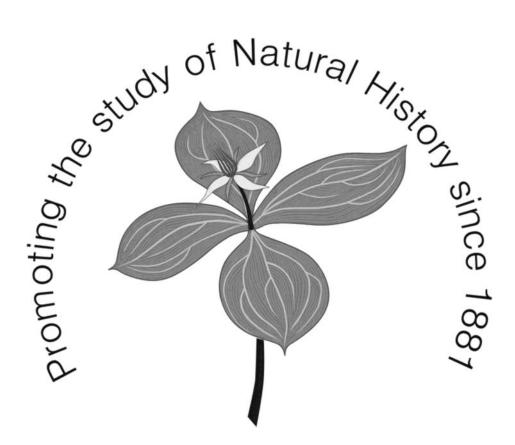
The Reading Naturalist

No. 75



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Report for 2022

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THE READING NATURALIST No 75 for the year 2022

The Journal of the Reading and District Natural History Society

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Editor's Note:

My special thanks to all the contributors for their determined efforts in meeting the deadlines whilst carrying on with their busy lives. The Honorary Recorders do a fantastic job with their respective taxa, as well as the many who produce the reports of the walks, excursions and meetings, articles and help with the incredible task of validating and proof reading, in particular Julia Cooper, Jan Haseler and Sarah White without whom the task of producing The Naturalist would be impossible.

PLEASE PLEASE can I ask more of the membership to write down their observations, pop them on the taxa report spreadsheets and send them/email them to the appropriate recorder? WE NEED YOUR OBSERVATIONS to record the wildlife of the local area and we need your help in creating the data.

I am very keen for and would greatly welcome your articles and photographs of all your interesting walks and trips, ongoing studies and discoveries, whether they are near or far and submit them for publication here.

Ken White (Hon. Editor) email your articles and photos to: white.zoothera@gmail.com

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Presidential Musings by Tricia Marcousé

A strange year for everyone with Covid rules lifted although new cases fluctuated wildly as Omicron threw off umpteen new strains and the end of the year saw estimates of 1 in 20 people catching the virus. The Committee decided to continue holding half of the winter programme of talks on Zoom to make us resilient to potential lockdowns and allow members who are worried about meeting indoors to enjoy at least some of the range of brilliant speakers. Fiona Brown used the Zoom option to bring in speakers from further afield than usual and covered everything from diatoms to wolves with a focus on ongoing research projects looking at restoration of biodiversity in a changing world.

Jan Haseler put together a full outdoor programme of field excursions and the more informal Wednesday walks, together with the annual mothing evening and fungus foray. Thanks go to her and to all of the people who led the walks and provided the ancillary details about parking, terrain and the nearest pub!

The Society did a range of outreach activities this year. In June we joined BBOWT to participate in the British Entomological & Natural History Society 150th anniversary bioblitz at Dinton Pastures, where one observant teenager found a complete sloughed skin from a Grass Snake and then saw the snake itself 30 minutes later!

As usual, John Lerpiniere's garden slow-worms had a day out at Clayfield Copse for Meadows Day in July and attracted people to the stall, where the combined talents from RDNHS, Econet, BBOWT and Reading Geological Society introduced them to a range of exhibits and took them on guided walks, with one specifically for children. The month of hot, dry weather beforehand meant that, apart from the knapweed and cranesbill, flora in the meadow had either finished flowering and set seed, or given up the idea altogether leaving a very limited colour palette. I was amazed to find that even Oxeye daisy, normally one of the wildflowers aiming for planet domination, had succumbed.

September was a busy month. We set up at the University Freshers' Fair, and took a stall at the Youth Festival at Reading School and one at Caversham Library during the Reading Climate Festival. In all locations we setup a screen to attract the unsuspecting, and showed loops of Rob Stallard's amazing photographs of the natural history year and Jan Haseler's beautiful presentation of butterflies in the garden. This was a successful system at the Youth Festival but failed miserably to interest people at Caversham library! In addition, the society arranged two Zoom talks during the Big Green Week: Martin Bidartondo of Imperial College repeated the talk he gave to the society in February to an audience of 90, and our first talk of the winter season from John Redford of the UK Centre for Ecology and Hydrology on balancing biodiversity within economic farming systems was shared with a wider audience.

We finished the year with the Christmas Party in Pangbourne Village Hall with mulled wine, quizzes: thank you Lesley, Katie and Rob, and the annual photographic competition, which was voted on by those at the party. My thanks to Rachel Woolnough who has taken over running this competition. It was difficult to cast a decisive vote amongst the number of excellent photographs, but you can see the "best" later on in this Naturalist.

Just enough space left to thank all the other Committee members not mentioned above: Fiona Cummins, our patient secretary, Ian Duddle for keeping us solvent and running the Zoom presentations, Julia Cooper for maintaining records of observations at meetings and Katie Jenks for starting the RDNHS lending library. Not forgetting our species recorders, Renée, Norman and John, who continue to document observations made by members throughout the year, and Ken White gets grateful thanks for continuing to edit the Naturalist from Dumfries. The final big thank-you goes to Rob Stallard for redesigning our website, and for editing and sending out the monthly newsletter, with glorious photos, that keeps everyone informed about society events and the wider conservation activities and news.

Membership 2022 by Norman Hall & Ian Duddle

Paid up Membership figures as they stand as at the end of December 2022

Single members 60

Family/Couples 30 (60)

Honorary members 7

Total 127

of whom we welcomed 6 as new members to the group:

Dr Martin and Jo Parsons

Howard and Maria Darby

Sue Ashwell

Miss Greta Bertram

Members' Observations 2022 by Julia Cooper & Rob Stallard

4th January 2022

Ken White- in their garden and locally at Plastow Green:

10/12/21 A Brambling on sunflower seed dispenser.

29/12/21 4 Red Kites roosting in bridleway trees.

01/01/22 Newbury Peregrines Black 69 (B69) and Mrs Newbury (Mrs N) very much in residence on the BT building, both chasing off an intruder Red Kite. Photos are on Twitter: @NewburyPeregrin.

01/01/22 Great Spotted Woodpecker drumming and 3 Grey Squirrels on sunflower seed dispenser. Honey and Bumble Bees feeding on *Mahonia* and *Lonicera* flowers.

02/01/22 A Goldcrest in full song.

03/01/22 Redwings singing from hedgerows (joining in with the songs of Blackbird, Mistle Thrush, Song Thrush, 1 Green Woodpecker, Dunnock, Wren, Robin, Goldfinch, Collared Dove, Great Tit and Blue Tit).

Jenny Greenham – a leucistic Blackbird in a garden in Market Drayton on 17/11/21, apparently one of several such birds there.

Jan Haseler – had visited Juniper Valley at Aston Upthorpe on 03/01/22. This is one of two sites where Plantlife are working to restore Juniper having received funding for a project to revitalise populations in Wiltshire and Oxfordshire:

(www.plantlife.org.uk/uk/blog/saving-englands-juniper-an-update-from-project-manager-matt-pitts).

As Juniper is a pioneer species it needs bare ground. On the western side of the Valley scrub has been removed and the ground scraped to bare chalk with the scrapings spread in nearby fields. Viable Juniper seeds from Kew will be scattered on the scrapes and cuttings will be hand planted, and chalk grassland flowers should grow from the seedbank, so it will be interesting to follow progress of the project.

18th January 2022

Ken and Sarah White at Plastow Green in their garden and nearby: 04/01/22 A Muntjac in the garden.

05/01/22 A Bullfinch singing in the garden and 2 Ravens gliding in to roost in nearby copse.

07/01/22 A Fieldfare taken as prey by Sparrowhawk in nearby field.

10/01/22 House Sparrows going in a nestbox in the garden.

14/01/22 50 Fieldfares, 80 Redwings and 30 Pied Wagtails in nearby stubble turnip field.

18/01/22 A Raven flew from nearby copse and then completed a flight display as it went by.

Jan Haseler – referred to the RDNHS walk at Miram's Copse, Bradfield last June where we saw leafless trees, particularly Hazel and Oak, with caterpillars everywhere – dangling down from long threads and feeding on the remains of leaves. The caterpillars were thought to be Winter Moths or Mottled Umber. Paul Black of the Berkshire Moth Group had observed around 100,000 Winter Moths in a wood north of Snelsmore when he visited on 03/12/21, which doesn't bode well for the trees next summer.

Tricia Marcousé – a Wren inspecting potential nest sites in her slightly dilapidated conservatory in Earley on 07/01/22.

Gustav Clark - Amber Jelly fungus *Exidia recisa* on Creeping Willow at Snelsmore Common. There were no other records of this fungus for Central England. (It is reported to be widespread but local.)

Dorothy Marshall – a Red Admiral on a sunny surface in her garden in Pangbourne on 12/01, 13/01 and 14/01/22 (3 cold but sunny days) and nectaring on *Mahonia*.

Catharine Paige (Bracknell Forest NHS) also saw a Red Admiral on Mahonia in Ascot on 14/01/22.

Rob Stallard – on a pre-walk to Savernake Forest on 12/01/22 saw hair ice for the first time. The hairs consist of ice crystals which are nucleated by a fungus *Exidiopsis effusa* present in rotting wood. No other records were found for that area. (The conditions required for the formation of hair ice are extremely specific: moist rotting wood from a broadleaf tree with *E. effusa*, moist air and a temperature slightly below 0°C are all required.)

1st February 2022

Ken White – at Plastow Green, a Great Spotted Woodpecker drumming on 21/01/22.

30/01/22 House Sparrows in and out of a nestbox.

30/01/22 Newbury Peregrines mating on the BT building.

Renée Grayer – on the lake at Whiteknights, Reading University, Renée and Christine Williams saw more than 50 Shovelers and 7 Gadwalls on 29/01/22. They also saw similar numbers of the ducks a week earlier on 22/01/22.

This week Renée found a number of feathers on her lawn in Earley, which she thought were pulled out and left by a Fox eating the remains of a bird. Most of the feathers were white with dark grey markings, but some smaller ones had red-brown edges. Renée sent photographs of the feathers to Ken White who identified them as the innermost secondaries of a Pheasant.

Veronica Vincent – heard a commotion in her garden in Reading recently and saw a large, very fat Brown Rat chasing a Magpie round her rotary dryer. The Magpie eventually flew off.

15th February 2022

Andy Bolton – on 08/02/22 at Wheathold Road, Axmansford, a remarkably large herd of 60 Fallow Deer on the Chamomile field, and 4 Yellowhammers settling down to roost in a shrubby hedgerow at about 5pm.

Renée Grayer - with Christine Williams on Friday 11/02/22 saw a Red Admiral flying in the parkland at Cliveden, near Maidenhead.

Dorothy Marshall - last week in her garden in Pangbourne had a female Chaffinch with a white scaly crust coating its feet, something she has never seen before. Apparently this can be caused by mites or a virus and is a condition Chaffinches are prone to.

Jan Haseler - saw the first frog of the year in the pond in their Tilehurst garden yesterday (14/02/22).

Ken White - at Plastow Green:

09/02/22 2 Red Admirals chasing each other around the garden.

11/02/22 10 Goldfinches queueing up for the sunflower hearts.

15/02/22 1 adult Hare roosting on the edge of a nearby field and a Muntjac wandered through the back garden. Also in the Newbury BT Exchange building nestbox on 13/02/22, the adult male Peregrine B69 was photographed scraping a depression in the gravel, caught on the new nestcam.

1st March 2022

Ian Duddle – 2 Redwings in his Tilehurst garden on 26/02/22.

Fiona Cummins – a Peacock butterfly in her garden in Sonning Common on 26/02/22.

Jan Haseler – a chorus of frogs from her garden pond in Tilehurst and at least 20 frogs in the surrounding undergrowth yesterday evening (28/02/22), which was mild and damp; and this morning the first frogspawn of the year.

John Lerpiniere found frogspawn in Cowsey Pond, Whitley on 23/02/22. A Roman Snail shell was found at Aston Upthorpe Downs in January. 2 pairs of Cranes were reported recently at RSPB Otmoor. Alan Parfitt then confirmed 2 pairs of Cranes are present and possibly a third.

Grahame Hawker – a Red Admiral at Thame on 26/02/22.

Jerry Welsh – a Cornelian Cherry *Cornus mas* in flower on the B481 from Peppard to Caversham today – a harbinger of spring.

Sally Rankin – 2 Common Lizards basking on a sunny bank at Nettlebed Common on 26/02/22, seen during a work party. They are becoming more common as the habitat is improved at Nettlebed, Peppard and Kingwood Commons. Jerry Welsh commented that he had seen Common Lizards there in February before, about 30 years ago.

15th March 2022

Marion Venners – Coltsfoot in flower on the north side of Hosehill Lake on 10/03/22 and also Primroses in flower. The area is more open than in the past. Julia Cooper commented she had also seen Coltsfoot flowers on what looked like an uncultivated arable margin near Hailey on 27/02/22.

Ian Duddle and Julia Cooper – in their Tilehurst back garden:

06/03/22 A Goldcrest seen in the Yew tree, often heard but rarely seen.

10/03/22 A male Brimstone, first sighting this year.

15/03/22 3 male Brimstones, a Comma defending its patch against one of them, and a Small Tortoiseshell – the first this year for the latter 2.

Also Scarlet Elfcups on rotting wood during their prewalk from Whitchurch Hill (SU631803) on 07/03/22.

4th October 2022

Renée Grayer - 2 Pipistrelle bats flying in her Earley garden on 02/10/22.

Dick Croker – had captured on video a Hummingbird Hawk-moth feeding on Verbena in his Tilehurst garden on 28/09/22.

Tricia Marcousé – Her neighbour had the hedge severely cut back. Tricia was concerned that this had destroyed a regular flight path of a Tawny Owl.

18th October 2022

Ian Duddle and Julia Cooper— a Red Admiral in their Tilehurst garden on Sunday 16/10/22, and 2 Ravens flying overhead towards Pangbourne on 18/10/22.

Fiona Brown – a brief sighting of an Otter on an RSPB trip to Thatcham reed beds on 20/09/22. Jenny Greenham – many gulls on a field being cultivated last week, and crows mobbing the gulls.

Jan and Laurie Haseler – 3 bats, probably Pipistrelles, in their Tilehurst back garden yesterday (17/10/22), and a 3rd generation Holly Blue butterfly today.

John Lerpiniere commented that he had seen a Holly Blue late last year in his garden near Jan's, and that he saw Ravens regularly over the Newbery Park area in Tilehurst.

Renée Grayer - While working in her Earley garden on 06/10/22, she saw a Sparrowhawk hunting and catching a small bird over Leighton Park which is just behind. It then flew into her garden with the prey in his beak, and straight into her back window. It fell onto the patio and it appeared it might be dead, but when Renée approached, it scrambled up and flew away, leaving behind his dead prey. This was a beautiful Goldfinch. Renée put it on the lawn as a potential meal for the Sparrowhawk or perhaps a Red Kite. The Goldfinch had already vanished from the lawn later that afternoon. (Reported after the meeting.)

1st November 2022

Marion Venners – a Hawthorn tree in bloom this morning at Purley Rise (RG8) [Editor's note: probably caused by the stress of the summer drought which induced a form of dormancy, and the recent mild moist weather triggered a springtime response].

Tricia Marcousé – at Claremont Landscape Gardens near Esher more than 2 weeks ago, saw separate flocks of Greylag and Canada geese with one pair of Egyptian geese. The Canada and Egyptians were grass grazing; but the Greylags were opening Sweet Chestnut husks using the tips of their beaks as screwdrivers and eating the nuts inside, while walking over any which had burst open on falling and exposed the nuts.

David Cliffe – saw hundreds of Starlings on the evenings of 05/10/22 and 06/10/22, flying near and roosting on Christchurch Bridge (a pedestrian and cycle bridge over the Thames between Christchurch Meadows in Caversham and Reading). None were seen on 07/10/22.

Ian Duddle – a Small Copper in the meadow opposite Stanford Dingley church on 25/10/22.

Grahame Hawker – a Fieldfare in their Brimpton Common garden today (01/11/22). Alistair Driver had also recently Tweeted a picture of a Horse Chestnut tree in full bloom in Sonning.

Jan and Laurie Haseler – Yellow Field Cap mushrooms, which first appear cylindrical with a strong yellow colour and open to a paler colour, were found on 30/10/22 for the first time on their front lawn in Tilehurst. On the back lawn there are Green Parrot Waxcaps and today some tiny orange waxcaps.

15th November 2022

Liz Butcher – reported she has not seen any Hedgehogs in her garden in Southend Road, Southend, Bradfield since 22/07/22; a building site of 11 new houses may have interrupted their normal foraging routes. Liz has contacted the builders who suggested various explanations (hot weather, lack of food etc.) but she has not observed a reduction in numbers under similar conditions in several previous years. Others along this road have reported the same lack of sightings. The British Hedgehog Preservation Society advised that it is quite likely numbers will improve again once the building site is complete.

Also Redwings and Fieldfares are in the hedgerows around Southend Bradfield but no Blackbird sightings at the moment.

Anne Booth – Red Admiral on $Buddleja \times weyeriana$ in her Earley garden on 12/11/22 and for about 3 days previously.

Jan and Laurie Haseler – in their Tilehurst garden on 12/11/22 at dusk: a bat, probably a Pipistrelle. At Moor Copse on 13/11/22 in Corner Field, there were 9 Scarlet Waxcaps, also nearby 10+ smaller orange waxcaps with radially grooved caps, and in 5-Acre Field, a yellow waxcap. This could be Butter Waxcap which Ailsa Claybourn has seen previously in Cottage Field.

Ken White – at Yonder Cottage, Plastow Green:

10/10/22 A Hummingbird Hawk-moth on *Buddleja*. Fieldfares in the garden most days since 26/10/22, feeding on the apples on the tree as well as windfalls.

12/11/22 male Bullfinch eating garden mint seeds in the patio borders and a Red Admiral flitting around the garden.

A Tree Creeper on the back garden apple tree on 13/11/22 and 14/11/22.

A Queen Buff-tailed Bumble Bee and Honey Bees on *Mahonia* Charity blossom on 14/11/22. Also on 12/11/22, a Peacock butterfly flying around at Crux Easton (Highclere estate), Peregrines B69 & Mrs N are resident in Newbury town centre. B69 was caught on nestcam visiting the BT nestbox on 15/11/22.

21/11/22 the Norwegian colour-ringed Black-headed Gull 'Green JOL1' was at The Kennet Wharf in Newbury town centre again on its 4th consecutive winter visit to this site., and was found sitting on the rooftop of the Camp Hopson department store.

Norwegian-ringed Black-headed Gull 'Green JOL1' photo © Ken White

6th December 2022

Rob Stallard – Chicory and Sweet Violet in flower in Tilehurst, near but not in his own garden on 02/12/22, examples of late/early season flowering.

Ian Duddle - on 04/12/22 a Green Woodpecker in their back garden, foraging in the lawn for about 20 minutes, was chased off by a Grey Squirrel (possibly protecting buried hazelnuts) but returned to another area; also several dark Earth Tongues and 2 white Fairy Clubs in mossy patches of the lawn.

Tricia Marcousé – heard from residents of Nuney Green on 04/12/22 that the numbers of European Edible Dormouse *Glis glis* there had increased rapidly from their previous low level in the last year: 227 had been caught in 4 houses. They are fond of strawberries which are used as bait. It is likely that the increase is due to the death of a cat which kept them under control. (Note – under the Wildlife and Countryside Act 1981 Edible Dormice can be trapped and destroyed under licence by authorised pest controllers.)

While driving from Reading to Woolley Firs on 03/12/22 Tricia saw over 50 Red Kites flying low over the traffic at the edge of Reading University farmland with the sun glinting on their plumage. She was unable to identify any prey there. Earlier in the week when she was heading to Newbury on the M4 with busy traffic, a Mute Swan was flying down the central reservation towards Reading.

20th December (reported 3rd January 2023)

Tom Walker – 3 Redwings in his garden in Redlands Road, Reading, on 16/12/22 during the cold snap.

Ian Duddle – also during the cold weather 11-16/12/22, a variety of birds were recorded on his trail camera using the tray of water in their Tilehurst garden for drinking and/or bathing. These included Great, Blue, Long-tailed and a Coal Tit, Blackbird, Song Thrush and Redwing, Wren, Goldcrest, Dunnock, Chaffinch, Goldfinch, Robin, Blackcap, Nuthatch and Wood Pigeon. A Fox and Grey Squirrel also came to drink.

Obituary

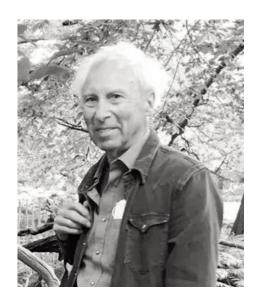
Renton Righelato by Renée Grayer

On 8 November 2022 we lost one of our most eminent members, the nature conservationist and bird expert Professor Renton Righelato, at the age of 79. Renton started his career in industry as a microbiologist and became Head of Research and Development at Tate & Lyle. In the early 1990s he took early retirement to devote the rest of his life to nature conservation. He was especially interested in the conservation of birds and was a driving force behind the development of a number of Berkshire wetland reserves, including Lavell's Lake, Moor Green Lakes and Lea Farm Lake, and the establishment of the Fobney Island Reserve. He had plant surveys carried out in these reserves, in order not to lose rare plants by making the habitats more suitable for certain bird species. Several members of the RDNHS were involved in these surveys, including David Morris, John Lerpiniere, Trish Marcousé and myself. When areas of Lea Farm Lake Reserve were due for excavation to extend the reed beds, Renton and other RDNHS members collected seeds of some of the more unusual plant species growing there to sow at the other side of the lake, and potted up rare plants in danger of submergence to transplant the following spring.

Although Renton was more active in the Berkshire Ornithological Society (BOC) than in the RDNHS, he did lead walks for our Society, for instance to Moor Green Lakes, and he enhanced my excursion to Fobney Island in 2016 by giving a talk to the participants about the development of the reserve to improve the habitat for birds, bats, fish, reptiles and amphibians. In 2012 he gave us an evening talk on Bird Conservation in Ecuador where he had established a bird reserve, showing that he was also an international conservationist. In the 1990s, he was especially interested in environmental causes and land use in South America and became a

trustee and later the chairman of the World Land Trust. He pleaded against the deforestation of South America in leading scientific journals, arguing that it is environmentally much better to turn arable land into forests instead of using it for the production of biofuel.

Another feather in Renton's cap was the publication of "The Birds of Berkshire" (second edition) in 2013, which he compiled together with other members of the Birds of Berkshire Atlas Group using data recorded in the county from 2007 to 2011 by BOC members and many other volunteers. It is a superb book, counting 520 pages packed with interesting information that no bird enthusiast in the county should be without. He also took a lead in the promotion of other atlases, both national and local. I once asked Renton about his unusual name and he explained that Renton was Scottish and Righelato Italian, reflecting his ancestors. Perhaps they also reflected his national and international interest in Nature Conservation.



