

List to 'Checklist of the Lepidoptera of the British Isles' - Agassiz DJL, Beaven SD& Heckford RJ(2013), which replaces Bradley 2000 list (Bradley log numbers and any former names are included with each species to aid cross referencing with earlier publications). The Agassiz et al. checklist is in line with European scientific colleagues and latest DNA analysis which arranges families from the most primitive to most developed based on current knowledge. The Agassiz et al. checklist assigns a number to each moth: the number before the decimal point relates to the 'Family' and the post-decimal number to the 'Species'.

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 Alder, #Kay Andrews, Katty Baird, Karen Bullimore, Heather Burrow, Peter & Janet Burns, Anne Clarke, Win Clements, #Ric Else & Hazel Watson, #Richard Falls, David & Nyree Fearnley, #Charles Fletcher, Audrey Gramshaw, #Colin Harrison, Fred & Carmen Horner, #Diana Jakeways, Dave McMahon, Paul Millard, Denis O'Connor, Jo Peters, Peter & Anne Riley, Jo Smith, Susan Stanwell, 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.

Miscellany

Bird succession

At the beginning of the year we had a large number of bullfinches coming to the garden. It was not unusual to find eight eating from a 10-port feeder, apparently four pairs sharing amicably. Others were waiting to take their place, or were on one of the smaller feeders. This went on for the first three months of the year. Our President, who was still waiting to coax in his first bullfinch of the year, was somewhat jealous.

Eventually the bullfinches thinned out a little and came a pair at a time, presumably breeding. They kept coming through the year, eventually bringing youngsters, but were no longer congregating as they were in the winter.

But as the bullfinches thinned out, the siskins moved in. On a summer morning there were often 25 or more chirping in a tree at the bottom of the garden and going backwards and forwards to the feeders. When there are so many, you realise how different they can be in size, colour and details of markings, while still remaining obviously siskins. They were possibly the most numerous, certainly the most obvious, birds at the feeders, right through to the autumn equinox, when they were replaced by goldfinches in flocks on the tree and down on the feeders. For years we have left seedheads on garden plants through the autumn, and goldfinches have ignored them, until last year, when a few used them. This year there were little groups of goldfinches hanging on every possible plant.

The aforementioned species were obvious because of their number, but many other birds visited regularly. Blue tits, great tits, and coal tits are always around. So are robins, dunnocks, crows, jackdaws, magpies, wood pigeons, town pigeons, chaffinches, wrens, blackbirds, tawny owls. Less constant, but no surprise when seen, are great spotted woodpeckers, jays, and longtailed tits.

The surprises this year were a couple of redpoll that visited twice early morning in the summer, and a family of greenfinches that visited just once in the autumn.

Disappearing hedgehogs

Last year, for as far as we knew the first time, hedgehogs were living in the garden. They may have been there before but there had never been any sign or sighting. With a trailcam in place we enjoyed their feeding and interactions, including squaring up to one another like stags.

This year we put out the camera in the spring and checked it each morning. Nothing. No hedgehogs, no moths fluttering by, no owls alighting in front of the camera, no rats, not even the neighbours' cats. Nothing between a woodpigeon at dusk, and a woodpigeon at dawn. And so it went on, until the point that we tired of checking. This was a big disappointment.

A house a couple of hundred metres up our lane, and another a similar distance down, had major building work done during the year, and we can only assume that this put off the hedgehogs from living in the area. We can only hope they return now all has gone quiet. Not quite sure why the other nocturnal wildlife went absent too, though.

We hope for better luck in 2022.

Fragrant trees

For several years I have been puzzled by a scent in the local wood in the summer, a pleasant sweet smell which gets you looking for a flower that has produced it. None can be found.

This year the scent had been there for a few days when I found a branch hanging lower than usual. It struck me that this was giving off a scent. When I turned over the leaves I could reach I saw the culprits, sycamore aphids in abundance. They were producing a perfumed honeydew.

The sycamore aphid *Drepanosiphum platanoidis* lives on sycamore trees, occasionally on other *Acer*, rarely on other trees. Although the honeydew gives a pleasant odour to us, it does not attract ants as other aphids do.

Should have gone to Specsavers

Our dog takes no notice of sheep, regarding them as an inferior species somewhat lacking in intellect. On the other hand, she seems to look harmless to most sheep. When she passes they take one look and go back to their grazing. Occasionally a sheep comes across to examine her nose to nose, perhaps wondering if this largely white animal is some sort of sheep.

But this year on the moor, on three occasions, a lamb has appeared over the brow of a hill, obviously having lost touch with its mother, glanced around, and made a beeline at speed towards the dog, only to brake hard a couple of metres away when it realises it isn't mum, or even a sheep. I have always assumed sheep, like most ungulates, had good distance vision and a wide field of view, but perhaps this is not true. Or perhaps they are even dimmer than we thought.

John Stidworthy

Cabbage Attack

Watch out for your brassicas when the whites are on the wing.

Your broccoli will be in tatters if you let them do their thing.

Known as summer snowflakes by those who don't grow greens.

In the veggie patch they must be stopped by tough but friendly means.

Erect a mesh but be aware they will crawl underneath.

But fluttering round they can't get in because they don't have teeth.

Kelvin Smith



THANKS

Many thanks to all the members who provided material for this publication.

The recorders' reports give a valuable amount of data on the state of wildlife in our area which can be compared with records from former years.

Others have contributed notes on the Society's activities, or articles on a variety of topics with wildlife in mind.

There are also many beautiful and informative photographs

Thanks to everyone who has contributed. Apologies to anyone inadvertently left off the credits. Keep the contributions flowing for 2022

Most of the photographs have captions, with the initials of the photographer appended.

A key to the names is on this page.

Where a photograph is within an article, it is by the author unless labelled otherwise. Similarly, captions may not appear if the subject is obvious from the surrounding text.

Anne Riley	AR
Bruce Brown	BB
Carmen Horner	CH
David Varney	DH
Denis O'Connor	DoC
Jeremy Taylor (drawings)	JT
Jill Riley	JR
John Stidworthy	JS
Kelvin Smith	KS
Nyree Fearnley	NF
Patrick Wiegand	PW
Ros Lilley	RL
Terry Flynn	TF
Front Cover Curlew	Patrick Wiegand

Review of the year 2021

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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.