Excursions 2022 by Jan Haseler, Sean O'Leary, Rob Stallard, Tom Walker and Ken White

The first field trip of 2022 was organised by John Lerpiniere on Saturday 8 January, on a morning of light but persistent rain. The Society would like to thank owner Mary Baylis for permission to visit the private Winterbourne Wood, and Woodland Manager Mark Brown for leading the walk and telling the group about the management of the site. The wood runs from south-east to north-west on the ridge between Winterbourne and the valley of the River Lambourn at Boxford. The wood has tall standards of Oak Quercus sp. and Ash Fraxinus excelsior, with a ground cover dominated by Bracken Pteridium aquilinum and Bramble Rubus fruticosus agg. Because of Ash-dieback Hymenoscyphus fraxineus (formerly Chalara fraxinea), most of the Ash trees will need to be felled at some point. The group set out north-eastwards along the track which runs along the lower side of the wood. A Tawny Owl Strix aluco nest box with the entrance hole in the middle was fixed to one of the trees near the track. Apparently young Tawny Owls can clamber around the tree before they can fly, and if they fall to the ground, they can probably claw their way back up to the box. In contrast, Barn Owl Tyto alba chicks are not good climbers, so Barn Owl boxes have the entrance hole near the top of the box. Leaves could be seen inside the box and a Grey Squirrel Sciurus carolinensis was spotted leaving it. Most of the presentday wood was depicted as woodland in old 18th century maps, but a section in the centre of the wood had been open farmland at the time. By the 19th century, all of the present day wood was shown as woodland. Mark explained that there had been a dense covering of Alder Alnus glutinosa in the formerly cultivated section, but this had mostly been cleared in two stages. In one section, which was watered by springs, the young Alder was growing back vigorously, while in the other drier section it had almost been eliminated. A Common Buzzard Buteo buteo flew across the eastern edge of the wood. Three separate Roe Deer Capreolus capreolus were disturbed, showing their pale rumps as they raced away. Mark said that there were also resident Chinese Muntjac Deer Muntiacus reevesi and occasional visiting Fallow Deer Dama dama. A Primrose Primula vulgaris in flower was a surprise sighting. There were rosettes of Marsh Thistle Cirsium palustre and leaves of Barren Strawberry Potentilla sterilis, Greater Stitchwort Stellaria holostea, Lesser Celandine Ficaria verna and Bugle Ajuga reptans. The Spindle Euonymus europaeus bushes had pink berries and the first catkins were appearing on the Hazels Corylus avellana. Mark informed the group that the wood has Grass Snakes Natrix helvetica and a good population of Slow-worms Anguis fragilis. He showed a picture of five adult Slow-worms which had been found when a wood pile was moved.

Towards the northern end of the wood, two Hares *Lepus europaeus* which had been sheltering in the Bracken were disturbed. They looked surprisingly large to those of us who are more accustomed to looking at Rabbits *Oryctolagus cuniculus*, or who only ever see distant Hares. The route then climbed up towards the ridge on the western side of wood, passing various springs and seepages on the way. A bank at the top of the ridge marks the parish boundary between Winterbourne and Boxford. Along it grow a magnificent collection of big old multi-stemmed Beech *Fagus sylvatica* trees. Bluebell *Hyacinthoides non-scripta* leaves were poking up through the leaf litter. There were a number of active Badger *Meles meles* setts and a dead Badger was found nearby. Several members of the group walked through the Bracken below the line of the ridge and disturbed a Woodcock *Scolopax rusticola*, which flew rapidly away. A Hoof Fungus *Fomes fomentarius* on oak and one of the Oyster Mushrooms *Pleurotus* sp. on Rowan *Sorbus aucuparia* were inspected. There were a number of Spurge-laurel *Daphne laureola* plants which would soon be coming into flower. Across the valley, Mark pointed

out the location of the Boxford Roman mosaic which had been rediscovered in 2017. The walk continued over the top of ridge to the south-facing slope above the lane. Wood Sage *Teucrium scorodonia*, Wood Spurge *Euphorbia amygdaloides* and Foxglove *Digitalis purpurea* were noted. Primroses are abundant here in spring. The open clearing where they grow had been dominated by Bracken, but twice-yearly cutting over about 7 years has almost eliminated it. The flowery grassland is now a good place to look for butterflies in spring and summer. A second Woodcock was disturbed from the Bracken on the walk back to the entrance track. Mark pointed out a spectacular standing burnt pine *Pinus* trunk. A work party had had a bonfire some distance from the tree. At the end of the day, the fire had been raked over and the surrounding vegetation had been damped down. But there must have been dead roots underground which caught fire, because about three weeks later, Mark discovered that the pine trunk had burnt out and the surrounding ground had dropped by about four inches. Finally, Yellow Brain *Tremella mesenterica* fungus was found beside the path on a dead branch.

Ken and Sarah White chose Tuesday 2 February, the date of the maximum spring tide, for a visit to HIWWT Farlington Marshes, between Cosham and Havant. 15 members and friends gathered at the entrance to the reserve at 09:00, before setting off anticlockwise along the path which runs along the top of the sea wall. The mudflats in the harbour were still extensive, but shrinking rapidly as the tide rose. There were close views of a small flock of Pintail Anas acuta and waders seen included Lapwing Vanellus vanellus, Curlew Numenius arquata, Redshank Tringa totanus, Oystercatcher Haematopus ostralegus, Grey Plover Pluvialis squatarola and Ringed Plover Charadrius hiaticula. Turnstones Arenaria interpres were turning over the seaweed in their hunt for food. Feral Canada Geese Branta canadensis and a big flock of migratory Russian Dark-bellied Brent Geese B. bernicla bernicla were grazing on the grass on the landward side of the sea wall. There were very few juveniles, distinguished by white bands of pale-edged coverts on their backs, indicating that the birds had a poor breeding season in 2021. Continuing a short distance along the sea wall, the number of birds on a shallow brackish lagoon steadily rose as more and more flew in from the rapidly diminishing mudflats. Teal Anas crecca lined up on the banks along the edge of the reed-bed and amongst them were two Common Snipe Gallinago gallinago. A flock of about 30 Avocets Recurvirostra avosetta flew in from the western edge of the harbour. There were at least 30 Black-tailed Godwits Limosa limosa and three much paler-looking Greenshanks Tringa nebularia. Also seen here were larger flocks of Redshank, Dunlin Calidris alpina and Lapwing. A Little Grebe Tachybaptus ruficollis was diving in the water and a Kingfisher Alcedo atthis flew out across the harbour. A cold wind blew across the marshes as the group continued along the sea wall. The leaves of Sea-purslane Atriplex portulacoides and Rock Samphire Crithmum maritimum were found on the sides of the sea wall, while tiny rosettes of Buck's-horn Plantain Plantago coronopus were growing amongst the stones of the track. The next section of the reserve on the landward side of the sea wall consisted of open grassy fields, hedgerows, patches of scrub, small pools and wet ditches. Birds seen here included Meadow Pipit Anthus pratensis, Greenfinch Chloris chloris, Linnet Linaria. cannabina, Song Thrush Turdus philomelos, Little Egret Egretta garzetta, Shelduck Tadorna tadorna, Kestrel Falco tinnunculus and Common Buzzard. Gradually, the wind dropped, the sun came out and the temperature was almost pleasantly warm as the group settled down on the seaward side of the sea wall for a picnic. The tide was close to its peak and any remaining birds were forced off the final scraps of dry land out in the harbour. In the distance to the east, an enormous flock of Golden Plover Pluvialis apricaria wheeled in the sky, while closer in, a pair of Red-breasted Mergansers Mergus serrator were swimming out on the channel. The walk continued along the sea wall round the eastern part of the reserve. Big flocks of Wigeon Mareca penelope and Brent Goose were grazing on the marsh and other species seen here included a few Shoveler Spatula clypeata and Gadwall Anas strepera. Two Stonechats Saxicola torquata, thought to be a female and a juvenile male, perched on top of the hedge which borders the marsh. Out over the harbour to the east, a big mixed flock of flying waders sorted itself into larger Golden Plover above and smaller Dunlin below. There was an unusually large flotilla of Great Crested Grebes Podiceps cristatus, with a total of 20 birds counted. On the walk back to the cars, a large, shallow pool harboured a Cetti's Warbler Cettia cetti, two diving Little Grebes and more Black-tailed Godwits.

Icy blasts of bitter wind did not deter members from attending the annual moss walk, this year at the NT Watlington Hill, near Christmas Common on the afternoon of Saturday 5 March. Leader Sean O'Leary wisely introduced the gathering to species of sheltered woodland near the car park first. Here we found examples of acrocarpous mosses, growing as upright shoots in tufts, such as Dicranella heteromalla and various species of Orthotrichum on tree trunks. In addition, there were pleurocarpous mosses, growing in horizontal mats on the ground such as Kindbergia praelonga and Brachythecium rutabulum. Having warmed up, bold members now headed out into open chalk grassland on the slopes of the hill. The rabbit-grazed turf here is very rich in bryophytes such as Flexitrichum gracile, Trichostomum crispulum, Barbula unguiculata, Homalothecium lutescens and spectacular patches of Hylocomiadelphus triquetrus and Pseudoscleropodium purum. However, the more sheltered southern slopes beckoned. The Yew Taxus baccata woods here provided a less hostile environment on such a day and some interesting finds. The male 'flowers' (antheridia) of Bryum capillare were discovered, and tiny shoots of Seligeria calycina growing on loose chalk. The views from Watlington Hill are very lovely, especially on such a clear day, and the bracing weather was certainly invigorating. There were few

complaints however when we neared the car park for a well-deserved slice of Louise's legendary muesli crunch. Serious bryologists poo-pooed the idea that this was the main reason members attended the walk. [Editor's note: a useful website is: www.britishbryologicalsociety.org.uk]

Marcus Wheeler led a walk to look at the trees of **Prospect Park, Reading** on the morning of **Saturday 26 March**. The sky was unbroken blue and the sun was shining strongly but there was a cool easterly breeze. After gathering at the main Liebenrood Road entrance car park, 18 members set out westwards along the road which leads towards the Mansion House. First stop was the group of white-barked Himalayan Birch Betula utilis ssp. jacquemontii trees near the new mini-golf course. One of the specimens had unhealthy-looking dark patches on its bark. Continuing towards the tennis courts, there was a recently-planted Chestnut-leaved Oak Quercus castaneifolia, a tree which is native to the mountain regions of the Caucasus and northern Iran. There followed a brief diversion to the south-facing slopes to look at one of the oldest trees in the park, a large healthy-looking Pedunculate Oak Quercus robur which Marcus estimated was 400-500 years old. Continuing up the hill, fallen timber was still piled up by the roadside, marking the location where a large Horse Chestnut Aesculus hippocastanum had lost its upper section in recent gales. On the other side of the road was a fastigiate oak, an unusual form of Pedunculate Oak called Fastigiata which grows in a columnar shape, rather than the usual spreading form. Magnolia and Wild Cherry Prunus avium trees were covered in blossom. On the slope to the left were an Atlas Cedar Cedrus atlantica, with branches which grew upwards, and an enormous old Cedar of Lebanon C. libani, with branches which grew horizontally. Marcus pointed out a Northern Red Oak Quercus rubra, originally from North America, with pointed leaves. Nearby, a Brimstone Gonepteryx rhamni and a Peacock Aglais io butterfly were flying in the sunshine. The next part of the walk was through the woodland section near the top of the hill. At the edge of the woodland, dense Cherry Laurel Prunus laurocerasus, the smaller-leaved Portuguese Laurel Prunus lusitanica and Holly Ilex aquifolium were all crowding out the ground flora. Further in, Wood Anemone Anemone nemorosa, Lesser Celandine and even a few Bluebells were in flower, Chiffchaff Phylloscopus collybita and Stock Dove Columba oenas were calling and Long-tailed Tits Aegithalos caudatus moved through the trees. A big Lime Tilia sp. had red buds and a mass of twiggy growth near the base of the trunk. Hazel and Blackthorn Prunus spinosa were just coming into leaf and the Blackthorn was covered in masses of white blossom. The path emerged in the open area on the north side of the park. An Evergreen Oak Quercus ilex, with points on the young leaves, was inspected. Many of the leaves showed feeding damage from some sort of leaf-mining insect. [Editor's note: a very useful website is www.ukflymines.co.uk. Use the search box for the plant host name]. A Woodpigeon Columba palumbus was sitting on a nest deep in an adjacent conifer. Deeply lobed dead leaves were found beneath a Scarlet Oak Quercus coccinea, a native of North America with spectacular autumn colour. Tall trees, including Lime, Beech, Horse Chestnut and London Plane Platanus x hispanica line the northern boundary of the park. A few of the distinctive small balls of seeds were still dangling from a big London Plane. Marcus pointed out the regenerative bark and smooth flat pointed leaves which shed water easily, helping to make this such a useful tree for polluted urban environments. Historic records from the old Coley Park estate show that London Planes were first planted there in 1750. A ball of Mistletoe Viscum album was growing close to the top of one of the limes. Higher up the slope, a large branch from a big willow Salix had fallen to the ground but still appeared to be full of life. Similarly, a little further on, a White Poplar Populus alba had partially shed a big branch which continued to grow from the ground. A steep climb led up to the flatter area near the children's playground. A densely foliaged, almost cylindrical evergreen tree was identified as a young Wellingtonia Sequoiadendron giganteum. Near the road, a tall Aspen Populus tremula was surrounded by smaller suckering specimens. Some of these had plump catkins with red tips. Next to the roundabout, a smallish tree with bright green leaves and flowers was identified as a Southern Beech Nothofagus, native to Chile and Argentina. Heading back towards the car park, there was an avenue of big Beeches, and, finally, another fastigiate tree, this time a small Beech. Afterwards, some of the group went in search of one of Prospect Park's botanical rarities. Close to the ancient oak which had been inspected earlier in the morning is a good-sized pond, currently home to a pair of Mandarin Aix galericulata ducks and a family of Egyptian Geese Alopochen aegyptiacus with nine goslings. The flowers of Purple Toothwort Lathraea clandestina were found close to the railings on the east, south and west sides of the pond. Purple Toothwort is a parasitic plant without chlorophyll, whose hosts include various willows. It has been known from this site for at least 60 years.

The sun was shining brightly on the morning of **Saturday 30 April** when Jan Haseler led a walk at **BBOWT Moor Copse Reserve** near **Tidmarsh.** The reserve forms part of the Sulham and Tidmarsh Woods and Meadows SSSI and the meadows are the Coronation Meadows for Berkshire. While 21 members were assembling, sightings included Large Red Damselfly *Pyrrhosoma nymphula*, Beautiful Demoiselle *Calopteryx virgo*, Grey Wagtail *Motacilla cinerea* and Orange-tip *Anthocharis cardamines*, Holly Blue *Celastrina argiolus* and Speckled Wood *Pararge aegeria* butterflies. The group set out southwards along the old road, pausing after a short distance to inspect the balls of apple-green seed disks on a Wych Elm *Ulmus glabra*. After crossing the bridge over the River Pang, the route turned left along the track towards the meadows, passing a dense area of flowering Ramsons *Allium ursinum* between the track and the river. The group paused to look over the gate into River Field, which is

one of the SSSI meadows, and the former arable field, which is being restored as a meadow. Seven Dexter cattle had recently been moved into River Field. The track led to Wigley Field, which is not part of the SSSI. The turf was dotted with yellow Bulbous Buttercups Ranunculus bulbosus, with the flowers showing the diagnostic reflexed sepals. As is the case for most of the meadows on the reserve, the management regime for Wigley Field consists of a hay cut at the beginning of July, followed by aftermath grazing by cattle. To the left of the fence at the end of Wigley Field lies Harescroft Copse, which had a stunning blue and white carpet of Bluebells and Greater Stitchwort. The walk continued through a gate into Cottage Field, one of the SSSI meadows. Cuckooflower Cardamine pratensis was dotted in profusion across the damper sections of the field and a Garden Warbler Sylvia borin sang from adjoining Wigley Copse. A second gate led to Corner Field, another SSSI meadow. The field has low-lying wetter sections separated by dry gravel terraces. The route followed one of these terraces diagonally across the field, passing 3 big clumps of Cowslips Primula veris. Turning aside into one of the damper sections, Marsh-marigold Caltha palustris and Water Avens Geum rivale were found, then leaves of Great Burnet Sanquisorba officinalis and Betony Stachys officinalis were seen near the edge of an adjoining wet area. A Redheaded Cardinal Beetle Pyrochroa serraticornis was spotted on the walk back along the boundary with Horsemoor Copse. The next gate led into Barton's Field, which is not part of the SSSI. This field did not have a hay cut last year and the grass was longer and more tussocky. The walk continued into Moor Copse, where the ride was lined with Bluebells, Wood Spurge, Yellow Archangel Lamiastrum galeobdolon, Primrose, Wood Speedwell Veronica montana and Bugle, and a Peacock butterfly was seen nectaring on Bluebell flowers. The ride crossed a small bridge over a ditch, where Yellow Iris Iris pseudacorus leaves marked a deep peat channel. Eight Early-purple Orchids Orchis mascula were in flower in a section of Hazel coppice to one side of the track. They were all quite small specimens and there were significantly fewer than in recent years, perhaps due to browsing deer or the lack of rain in the preceding weeks. Further along the ride, Wood Anemone and Field Horsetail Equisetum arvense were seen and tall Wild Cherry trees were in flower. The walk continued across 5-Acre Field, which was yellow with Dandelions Taraxacum officinale agg. and Bulbous Buttercups. There were also patches of Crosswort Cruciata laevipes in flower. Two clumps of Fritillaries Fritillaria melegaris were a surprise sighting. A few flowers had been found last year, but before that it had not been known on the reserve. The walk continued into Park Wood, accompanied by the short melodious phrases of Mistle Thrush Turdus viscivorus song. The root plate of a big conifer which had been brought down by gales earlier in the year showed the underlying gravel. There were a number of patches of Solomon's-seal Polygonatum multiflorum at the side of the ride and a big Field Maple Acer campestre had a mix of flowers and newly-formed winged seeds. The partly-rotten trunk and hollowed-out stump of a felled Ash which had been severely affected by Ash-dieback were inspected. The wide main ride led back towards the river. It was edged with Bluebells, together with contrasting flowers of Red Campion Silene dioica and Greater Stitchwort. Flowers on a glossy-leaved Guelder-rose Viburnum opulus were still in bud. The blue of the Bluebells stopped abruptly at a damper section where a few plants of Water Avens and a specimen of the hybrid with Wood Avens Geum x intermedium were found. Then came the morning's best display of Bluebells, with the carpet of blue extending deep into the woods on either side of the ride. Goldilocks Buttercup Ranunculus auricomus and Bush Vetch Vicia sepium were also seen here. After crossing the Pang into Hogmoor Copse, the final section of the walk followed the river bank back to the car park. The water's edge was lined with flowering Large Bittercress Cardamine amara and the glossy green leaves of Hemlock Water-dropwort Oenanthe crocata. At an accessible section of the bank, the flowers of the Large Bittercress were examined more closely, revealing their violet anthers. Other sightings along the bank included a single patch of Alexanders Smyrnium olusatrum, Common Comfrey Symphytum officinale, Goat Willow Salix caprea and Spindle bushes. Near the entrance to the reserve, a swarm of small flies were zig-zagging in the sunshine over the surface of the river, with a Blackcap Sylvia atricapilla singing from deep in the vegetation behind them.

Ken and Sarah White led an early morning springtime bird song walk on Sunday 8 May, starting at 6am from the car park of the Rowbarge Inn at Woolhampton. During the walk along the R.Kennet and around Rowneys Predator Lake, a total of 47 species were identified, 16 from song, 10 from calls and 21 by visual identification. The walk started out eastwards along the track across the road. On the Society's previous visit a year ago, the vegetation to the right of the track had been waist high and a Sedge Warbler Acrocephalus schoenobaenus had been singing there. Following over a month without significant rain, the vegetation was knee high, with no suitable cover for a Sedge Warbler. The walk continued to the Kennet and Avon Canal, then turned back westwards along the towpath. Singing loudly from the adjoining village gardens and woodland were Song Thrush, Blackbird Turdus merula, Blackcap, Dunnock Prunella modularis and Wren Troglodytes troglodytes. A pair of Grey Wagtails were lingering around the lock gates and collecting nesting material. Looking backwards through the branches of a big bankside Sycamore Acer pseudoplatanus, sunbeams from the rising sun were picked out by mist rising from the canal. Continuing for a short distance along the towpath, a barking Muntjac deer, a Treecreeper Certhia familiaris and a distant Cuckoo Cuculus canorus were heard. The route then led southwards along a track through various fishing lakes, where Reed Warbler Acrocephalus scirpaceus and Cetti's Warbler were singing. Several Great Crested Grebes and a male Mandarin were seen here. Presumably a female Mandarin was hidden away somewhere, sitting on eggs. To everyone's delight, the wandering voice of the Cuckoo came nearer and nearer, while in the distance, a second bird was heard. The group paused to survey the open waters of Rowneys Predator Lake, where species seen included Tufted Duck *Aythya fuligula*, Pochard *A. ferina*, Gadwall and Great Crested Grebe. A great disappointment was the absence of a floating raft - which the numerous Common Terns *Sterna hirundo* and Black-headed Gulls *Chroicocephalus ridibundus* were clearly missing as a suitable nesting site. Further Song Thrushes and Blackcaps lined the route while circumnavigating anticlockwise around the lake. A pair of Greylag geese escorted four young goslings on the water and a Muntjac deer was seen in an adjacent field. Eventually the first of three Garden Warblers was found and soon afterwards the unmistakable strains of a Nightingale *Luscinia megarhynchos* were heard, emanating from the well-vegetated margins of a pond near the former gravel works stock yard. A nearby recently harrowed field had a vigilant Lapwing and Stock Doves foraging on it and brief snatches of Whitethroat *Curruca communis* song were heard from the wonderfully overgrown boundary hedges. A Little Egret flew overhead and a singing Skylark *Alauda arvensis* was heard. Back at the car park, Ken and Sarah kindly offered hot drinks and chocolate biscuits to the participants.

Jan Haseler led 23 members on a walk at Aston Upthorpe Downs near Didcot on the morning of Saturday 14 May. It was a day of warm sunshine with a cloudless blue sky and a gentle southerly breeze. The plan for part of the walk was to inspect the work which the charity Plantlife had organised over the winter as part of its project to restore the threatened Juniper Juniperus communis population of Southern England. According to Plantlife, as few as 28 colonies of Juniper with at least 50 bushes survive in the region and there has been no significant regeneration since the 1950s, when Myxomatosis amongst the Rabbit population and the abandonment of wartime cultivation on thin chalky soils led to a wave of new plants. Juniper is a pioneer species of bare Cretaceous Chalk. Back in 2010, Plantlife created a series of trial scrapes, removing vegetation and topsoil to reveal the underlying subsoil and Chalk bedrock. These were subsequently sown with locally collected Juniper seeds. Ten years on, 11 out of 14 of these sites had healthy Junipers, some of which were waist high and covered in berries. Plantlife have now embarked on a landscape scale project to restore Juniper, including large scale scrapes in Juniper Valley. The surface material has been removed from the site and spread over a neighbouring field. The walkers set out southwards along the rutted track towards the Downs. Conditions were ideal for butterfly watching and good numbers of Dingy Skipper Erynnis tages, Grizzled Skipper Pyrgus malvae, Green Hairstreak Callophrys rubi, Small Heath Coenonympha pamphilus, Brimstone, Orange-tip and Green-veined White Pieris napi were seen. Turning into Juniper Valley, first stop was the nearest scrape on the western side of the valley. Previously, the Junipers on this side of the valley had been submerged under a dense tangle of scrub. Now they had been cleared of scrub and stood as green islands in a sea of white Chalk rubble. There was no sign yet of any planting or new growth on the scrapes. The scraped area was mostly restricted to the upper part of the slope and stretched along most of the length of the valley. The eastern side of the valley has Junipers growing out of turf and had not been touched. Crossing the valley, the next stop was the fenced square of turf half way up the eastern slope where Pasqueflowers Pulsatilla vulgaris are protected from grazing Rabbits. One plant was still in flower and good numbers of wispy seed-heads could be seen on other plants. A few plants had managed to grow outside the exclosure and these had been protected by wire cages. The profusion of Cowslips, Chalk Milkwort Polygala calcarea and Salad Burnet Poterium sanguisorba ssp. sanguisorba inside the fence gave an indication of how flowery the valley might look with reduced Rabbit grazing. An obliging Green Hairstreak butterfly posed in full view just inside the fence. Descending to the valley bottom, Small Copper Lycaena phlaeas, Common Blue Polyommatus icarus and Peacock were soon added to the butterfly tally and Cinnabar Tyria jacobaeae moths were seen. Continuing up the valley, flowering Field Mouse-ear Cerastium arvense was found on bare soil next to a collection of Rabbit holes and two Northern Wheatears Oenanthe oenanthe showed their white rumps as they flew away. Towards the top of the valley, a sprawling Barberry Berberis vulgaris bush amongst the scrub on the western slope was covered with yellow flowers. Yet more Green Hairstreaks flitted round its upper branches.

A permissive path leads westwards from the top of Juniper Valley up to the track at the top of the ridge, where the group turned north-eastwards. Skylarks sang high above and a Lapwing was seen in flight. Kidney Vetch Anthyllis vulneraria, Wild Mignonette Reseda lutea and Musk Thistle Carduus nutans were in flower beside the track. The next section of the walk followed Grim's Ditch westwards towards Oven Bottom. A pair of Brimstones corkscrewed upwards in their mating flight, with the pale female above the yellow male. A pair of Yellowhammers Emberiza citrinella flew out of the top of a Hawthorn Crataegus monogyna bush and a distant Roe Deer was seen. Oven Bottom has fine Chalk grassland which is not grazed as heavily by Rabbits as Juniper Valley. In flower here were Cowslips, Chalk Milkwort, Horseshoe Vetch Hippocrepis comosa and Common Rockrose Helianthemum nummularium. Once again, Dingy and Grizzled Skipper, Green Hairstreak and Small Heath were seen in good numbers, but an additional sighting here was a Marsh Fritillary Euphydryas aurinia of doubtful provenance (someone is thought to be releasing them unofficially). Common Heath Ematurga atomaria and Green Carpet Colostygia pectinataria moths were confirmed, while a number of Burnet Moths with 5 spots generated some discussions as to their identity. The early date indicated that they might belong to the rare Chalk grassland subspecies of Five-spot Burnet Zygaena trifolii ssp. palustrella, rather than the much commoner Narrow-bordered Five-spot Burnet Z. lonicerae, which is not usually seen before mid-June. (One of the members

returned to Oven Bottom a few days later and managed to photograph a specimen with conjoined red spots, another feature which is more common in the *palustrella* population.) On the walk back, a Willow Warbler *Phylloscopus trochilus* was heard, Comma *Polygonia c-album* and Red Admiral *Vanessa atalanta* were added to the butterfly list and an observant botanist found Fairy Flax *Linum catharticum* and the leaves of Dropwort *Filipendula vulgaris*.

Julia Cooper and Ian Duddle organised a visit to HIWWT Noar Hill, situated on the East Hampshire Hangers just south of Selborne, on the morning of Wednesday 22 June. This SSSI was the site of Medieval Chalk workings and the resulting banks and hollows now have a mosaic of rich chalk grassland and scrub. It was sunny and already warm when 13 members met with the warden Fiona Haynes who kindly guided the group for part of the visit. Taking the northern track to the reserve, Fiona stopped at a field entrance where she pointed out the lower meadow which was managed by the Trust. The margins and hedgerow at the far end had Blackthorn with bays and rotational cutting for Brown Hairstreak Thecla betulae. Kestrel, Dunnock, Whitethroat and a Yellowhammer on a telegraph pole were spotted nearby. Further up the track the footpath into the reserve was initially in the shade of light woodland but then emerged into bright sunshine and a colourful mixture of chalk grassland flowers with abundant Common Spotted-orchid Dactylorhiza fuchsii, Pyramidal Orchid Anacamptis pyramidalis and Twayblade Noettia ovata with a few Chalk Fragrant Orchids Gymnadenia conopsea. Other plants in flower included hawkbits, Lady's Bedstraw Galium verum, Yellow-rattle Rhinanthus minor, Agrimony Agrimonia eupatoria, Oxeye Daisy Leucanthemum vulgare, Wild Marjoram Origanum vulgare and knapweeds; Cowslip leaves were also common. Meadow Brown Maniola jurtina and Marbled White Melanargia galathea butterflies were seen as well as the first of many anthills formed by Yellow Meadow Ants Lassius flavus, often colonised with Wild Thyme Thymus drucei. Four Skylarks were singing overhead. The footpath led on to North Pit, where the vegetation was shorter on the steep banks. Close to the path at the bottom of the slope was a Frog Orchid Coeloglossum viride with 3 smaller specimens nearby. Chalk Fragrant Orchids were more common in this area, along with Salad Burnet, Dwarf Thistle Cirsium acaule, Common Bird's-foot-trefoil Lotus corniculatus, Fairy Flax, Common Rock-rose and Eyebright Euphrasia agg. Dark Green Fritillary Argynnis aglaja and Common Blue butterflies were seen and a Blackcap was singing. Fiona explained about the management of the site and the difficulties of balancing the varying requirements of the different species. In particular there is a colony of Duke of Burgundy Hamearis lucina butterflies which prefers tussocky vegetation with Cowslips to lay its eggs, while the Musk Orchids Herminium monorchis for which the site is nationally important require a short sward grazed by sheep. The Trust use low density grazing by cattle, with sheep grazing one compartment a year on rotation. Compromise is also required for management of the scrub, predominantly Hawthorn and Blackthorn, which is controlled by the cattle and coppicing/removal. Scrub is permitted at higher than normal levels for chalk grassland under their environmental agreement with Natural England to encourage Brown Hairstreak and Duke of Burgundy butterflies. The scrub also benefits birds such as Bullfinch Pyrrhula pyrrhula and Yellowhammer, and Garden Warblers which were heard in that area. The group moved on to a fenced scrape which had been spread with Juniper seed several years ago as part of a Plantlife restoration scheme. There were about 70 healthy seedlings; one had been bark-stripped which emphasised the importance of continued protection. Kidney Vetch from the seed bank had grown in abundance on the disturbed ground and a Small Blue Cupido minimus butterfly was seen. In the next 'Wayfaring' pit along the footpath, Fiona pointed out a few plants with large pale yellow pea-like flowers in the longer grass. This was Dragon's-teeth Lotus maritimus, an unusual naturalised neophyte first recorded in the wild in England in 1875. The colony was smaller than when the Society last visited on 21/06/2008. Further on the first of many Musk Orchids were seen on a north-facing bank. A Humming-bird Hawk-moth Macroglossum stellatarum, Six-spot Burnet Zygaena filipendulae and a Scarlet Tiger Callimorpha dominula moth were seen as Fiona led the group to a pit on the right of the footpath where a single Fly Orchid Ophrys insectifera was growing near a large clump of Hemp-agrimony Eupatorium cannabinum; 14 of the orchids had been recorded there a few weeks earlier. Anthills were plentiful and Fiona commented that Yellow Meadow Ants are considered to be ecosystem engineers in old grassland, contributing significantly to species diversity. Mature Juniper was common in this area.

The track continued into welcome woodland shade. Here Fiona pointed out a rutted area which provides habitat for the rare Fairy Shrimp *Chirocephalus diaphanus*. This is an ancient temporary pond species more common on Salisbury Plain and in the New Forest. None had been recorded at Noar Hill since 2006, but in March Fiona had counted 28 in 5cm deep water in the now dried out ruts. Eggs can survive for many years until sufficient water is available - a proportion of them then hatch within 48 hours and they can mature to breed within 3-4 weeks. If the water dries up before this and the shrimps die, eggs still remain for another cycle. Management of this area to improve the shrimps' breeding success is being considered. After a brief diversion into a large pit edged on one side with mature Beech trees, and with a fine display of Common Rock-rose, the group stopped for a picnic lunch in the shade, while Fiona left to check on grazing livestock. The route then continued westwards along the wide path known as Common Lane and passed through a more open area edged with brambles and Sweet Briar, where Speckled Wood, Ringlet *Aphantopus hyperantus* and a Red Admiral were on the wing and a Chiffchaff was seen. Further on Chalk grassland with scrub dominated again. A Common Buzzard and Swifts *Apus apus* flew in the

cloudless sky. To the right was a flowery area rich in Kidney Vetch. Fiona had told us this was a scrape created about 20 years ago with the aim of encouraging Juniper and a range of chalk grassland plants. Neither Juniper nor the Bee Orchids *Ophrys apifera* which had been recorded a few weeks earlier were found, but a single Bee Orchid was spotted further down to the left of the track. Devil's-bit Scabious *Succisa pratensis*, Clustered Bellflower *Campanula glomerata* and a large Knapweed Broomrape *Orobanche elatior* were seen in longer grass on the right-hand edge, and beyond this was a network of pits with short vegetation where Musk Orchids were particularly plentiful. A Small Tortoiseshell *Aglais urticae* and a Whitethroat were seen as the path continued out of the Reserve and back to the cars. After welcome refreshment at the Selborne Arms some members completed a circuit from Selborne Church, where Gilbert White is buried, along the Long Lythe by Priory Farm, and back along the Via Canonorum (Monk's Way). This is an ancient road through the beeches of Dorton Wood with the Oakhanger stream in the deep valley below. A hardy few then climbed the Zig-zag path cut by Gilbert White and his brother to give easier access to Selborne Common. With increasing height, Soft Shield-fern *Polystichum setiferum* became more abundant in the lush vegetation at the sides of the path, and fine views over Selborne and the Oakhanger woods were revealed.

Norman Hall and Paul Black led a moth-trapping event at Withymead Nature Reserve on the night of Saturday 25 June. Withymead is on the north bank of the River Thames between Goring-on-Thames and South Stoke. A number of members came along at 9am next morning to view the catch. The event was very successful despite the drop in the temperature over the previous few days and the increasingly high wind speeds during the daytime. The number of macro species of moth recorded (81) was surprisingly high for the conditions, especially as numbers of individual specimens were quite low. The number of micro species recorded (17) was however disappointingly low, as well as the number of individuals. On arrival on Saturday evening, Norman and Paul had been welcomed by warden Pete Morton. They decided that they would both set up their traps and sheets on the east (railway) side of the lane, where there is good chalk flora, an orchard and a surprisingly good variety of native trees, plus the possibility of some good marshland species spilling over from the river side. One member came in the evening to watch the trapping and returned the following morning to view the catch. Other spectators on the Sunday morning included an enthusiastic 9-year old girl. The catch included 5 species of Hawk-moths, including a Pine Hawk-moth Sphinx pinastri and 5 huge Privet Hawk-moths Sphinx ligustri, a Festoon Apoda limacodes (a nationally scarce oak feeder in the family Limacodidae, of which Festoon and Triangle Heterogenea asella are the only British species), a Vestal Rhodometra sacraria (which is a migrant), a Brown-tail Euproctis chrysorrhoea (which can be a serious pest if breeding conditions are right for it) and Dotted Fan-foot Macrochilo cribrumalis, Southern Wainscot Mythimna straminea and Obscure Wainscot Leucania obsoleta, all three of which might have come up from the marshy ground nearer the river. Sample moths of all the species seen had been potted up or put in glass tubes for examination, and there were better opportunities for photography as these were eventually released. Afterwards, the warden invited members to have a look round the main part of the reserve near the river, and several of them were delighted to see a Grass Snake.

John Lerpiniere led a walk which was attended by 25 members at Bradfield on the morning of Saturday 9 July, starting from Troopers Field at Rushall Manor Farm. John was ably assisted by Liz Butcher and Jo Parsons, who walk the local butterfly transect. The weather was initially warm but cloudy, then gradually became sunny and hot as the clouds cleared. Swallows Hirundo rustica were nesting amongst the farm buildings and Skylarks were singing high above. The walk started out north-eastwards along a track which led to Scratchface Lane, then crossed into first Round Copse, then Owlpit Copse. Enchanter's-nightshade Circaea lutetiana, Yellow Pimpernel Lysimachia nemorum, the grasses Wood Melick Melica uniflora and Wood Millet Milium effusum, and an enormous old multistemmed Field Maple were found in the woodland. Owlpit Copse contains two fields which are topped in the autumn, but have not been cultivated for many years. They have a rich variety of flowers, but John commented that there has been a worrying increase in Bracken cover in recent years. The first field was alive with butterflies — Ringlet Aphantopus hyperantus, Meadow Brown Maniola jurtina, a few Gatekeepers Pyronia tithonus, Marbled White Melanargia galathea and many golden skippers. The Large Skippers Ochlodes sylvanus had distinctive dappling at the outer edge of the wings, but it was much harder to tell the tiny Small Skippers Thymelicus sylvestris and Essex Skippers T. lineola apart in the field. Photographs confirmed that both species were present. A particularly confiding Comma butterfly perched on a number of different people. Two moths, a Rosy Footman Miltochrista miniata and a Buff-tip Phalera bucephala, were spotted perching on vegetation and a young Common Toad Bufo bufo was found. Flowers seen here included Greater Bird's-foot-trefoil Lotus pedunculatus, Tormentil Potentilla erecta, Common Spotted-orchid Dactylorhiza fuchsii, Wood Spurge, Wood Sage, Slender St John's-wort Hypericum pulchrum, Marsh Thistle and Common Centaury Centaurium erythraea. There were also some unusual pink Selfheal Prunella vulgaris flowers. A black and yellow longhorn beetle Strangalia maculata was seen feeding on the flower head of a Marsh Thistle and a Red-legged Shieldbug Pentatoma rufipes was found on Bramble. A single Silver-washed Fritillary Argynnis paphia butterfly flew along the line of trees at the northern edge of the field. There were tantalising glimpses of a Purple Hairstreak Favonius quercus flying round the upper branches of a lone oak which stood in the middle of the second field. One of the highlights of the morning was a Dark Green Fritillary Speyeria aglaja butterfly which flew low over the grass with characteristic fast fluttering wingbeats. John

commented that there have been a number of sightings of Dark Green Fritillary in the Owlpit Copse meadows in recent years and they may have established a new breeding colony. The next part of the walk was along a wide ride through Greathouse Wood. Flowering Upright Hedge-parsley *Torilis japonica* and Musk-mallow *Malva moschata* were found here. The ride is lined with Bramble and its blossom was attracting a number of butterflies. Members at the front of the group were delighted to see two specimens of the target White Admiral *Limenitis camilla* butterfly. Those at the back had to make do with good numbers of Silver-washed Fritillaries. At the end of the ride was a hub area with a large Buddleia bush at its centre. The Buddleia blossom had attracted a variety of butterflies, including new generation Brimstones and Peacocks, a Large White *Pieris brassicae* and more Gatekeepers and Meadow Browns. Sometimes it can be a good place to spot White Admirals – but not alas on this occasion. The final part of the walk led back through Owlpit Copse and Round Copse to the start. Speckled Wood butterflies were added to the species tally and there were occasional glimpses through the edge of the wood of the valley of the River Pang stretching out below.

Rob Stallard led a walk to Hungerford Marshes on Sunday 24 July. This extensive marshy area is fed by the river Dun which is a Chalk river that flows from near Great Bedwyn to join the Kennet at Hungerford and so despite the long period of hot dry weather the marshes still had lush vegetation. 12 members gathered at the Kennet and Avon canal bridge near the church of St. Laurence close to the town centre. Following the canal west, a wide range of marsh loving plants were seen including Meadowsweet Filipendula ulmaria, Great Willowherb Epilobium hirsutum, Water Figwort Scrophularia auriculata, Gypsywort Lycopus europaeus, Orange Balsam Impatiens capensis, Greater Tussock-sedge Carex paniculata, Perennial Sow-thistle Sonchus arvensis, Branched Bur-reed Sparganium erectum and Wild Angelica Angelica sylvestris. There were also a couple of plants of the rarer umbellifer Lesser Water-parsnip Berula erecta. Further along the mix of plants changed with Red Bartsia Odontites vernus, Reed Sweet Grass Glyceria maxima, Common Fleabane Pulicaria dysenterica and Squarestalked St John's-wort Hypericum tetrapterum. A patch of Water Mint Mentha aquatica had attracted a good number of Mint Leaf Beetles Chrysolina herbacea. Other insects here included Spiked Shieldbug Picromerus bidens and European Cinchbug Ischnodemus sabuleti. House Martins Delichon urbicum and a Common Buzzard were seen and a Peregrine Falcon Falco peregrinus flew over the canal. At Marsh Lock the group crossed over to explore the main area of Hungerford Marshes that has SSSI designation. The soil type here is a 'Gley' which is a very fine grained calcareous material that is impervious to water. It is relatively infertile and difficult to plough which has led to the area escaping agricultural development for several centuries. The marsh area was developed as a water meadow where ewes were fattened on spring grass but this practice ceased long ago. On the north side of the canal a patch of Celery-leaved Buttercup Ranunculus sceleratus and a Peacock butterfly were seen and a Little Egret was exploring the marshy area near the willow and Alder carr. A Carrion Crow Corvus corone carrying an egg was chased by another crow. The overcast skies gradually cleared to give a good deal of sunshine for the rest of the trip. The bridge over the River Dun gave a good view of plants that prefer flowing water; Blue Water-speedwell Veronica anagallis-aquatica was in profusion as well as River Water-crowfoot Ranunculus fluitans, Fool's Water-cress Helosciadium nodiflorum, Water Dock Rumex hydrolapathum and patches of bright yellow Monkeyflower Erythranthe guttata. The path led away from the river to Hopgrass Farm which was the home of the famous naturalist and raconteur Johnny Morris for his last 15 years. Here the river splits into two channels and the group followed the path along the southern side of the northern channel. From the bridge crossing this channel a trout was seen. Along this peaceful stretch of river a good range of marsh and water plants was to be found. At the eastern edge of the river further exploration was blocked by the closure of an unsafe bridge so the group investigated the marshy ground to the south where Marsh Ragwort Jacobaea aquatica was common. This area had been heavily grazed by cattle. To the south beyond a fence, a reedbed could be seen with large specimens of Water Figwort along the fence line. A Noon Fly Mesembrina meridiana was seen on a cowpat and some of the Marsh Ragwort was being nibbled by Cinnabar Moth caterpillars. Tormentil, Silverweed Potentilla anserina and Brooklime Veronica beccabunga were also noted. A few Marsh Thistles had been infected with the Thistle Gall Fly Urophora cardui giving a large swelling on the stems. A Small Tortoiseshell butterfly was seen feeding on Marsh Thistle flowers. The path led to the canal bridge which had been crossed earlier. Three Swallows flitted over the water and along the canal path where a Mint Moth Pyrausta aurata and Hedge Bindweed Calystegia sepium were spotted. The path brought the group back to the church.

Tom Walker organised an all-day joint meeting with the Conchological Society of Great Britain and Ireland at **BBOWT Hartslock Reserve**, south of Goring, on **Saturday 6 August**. He was joined by volunteer warden Chris Raper, who led a general interest walk round the reserve in the afternoon. The morning session was reserved for serious snail and slug hunting, and participants spent much of the time on hands and knees, searching for specimens, many of which were very small. Following weeks with no rain and high temperatures, the ground was very dry, so the hope of finding many living shelled molluscs, let alone slugs, seemed slight. But despite the unfavourable conditions, 8 people turned out in the morning, including 3 from the Conchological Society. Molluscs are under- recorded on the reserve. There are no records on the Conchological Society database prior to 1983. Since then, there have only been 35 records covering 19 species (with a further one on iRecord) — and no slugs. So it was high time that a more comprehensive survey was carried out. The group started out along the

south-western margin of the reserve where a small path runs between scrub and woodland (which is outside the reserve) with mature Oak, Beech and Ash trees. Live Round-mouthed Snail Pomatias elegans was present in abundance, as would be expected on a chalky hillside. An interesting find was examples of Brown-lipped Snail Cepaea nemoralis in aestivation, with a very well developed epiphragm – a sign of the extremely dry conditions. A few other species typical of shaded ground were observed, some living but also the shell only of several taxa. It had been hoped that some slugs would be found, but the ground was much too dry, and any that might have been present would have descended well below ground level. Next, the group climbed the steep hillside to explore the area of grass and scrub. This produced good numbers of typical species which are adapted to very dry conditions, but all were shells only apart from living Large Chrysalis Snail Abida secale. It was disappointing not to find any Moss Snail Pupilla muscorum, but this species seems to be on the decline, and it is possible that it is no longer living on the site - previously there has only been a single record, in 1983. Another declining species is Heath Snail Helicella itala; numerous dead shells were found but no living examples, although live specimens had been seen earlier in the year. The third site investigated was a small accessible area in the fringe of scrub woodland along the north-eastern margin of the reserve. Among the scrub was an area of longer grass which looked promising. It was good to find a few living molluscs in this slightly cooler shaded area, but the ground was still very dry and there was no evidence of any slugs. Somewhat surprisingly, Rounded Snail Discus rotundatus was not found here. The group returned to the reserve entrance for lunch, and took the opportunity to examine some of the numerous anthills among the grass, built by the Yellow Meadow Ant Lassius flavus. Naked eye searching produced several small species, including Blind Snail Cecilioides acicula, but a sample taken for sieving from abandoned anthills turned up trumps. In about 1 litre of sediment there was a total of 150 shells from 20 species, including two which had not been found elsewhere and were new to the site: Prickly Snail Acanthinula aculeata and Dwarf Snail Punctum pygmaeum, as well as several slug plates. Many of the anthill remains were very small and fragmented, some being less than 1mm in size. All the anthill specimens were dead, and it is impossible to determine how recent they are – some may have been in the ground for many decades or even longer, but it is good to know that at some time in the past these species were present at Hartslock, and could well be found living if visits were made in more favourable climatic conditions. And we do now know that some slugs do inhabit the reserve, even if only their internal shelly plates were found during the present visit.

The snail-hunters were joined in the afternoon by other members, swelling the numbers to 15, for a walk round the reserve led by Chris Raper. While waiting next to the gate between the bottom field and the orchid field, Chris spotted a leaf-cutter bee disappearing into a small hole in the bolt of the gate lock. The walk started out up the steep path through the woods on the north-east side of the reserve. Two leaf spikes of White Helleborine Cephalanthera damasonium were spotted near the top of the wood. The path opened out onto the top field of the reserve, which was surprisingly flowery despite the very dry conditions. Flowers included Wild Marjoram Origanum vulgare, Field Knautia arvensis and Small Scabious Scabiosa columbaria, Common Centaurea nigra and Greater Knapweed C. scabiosa, Carline Carlina vulgaris and Dwarf Thistle Cirsium acaule, Harebell Campanula rotundifolia, Clustered Bellflower Campanula glomerata, Squinancywort Asperula cynanchica, Yellow-wort Blackstonia perfoliata and Burnet-saxifrage Pimpinella saxifraga. Dodder Cuscuta epithymum scrambled through the vegetation and there were glossy black berries on both Wayfaring-tree Viburnum lantana and Dogwood Cornus sanquinea. A Sweet-briar Rosa rubiqinosa bush was covered with Robin'spincushions Diplolepis rosae. The grassland was alive with insects. Chris netted a specimen of Mecyna flavalis, a small pyralid moth which is one of the specialities of the Goring Gap hillsides. He showed the contrast between its yellow upper-side and its brown underside, so that when it rests upside-down below a grass stem, it is almost impossible to spot. He also passed round a Rufous Grasshopper Gomphocerippus rufus, which can be identified by its clubbed antennae. Butterflies seen included Meadow Brown, Gatekeeper, Common Blue, Green-veined White and Small Heath and there were a number of Six-spot Burnet Zygaena filipendulae moths. A large female Wasp Spider Argiope bruennichi had caught two grasshoppers in its web. A female White-legged Damselfly Platycnemis pennipes was disturbed from the vegetation. The shade under a spreading Beech tree was welcome after the heat of the open hillside. Bastard-toadflax Thesium humifusum was in flower here and a specimen of the nationally scarce Bastard-toadflax Bug Canthopherus impressus was seen. The walk back followed a path at the top of the field, where the first Autumn Gentians Gentianella amarella were coming into flower. The final section of the walk led down through the orchid field to the bottom field.

Inge Beck led 13 members on a circular walk which started from the **N T Cookham Moor** car park on **Sunday 21 August**. The morning was initially warm but cloudy, heating up as the cloud cover slowly dispersed. A female Banded Demoiselle *Calopteryx splendens*, with greenish-tinged wings, was photographed in the car park. First stop was the Fleet Bridge on the Causeway, which crosses Cookham Moor. The lush vegetation in the wetland below the bridge was in sharp contrast with the dry and drought-stricken conditions elsewhere. There were tall Bulrush *Typha latifolia* spikes and wetland flowers included Purple *Lythrum salicaria* and Yellow Loosestrife *Lysimachia vulgaris*, Orange Balsam and Square-stalked St John's-wort. Small tufts of Wall Rue *Asplenium ruta-muraria* were growing on the north side of the bridge, while a sprawling clump of Dwarf Mallow *Malva neglecta*

was found on the approach road. Inge pointed out a tall Lime tree on the far side of Cookham Moor which had been planted to celebrate the Silver Jubilee of George V. She showed a picture of a 1936 Stanley Spencer painting of the newly-planted tree. The walk continued along Cookham High Street, past the Stanley Spencer Gallery and along Mill Lane to the River Thames, which at this point looks across to the steep woods of the Cliveden Estate. The route then led southwards along the Thames Path. Plants found here included Common Valerian Valeriana officinalis, Dewberry Rubus caesius, Wild Angelica, Water Mint, Water Figwort and Orange Balsam. Looking down onto the smooth surface of a sheltered stretch of river edge, it looked as if most of the many Pond skaters were paired up, but when they turned, it became apparent that the second part of each pair was actually its own reflection. The next section of the walk crossed the recently acquired Battlemead Nature Reserve. A hay crop had been taken from the first field, which was now brown and dusty. The path ran next to the longer vegetation which had been left uncut at the edge of the field. This was dominated by tall Wild Teasel Dipsacus fullonum and thistles. Both Greater Arctium lappa and Lesser Burdock A. minus were found here and it was interesting to compare the two species. The Greater Burdock had long flower stalks, its leaves were as long as they were wide and the stems of its basal leaves were solid; the Lesser Burdock had short flower stalks, its leaves were longer than wide and the stems of the basal leaves were hollow. A distinctive smell betrayed the presence of prostrate clumps of Lesser Swine-cress Lepidium didymum in the path. The path led through a low-lying wooded section which regularly floods in winter. A number of owl boxes had been attached to trees here. The path continued along the boundary of the next field, where the first butterfly of the morning, a Small Heath, was seen. The route then crossed the rough grass of the N T Widbrook Common. Flowers seen here included Meadow Vetchling Lathyrus pratensis, Common Bird's-foot-trefoil Lotus corniculatus, Greater Bird's-foot-trefoil, Musk Thistle, Bristly Oxtongue Helminthotheca echioides and Autumn Hawkbit Scorzoneroides autumnalis and a few Meadow Brown butterflies were flying. The White Brook crosses the Common, and at one point where there was a gap in the bankside vegetation, the stream was inspected more closely, revealing Brooklime, Water-plantain Alisma plantago-aquatica and abundant Reed Sweet Grass. Continuing to the southern tip of the Common, a Red Admiral butterfly flew along a bramble-laden hedgerow. A footbridge crosses the White Brook here, giving closeup views of both Lesser Water-parsnip and Fool's Water-cress, the latter having brighter green and less deeply toothed leaves. Also seen here were Water Dock, Gypsywort, Water Mint and a good-sized Common Frog Rana temporaria. The path crossed a recently-harvested corn field to the junction of the Strand Water and the White Brook, where Inge has seen Grass Snake and Kingfisher in the past, although neither was present this time. The final section of the walk followed the Strand Water back towards Cookham. Leaves on the stream-side Alders were riddled with holes, the feeding damage of numerous Alder Leaf Beetles Agelastica alni. A fresh-looking Brown Argus Aricia agestis butterfly was resting with wings open on a Yarrow Achillea millefolium flower-head and further on, a Holly Blue was seen on Ivy Hedera helix. Galls created by the locally rare Eriophyes exilis (a gall mite) were found at the junction of the leaf veins on a hybrid lime tree. (A number of other galls had been found earlier in the walk.) The path emerged next to Moor Hall, then the group walked back across Cookham Moor to the starting point.

Sue White led a walk, attended by 12, at BBOWT Snelsmore Common, north of Newbury, on the afternoon of Sunday 4 September. While members were assembling, a Dock Bug Coreus marginatus was found on Redshank Persicaria maculosa. It resembled a shield bug, but with prominent 'shoulders'. The group started out southwards through the woods, stopping soon to inspect a bracket fungus on a stump. The slot-shaped pores on the underside indicated that it was some form of Mazegill Daedalea sp. The path opened up ahead, with a view across a shallow valley. Sue described the underlying geology of the area, with a deep layer of chalk covered by the sands and clays of the Lambeth Beds and the London Clay. The shallow valley was on impermeable clay, and despite drought conditions following several months without significant rainfall, the mire in the valley bottom was still damp. Heading into the bog for a closer inspection of the plant life, the first find was Marsh Pennywort Hydrocotyle vulgaris. Each distinctive round leaf is attached to its stalk at the centre of its lower surface. Yellow flowers of Tormentil were scattered through the turf, leaves of Marsh St John's-wort Hypericum elodes were identified and there were clumps of Cross-leaved Heath Erica tetralix. Deeper into the mire were patches of the orange seed-heads of Bog Asphodel Narthecium ossifragum and a white fluffy cottongrass Eriophorum sp. In amongst the Sphagnum moss were Round-leaved Sundew Drosera rotundifolia plants. Devil's-bit Scabious Succisa pratensis was growing towards the top of the mire on the far side of the valley and a Common Carder Bee Bombus pascuorum was spotted nectaring on one of the flower heads. Also found here was a yellow slime mould at the base of a tuft of grass. The route then led steeply up onto the sandy ground above the valley and continued southwards for a while, before dropping back into the mire lower down the valley. Here the leaves of Bog Pimpernel Lysimachia tenella were seen, as were the distinctive kidney-shaped leaves of Marsh Violet Viola palustris and the tiny pink paired flowers of Lesser Skullcap Scutellaria minor. At the edge of the mire, small bright red waxcap Hygrocybe sp. fungi were poking up above the sphagnum moss. A Bush Cricket and a Straw Dot Rivula sericealis moth were found amongst the vegetation. After a steep upward scramble, the next section of the walk followed the southern boundary of the Common, where there was a row of big old multi-stemmed Beech trees on an earth bank. Tracks led to the south-west side of the Common, where a large pond still held a significant amount of water, despite the lack of rain. Invasive New Zealand Pygmyweed Crassula helmsii showed up as a bright green band on the far shore, exposed by the falling water level. A hawker dragonfly patrolled above

it, but was too far away for positive identification. The track dropped steeply down into the next valley, with Bell Heather *Erica cinerea* in flower near the top. In the valley bottom was another mire, which was also investigated. The red moss *Sphagnum magellanicum*, which is uncommon in Southern Britain, was found here. There were more Round-leaved Sundew plants and a number of them had tall flower spikes with tiny white flowers. Deep blue Heath Milkwort *Polygala serpyllifolia* flowers were also found. There followed a steep scramble up the far side of the valley, disturbing a Common Lizard *Zootoca vivipara* on the way. The top of the Common was covered by an extensive open area with flowering Heather *Calluna vulgaris*. A dead Slow-worm was found at the side of the track. The final section of the route circled round the top of the Common and led back to the car park. An oak tree near the end of the walk had an interesting collection of galls and leaf mines, including a green spherical gall on the underside of a leaf, caused by the tiny Cherry Gall wasp *Cynips quercusfolii*.

On the sunny afternoon of Saturday 17 September, 10 members met at Enborne Church, west of Newbury, for a walk through Hamstead Park and along the Kennet and Avon canal. Unfortunately our scheduled leader Andy Bolton was isolating with a Covid-19 infection so the walk was led by Julia Cooper and Ian Duddle with help from Rob Stallard and other members. The Grade 1 listed 12th Century church with its interesting font was visited briefly; Small Tortoiseshell and Red Admiral butterflies were spotted in the churchyard. After crossing the road the route followed public footpaths north-westwards through Hamstead Park. This was established as a deer park in the 13th Century and is a rare example of a surviving park which has not been cultivated for agriculture and still has elements of the medieval landscape. On the first section of the driveway the first of many old trees including a veteran Oak were admired and widespread Parasol mushrooms Macrolepiota procera were seen in addition to a Great Spotted Woodpecker Dendrocopos major, House Martins, a Common Darter Sympetrum striolatum and a Brimstone. To the left of a crossroads of footpaths was a memorial to the 101st Airborne Regiment of US forces who encamped in the Park in the closing months of World War Two, and an avenue of mature Lime trees with Horse Chestnuts Aesculus hippocastanum outside them lining a disused stretch of driveway. The path then bore right, passing behind Hamstead Park house and leading down into a damp area where Tormentil was found and a small Common Frog was spotted in the long grass. A toadstool suspected to be an Amanita sp. was later identified as very probably Grey Spotted Amanita Amanita excelsa, and there were leaves of Yellow Iris in a ditch. Further on up the hill were an interesting hollow tree trunk and a dark red bracket fungus growing on a dead tree; although the radial pattern on the upper side was not typical the colour and size of the pores beneath indicated this was Beefsteak Fungus Fistulina hepatica. There was a fine view of the parkland and ancient fishponds in the valley below. From above, Mallard Anas platyrhynchos, Coot Fulica atra and Moorhen Gallinula chloropus could be seen in the lake and 2 Little Egrets perched in the surrounding trees, while a Buzzard was soaring overhead. As the group walked down to cross the bridge by the ponds a Grey Heron Ardea cinerea, Canada Geese and a Cormorant Phalacrocorax carbo came into view and a Wren was heard. Lesser Hawkbit Leontodon saxatilis was growing on the bridge. The path continued between the trees which screened the River Kennet, where a Hornet Vespa crabro was flying and an Alder Leaf Beetle Agelastica alni was found, and the parkland with mature Sweet Chestnuts Castanea sativa where a Mycena sp. and a Giant Polypore Meripilus giganteus were spotted. Before leaving the Park a short detour was made to view the gatepiers and remains of the old mansion walls on the site of the first Baron Craven's mansion, built in the 1660s but burned to the ground in 1718. Parts of the ditch and bank of the original medieval Park Pale, which is now a Scheduled Ancient Monument, could also be seen in this area.

The route then continued over the river and the Kennet and Avon Canal, and onto the canal towpath east towards Benham Bridge. Wall Rue and Greater Celandine Chelidonium majus were growing on the bridge with Gypsywort and Hemp Agrimony nearby. Either side of the towpath a variety of plants were seen including Common Knapweed, Burnet-saxifrage, Creeping Cinquefoil Potentilla reptans, Lesser Burdock, Common Fleabane, Common Comfrey, Meadowsweet, Horse-radish Armoracia rusticana, Oxeye Daisy, Bittersweet Solanum dulcamara, White Bryony Bryonia dioica, Hop Humulus lupulus and Square-stalked St John's-wort. A white Michaelmas daisy Symphyotrichum sp. was growing for at least 500m along the canal path away from the water's edge, and for a lesser distance on the water side, apparently it has been naturalised here for many years. Long-tailed Tits were spotted and a Migrant Hawker Aeshna mixta was perched on Benham weir where the group crossed the river. Continuing along the towpath, other observations included Great Willowherb, Water Mint, Water Figwort, Spindle, Purple Loosestrife and Orange Balsam, a Willow gall caused by Willow Redgall Sawfly Euura proxima and a Golden-ringed Dragonfly Cordulegaster boltonii flying over the water. The group then left the towpath, crossing the canal by Benham Bridge and taking a footpath over the water meadows, past a Willow plantation and up into the edge of Enborne Wood. Along this section Buckthorn Rhamnus cathartica with berries, Herb-Robert Geranium robertianum whose flowers were smaller than in the summer, Upright Hedge-parsley, Blushing Bracket Daedaleopsis confragosa with its typical variable pores, Red Campion, Thymeleaved Speedwell Veronica serpyllifolia, Hedgerow Crane's-bill Geranium pyrenaicum, and a Goldfinch Carduelis carduelis were spotted. Finally the track reached the Enborne Road which led back to the church.

Jan Haseler led a walk at **NT The Holies** at **Streatley** on the still, sunny morning of **Saturday 8 October**. Members gathered at the car park at the top of Streatley Hill, including two intrepid cyclists who had laboured up the long

steep hill from the village. The walk started out southwards along a track through woodland where there had been much recent felling of diseased Ash trees. A tuft of the poisonous Funeral Bell Galerina marginata fungus was found on rotting wood. Specimens had a smooth and slightly sticky orange cap and a flimsy ring which was stained rusty brown by the spores. There was a brief diversion into the Beech woodland on the west side of the track. A sharp line delineates the boundary between the Brambles which cover most of the hillside and the bare ground at the top of the slope. This vegetation boundary marks the geological boundary between the Clay-withflints (covered with Bramble) and the Westland Green Sands and Gravels, the highest and oldest of the Thames Gravel deposits. These Westland Green deposits include 'Northern Drift' material, with a scattering of crystalline and volcanic stones, as well as flint material. The track led to the Holies Top Field, an open area of acid grassland with scattered trees and scrub. Distant views into Hampshire opened up to the south, with the Hannington television mast prominent on the line of the North Wessex Downs. A few Field Mushrooms Agaricus campestris and a number of different Bolete species were poking up through the grass, including Red-cracking Bolete Xerocomellus chrysenteron and Brown Birch Bolete Leccinum scabrum and, under a Beech tree, Xerocomus cisalpinus. The route led down through two kissing gates into Holies Middle Field, an area of fine Chalk grassland. Traces can still be seen of the tracks left by the motorcycle scrambling which took place here in the 1980s. Flowers seen here included Wild Basil Clinopodium vulgare, Agrimony Agrimonia eupatoria, Common Centaury, Dwarf Thistle and Common Knapweed and there were dry seed-heads of Carline Thistle and Autumn Gentian. There was a pause to explore more closely one of the former scrambling trackways, where a number of tiny plants of Basil Thyme Clinopodium acinos were found. On the other side of the valley, Devil's-bit Scabious, Clustered Bellflower, Harebell and Field Scabious were all in flower and a few Meadow Brown butterflies were still on the wing. A pair of Stonechats was spotted down in the valley bottom. The walk continued through the gate into Holies Bottom Field and then back up the metalled track which climbs steeply up the hillside. In flower on the trackway were more Basil Thyme, Wild Marjoram and Vervain Verbena officinalis. A grasshopper at the side of the track was identified from a photograph as a Common Green Grasshopper Omocestus viridulus. Leaving the track, the route contoured round the steepest part of the hillside, where there were good numbers of the flat stripy Heath Snail. The resident herd of cattle were grazing down below in the valley bottom. Good numbers of the tiny greenish-white flowers of the semi-parasitic Bastard-toadflax Thesium humifusum were found amongst the shortest turf and a few plants of Yellow-wort Blackstonia perfoliata were still in flower. A female Kestrel perched on a wooden power-line support structure. The uncommon but distinctive fungus Agaricus bernardii was found here. Its cap was about 7cm in diameter with distinctively large scales, there were remnants of a veil and the stem bruised a red colour. Formerly chiefly coastal, it is now becoming commoner inland. About 10 Chiltern Gentian Gentianella germanica plants were in flower in the top north-east corner of the field and a Common Rock-rose flower was found nearby. From the top of the field, there were distant views south-eastwards down the Thames valley to Reading and beyond, and eastwards to Goring and the Oxfordshire countryside. A Brimstone butterfly flew into the dense scrub at the edge of the field. The return route led through the top gateway back into Holies Middle Field. A Whitebeam Sorbus aria next to the gateway had a good crop of chunky orange-red berries. Several patches of Pale Toadflax Linaria repens were in flower at the edge of the field. The route crossed a strip of Beech woodland and led back into Holies Top Field. Cep Boletus edulis was found in the grass at the woodland edge and a Red Admiral butterfly was seen nearby. A little further on, many Hornets were flying around the brambles at side of path. On the final stretch back through the woods, a Magpie Inkcap Coprinopsis picacea which had been missed at the beginning of the walk was found.

Mike Harrison led a fungus identification walk, attended by 17 members, at Wokefield Common, near Burghfield Common, on the morning of Saturday 7 November. Rain was falling gently at the start and at times during the morning there were pulses of heavier rain, but since the walk was through woodland, the weather was not a problem. Wokefield Common is mostly covered by tall pines, with an understorey of oak and birch. There had been prolonged heavy rain in the previous week and Mike commented that too much rain was not good for finding fungi, since they tended to go over more quickly and their colour and scent often washed off. The walk started with a productive inspection of the car park. Mike pointed out a few species which would be seen frequently throughout the walk. One of these was the Conifercone cap Baeospora myosura. A number of tiny specimens were growing on a pine cone. Another was Brown Rollrim Paxillus involutus, with a grooved, inrolled margin and ochre-yellow gills extending down the stem. The car park specimen was past its best and was infected with Bolete Mould Hypomyces chrysospermus. Individual bays within the car park were marked out with conifer logs and one of these had a patch of the small orange jelly-like spots of Common Jelly Spot Dacrymyces stillatus. There were a number of specimens of Wood Blewit Lepista nuda. The younger and fresher specimens were purple, while the older ones had turned brown. Earpick Fungus Auriscalpium vulgare was another species which was found growing on a pine cone. It is a small fungus with a long stem and spines on the underside of the cap. Milkcaps were seen throughout the walk. In the car park was a specimen of Liver Milkcap Lactarius hepaticus which is associated with pine trees. Mike bravely tasted a drop of the exuded milk – it was initially mild, then hot and acrid. A drop of milk on a tissue slowly turned from white to yellow. A Bay Bolete Boletus badius had a shiny dark brown, hemispheric cap. There was a very old specimen of Dyer's Mazegill Phaeolus schweinitzii, then Tawny Funnel Lepista flaccida was found under an oak. It had crowded gills which extended down the stem.

Common Rustgill Gymnopilus penetrans was growing on rotten conifer wood, while Oakbug Milkcap Lactarius quietus was found under oak. Mike demonstrated that the long slender stem of Snapping Bonnet Mycena vitilis made a snapping sound when broken. Like all the other Brittlegills Russula sp. found on the walk, a specimen with the hint of a formerly reddish purple cap was too washed-out to identify with certainty. A tuft of Clustered Brittlestem Psathyrella multipedata was found and there were specimens of Common Bonnet Mycena galericulata with transverse ribs between the gills. After crossing two roads, the walk continued in the northern section of Wokefield Common. A clump of Velvet Rollrim Tapinella atrotomentosa was growing on a stump in a grassy clearing. It was a big brown gill fungus which had an eccentric stem with black hairs at its base. Candlesnuff Xylaria hypoxylon and Yellow Stagshorn Calocera viscosa were seen on mossy stumps and False Chanterelle Hygrophoropsis aurantiaca was found amongst pine litter. A young specimen of Tawny Grisette Amanita fulva had an almost cylindrical cap and was growing out of the bag-like vulva, while an older specimen had a convex cap with a characteristic grooved margin. The stem of Milking Bonnet Mycena galopus exuded a white juice when broken. A yellow slime mould was found at the side of the path. Part of it was on a pine cone which was fused to a dead branch. The branched network of the streaming plasmodium could be seen as well as the yellow mass of the immature fruiting bodies. Mike thought that it was probably Leocarpus fragilis, but it was still too immature to confirm by microscopy. The path went past the edge of a small pond. On a wood pile next to the pond were fragments of green cut stems, all that was left of Saffron Milkcap Lactarius deliciosus after someone had foraged the main fruiting body. On the ground on the other side of the path was a line of 12 distinctively twisted specimens of White Saddle Helvella crispa. The next find was Purplepore Bracket Trichaptum abietinum. Then there was an Ugly Milkcap Lactarius turpis - it was an old specimen of a large milkcap with a dark cap and hot-tasting milk. Under an oak tree were a number of Sulphur Knight Tricholoma sulphureum fungi. These are normally yellow with a distinctive sulphur smell, but they had been washed out to white by the rain and the smell had also been washed away. A Blusher Amanita rubescens was another washedout specimen. It still had a ring but no scales were left on its cap. Its flesh turned red when bruised. Many of the group learned a new word, 'merulioid', which Mike used to describe Leucogyrophana mollusca, which had wrinkled folds, rather than gills or pores, on its underside. Tiny grey-blue specimens of Mycena pseudocorticola were spotted on the mossy trunk of an oak. Lower down, there were some even smaller pink and white specimens. The path led through a slightly more open section where, somewhat surprisingly, Heather was just coming into flower. The next find was Rufous Milkcap Lactarius rufus, a brown, leathery fungus with reddish, crowded, decurrent gills. The early stage of Postia ptychogaster, looking like a spiky sponge, was found on rotting conifer wood. It will later go on to produce a bracket. Then there was a cluster of yellow Sulphur Tuft Hypholoma fasciculare on a stump. A Scaly Earthball Scleroderma verrucosum had a noticeable root. Next find was a Common Puffball Lycoperdon perlatum. Birch Milkcap Lactarius tabidus was another species whose milk gradually turned from white to yellow when dropped onto a tissue. Another slime mould, this time orange rather than yellow, was found and a sample was taken away for investigation under a microscope. The next find was Yellowleg Bonnet Mycena epipterygia on dead wood. It had a green stem and was exceedingly slimy. Heading back towards the start, Turkeytail Trametes versicolor, Bleeding Oak Crust Stereum gausapatum, Deer Shield Pluteus cervinus and Butter Cap Rhodocollybia butyracea were amongst the sightings. Netted Crust Byssomerulius corium was another merulioid fungus. Finally, there were a few more finds back in the car park. The tiny Orange Bonnet Mycena acicula was growing on a conifer log and Pale Stagshorn Calocera pallidospathulata was found on another log. It was first recorded in Britain in 1969 and initially spread slowly, with few records before 1990. But since then its spread has accelerated and it is now almost as common as the other two stagshorn species.

Alan Parfitt organised a visit to the RSPB Otmoor Reserve, north of Oxford, on Saturday 4 December. It was a bright but chilly afternoon with a cold north-easterly wind. 15 members started out along the track into the reserve. To the left was a damp pasture with scattered shallow pools. A group of Teal were feeding on one of the closest pools. On the right was a scrubby field which was becoming more and more overgrown. Alan pointed out a recently cleared scalloped section next to the path where a thicket of Blackthorn had been cut down to the ground. This particularly benefits the rare Brown Hairstreak Thecla betulae butterfly which likes to lay its eggs low down on young Blackthorn. Black Hairstreak Satyrium pruni, which is even rarer, can also be found at the Otmoor reserve, where it favours sunny and sheltered dense stands of Blackthorn. The management plan is to cut the whole area over a 15-year cycle. A number of bird feeders were hanging from an oak near the end of the track. These were being visited by a constant stream of Blue Tits Cyanistes caeruleus and Great Tits Parus major, plus a few Chaffinches Fringilla coelebs. The track crossed a bridge and climbed up to a causeway. Beyond was a gateway opening onto an extensive area of wet grassland crossed by a network of ditches. Before the RSPB purchased the reserve, this area was used as arable land. Small parties of Greylag Geese Anser anser and Canada Geese were grazing nearby, several Magpie moths Abraxas grossulariata were down on the grass and a Red Kite Milvus milvus soared overhead. Continuing westwards along the track which ran along the top of the causeway, the group paused from time to time to scan the pasture to the north. A distant Kestrel flew over the field, hovering now and again. A pair of Stonechats perched on the tall vegetation on the side of a ditch, then flew down and back up from time to time. Four Roe Deer were grazing out in the open and a distant Marsh Harrier Circus aeruginosus patrolled over the reed beds. A big flock of waders wheeled across the sky, separating out into larger and darker Lapwings below and paler Golden Plovers above. There followed a brief diversion along a track on the left which led to a hide which looked out over the damp pastures and shallow pools on the southern side of the reserve. Alan pointed out the area where Cranes Grus grus had bred earlier in the year, successfully raising Otmoor's first chick. The low afternoon sun illuminated a small party of Reed Buntings Emberiza schoeniclus which were sheltering in the hedge beside the hide. The males looked very smart with their black bibs and caps. They were joined by a Dunnock, a Blackbird and a Chaffinch. A Muntjac Deer was spotted in the adjacent field corner. Returning to the causeway, a sign pointed along the track to the north to the best viewpoint for the Starling Sturnus vulgaris murmuration. It led to a hide and a viewing area overlooking a shallow pool and the main reedbeds. On the pool were a Mute Swan Cygnus olor and two fully-grown cygnets, plus small numbers of Mallard and Teal. A Little Egret stood hunched on the mud at the edge of a small island. Two Common Snipe foraged at the edge of an even smaller island, almost under the feet of a resting Mallard. A Kingfisher flew low across the pool in front of the hide. A little later, two Kingfishers flew back in the opposite direction, then a few Lapwings settled on the mud at the side of the pool. The sun set and the light slowly dimmed. Then a loud cackling was heard, announcing the approach of a big flock of geese. This was followed by a mixed flock of waders. Then finally the first big flock of Starlings arrived. They were joined by a number of smaller groups of birds as they flew in their twisting, weaving aerial display before spilling down into the far side of the reedbed. For over half an hour, a succession of flocks flew in, performed their aerial manoeuvres, then flew down into the reed bed. Some flocks looked like fat caterpillars up in the sky, others like long thin snakes. Disappointingly, only one flock flew really close to the hide. As the number of Starlings in the reedbed increased, the sound of their chattering calls became louder and louder. Finally, a brisk walk back to the cars in the gathering darkness helped to restore a little warmth to frozen fingers and toes.

Mid-week Walks 2022 by Jan Haseler and Rob Stallard

The first mid-week walk of 2022 was on Wednesday 19 January, when Fiona Brown led 15 members on a walk along the Jubilee River, starting from the Lake End Road car park, to the north of Dorney. The morning started cool and cloudy, but brightened up later. Members who had arrived early reported seeing a Mediterranean Gull on the other side of the road. The walk started out south-westwards along the southern bank of the river. Cases of avian flu had been reported from further downriver, but the Jubilee River Mute Swans looked to be in good health. A number of Cormorants were perched on trees, including one with a prominent white breeding patch on its flanks and grey plumage on the back of its head. Several showed a green sheen on their feathers. Canada Goose, Coot, Moorhen, Mallard, Tufted Duck and Great Crested Grebe were soon added to the species tally. A small group of Gadwall, with two males and a single female, swam across to the far bank of the river. Most of the gulls were Black-headed, but Common and Lesser Black-backed Gull were also seen. Two Buzzards circled above the far bank. Roundmoor Ditch is a chalk-fed stream that rises near Taplow, passes Slough Sewage Works, flows under the Jubilee River and crosses Dorney Heath. The sun had just emerged from behind banks of cloud and swarms of tiny flies were dancing in the sunlight above the stream at the point where it emerges on the south bank of the Jubilee River. The explosive call of a Cetti's Warbler came from deep in the brambles overhanging the stream. The walk then continued over the embankment and down onto Dorney Common. To the right was a big shallow pool with muddy margins. A small group of Wigeon were feeding in the shallow water and two Egyptian Geese could be seen on the far bank. The whinnying calls of Little Grebe were heard coming from the vegetation at the side of the Roundmoor Ditch and there were occasional glimpses of at least two individuals, together with the fleeting glimpse of a Water Rail. A group of Teal could be seen on the far bank and they were briefly joined by a Snipe. A Reed Bunting was also seen here and the leaves of Water Figwort were found on the bank. The walkers then turned round and retraced their footsteps back along the southern bank of the Jubilee River. A Kestrel was perching low in a nearby tree and Goldfinches were spotted in the bushes beside the track. Fiona turned down a side path towards the waterside, disturbing a Green Woodpecker. Beside the path was a large mystery bone. Research after the walk suggested that it was probably the pelvis of a large bird, possibly a goose. Across the river, willow stems gleamed yellow and orange in the low sunshine, standing out against a backdrop of dark clouds. Continuing back along the riverside track, red flower tufts were found on a Hazel bush and a Bullfinch was heard. Some of the group then had lunch nearby at the Pineapple pub, followed by a visit to St Luke's Church in Maidenhead, where they saw the resident female Peregrine flying in to roost (Editor's note: this is the female of a pair that were on St Luke's church early on the previous year who then went on to breed successfully on a church in nearby Marlow. The juveniles were colour-ringed and as soon as they fledged they were led back to St Luke's by the parent birds before they dispersed naturally in the autumn).

Rob Stallard led 16 members on a circular walk round **Blewbury, Blewburton Hill and Aston Upthorpe** on **Wednesday 16 February**. It was a mild but windy morning, initially sunny but gradually clouding over, with

drizzle for the final section of the walk. Before starting out from the car park of the Red Lion pub at Blewbury, Rob gave the group an introduction to the history of the village. It is one of a chain of settlements which lie on the spring line, where a layer of impermeable clay lies below the Chalk. The village dates back to Saxon times and has many attractive old cottages. A thatched cob wall runs along one side of the car park. First stop was the village church. Snowdrops, Yellow Aconites, Primroses and Crocuses were in flower in the churchyard. Parts of the current building date back to Norman times, but it stands on the site of an earlier Saxon church which was mentioned in the Domesday Book. On the north-east side of the nave, an intricately carved old wooden door hides stone steps which would have led up to a rood loft. Continuing through the village, the route crossed several crystal-clear streams which emerge from the Chalk at a constant temperature of about 10 °C. Flowering Lesser Celandine and Soft Shield-fern were seen on the bank above one of the streams, with the leaves of Water-cress and Fool's Water-cress in the water below. Leaving the village, the walk continued along a track which led eastwards towards Blewburton Hill. Skylarks were singing loudly and two Hares were spotted out in the open in the middle of a big cereal field. A Dunnock perched on the wire fence at the side of the track. The path continued along the southern side of Blewburton Hill and here a stand of Hemlock was beginning to show its leaves. The hill is an outlier of the Chalk and the ramparts and ditches of an ancient hill fort encircle its upper section. The southern side has not been grazed recently. Carline Thistle was abundant and Knapweed was also noted. Cherry Plum was in flower in the hedge beside the path. Its characteristic reflexed sepals were inspected. The track dropped down to the village of Aston Upthorpe, which had more attractive old cottages, a spring and a small early Norman church. Flowering Feverfew and Pellitory-of-the-wall were noted at the base of an old brick wall. Leaving the village by the Hagbourne Road, the walk continued along the side of an avenue of tall Pines. Rooks called noisily from the rookery in the tops of the trees and were joined in the field on the other side of the road by a few Jackdaws. The view extended northwards across the flat clay vale towards Wittenham Clumps, which lies on another outlier of the Chalk. The next footpath climbed back up towards Blewburton Hill, with the wind increasing steadily and light rain beginning to fall. The route led round the ramparts on the west side of the hill. A small flock of sheep were grazing at the top of the hill and a Meadow Pipit flew up. A pair of Stonechats were seen near the farm at the start of the track. Returning to the village, a Collared Dove called from a rooftop aerial and the characteristic rattling call of a Mistle Thrush was heard coming from a small field with big Lime trees which were dotted with clumps of Mistletoe. The return walk to the Red Lion followed a different route through the village, giving the group the opportunity to enjoy more old cottages and the Cleve which is a small lake where Water-cress was once harvested. Since the pub did not open until later in the day, most of the group then went on to the Bull at Streatley for lunch.

On Wednesday 16 March, Julia Cooper and Ian Duddle led a walk which started from the car park next to Whitchurch Hill Village Hall. It was a grey morning with the threat of rain to come. A Coal Tit was seen in a big conifer in the car park, a Buzzard drifted over the adjacent broad-leaved plantation, a woodpecker drummed nearby and a Chiffchaff was heard. The walk started out westwards, with Sweet Violets and Red and White Dead-nettle in flower beside the track. After crossing a field and turning north through a short stretch of woodland, the path emerged onto a track with multi-stemmed Sweet Chestnuts on one side and an avenue of big Horse Chestnuts in the field on the other side. The route crossed a narrow lane and continued uphill across a field where sheep had recently been feeding on a turnip crop. Skylarks sang overhead, a Red Kite was being dive-bombed by Black-headed Gulls and Fieldfares called as they flew down from a distant hedge. Cattle, including a small black calf, were lying down in the next field. The walk continued along tracks to the hamlet of Cold Harbour. A strange tree in one of the gardens provoked some discussion. The top part of the tree was a big old spreading cherry, but the bottom few metres consisted of a significantly wider trunk without the characteristic horizontal lines of cherry bark. It was like an ancient giant mismatched graft. The next footpath led down to Blackbird's Bottom. A big clump of Butcher's-broom at the start of the path had new berries forming. Two Green Woodpeckers were feeding down on the ground in the rough grass near the far hedge.

The next section of the walk was along a track which followed the valley bottom westwards. After passing a big clump of flowering Dwarf Comfrey, the track led into an area of woodland, with a larch plantation on one side of the valley and an area of Hazel coppice on the other. The latter side had flowering Primroses, glossy green Bluebell leaves and tall spikes of Wood Spurge. There was an interesting collection of plants on the banks beside the track. A few Early Dog-violets were in flower but most of the plants needed to be identified by their leaves. Wood-sorrel, Wood Anemone, Moschatel and Bush Vetch were found. Amongst a mossy pile of rotting branches was a striking collection of bright red Scarlet Elfcup fungi. Continuing down through the woods, flowering specimens were found one by one to confirm most of the earlier leaf identifications, then Barren Strawberry and Hairy Wood-rush were also found in flower. The track ran through the gardens of Bottom Farm, where there was a neat newly-laid hedge and a Marsh Tit was seen. Rain started to fall as the walk continued into the top of Great Chalk Wood. Raindrops glistened on the grooved, dome-shaped cap of a large Inkcap fungus on dead wood to one side of the track. Nearby were several Gooseberry bushes with bright green new leaves. Continuing down through the wood, a big patch of flowering Wood Anemone was found, together with a larger area of Ramsons leaves. The route then turned sharply back uphill. Towards the top of the wood, the

Ramsons leaves became so dense that they appeared to be smothering everything else. The next section of the walk followed lanes and tracks southwards towards Coombe End Farm. The rain, which had hardly been noticeable while under the tree cover of Great Chalk Wood, was increasing steadily. Greater Stitchwort was found in flower beside the track and a flock of Starlings flew down into the adjacent field, followed by a noisy flock of Fieldfares. The final footpath led back across fields to Whitchurch Hill. Most of group then went on to the Sun at Hill Bottom for lunch and were delighted to find a welcoming fire.

Maria Newham led a walk which started from the Recreation Ground at Binfield Heath on Wednesday 20 April. The sun was shining strongly, but there was a cool and strengthening northerly wind. The 18-strong group set out across the Recreation Ground, then turned along Kiln Lane, where Few-flowered Garlic was abundant on the roadside bank. Orange-tip, Peacock and Holly Blue butterflies were on the wing and a red and black Cabbage Bug Eurydema oleracea was spotted on a Garlic Mustard leaf. The route followed a footpath which led north-eastwards across a wide valley which had been planted with a crop of winter wheat. A Yellowhammer was singing from a hedge and a Raven called. On the other side of the valley, the footpath led steeply up through a conifer plantation. Clumps of first Southern and then Hairy Wood-rush were in flower beside the path. A warbler singing from the scrub at the top of the wood was thought to be a Garden Warbler. Soft green Hemlock was abundant in the margin of the bordering field and three Buzzards drifted across the sky. The footpath led over the field and into High Wood, which had a carpet of Bluebells. Several chunky plants of Wavy Bitter-cress were in flower beside the path. The walk continued along the lane past Upper Bolney House. A large bracket fungus was tucked away at the back of the hollow base of a big old multi-stemmed Ash. A gap in the hedge led to a well-worn path along the field margin where there were drifts of white Greater Stitchwort flowers. The next footpath led southwards alongside a broad hedge-line where bright lime-green flowers were found to come from three different tree species - Field Maple and Norway Maple with upright flower-heads and Sycamore with dangling inflorescences. A number of Wild Cherry trees were covered with white blossom. The walk continued westwards along the northern boundary of Upper Hailey Wood, then turned southwards along a footpath through Upper and then Lower Hailey Woods. Hornbeam trees lined the path on one side and there were drifts of Bluebells, together with flowers of Common Dog-violet and Yellow Archangel.

A fallen tree had a big specimen of the bracket fungus Ganoderma australis. Towards the southern edge of the wood, the track ran between two big pits. A Jay and a Wren were seen in the right hand pit. At the far side of the pit, a pair of Brimstone butterflies were flying together in a spiralling flight pattern, with the paler female above. After emerging from the wood, the route followed footpaths southwards and westwards along hedge lines. A Wych Elm tree covered with apple-green seed disks, Goldilocks Buttercups and a Comma butterfly were noted here. At the point where the path crossed the lane at Shiplake Row, there were big clumps of white- and dark blueflowered comfrey plants and Green Alkanet, all attracting bees. A black and yellow Scarlet Tiger moth caterpillar was found nearby. Continuing southwards across a wide open field, Skylarks were singing high above and distant views opened up across the Thames valley, with the trees which line Wellingtonia Avenue at Finchampstead prominent on the skyline. The next footpath led back westwards across the fields. A Small Tortoiseshell butterfly flew along the line of the hedge and Early Forget-me-not, with its small blue flowers, was found. An area of short turf next to the path had several big patches of Ground-ivy flowers which were alive with bee-flies and bumblebees. Rob Stallard took a photograph of an Oak Apple here, and was interested to discover later, when inspecting his picture, that the small currant-shaped galls in the background were made by the first spring generation of the cynipid wasp Neuroterus quercusbaccarum. The wasp's second generation make the more familiar Oak Spangle Galls on leaves in the autumn. The path then led into Shiplake Copse, where Opposite-leaved Golden-saxifrage and Brooklime were found in the damp area next to the small stream which flows down through the wood. Wood-sorrel was in flower on the bank beside the path and Scaly Male-fern and a Speckled Wood butterfly were also seen. The final section of the route crossed several fields and then followed a short stretch of road back to the starting point at Binfield Heath. Most of the group then went to the Shoulder of Mutton at Playhatch for lunch.

Fiona Brown led 10 members on a walk at Yateley Common on Wednesday 25 May. It was a dull grey and windy morning but the threatened rain held off. The walkers met at the eastern end of Blackbushe Airfield and set out along the perimeter fence, before turning into Yateley Common, which is managed by the Hampshire Countryside Service. The first part of the walk followed the old runways and stony tracks which criss-cross this part of the Common. Flowers at the side of the tracks included White Stonecrop, Common Stork's-bill, Wild Strawberry, Field Madder, Early Forget-me-not, Weld, Germander Speedwell and Common Bird's-foot-trefoil. Broom, Bramble, Dogrose and Honeysuckle were in flower in the bordering scrub. A Dryad's Saddle fungus was found low down on an unhealthy-looking old multi-stemmed tree. A Jay flew up ahead and Whitethroat, Chiffchaff and Willow Warbler were heard. The next part of the walk was through Castle Bottom National Nature Reserve. It consists of open heathland, with steep valleys and valley mires. Exmoor ponies are used to control the vegetation. The first sighting, on entering the reserve, was a circling Buzzard being mobbed by several Magpies. A few flowers of Bell Heather and Cross-leaved Heath were found beside a narrow path which led steeply downhill into a side valley. Heath

Speedwell, Sheep's Sorrel and Tormentil were flowering amongst the acid grassland of the valley bottom. An old bonfire site was home to small bright green patches of Bonfire-moss Funeraria hygrometrica. Continuing down the valley, the path led past a cluster of flowering Alder Buckthorn bushes. A well-chewed leaf betrayed the presence of a green Brimstone caterpillar, which was clutching the midrib of the leaf with a short section of its back end, while most of its length was sticking straight out from the leaf at an obtuse angle. The path led to a board walk over what would normally be a very wet area but, after prolonged dry weather, was now barely damp. The leaves of Bog Pimpernel were identified, while Lousewort was in flower nearby. Further on, tall closed flowerheads of Goat's-beard were noted at the side of the path. The route led down to the main valley, where a larger stream continued to flow over its gravel bed, though probably with a significantly reduced volume. Hard-fern was growing by the banks of the stream. The track then climbed up through a section of woodland. The leaf rosette of a Spotted-orchid was found beside the path but the flower stalk had been bitten off by a browsing animal. It was a good day for finding moths, and through the morning, Common Heath, Brown Silver-line, Peacock, Common White Wave and the micro-moth *Teleoides luculella* were all seen and identified. The track climbed up to the top of the hill, with good views across the reserve, and, in the opposite direction, over a large area of former gravel workings. The walk continued down through woodland and then circled back to the airfield. The main runway had a wide grassy margin and flowers of Mouse-ear-hawkweed and Fairy Flax were amongst the sightings here. After returning to the car park, most of the group went to the Cricketers pub at Yateley for lunch.

Jim Wills led a circular walk which started at Frieth, west of High Wycombe, on Wednesday 8 June and was attended by 14 members. The morning started cloudy, but the sun soon came out and it was pleasantly warm, though becoming windier as the walk progressed. The walk started out northwards from the village, initially past a recently-planted orchard. There was abundant Yellow Rattle in the grass below the trees, together with Dame's Violet and Red Campion beside the path. The route followed footpaths along hedgerows and into the edge of a wood, before turning right through a gateway and down across a field with fine grasses, dotted with Red and White Clover. At the bottom of the field, the footpath crossed a deep wooded sunken lane. Five White Helleborine flower spikes were found beneath Beech trees on the bank. The walk continued uphill along the edge of a wood, where Field Rose with white flowers was scrambling through the hedgerow. The footpath then followed the boundary between two fields, where sightings included Bladder Campion, Common Poppy and Ox-eye Daisy. The next part of the walk was through Fining Wood, where the underlying geology changed from the Chalk of the farmland to the Clays and Sands of the over-lying Lambeth Beds. On the left of the path, Rough Chervil was growing next to Cow Parsley. A damp stretch of ground had Brooklime and Common Figwort, while further on, Yellow Pimpernel was found. Turning back southwards, the next footpath led out of the woodland and back onto farmland on the Chalk. Skylarks sang overhead, a Yellowhammer sang from the hedge and a Kestrel was seen. The path ran past a house with a green stonecrop-covered roof. Its large pond had attracted a few Swallows and House Martins.

Next stop was the northern section of **Moorend Common**. The underlying geology is London Clay, which is rarely found in the Buckinghamshire Chilterns. The meadow was covered by a glorious mix of Southern Marsh-orchid, Common Spotted-orchid and Heath Spotted-orchid, together with a bewildering mix of hybrids between them. Jim had helpfully provided a crib-sheet describing key features of the three species which could be used to try to work out the lineage of different specimens. The crib-sheet described the leaf markings and the colour, shape and patterning of the flowers. Also found here were Bitter-vetch and the leaves of Devil's-bit Scabious. Moths seen included Burnet Companion and Green Oak Tortrix, and a Marsh Fritillary butterfly was roosting in the grass with its wings together – was this yet another unofficial release of this species? The central part of Moorend Common is wooded. Many of the tree leaves showed signs of feeding damage but there were no obvious caterpillar culprits. It was suggested that the first generation of the Alder Leaf-beetle might have been responsible. The southern section of the Common was another glorious orchid-covered meadow. There appeared to be more Common Spotted-orchids than Heath Spotted-orchids – on the northern meadow, the opposite had been the case. A wetter part of the meadow had Ragged-robin, Lousewort, Marsh Speedwell and Common Marsh-bedstraw. In the centre of the meadow were a number of clumps of Petty Whin. Most had finished flowering, but there were a few remaining yellow flowers. Leaves of Betony, Devil's-bit Scabious, Sneezewort and Common Fleabane were identified. Fen Bedstraw was found on the drier side of the meadow. Meadow Brown, Small Heath and Speckled Wood butterflies were seen, together with Straw Dot and Silver Y moths. The final part of the walk, in a strengthening wind, was along footpaths across fields and back to Frieth churchyard. Most of the group then went on to the Frog pub at Skirmett for lunch.

Sally Rankin led a walk at **BBOWT Warburg reserve** at **Bix Bottom** on the morning of **Wednesday 20 July**. The warden gave the group a brief introduction to the reserve and reported on recent management work. After two days of extreme heat, the temperature was significantly lower, but as the morning progressed, conditions gradually became hotter and more humid. The walk started out northwards along a footpath which led steeply uphill through woodland. Plants found beside the path included Ploughman's-spikenard, Nettle-leaved Bellflower (including a few white specimens), Pale Toadflax and Broad-leaved Helleborine. More Helleborine spikes were

found, not yet in flower, further back from the path. There was some debate as to whether they might be Broadleaved or Narrow-lipped Helleborines. The path opened up, with a wide margin of scrub to one side where most of the Herb Paris was found. Many of the plants already had brown leaves, together with a glossy black berry-like fruit. Male specimens of both Large and Small Skipper were found perching on the scrub. The next footpath led back down through the woods, and it was bordered in places by big old multi-stemmed Beech trees. A total of 17 spikes of Bird's-nest Orchid were found beneath the Beech trees. They were long past flowering and had turned a darkish brown, but were still easily recognisable. Low bushes of Spurge-laurel were found nearby. The footpath led down to Great Hill Ride, which is bordered by a wide margin of chalk grassland. Flowers seen here included Wild Marjoram, Wild Basil, Wild Thyme, Common Rock-rose, Small Scabious and Common Centaury. Sharp-eyed botanists at the back of the group also spotted Fly Orchid spikes, again well past flowering. Butterflies included Marbled Whites, Meadow Browns, large numbers of Gatekeepers and a few Common Blues. The ride then passed through a stretch of woodland, where more Broad-leaved Helleborines and the seed spikes of White Helleborine were found. The next section of the walk was through Big Ashes, a large field of chalk grassland. Common Gromwell plants next to the path had both flowers and hard white seeds. Seed spikes of Common Spotted-orchids were found, and a Pyramidal Orchid was still clinging on to the last of its flowers. A family of Marsh Tits called as they moved through the trees at the edge of the field. The next path led down through woodland to the bottom of the valley. Hairy St John's-wort and Common Figwort, together with Ringlet butterflies, were seen here. Many dead Ash trees - casualties of Hymenoscyphus fraxineus disease - on the far side of the valley made a sad sight. The route then turned left along the track at the bottom of the valley. This led through a clearing where two Silverwashed Fritillary butterflies were nectaring on Bramble blossom. Orpine, Dark Mullein, Musk Mallow and a Cinnamon Bug were seen here. The next path led up through the Beech woodland on the south side of the valley. Under the trees were a number of wire baskets. A few were protecting Helleborine spikes (none were in flower), but most were empty. Continuing back down the slope, a rare snail, Mountain Bulin Ena montana, was found on the trunk of an Ash tree. It is found in old deciduous woodland on calcareous soils, with its remaining strongholds in the Mendips, Gloucestershire and the Chilterns. The final part of the walk was back along the track at the bottom of the valley to the visitor centre. There were abundant leaves of Green Hellebore beside the path, long past their flowering time early in the year. After the walk, most of the group went on to the White Hart at Nettlebed for lunch.

Rob Stallard led a group of eleven people for a circular walk at Hermitage on Wednesday 17 August. The walk started with a steep climb up to Oare Common where some Dwarf Gorse was found. The Common had many mature oak trees among Bracken but on the edges a wider range of trees was seen including Alder Buckthorn. The group then explored Roebuck Woods to the north-east which had a greater mix of trees as well as Honeysuckle, Hard-fern and Wood-sorrel. The whole walk was over an area of London Clay with some gravel patches and so on Oare Common any small hollow that would normally accumulate water had patches of Water Pepper. At the north edge of the Common the curious egg sacs of the Sputnik Spider Paidiscura pallens was spotted on an oak leaf. Rob then led the group down the north edge of the Common where Common Hemp-nettle and Male-fern were seen. A young Buzzard was heard squawking continuously. Drought conditions had been declared in the last week and although some welcome rain had fallen the previous day the whole area was still very parched. The lack of rain was evident at the Oare village pond. Near the centre of the dried-up pond were Water-plantain, Water Dock and some Trifid Bur-marigold Bidens tripartita surrounded by Water Mint, Yellow Iris and some Water Horsetail. The route then headed east beside fields of Sweetcorn with some arable weeds including Corn Spurrey plants at the field margin. A second dried-up pond was investigated and it had a different range of plants including Redshank, Bistort, Water-starwort and Marsh Cudweed. A Slender Groundhopper Tetrix subulata was seen here. After another field of Sweetcorn the path passed a site where an Iron Age roundhouse was in the process of being constructed. The route then followed a section of bridleway along the disused Didcot-Newbury railway line until it reached a recently created butterfly meadow and here both 'Common' Agrimony and Fragrant Agrimony were found. The path followed the edge of the wood leading to Little Hungerford. The group then crossed the Yattendon Road and explored Poundpit Piece to the east of Hermitage. There was a patchwork of different plantings in Pheasant Hill Wood, some conifer and some mature trees of different ages including Beech and Sweet Chestnut along the many tracks criss-crossing the woods. At a damp patch on the track Lesser Spearwort and Water-pepper were seen. Some Speckled Wood butterflies were also spotted here. The route then headed down the slope and here on a stump of Sweet Chestnut a Giant Polypore fungus was seen. The path led down to the village of Hermitage where some of the walkers had lunch at the Fox Inn.

Fiona Cummins led a walk on the morning of **Wednesday 14 September** which started from the King William pub at **Hailey** near Ipsden. Overnight rain had cleared away, the sun came out and the temperature rose steadily. After a summer of drought, unsettled weather in the last few weeks had helped to turn the countryside from parched brown to green. While the 10 walkers gathered, a Raven was heard. The walk started out up the track beside the pub, passing a hedge covered in Ivy blossom which had attracted large numbers of Ivy Bees. The next footpath turned off to the right and followed a wide conservation margin along the side of an arable field. The margin contained a wonderful collection of plants, including sky-blue Chicory, Wild Mignonette, Fool's Parsley, Pale and Small Toadflax, Bladder and White Campion, Field Pansy, Field Madder, Fairy Flax, Bristly Ox-tongue and Dwarf

Spurge. There were many Common Poppies, but a highlight of the walk was a single Prickly Poppy. Its flowers were small, orange rather than red, with non-overlapping petals and it had a long cylindrical bristly seed capsule. Butterfly sightings included a number of Small Whites, several Common Blues and a Small Heath. A flock of House Martins, together with a few Swallows, flew over the field and a female Kestrel perched on a power line at the bottom of the field. The route then turned left up the lane past Wellplace Farm, continuing up the valley for about a kilometre before turning left again and following a footpath which climbed steeply up through a narrow strip of woodland. Bright red Black Bryony berries were seen on one side of the path and Wild Clematis draped the vegetation on the other side. A number of Nettle-leaved Bellflower plants were in flower beside the path. Further up, a fallen branch had a row of the tiny Collared Parachute Marasmius rotula fungi, with long dark spindly stems with paler tops, and delicate pale caps with a dark central dot. Several Hairy Snails Trochulus hispidus were feeding on a sap run which was oozing from the trunk of a Beech tree. The footpath emerged from the trees and crossed a grassy field, where a few round white puffballs were just beginning to emerge. After going through a gateway, the route turned left onto a track which contoured round the hillside. Insects in the hedge on the sunny side of the road included Volucella inanis the smaller of two hornet-mimic hoverfies, a Comma butterfly and many honeybees on Ivy blossom. Occasionally the trees opened up on the left to give distant views over the Thames valley towards the Berkshire Downs. The route continued through old Hazel coppice, followed a short stretch of track to the left, crossed a grassy field and passed through a gateway into BBOWT Warren Bank reserve. The reserve has three steep fields of sunny chalk grassland. Flowers seen here included Small and Devil's-bit Scabious, Autumn Gentian, Yellow-wort, Harebell, Dwarf Thistle, Wild Thyme, Carline Thistle and Common Bird's-foot-trefoil. Also found was a chunky light brown fungus with its stem covered by an orange net-like pattern. It was identified as a Lurid Bolete, which grows in association with Common Rock-rose. On the walk out of the reserve, red berries and white-backed leaves on the ground betrayed the presence of a Whitebeam tree. The final stretch of the walk led down alongside a sunny hedgerow. Green-veined White butterflies were nectaring on Field Scabious flowers, a Red Admiral perched up on Ivy and Vervain was in flower. Most of the party then stayed for lunch in the sunshine in front of the King William, where a Brimstone butterfly was added to the species tally.

Marion Venners led a walk on Wednesday 19 October which started next to a ford over the River Lyde near Mill Farm at Hartley Wespall north-west of Hook. The Lyde rises initially at springs in the chalk aguifer to the east of Basingstoke, then it flows northwards for about 20 miles before joining the Loddon near the starting point of the walk. It was a mild morning with a strong easterly wind, with the temperature rising as the cloud cover cleared away. Wild Angelica, Hemp Agrimony, Gypsywort, Branched Bur-reed, Meadowsweet and stingless Nettles were found amongst the bankside vegetation. After crossing the footbridge next to the ford, 8 members started out across two grassy pastures. Good numbers of the Yellow Fieldcap fungus were found. Initially bell-shaped and a shiny bright yellow, it then became more flattened, a paler yellow and rather fragile. The River Loddon flowed in a deep channel at the far side of the second field. At one point, the trunk of a fallen tree had been positioned to block most of the channel, increasing the flow and washing clean the gravel below the obstruction. Water Forgetme-not and Water Figwort were in flower nearby and a Grey Wagtail flew across the field and paddled in a shallow stretch of the river. The footpath followed the river bank and crossed over a footbridge. Hops scrambled through the bankside Hazels, pink Spindle berries hung over the water's edge and Guelder-rose bushes were covered with waxy red berries. The next footpath ran alongside a hedge at the edge of the Sherfield Oaks golf course. There were red berries on Black Bryony, black berries on Dogwood, an Artichoke Gall was found on an oak leaf and a number of Giant Puffballs were spotted at the base of a Blackthorn thicket.

The walk continued through Gravel Pit Copse where a wide variety of fungi were seen. Clumps of Bulbous Honey Fungus, with the stems tapering upwards from a distinctive bulbous base, were seen around some big Beech trees and Sulphur Tuft was found nearby. Common Bonnet, with transverse ribs between the gills, was growing on fallen wood, while on the other side of the path, a pale club fungus was pushing up through the woodland soil. A row of tufts of puffballs marked the outline of a fallen branch. Small jelly-brackets on a fallen Ash trunk, with concentric zoning on the upper side and a wrinkled-jelly underside, were identified as Tripe Fungus. A distinctive fungus with an eccentric stem which was growing on a rotting stump was thought to be Blackfoot Polypore. The route then led southwards along Wildmoor Lane, eastwards along a track past Wildmoor Farm, along the steep southern side of a deep sunken trackway and back over the River Loddon. The track crossed several grassy fields, most of which were closely grazed, but one had long rough grass and berry-laden hedges and at its far side, a Sparrowhawk flew along the tree line. A Common Polypody fern was growing on the next bridge, which spanned the River Lyde. The walk continued along the edge of another golf course, where a dragonfly was flying in the shelter of the tall hedge which bordered the path. The route then turned sharply back towards the north-west and followed a footpath along the field edge towards Summerstead Farm. A Bullfinch called from a dense section of hedge. After passing the farm buildings, the path crossed a grassy pasture which was bordered on the western side by the River Lyde. Yellow Fieldcap fungi started to be found again in good numbers, a clue that these fields were a continuation of the riverside pastures which had been crossed at the start of the walk. Flowering Greater Stitchwort was a surprise find at the base of a hedge and a flock of Redwings was seen. A footbridge crossed the River Lyde, giving access to a narrow patch of woodland on the west bank, where a row of enormous Poplars lined the river bank. They had

trembling yellow leaves and several had dropped huge limbs. They were home to a number of different fungi, including some distinctive brackets. The footpath then crossed back over another footbridge to the fields on the east side of the river. The Splitgill fungus *Schizophyllum commune*, with distinctive branched gills, was found on the sawn end of a log by the riverbank. The final stretch of the walk crossed the fields back to the start. Most of the party then drove to Rotherwick for lunch at the Coach and Horses pub.

Julia Cooper and Ian Duddle led 10 members on a walk at Stanford Dingley on Wednesday 16 November. After heavy overnight rain and significant rain in the preceding days, the approach roads had many deep puddles. Then the clouds cleared and the sun shone for the first half of the walk. Meeting point was the church. Across the road, Rooks were putting on an aerial display and settling noisily in the tops of the trees at the edge of the field. A Grey Heron flew overhead. The walk started out northwards along the lane, with flowering Dogwood in the hedgerow a surprise for November. The route then followed a footpath north-westwards across two grassy pastures. There were extensive views to the south across the valley of the River Pang and up towards Bucklebury Common. The leaves on isolated hedgerow oaks were just beginning to change colour and they glowed yellow and green in the sunshine. White Snowy Waxcaps and a solitary Parasol Mushroom were found amongst the shorter grass and small Inkcaps and numerous dung flies were seen on cowpats. A Buzzard circled above. The view to the north opened up, over an undulating grassy field and up to a line of broadleaved woodland, with dark conifers above on the skyline. Closer inspection revealed that a mystery plant in an adjacent field was a Thorn-apple. The walk continued along the edge of the next field between two rows of trees which marked a former sunken trackway. Three Giant Puffballs were well past their prime and Jelly Ear fungus was found on dead wood. On a previous walk, it had been estimated that the age of a magnificent hedgerow oak was at least 300 years. The next section of the walk was southwards through woodland along a track which followed the former route of the Yattendon to Stanford Dingley road. The trackway led between banks which were lined with old multi-stemmed trees, including Field Maple and both Wych Elm and suckering English Elm. Most of the leaves had already fallen from the Field Maples but the leaves on the elms were still green. In the woodland at the side of the track was an impressive line of big Trooping Funnel fungi. A large deep pit to the right of the track was thought to be a swallow hole. A pond higher up in the woods drains into the pit. Continuing along the track, a big Beech with gold and orange autumn leaves had a Hoof Fungus at its base. Flowering Bush Vetch was another unexpected sighting for November, as was flowering Holly later in the walk. On the left of the track, first an earthball, then a clump of Hare's Ear fungus were found. A Tawny Funnel had crowded, deeply decurrent orange gills. A number of delicate white-gilled fungi were found on a fallen twig. Later inspection of the spores with a microscope confirmed their identification as Roundspored Oysterling. An Oakbug Milkcap had concentric rings of lighter and darker brown on its slightly depressed cap. A merulioid fungus, with folds rather than gills or pores on the underside, was identified as Netted Crust. Leaving the woodland, the walk then followed the field edge down to Pangfield Farm. Amongst the farm buildings was an old granary on staddle stones. Two Pied Wagtails were foraging close to grazing horses in a field below the farmhouse. The route continued down to the Pang, then eastwards through a rushy pasture with grazing sheep, through a small damp copse and across a final grassy field to get back to the church at Stanford Dingley. Several Guelder-rose bushes in the hedgerow bordering the last field carried a heavy crop of waxy red berries. Afterwards, most of the group went to the Old Boot Inn for lunch.

Fiona Brown led 12 members on a walk round **Ewelme**, starting from the car park of the Shepherd's Hut pub, on Wednesday 14 December. It was the fourth day in a row with the temperature failing to rise above freezing and the vegetation around Reading had been covered with a thick coating of rime. Approaching Ewelme in bright sunshine, it became clear that the even thicker coating of white on the surrounding fields was snow. The temperature dropped to -5 °C. Fiona explained that the underlying geology was chalk above Gault clay, but much of the village was built on tongues of surface gravel. Springs rising around the village feed into the Ewelme Brook, which joins the Thames near Benson. The pub used to be a private house with an orchard where drovers could pen their sheep before taking them to the market at Wallingford. The walk started up High Street alongside the Watercress beds. The water around the Water-cress plants was beginning to freeze over, but the stream continued to flow freely. Above the Water-cress beds, the stream flowed between the road and a wall. A dense layer of liverworts covered the wall just above the water line, Hart's-tongue Fern was growing higher up and the green leaves of one of the Water-crowfoots could be seen in the crystal clear water. A dead Grey Wagtail lay face down in the stream. First stop was King's Pool, where the water from various springs collects before feeding through to the Water-cress beds. It was occupied by a large flock of Mallards and a single Coot. Fiona informed the group that the king in question was Henry VIII, who was reputed to have swum here. Turning left into Parson's Lane, the group stopped to admire an ornamental crab-apple tree which was covered with bright red cherry-like fruits, before walking up to the parish church. In 1437, Alice de la Pole and her husband William, the first Duke of Suffolk, established and endowed a school and cloistered almshouses which are still in use today. Alice was the granddaughter of Geoffrey Chaucer and the daughter of Thomas Chaucer, the Governor of Wallingford Castle and Speaker of the House of Commons. Alice is buried in the church, where her impressive alabaster tomb can be seen. The church has many outstanding features, including the roof, various brasses and the carved wooden font cover.

The almshouses have some of the oldest brickwork in Oxfordshire, made with small, thin bricks, sometimes laid horizontally and sometimes in a herring-bone pattern. The school now houses the village primary school. In the churchyard are the graves of Jerome K Jerome and several members of his family.

After standing around in the cold to look at the church and almshouses, a brisk walk was welcome. The route led to the edge of the village and then eastwards along the Chiltern Way. Animal tracks crossed the path. These were mostly Rabbit but at one point a clear set of Badger prints emerged from a gap in the hedge. The sunshine was gradually becoming hazier. There followed a short stretch of road, made somewhat treacherous by ice and packed snow. Turning left onto a footpath, a mixed flock of Redwings and Fieldfares flew down to the stubble field on the right. The hedges had been flailed, but a few berries remained, including privet and rose. The next footpath ran north-westwards with hedges on both sides. A hedgerow tree was identified as a Walnut, distinguished by its pale bark with vertical markings, big pinnate leaves, chunky twigs and the distinctive smell of its crushed fallen leaves. On an exploratory walk back in October, Fiona had found the characteristic leaf blisters of the Walnut Leaf Gall Mite Aceria erinea. Now, amongst the fallen leaves, she managed to find a damaged leaf which showed signs of an exited gall. Flocks of thrushes and smaller birds, including at least one Goldfinch, moved through the hedgerow ahead. Pigs in a nearby field had attracted a large flock of Lesser Black-backed Gulls and another flock of crows. A Pied Wagtail foraged on the mud in a gateway. Continuing across a lane and along the next footpath, an unusual tree was noticed. At its base, two different apple trees appeared to have fused together. One was an ornamental crab apple with small red fruits which were being eaten by a solitary Fieldfare. The other was an ordinary eating apple tree. Approaching the next lane, a Grey Squirrel was sitting on the top of the first of a line of telegraph poles and a Red Kite perched at the top of the second. The sun was now completely obscured by clouds. The lane led back to the pub, where there was a welcoming fire and lunch awaited.

Indoor Meetings 2022

Reports by Fiona Brown, Julia Cooper, Fiona Cummins, Ian Duddle, Jan Haseler, Katie Jenks, Rajan Jolly, Tricia Marcousé, Rob Stallard & Tom Walker

4th January

Exploring the wildlife of India and Sri Lanka by **Rajan Jolly** (Naturetrek Ltd.)

Sri Lanka is a naturalist's paradise, a verdant tropical island endowed with an abundance of forest and freshwater pools and populated by a great diversity of mammals, birds, insects and plants, many of which are endemic to the island. This Wildlife and History tour embraces elements of the Sri Lankan past with visits to the ancient archaeological sites in the so-called 'Golden Triangle' before crossing the wonderfully scenic Hill Country, home of the tea industry, and descending to the south of the island to Yala National Park and the unique Sinharaja Forest. Each day the tropical atmosphere is enhanced by the vivid colours of exotic flowers, a myriad of butterflies and the tempting displays of fruit on offer in every village.

India - Tiger Direct! is the most convenient Tiger tour that Naturetrek have offered yet. By flying straight in to Nagpur, in Madhya Pradesh (heartland of the Tiger), the Indian wildlife enthusiast is offered the ultimate luxury — a tour relatively free of large cities and endless overland journeys. On this Tiger tour more than any other, the time spent in India's wonderful national parks is maximised. The focus is on Pench and Kanha National Parks, two of India's best Tiger Reserves. In both trips the guides explore a wide range of habitats on morning and evening game drives, looking for Tigers, Sambar, Spotted and Swamp Deer, Gaur, Wild Boar, and Leopard, Dhole or Sloth Bear, as well as a colourful profusion of birds. An optional extension to tourist-free Tadoba Tiger Reserve is also offered and it is currently providing some of the best wildlife encounters in India.

18th January

Biological invasions: learning from the past and looking to the future by **Prof Helen Roy** (UK Centre for Ecology and Hydrology (UKCEH))

Biological invasions can threaten biodiversity and ecosystems, particularly through their interactions with other drivers of change, such as climate warming. Sharing knowledge on invasive non-native species between countries is essential to advance understanding and enable successful implementation of management strategies. This talk provided an overview of the ways in which this information can be used to inform science, policy and conservation.

Dr Roy's research looks at the effects of environmental change on insect populations and the interactions between predators and prey in the UK. She is involved in research on the ecology of non-native species and leads the UK input at international level on assessing the risks of existing and potential non-native invasive species. She is co-chair for the Thematic Assessment on Invasive Alien Species and their control within the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

She leads work within the GB Invasive Non-native Species Strategy which emphasises the importance of preventing invasive non-native species from establishing in Great Britain and rapidly responding to them if they do. Details are on:

https://www.nonnativespecies.org/non-native-species/

This website gives a list of existing non-native species where recording of sightings is needed to inform policy and access to reports showing current records. Identification information for existing and potential invasive non-native species are on the site together with links to sources of information on the management of each. Generic contingency plans have been, or are being, produced for each country in the UK describing how government and its partners will respond to new invasive non-native species. The plans are separated into six groups: terrestrial vertebrates, terrestrial invertebrates, terrestrial plants, freshwater animals, freshwater plants and marine species. These are approved by the GB Non-native Species Programme Board after consultation and updated as required. The plans will include detailed species specific plans for high priority species in due course.

1st February

Fungi and plants working together in a changing world by Prof. Martin Bidartondo (Imperial College & Royal Botanic Gardens Kew)

400 million years ago there was no need for fungi to enable green algae to survive in a water environment, but they became prevalent with the evolution of the first land plants, mostly the small, flat, liverwort types. Fungi formed a biomass within the cells and can be seen in fossilised plant cells, so it is considered that symbiosis between fungi and plants started before plants developed stomata, roots and seeds, and helped in the colonisation of the land.

By 70 million years ago, plants and fungi had very well-developed symbioses, known as mycorrhizae, in all regions and climates. Root hairs are short and thick whereas fungal mycelia growing in the root's outer tissues provide long, thin, branched threads that can work through the soil to collect nutrients and water from a greater distance, whilst the roots offer the fungi stability and protection.

There are two main groups of mycorrhizae. The first and earliest group are the endomycorrhizae, where the fungi form structures within the cells and also grow intercellularly so that the membranes of the fungus and the plant are in direct contact. The second are the ectomycorrhizae that form a net between the epidermal and cortical root cells, usually on woody plants, and do not penetrate the cell walls of the host plant. This latter group form a dense glove of hyphae surrounding the roots, perhaps extending several centimetres into the surrounding soil. It is this hyphal network that helps the plant to take up nutrients including water and minerals from the soil, and to provide the fungus with carbohydrates from the woody plant. This group is seen as of increasing importance in agriculture and forestry.

The fungal hyphae can extend great distances and link different plants of the same species, or plants of different species, together. Most plant species can develop several types of mycorrhizae from germination and this will vary with different soil types and the range of plant species in the area. The potential to exchange water and nutrients across soils can assist individual plants, perhaps those at the edge of an area of woodland, to survive drought, flood or poor soil conditions. This mechanism is often referred to as the wood-wide web.

Potentially, a plant can "cheat" the system and cease to use chlorophyll (green colour) to photosynthesise, taking all necessary food, micronutrients and water through the fungal network. To cheat so efficiently these plants need to be in the right location to obtain all the nutrients required from the vascular plant and fungal hosts. For example, in the UK, Yellow Bird's-nest *Hypopitys monotropa* grows when Grey Knight *Tricholoma* fungi are linked with Scots Pine or Beech, or in the US, Red pine with Copper Brittlegill fungus can provide all the necessary food sources for Indian Pipe *Monotropa uniflora*.

Today we are carrying out one of the biggest uncontrolled experiments ever on tree and forest growth. Carbon has increased from 200—300 ppm in the atmosphere to 400ppm and increasing, and more nitrogen is being

deposited on forests, most from agricultural inputs and vehicle emissions. Fertiliser use has grown on agricultural land in the west from 0kg/ha/year to 50 kg/ha/yr and the excess nitrogen is moved onto forests through air and water dispersion. In 2015, researchers found a nutritional imbalance in various species of tree, and work began using standardised sampling on long-term plots to understand the underground network since tree nutrition is dependent upon mycorrhizal diversity in the soil.

The International Co-operative Programme on Assessment & Monitoring of Air Pollution Effects on Forests (ICP Forests, www.icp-forests.net), was launched in 1985 to look at long range air pollution impacts and compile information on the condition of forests in Europe and beyond. It monitors over five thousand 16 x 16km plots on a systematic transnational grid to look for geographic and temporal changes in forest condition, while 561 plots in selected forest ecosystems undergo intensive monitoring to clarify cause-effect relationships. In a separate study which involved members of Martin's team, 137 of these plots were checked for mycorrhizae gainst the ICP Forests' long term monitoring of 38 environmental factors. The most important factor affecting mycorrhizae was found to be nitrogen pollution at the plots. Whilst small increases in nitrogen result in an increase in the mycorrhizae and hence increased tree growth, larger quantities are detrimental to some types of fungi. Many trees across Europe are badly affected by this loss of mycorrhizae, particularly within coniferous species, and it is possible that there will be a tipping point where certain species of mycorrhiza cannot recover. As well as affecting tree nutritional status and growth, this is a shift towards the species of fungi that do not pump carbon into the soil, which therefore reduces the ability of forests to capture and store atmospheric carbon both above and below ground level.

15th February 2022

Local rivers and the fascinating life of the European Eel by **Mia Ridler** (Action for the River Kennet (ARK))

Mia Ridler is a Project Officer for ARK and runs the Thames Catchment Community Eels Project in the Kennet and Pang catchment. ARK is part of a partnership led by the Thames Rivers Trust which in turn is part of an international collaboration. Partners include: Cotswolds Rivers Trust, River Thame Conservation Trust, South East Rivers Trust, and Thames21. They are working together to deliver a strategic view embracing communication and skill sharing to create joined-up thinking and funding for river restoration projects across the Thames Basin.

ARK works with schools and communities near the middle and lower River Kennet and the River Pang to engage them with the European Eel *Anguilla anguilla* and their local rivers. They run Eel workshops, talks and riverbank Eel walks to help people enjoy their blue spaces and discover more about the critically endangered European Eel.

Historically the Eel has played a huge part in UK culture. It was previously abundant in UK waters and in medieval times Eel rents were commonplace. It was also a cheap and nutritious food source for the people of London and became a staple for London's poor typified by the tradition of jellied eels.

The UK only has two true Eel species: the European Conger Eel *Conger conger* which is a marine species and the European Eel.

The life cycle of the European Eel begins in the Sargasso Sea in the western Atlantic Ocean. Tiny spherical eggs float on the sea currents and the larvae hatch out. These are called Leptocephali. They are about 5mm long, flat and shaped like willow leaves. They drift in the current to Europe, a distance of 6,500km, by which time they have grown to 80mm. As they approach river estuaries they develop into Glass Eels which are about 8cm long. They are transparent and have a spine and very basic eyes. As they move up the rivers, they develop into Elvers which are about 12 cm long and are a greyish brown colour. They have fins and their eyes are developed a bit more. They go up the Thames to some of its tributaries moving up-river at night en-masse and trying to find healthy habitats. Those that manage to make it develop into Yellow Eels (mature adults). This is the stage in which they spend the majority of their lives. Females can live for 20 or more years and grow to a length of about 1 metre. Males however only live about 7 - 12 years and are approximately 40cm long. They have tiny scales embedded in their skin. Their dorsal and ventral fins are fused continuously with the tail fin, and together with the lateral line help the Eel sense movement and pressure changes in the surrounding water. Their pectoral fins are used for balance and steering. A mucous coat protects them from disease, acts as a deterrent to predators and allows them to squeeze into tight places. They have gills to absorb oxygen (it is believed that they can also breathe through their skin). They have poor eyesight, but an amazing sense of smell helped by having 4 nostrils. After several years in our rivers Eels migrate back to the Sargasso Sea to breed. During this journey the adults develop into Silver Eels altering their body chemistry to cope with salt water. Their stomachs shrink to save energy and their pupils become larger allowing them to see in the low light conditions of the deep sea. On arrival they spawn for the only time in their lives to produce the next generation of Eels. They are a key member of the food web and are vital to maintaining the ecological balance in aquatic environments. Volunteers have been measuring and noting information about eels using eel traps placed in the same locations as those used in a 1980s survey. It was found that upstream migration is only about 10% of pre 1980s levels - a truly shocking statistic. This has contributed to the European Eel being designated as Critically Endangered. Reduction in numbers is due to several factors — over-fishing (including a boom in illegal trade of elvers), loss and pollution of habitat, climate change, parasites and viruses, and barriers such as weirs and sluices which stop the Eels reaching much of their former habitat.

The partnership is working closely with The Zoological Society of London and The Thames Estuary Partnership to develop and trial a nationally recognised and standardised methodology for a citizen science 'Eel barrier walkover survey' - ObstacEELS. Trained volunteers are helping assess and map robust data of where there are barriers to Eel migration, and this will allow strategic prioritisation for future Eel projects. They carefully assess the passability of each man-made obstruction in the river channels. Then an app is used to review data collected to ensure accuracy and produce a fish migration road map of the obstacles. This will enable the Environment Agency and other organisations to accurately prioritise obstacles for removal or alteration for eel passage. It is estimated that there are about 20,000 barriers in the Thames area.

The next stage of the project will involve practical work. Unlike Salmon and Trout, Eels can't jump obstacles so they can't use Salmon ladders. However, they can crawl overground so long as the surface is wet and rough. This fact will be used to provide fish passes with suitable surfaces that they can move over. By making barriers passable more Eels will be able to reach suitable habitats in our rivers and eventually migrate back to the Sargasso Sea to spawn. It is hoped this will support increasing populations in the future. This work will of course benefit other species including humans.

To volunteer go to the Thames River Trust website: <u>www.thamesrivertrust.org.uk/thamescatchment-community-eels-project/</u>

1st March 2022

How I got into shells by Dr Tom Walker (RDNHS and Conchological Society of Great Britain & Ireland)

Tom had concluded that the RDNHS has shown little interest in molluscs during the 74 years of *The Reading Naturalist*. He found that it had devoted Issue 4 in 1952 to an identification guide to land snails in the Reading area, and since then there have been only six articles which include molluscs. 'Observations' have included shells in only 6 annual reports. However, within a 25km radius of Reading 67 land shells, 25 slugs and 54 freshwater molluscs are recorded on the National Biodiversity Network database, and he has personally observed 108 of these 146 species. So he suggested that it was time that our Society was made more aware of what is around us.

There have been many threads to his interest in shells, and this talk illustrated many of them. Several exhibits of both shells and conchological books were shown during the talk to highlight particular aspects being discussed. Exhibits ranged from the largest British mollusc, the Pearl Mussel *Margaritifera margaritifera*, 15cm in length, to the smallest family, the Vertiginidae, at only 2-2.5mm in length.

Tom's involvement in shells commenced during a two-year period working in Jamaica in the mid-1970s when he took up scuba diving and marvelled at the molluscs encountered in the Caribbean. Over the two years he and his wife accumulated a moderate collection of shells and on their return to England he wished to pursue this new hobby. It was unlikely that he would visit the Indo-Pacific where most 'collectable' shells are found, and he did not wish just to purchase from dealers, so he turned to a childhood hobby and began collecting postage stamps showing molluscs. By the end of 2007, when this aspect of his hobby stopped, the collection had reached about 6,500 stamps showing some 1,170 identifiable species. Along the way the thematic catalogue *Collect Shells on Stamps* was published by Stanley Gibbons in 1995, and a CD in full colour in 2004 (copies are available for anyone interested).

In the early 2000s Tom looked for a new area of molluscan study and settled on British non-marine shells. This choice was influenced by the fact that he lives in Reading and did not make many excursions to the sea to collect marine shells, and also that the total number of non-marine shells was sufficiently small that he could become familiar with most of them.

At present in Britain/Ireland there are a total of 233 recognised species:

- 101 terrestrial shelled molluscs
- 43 slugs
- freshwater/brackish water gastropods
- 33 freshwater bivalves

Recording of molluscs is led by the Conchological Society of Great Britain and Ireland, and all records are placed on the National Biodiversity Network website. Tom has been involved in several recording exercises, the most recent being in High Wood at Blenheim Palace, where a study coordinated from Kew Gardens is documenting all taxa, both flora and fauna, found in Blenheim Park. In the three years of the study he and his colleagues made 13 visits and recorded 1,213 shells belonging to 51 shelled taxa and 17 species of slugs. Records were also made of any usual sightings, an example being that of observing a shell climbing ash trees in Sulham Wood; this turned out to be the first record in Britain of the Round-mouthed Snail *Pomatias elegans* climbing trees.

Although Tom was not involved in the project, he talked about the fiasco of the attempted relocation of the minute Desmoulin's Whorl Snail *Vertigo moulinsiana* during construction of the Newbury bypass in 1966. Although translocation to a new site at Bagnor was carried out, the snail there was declared extinct by 2006 – another example of man's efforts to interfere with nature that resulted in failure.

In recent years his molluscan interests have turned very much to archaeology. The talk showed some examples of archaeological shells, from beads and an artist's palate dating from 75,000 years ago in South Africa, through 18,000 year old Triton trumpets in France and Oysters in Roman Britain. His involvement with conchological archaeology is in the use of shells for the reconstruction of the palaeoenvironment in past times, particularly the period between the end of the last Ice Age (about 11,000 years ago) and the start of written records. Different non-marine molluscs are found in different environments; some land species live only in open country with good sunlight, others prefer shady areas, while some can tolerate a wide variety of habitats. Similarly, different freshwater shells are found in moving water, ditches or slum environments. An example was given of a mollusc sequence at Gwithian in Cornwall, where molluscs established that in the Neolithic period the area was wooded, but around the beginning of the Bronze Age, 2,400 BC, the woodland was all cleared and the mollusc assemblages changed to open country species typical of sand dunes.

Tom's talk then turned to species which have become extinct in Britain since the Ice Age and those which have been introduced. Some extinctions occurred very soon after the ice disappeared, but others are much more recent. New studies have revealed several species which were last seen living as recently as 10 or so years ago, but may now be extinct. One example is the Thames Ram's-horn Snail *Gyraulus acronicus* which has been found living in the Upper Thames and its tributaries, but is now possibly no longer extant. The last proven observation of living specimens was in the River Pang as recently as 2011, but searches in this river and at other localities have failed to find live specimens. The cause of this decline is not known, but may be due to pollution although the alien signal crayfish has also been incriminated.

There are many species in Britain which have been introduced since the British Isles separated from the continent around 7,000 BC. It is well known that the Roman Snail *Helix pomatia* came with the Romans, but less well known is that they also brought that pest of gardeners, the Common Garden Snail *Cornu aspersum*. Some freshwater introductions are of great ecological concern as they are known to proliferate at rapid rates and can choke rivers and streams causing great disruption to water flow.

An interesting topic is establishing how old any specimen of shell is. The Ocean Quahog *Arctica islandica* is the longest-living known single-bodied animal; one specimen from the Atlantic Ocean was 507 years old when dredged up, the age being established by counting the annual growth rings that can be seen on a cut section of the shell.

It is general knowledge that the purple dye, Tyrian purple, used for example in the garments of Roman senators, was derived from Mediterranean seashells. Less well known is that a small British seashell, the Dog Whelk *Nucella lapillus* can also produce purple dye. Shells found in an archaeological collection from Bossiney in Cornwall were broken in such a way that extraction of the soft parts of the animal to make dye is the likely explanation; experimental breakage of modern shells to access the dye gland produced similarly shaped shell fragments.

The painting *The Birth of Venus* by Boticelli in 1478 is probably the most famous painting depicting a shell – in this case a scallop, but this theme can also be seen on a fresco from Pompeii in Italy, predating that town's destruction in 79 AD. Shells have been shown on a very large number of classical paintings from the middle of the fifteenth century. Many paintings demonstrate the wealth of the owner of the shells, while some are used as symbols of,

for example, the mortality of man, an aphrodisiac (oysters) or a 'loose life' (mussels). There are numerous books illustrating shells. The earliest devoted to molluscs is Martin Lister's *Historiae sive Synopsis Methodicae Conchyliorum*, [Editors note: the Biodiversity Heritage Library (www.biodiversitylibrary.org) cites it as 'Historia sive synopsis methodica conchyliorum'] which contains many beautifully engraved illustrations of shells including marine and land shells as well as fossils from Britain, Europe and more exotic countries.

A particular interest of Tom's is those shells which can only survive in Britain in heated glasshouses – so-called 'hot house aliens'. He is visiting all such habitats he can find, and to date he has been to 47 locations, of which 27 contained 'aliens'. At present these are no threat to our countryside, but if global warming is sufficient to enable them to survive in the wild then it is possible that they may become a threat to some of our native species.

The final topic of Tom's talk was the use of shells as food. The conch fritters or conch chowder made from the meat of the Queen Conch *Strombus gigas* in the Caribbean will be known to anyone who has travelled there. In Britain several types of shellfish are regularly eaten, but less common is the Garden Snail. He was interested to find an eating house called *The Wallfish Bistro* with a snail logo in Bristol, and found that the Garden Snail was once called the Wallfish. This is because it hibernates in winter in clusters on walls and can easily be collected. In the medieval Catholic church it was not permissible to eat meat on certain days but the definition of 'not meat' is curious. All fish and cold-blooded animals are not meat, as are any animals that live in water (the Beaver and Capybara are therefore classified as fish!). So the Garden Snail was a permitted food. It is now illegal to collect the Roman Snail in Britain, so that species is no longer on our menus.

Tom's talk was a ramble through many conchological areas that interest him, but he hoped that it demonstrated that there are many aspects to shells other than regarding them as garden pests. Very few do any damage to our flower borders or crops and many are very beautiful creations.

15th March AGM and Member's Talk:

Plant galls by Rob Stallard

Rob Stallard gave a short talk about galls. His illustrated talk showed some of the common plant galls that can be seen in the area including the Robin's pincushion gall on roses, Cherry gall on oak trees and Willow red gall on willows. A gall is defined as an abnormal growth produced by a plant or other host under the influence of another organism. Most plant galls are caused by the larvae of insects but others are caused by bacteria, arachnids, fungi and even other plants. There are around 5,000 species of these gall producers in the UK and they are poorly recorded and understood. They are often only found on a particular species of plant so if you know the gall you can safely identify the plant it is on. Rob concluded that galls are easiest to spot in late summer when they are fully formed and are definitely something worth looking out for.

4th October Balancing biodiversity with economic farming systems by Dr John Redhead (UKCEH)

Agri-Environment Schemes (AES) have been operating for over 30 years but declines in farmland wildlife have continued. This long term research programme by UKCEH looked at whether an average farmer could maintain income whilst doing something constructive for wildlife on an average farm. The experiment was funded by DEFRA and Natural England at the start of Environmental Stewardship in 2005 and took place on a typical lowland farm in Hillesden, just south of Buckingham. The farm was running a rotation of winter wheat, field beans, barley and oil seed rape on heavy soils with many hedgerows and mature trees, and had not been managed under AES before.

During Phase 1 from 2005-2010, the farm was split into 3 areas of different treatments: (1) a control area, (2) an area with small-scale AES (grass margins and a single patch of wild bird food seed), and (3) an area with more extensive AES including perennial wildflower patches and pollen and nectar mixes with many legumes. They monitored a large range of variables including: type of AES, different species found and species abundance, crop rotations and production, availability of food supplies and distribution, by carrying out regular transects, bird ringing, moth trapping, small mammal trapping etc. They installed nestboxes to look at the breeding success of Blue Tits and Great Tits with respect to food resources since these resources were increased by reduced frequency of hedgerow cutting which was one of the AES options adopted.

Photographic Competition 2022 Winning Photographs

(for article, see page 42)



Overall Winner & Winner: Any Fauna Waxwing Bombycilla garrulus
Strood, Kent © Steve Woolnough



Winner: **Colour Prejudice** & Runner Up for Overall Winner Rose Chafer - Burghfield Common garden © Rachel Woolnough



Winner: **Small is Beautiful** Speckled Bush Cricket Tilehurst garden © Rob Stallard



Winner: **Three of a Kind** Nesting Kittiwakes Grand Hotel, Scarborough © Fiona Brown



Winner: **Pattern Perfect** Merveille du Jour Brimpton Common © Grahame Hawker

Photographic Competition 2022: Winning photographs and Runners Up



Winner: **Makes you smile** Red Fox Dungeness, Kent © Steve Woolnough



Winner: **Any Flora & Fungi** Chicken of the Woods Farley Hill © Fiona Brown



Winner: **Nature in action** Crab Spider with bee Pangbourne garden © Dorothy Marshall



Winner: **Nature on your doorstep** Romantic Frogs Bradfield garden © Jo Parsons



Runner Up: **Small is Beautiful** Southern Green Shieldbug Saint Emilion, France © Lesley Hawker



Runner Up: **Colour Prejudice** Beech leaves Ashampstead Common © Rob Stallard

Photographraphic Competition 2022: Runners Up



Runner Up: **Nature in action** Crab Spider with bee Bradfield Southend © Jo Parsons



Runner Up: **Colour Prejudice** & Runner Up Overall Winner ♂ Brimstone on Sweet Pea - Bradfield garden © Jo Parsons



Runner Up: **Pattern Perfect** Sunshine through fallen leaf Rushall Farm, Bradfield © Jo Parsons



Runner Up: **Pattern Perfect** Butcher's Broom Sulham Woods © Rob Stallard



Runner Up: **Makes you smile** Stonechat feeding juvenile Silchester Common © Steve Woolnough



Runner Up: **Three of a Kind** Fly Agaric Silchester Common © Rachel Woolnough

Photographraphic Competition 2022: Runners Up



Runner Up: **Any Fauna** Southern Darter Miasmus, Rio Guadalquiver, Spain © Fiona Brown



Runner Up: **Nature on your doorstep** Red Kite Burghfield Common © Steve Woolnough



Runner Up:: **Any Flora & Fungi** Blackthorn Hosehill Lake, Theale © Rachel Woolnough



Runner Up: **Flora & Fungi UK** Parasol mushroom Hope Cove, Devon © Grahame Hawker

Other photos for articles in this Naturalist



Newbury Peregrine Mrs N training one of the male juveniles to catch prey July 2022 © David Webster



Brimstone caterpillar on Purging Buckthorn July © Ken White

During Phase 2 from 2012-2017 UKCEH reduced the overall intensive monitoring but carried on with bird and pollinator monitoring.

High resolution mapping showing height of vegetation and land cover gave accurate data about the land under cropping and AES. The low level AES took 1-3% of land out of production and the higher level AES accounted for 5-10%.

In general, there were a wide range of positive impacts on biodiversity from AES introduction. For example, double the levels of flowers for pollinators in low level AES and 5 times the control levels in higher level AES. There were similar increases for the pollinators as well.

Mammals increased from only Wood Mice the first year with noticeably increased numbers and variety of species after 3 years within the AES areas. For example these included Bank Voles and Field Voles, which are food sources for raptors and other predators.

Bumblebee surveying took DNA samples to enable tracking of the colonies and to follow the family trees of the bumblebees through subsequent years. AES boosted the amount of spring and summer forage for bees and reduced the distances travelled for food. Colonies within the AES produced new queens that are more likely to survive to the next year.

The effects on farm productivity were considered from two aspects: the impact of increased predators in AES areas on crop pests and the overall economic impact. UKCEH found that crops benefited from increased pollination and crop pest control within 10 15 metres of AES options such as flower-rich margins. Precision farming data allowed field yields to be monitored by the square metre to measure overall production levels near to the AES.

All AES options could be done without a negative impact on overall production. Substantial boosts were found on maximum production/hectare for fields under AES after about 3 years, but the AES had reduced the overall amount of land under production, and when this was factored in, there was no difference in overall production/hectare on the farm. However there was an increase in biodiversity. Of course, this was measured on just the one farm, and the trends in biodiversity might have been seen across the wider countryside.

In 2018 UKCEH looked at overall trends on the Hillesden estate over a ten year period using the continuous monitoring data of birds and butterflies, and compared them with data from the same period from similar landscapes without AES within 100 km. This data was provided by the BTO Breeding Birds Survey and the Wider Countryside Butterfly Survey (which feeds directly into the UK Butterfly Monitoring Scheme) using inter-annual change rates so that different starting conditions could be eliminated and missing datasets from other sites could be excluded.

The results showed:

Clear winners at Hillesden (large positive improvement compared with the non AES sites): Chaffinch, Yellowhammer, Blue Tit, Great Tit, Meadow Brown, Gatekeeper, Green-veined White.

Possible winners (limited positive improvement): Blackbird, Linnet, Reed Bunting, Whitethroat, Wren, Ringlet, Small Tortoiseshell, Marbled White.

Possible losers: Dunnock, Large White, Common Blue.

Clear losers compared with numbers on land without AES: were Robin, Song Thrush, Small White.

18thOctober

Captive Grey Wolves and their social interactions by Emma Ashby (Berkshire College of Agriculture)

Emma Ashby presented a talk on Grey Wolves *Canis lupus* which was based on a study she did in 2017 at the UK Wolf Conservation Trust in Beenham, Berkshire. The welfare of social species of animals in captivity is being increasingly studied as humans are discovering the need for animals to express natural behaviours in captivity. Wide-ranging social predators such as wolves pose difficulties as they are social animals which need large territories and can develop problem behaviours such as pacing. We can explore ways to help them by studying how they interact and how it affects their welfare. By maximising behaviours such as hunting techniques and maintaining social bonds it is possible to maintain structure in the pack. In view of the difficulties in studying animals in the wild, it is necessary to monitor a captive population.

Captive wolves display more aggressive behaviours than those in the wild and the question is why? This study aimed to define specific behaviours and established hierarchies, investigate whether individuals, food,

dietary enrichment or pack influence the types of behaviour observed. and to explore social networks between the wolves using Social Network Analysis (SNA). In this technique each individual is represented by a node (circle) and their relationships by lines between them. The network shows which animals are interacting and which is dominant.

There were four wolf packs separated by enclosures, the biggest of which was 4.3 acres (1.74 hectares). There were ten wolves altogether. Several of the packs were related eg. a mated pair of Northern Grey Wolves *Canis lupus lupus* were in one pack and their three offspring in another, and some were Arctic wolves *C. l. arctos*. The male wolves had been castrated to reduce aggressive behaviour. Each pack was observed every 20 seconds for one hour daily for 30 days during the summer. Behaviour was recorded under four conditions: (1) neither food nor enrichment, (2) no food but enrichment, (3) no enrichment but fed and (4) both food and enrichment provided. Enrichment involved providing the wolves with hessian sacks scented with oils, meat filled hessian sacks, howling or ice lollies.

A single fence ran between the enclosures and male wolves exhibited play behaviour such as pouncing and parallel running. The proportion of time spent growling varied between individuals. Where there were three wolves in a pack more growling was observed. Wolves in the same pack interacted with each other more than with wolves in other packs. Wolves were observed trying to interact with wolves in more distant enclosures. It was observed that the wolf which had the highest rate of interaction was the individual with the least human contact during upbringing.

This exploratory study helps us to understand individual and intraspecies interactions. It helps to answer questions such as are wolves in singular packs or are they treating each other as being one large pack? Do the more social wolves need more enrichment and do the wolves in adjacent packs count as a social enrichment? In captive mammal welfare the question is which pack size is preferable and do we need to tailor enrichment to pack size? This study indicated that enrichment programmes need to be implemented to increase the behaviour repertoire of wolves.

1st November Diatoms in the Ring of Fire by Dr David Williams (Natural History Museum)

Dr David Williams is a diatom systematist-taxonomist at the Natural History Museum. His research is divided between empirical studies on the systematics and biogeography of diatoms and theoretical studies related to advances in systematic theory. David's main interests are diatom phylogeny, systematics and biogeography – during the last decade he has concentrated his efforts on the role of fossils in determining the evolutionary relationships in diatoms.

The main characteristics of diatoms are that they are single-celled organisms, i.e., made of only one cell that provides all functions. They are also photosynthetic and, as eukaryotes, they have a nuclear envelope-bound cell nucleus. The single cell is contained inside a girdle box of silica and, after their death, these silica shells accumulate on ocean floors forming fossil deposits.

Diatoms are divided into two groups that are distinguished by their shape:

- (1) Centric diatoms possess radial symmetry, are circular and they are non-motile in nature and
- (2) Pennate diatoms are elongated and cigar-shaped, have bilateral symmetry and are motile, moving by gliding.

Diatoms are specifically micro-algae living in oceans, waterways and soils. They are extremely sensitive to changes in the environment and their fossils give good records of changes – e.g. in Lake Baikal's case, from the Industrial Revolution to date.

In his presentation, David focussed on his research on diatoms in Lake Baikal, Siberia. His work at London's Natural History Museum (NHM) contains 139,000 slides and 12,000 specimens. There are 15,000 known species of diatom, with approximately 25% being in the NHM collection - but with 200,000 possible species in the world perhaps there is only approximately 2% in the NHM collection.

Lake Baikal is in southern Siberia in Russia. It is the deepest lake in the world (about 1,637 m/5,370 ft) and the largest freshwater lake in the world by volume. It was formed in an ancient rift valley, so it is long and crescent-shaped with a surface area (about 12,160 sq. miles/31,494 sq. km). It is the oldest lake in the world (ca. 25 million years old) and contains around 1,700 species of plants and animals of which two thirds are endemic.

In Britain, joint research links with Lake Baikal were initiated in the late 1980s as a result of the BICER (Baikal

International Centre for Ecological Research) Agreement, organized and supported by the Royal Society. This has resulted in several important UK supported research projects funded principally by the Natural Environment Research Council, the Leverhulme Trust and the Darwin Initiative for the Survival of Species, which gives UK government funding to neglected research areas.

During the Soviet period, little research in the area was carried out and David's aim was to sample areas of the lake's shoreline and deep water for a better understanding. Questions to be tackled were:

How have the various organisms achieved their endemicity, and how well can this be defined?

Are there groups of organisms that have not appreciably diversified, and from where do they originate?

What are the past and present distributions of endemic organisms and what might be done to record this diversity?

How might diversity research contribute to the lake's conservation issues?

One question raised was discovered through past research by Christian Gottfried Ehrenberg (1795-1876). A German geologist and microscopist, Ehrenberg was particularly enthusiastic about diatoms and his fossil specimens are still in Berlin. He discovered 4 species of diatom specific only to Siberia, 5 only to Oregon, but 7 species in both areas. His question was: why do almost identical fossils occur on either side of the Pacific? Further research was carried out in the early 20th century by Russian botanist, Boris Skvortsov. He was the first person to look at benthic diversity on Lake Baikal and, in July 1916, a small bottom sample from the depth of 33 metres was taken near the Olkhon Gate of Baikal Lake. Approximately one hundred microscopic slides from this area were examined; the result was unexpected: 304 species, varieties and forms of diatom were identified, among which 148 were new.

David repeated Skortsov's work at Baikal. He found that the number was greatly underestimated. New studies show that out of just 28 samples, 222 new species and 10 new genera were identified; 170 yet to be described. This may give a total of 1500-1600 species. The majority of these were freshwater species that intermingle with marine species going further south.

There was a strong link between species on both sides of the Pacific that could not be explained. David concluded the presentation by discussing possible theories behind the similarity of species on either side of the ocean. His main theory is that movement of tectonic plates explain this distribution.

15th November Saving England's Lowland Juniper by Matt Pitts (Plantlife)

Matt Pitts is managing a project for the charity Plantlife to rescue Juniper *Juniperus communis* in lowland England, where it is in serious decline. It has been predicted that if nothing is done, it could be lost from southern Britain within 50 – 60 years. Juniper is one of three native gymnosperms (and is now in the family Cupressaceae, subfamily Cupressoidea) in Britain and it supports a wide range of wildlife, including some species which are completely dependent on it. These include the Juniper Carpet moth *Thera juniperata* and the Juniper Shield Bug *Cyphostethus tristriatus*. Birds such as Fieldfare and Redwing eat the berries and distribute the seeds. In southern England, Juniper is mainly found on the Chalk, particularly in the North and South Downs, the Chilterns and in Hampshire, Berkshire, Oxfordshire, Wiltshire and Dorset. There are scattered populations of Juniper in the Cotswolds and on the Lizard in Cornwall. Juniper is also found in Northern England and Scotland, but the northern populations do not seem to be declining as fast as in Southern England.

There are various reasons for Juniper's decline. It cannot cope with shade. Matt showed a picture of an area of secondary woodland in Wiltshire, surrounded by arable farmland. Then he showed an aerial photograph of the same area from the 1940s. Then it was a sunken trackway with the vegetation controlled by grazing and surrounded by open grassland. Droppings from birds perched in the Juniper bushes contain seeds which grow into scrub. This is initially protected from grazing animals by the Juniper bushes themselves. Then the uncontrolled scrub gradually grows into secondary woodland and shades out the Juniper. Over-grazing by Rabbits and other livestock means that any seedlings which manage to find bare ground to germinate get eaten. A further recent problem has been the serious pathogen *Phytophthora austrocedri*.

In 2009, Plantlife obtained funding from Natural England to make trial scrapes. Some were large (30m x 30m)

and some were small (1m x 1m). Some were fenced and others not. These included a large fenced scrape, with vegetation and topsoil removed, at the Hampshire and Isle of Wight Wildlife Trust Noar Hill reserve near Selborne. For the first few years, there was little regeneration, then after about five years, the first Juniper plants could be seen and the first of the specialist chalkland flowers had started to appear. After ten years, the scrape was covered in wild flowers, including masses of Kidney Vetch and Common Spotted, Pyramidal and Fragrant Orchids, and berries were beginning to appear on about 30 Juniper bushes. Ten years after 18 trial scrapes had been created and 30,000 seeds had been sown, 688 new Juniper bushes were counted.

During the Covid pandemic, money from the Government's Green Recovery Fund was used by Plantlife to pay for Matt to oversee a new Juniper project. This involved working with private landowners in two clusters – seven in the Wylye Valley near Codford in Wiltshire, and Juniper Valley and Oven Bottom in the Aston Upthorpe Downs in Oxfordshire. One of the Wiltshire sites was the sunken trackway which had been described earlier in the talk. The woodland was cleared, and scrub and grass were removed, leaving bare Chalk and a few surviving Juniper bushes. Very quickly, Cowslips and Greater Butterfly Orchids returned to the site. Juniper Valley and Oven Bottom are SSSI sites with rare flowers of the Chalk, including Burnt Orchid and Pasqueflower (although Juniper Valley is seriously over-grazed by Rabbits). There are still about 1,500 Juniper bushes at Juniper Valley, but scrub is invading and swamping the Juniper. It is also ageing – there must have been a pulse of regeneration at some point in the past. Last October, after the bird-nesting season was over, there were extensive scrub clearing operations. For about 3 weeks, a remote-controlled robot flail was used to clear around the Juniper bushes on the steep side of the valley. It left behind large amounts of chopped material. Fortunately, it was a dry autumn, allowing heavy machinery to be brought on site in November to remove the litter and grass and scrape down to bare Chalk. More scrapes were excavated in the field between Juniper Valley and Oven Bottom. Juniper had been cleared from here in the 1950s, when it had been converted to arable farmland. More recently, it had been reverted to pasture.

Another part of the project involved collecting Juniper berries. These are green in the first year, purple in the second year and brown thereafter. It was the purple berries which were wanted and they were picked by hand. They were crushed and passed through a mincer to remove the flesh and extract one or two seeds per berry. The Plantlife team worked with the Millenium Seedbank to investigate the viability of the seeds. Overall this was about 2%, dropping to 1% for seeds from the ageing bushes at Juniper Valley. The seeds were then broadcast onto the scrapes. Cuttings have also been taken and grown on at a commercial plant nursery in the West Country (but this brings a danger of transmitting *Phytophthera* and lacks the genetic diversity of plants grown from seed). Looking forward, more scrapes are planned for Beacon Hill near Highclere and a site near Devizes.

6th December

Fungi in Gardens: The good, the bad and the wondrous by Dr Fay Newbery (Royal Horticultural Society/British Lichen Society)

Fay works for the RHS as a Plant Pathologist, answering questions from gardeners about problems with their plants — which are often caused by fungi. However Fay set out to enlighten us that not all fungi are bad, some are good for our gardens and the planet, and some are just wondrous. There are about 70,000 named species of fungi, many of which are distributed across the world, including 45,000 isolated from soil, though estimates of the total number range from 1.5 to 3 million. In the UK around 12,000 species have been identified and this increases by about 40 each year.

Fay started with beneficial fungi, explaining that they are essential recyclers; as a group these amazing chemists can break down all known organic compounds. For example in our gardens they break down leaves, dead birds, and thatch and dead roots in lawns to help keep the lawn healthy. Larger species such as the early fruiting St George's mushroom may form fairy rings as they grow out from their centre, with the ring of greener grass caused by release of nutrients from breakdown of the thatch. Occasionally a circle of dead grass occurs in dry weather due to uptake of water by the mycelium. Other fungi such as Trooping Funnel may radiate out along the roots of a dead tree, dying out as they use up the substrate. The increasing use of woodchip in gardens has increased the occurrence of wood rotting fungi, which have different ways of spreading their spores. These include the ascomycete Orange Peel Fungus which is common on conifer woodchip and the Magpie Inkcap with a liquefying cap which favours Beech. Earth Stars form an egg which lifts the spore sack as it matures, while Bird's nest fungi have fruiting cups with tiny sacks containing spores which are ejected 3-4ft when raindrops fall on them, and attach themselves to a nearby twig.

Fay also mentioned lichens which grow on but are not harmful to trees and shrubs. They are symbiotic partner-

ships between a fungus which provides protection by building the lichen thallus, a framework medium for the algae in which to live in return for some of the sugars produced by the colonising photosynthetic alga or bacterium. Lichens are often more plentiful if there are fewer leaves on the trees so their presence can be a sign of tree disease. They add colour and texture in the garden and also provide shelter for invertebrates, which in turn can be a food source for other creatures.

Turning to 'bad' fungi, Fay then gave some examples of pathogens she encounters in her work (https://www.rhs.org.uk/disease) that were chosen to illustrate some of the different ways they attack their hosts and the consequences. Wood decaying fungi often digest the heartwood which is already dead, but this may not damage the tree for many years if the fungus (e.g. Ganoderma) grows slowly in the trunk. Removing the brackets or other fruiting bodies does not slow down decay because this is caused by mycelial growth. Decay in an infected branch (e.g. through a wound) may cause branch fall and associated damage, though the tree can often survive. In contrast the Giant Polypore Meripilus giganteus attacks the primary buttress roots of living trees. Initially this does not affect the canopy so the tree looks healthy, but the whole tree may fall in strong wind and cause significant damage.

Another fungal disease seen in gardens is Powdery Mildew, caused by species-specific fungi which grow mainly on the surface of the plant. In the past Oak trees were rarely affected by this disease as they were adapted to the existing pathogens, but in the early 20th century an alien species was imported which causes the more severe infection seen today. Courgettes often develop a thick coating of mildew, which reduces cropping. By contrast Raspberry rust does not reduce the fruit crop, and the spores may provide a food source for insects, thus increasing diversity. The incidence of Pear rust has increased recently in the UK. Instead of relying on overwintering spores it utilises airborne spores to alternate with a perennial host, Juniper. Bright orange spots with red centres appear on infected Pear leaves, followed by swellings underneath the leaf which produce brown outgrowths like mini birdcages. In the autumn these produce air-borne spores which infect the stems of Juniper bushes. In spring bright orange gelatinous galls appear and spores disperse to reinfect Pear trees. Infected Juniper stems can be pruned out if possible, but currently there is little reduction in the pear crop. Blackspot infection in Roses is a fungal infection mainly of the leaves, where spores are produced in the lesions. It is not well tolerated by the plants which can suffer severe leaf drop. A fungicide can be used, but is not very effective on the stem infections which also occur - spores are produced from these lesions in spring to infect new leaves so it is best to prune them out.

Fay concluded with some examples of wondrous characteristics of fungi, starting with methods of spore dispersal. The Stinkhorn *Phallus impudicus* was formerly found in woodland but now also occurs in gardens on woodchip and leaf mould. The toadstool grows from an egg; the stem fills with water from the mycelium and grows overnight to produce a bell-shaped cap covered with spore-containing slime. This has a strong smell unpleasant to humans but very attractive to flies which disperse the spores. Other stinkhorn fungi have a similar life cycle, for example the Red Cage *Clathrus ruber* which was introduced to the UK, probably in soil. Instead of a toadstool it rapidly produces a red cage-like structure with smelly black spore-carrying goo on the inside. The Octopus Stinkhorn *C.archeri* (found at Ashford Hill NNR in November 2022) is made up of at least 3 or 4 red 'tentacles' initially covered with black goo; it was first found in Cornwall and spread to Derbyshire by movement of garden plants.

Other wondrous fungi include some *Retiarius* spp. which eat pollen. Their mycelium grows on waxy leaves and produces spikes which catch pollen grains blown along the leaf surface. The contents are then digested by the fungus. Some soil fungi produce lassoo-like structures which actively trap live nematodes, while other fungi parasitise insects, infecting them and then reprogramming the insects to climb up a plant so that their spores are released at a suitable level.

Fay's talk illustrated that fungi are an extremely diverse group of organisms, some of which are beneficial or troublesome in our gardens while others are simply fascinating.

20th December Christmas Party

For our 2022 Christmas party we were able once again to meet at Pangbourne Village Hall. Lesley Hawker kindly provided a couple of quizzes for us to mull over whilst enjoying our food and mulled wine. Katie Jenks gave us an identification challenge in the form of grass specimens which stumped many members. Rachel Woolnough very kindly organised the Photographic Competition and whilst the votes were being counted Rob Stallard went through the answers to a quiz he had provided, which involved working out in which month some of his wonderful photographs had been taken.

Christmas Party Photographic Competition 2022 by Rachel Woolnough

December 2022 found us back in Pangbourne Village Hall for the Christmas party and photographic competition. Eighty-three pictures were entered into this year's competition, nicely spread over the 9 categories. First and second places were distributed between eight different members, and the winners and runners up in each category can be seen in the table below. There was a three-way tie for overall best picture and, as per the rules, the president was invited to choose a winner. First place was awarded to Steven Woolnough for his picture of a Waxwing.

Category		No. Entries	Winner	Subject
1.	Small is Beautiful: (UK)	10	Rob Stallard	Speckled Bush Cricket, Tilehurst garden
2.	Three of a Kind: (UK)	9	Fiona Brown	Nesting Kittiwakes, Grand Hotel, Scarborough
3.	Nature in Action: (UK)	7	Dorothy Marshall	Crab Spider with captured bee, Pangbourne garden
4.	Colour Prejudice: (UK)	9	Rachel Woolnough	Rose Chafer, Burghfield Common garden
5.	Pattern Perfect: (UK)	12	Grahame Hawker	Marveille du Jour moth, Brimpton Common
6.	Makes You Smile: (UK)	9	Steve Woolnough	Fox, Dungeness
7.	Any Flora or Fungus:	9	Fiona Brown	Chicken of the Woods, Farley Hill
8.	Any Fauna:	10	Steve Woolnough	Waxwings, Strood, Kent
9.	Nature on your doorstep	8	Jo Parsons	Romantic Frogs on way to a pond, Bradfield garden
	OVERALL WINNER		Steve Woolnough	Waxwings, Strood, Kent

Category	Posn.	Runner Up	Subject	
Runners up to Overall Winner	= 1st	Rachel Woolnough Jo Parsons	Rose Chafer, Burghfield Common garden Brimstone on Sweet Pea, Bradfield garden	
1. Small is Beautiful: (UK)		Lesley Hawker	Southern Green Shieldbug, St Emilio (France)	
2. Three of a Kind: (UK)		Rachel Woolnough	Fly Agaric, Silchester Common	
3. Nature in Action: (UK)		Jo Parsons	Crab Spider eating a bee, Bradfield Southend	
4. Colour Prejudice: (UK) = 1st		Jo Parsons Rob Stallard	Brimstone on Sweet Pea, Bradfield garden Beech leaves, Ashampstead Common	
5. Pattern Perfect: (UK)	5. Pattern Perfect: (UK) = 1st Jo Parsons Rob Stallard		Sunshine through fallen leaf, Bradfield Butcher's Broom, Sulham Woods	
6. Make You Smile: (UK)		Steve Woolnough	Stonechat feeding juvenile, Silchester Common	
7. Any Flora or Fungus: = 1st		Rachel Woolnough Grahame Hawker	Blackthorn, Hose Hill Lake, Theale Parasol mushroom, Hope Cove, Devon	
8. Any Fauna:		Fiona Brown	Southern Darter, Rio Guadalquivir, Spain	
9. Nature on your doorstep		Steve Woolnough	Red Kite, Burghfield Common garden	

It wasn't spotted until after the event that we had a biological invader as runner up in Small is Beautiful - this is a UK only category, and the photo was taken in France. However, some research revealed that the Southern Green Shieldbug *Nezara viridula* is now in mainland Britain, and was found breeding in London for the first time in 2003, so on this occasion it was allowed as it could have been photographed here.

Winners or not, there were so many beautiful photos entered into the competition that it could equally be billed as the RDNHS Photographic Exhibition. For details of the competition and gallery of some winners from previous years go to: https://rdnhs.org.uk/blog/rdnhs-photographic-competition/

Further Moth highlights in 2022 at Great Haughurst Copse, Axmansford

by Andy Bolton

Further to my initial report in last year's Naturalist on my moth-trapping at Great Haughurst Copse, just north of Axmansford, here are some details of additional moths of interest seen there during 2022.

I ran the Robinson MV trap on nine occasions from late March until late October and this increased the species count from 260 to 335. Some of the previous season's highlights such as Mocha, Light Crimson Underwing and Alder Moth reappeared, along with a fair number of new species for the site.

In high summer the butterflies were also doing well, with Purple Hairstreak, White Admiral, Silver-Washed Fritillary (including form Valesina) were all seen, and most excitingly, on 10 July a beautiful male Purple Emperor was seen up close on the ground taking minerals.

Common name	Scientific name	Dates	Count	Status
	Agonopterix yeatiana	30/04/22	1	Local
Oak Nycteoline	Nycteola revayana	30/04/22	1	Local
Great Prominent	Great Prominent Peridea anceps		17	Local
Chocolate-tip	Clostera curtula	14/05/22	1	Local
Devon Carpet	Lampropteryx otregiata	14/05/22	1	Local
	Esperia sulphurella	14/05/22	1	Common
	Recurvaria leucatella	09/07/22	1	Local, new 10km sqare
	Stenolechia gemmella	05/08/22	1	Local, new 10km sqare
Vestal	Rhodometra sacraria	03/09/22	3	Immigrant
Vesta.	Anouometra sacrana	29/10/22	2	
	Ypsolopha sylvella	29/10/22	1	Local, new 10km sqare

Notes on the species:

Agonopterix yeatiana - A localised resident of damp grassland, marshes, scrub and woodland, it hibernates as an adult and may be seen in any month. It specialises in breeding on umbellifers such as Wild Carrot, Rough Chervil and Hemlock Water-dropwort.

Oak Nycteoline - New for the site and new for me, this Oak breeding moth is tremendously variable in appearance, as can be seen from its entry on the excellent www.hantsmoths.org.uk website. At least eight distinct forms are known, so this is one to keep you on your toes.

Great Prominent - This moth is handsome in an understated way, with its complex of grey/yellow/brown streaking and marbling which gives it a greenish tint when fresh. It is also reliant on Oak and evidently did well at this location with a tally of 17.

Chocolate-tip - It is always a pleasure to see this attractive moth and a sign of good quality habitat containing Aspen, Poplar and willows. The name comes from the distinctive blotch at the forewing tip.

Devon Carpet - As the name suggests, originally local to the West Country, in the last 20 years it has expanded its range across the Midlands into East Anglia and even as far north as Cumbria. However there are still not many records from north Hampshire.

Esperia sulphurella - This is a commonplace but interesting and attractive micro-moth, one whose life cycle relies on the rot and decay of dead trees, the larva feeding and developing under the bark.

Recurvaria leucatella - A small but distinctive micro with a black and white colour scheme, it has a single summer brood between June and August. The larva feeds on Hawthorn, Apple and Rowan. It is fairly sparsely recorded in north Hampshire.

Stenolechia gemmella - This is a close cousin to the previous moth, in the Gelechiidae family, and again records are widely scattered through Hampshire. It has a single late summer brood, the larva feeding on Oak buds and new shoots.

Vestal - This very attractive immigrant moth hails from southern Europe but is a regular visitor and often produces a small UK- bred generation. It is not thought able to reliably survive the British winter, but with climate change could be one to watch.

Ypsolopha sylvella - This is another thinly distributed, Oak feeding micro of late summer and well into the autumn. It is one of 16 species in the Ypsolophidae, which is split between the genera of Ypsolopha and Ochsenheimeria.

New taxa discoveries – we can all make a difference by Linda Fenwick

The *Callicera* are a rarely-sighted and charismatic genus of Hoverflies, highly prized finds for Syrphidae enthusiasts and recorders throughout the UK. They are distinguished from other hoverflies by their covering of golden-bronze hairs and their porrect, white-tipped antennae.

In June 2019 I was fortunate enough to be in my garden with camera in hand when a male *Callicera* aurata landed on a nearby Scabious flower.a male.



Male Callicera aurata Hoverfly June 2019 © Linda Fenwick

My find was verified by Roger Morris of the UK Hoverfly Recording Scheme (http://hoverfly.uk/hrs) via their recording group on Facebook. Since then I have planted several more large clumps of Scabious in the hope of attracting another of these beautiful creatures to my garden. The summer of 2020 produced no sightings and by July 2021, when the last of the scabious flowers withered and fell, I had given up hope of a second record. However, on 15 August as I walked past my washing line, I noticed a flash of gold on a bright blue towel and ran to get my camera. Luckily, the Hoverfly stayed long enough for me to get several shots and, full of excitement, I posted the results on the Facebook page. To my surprise and delight it was identified as another *Callicera* species, a female *C. rufa*.



Male Callicera rufa Hoverfly June 2019 © Linda Fenwick

In the UK *Callicera rufa* is rarely sighted outside Scotland, where its larvae live in tree rot-holes in the Caledonian Pine forests, so this was an extraordinary find. It is also found in western Europe, including the Netherlands, Belgium and Germany, so it just might also have been a migrant visitor from the east. There have been occasional sightings in Bedfordshire, Nottinghamshire and Shropshire, and I believe this record to be a 'county first' for Berkshire. It does, however, show that investment in specific nectaring plants is not always a guarantee of attracting interesting species to the garden. From now on I will be hanging blue towels on my washing line every August.

Earlier in 2021, Caitlin Coombs from the Thames Valley Environmental Centre (TVERC) contacted RDNHS to ask for volunteers to undertake specialist species surveys on local sites within Berkshire. I offered to survey Lousehill Copse to the west of Reading town centre, principally to record Hoverfly sightings, but with a view to including any other invertebrate finds which might be of interest. I had never previously visited Lousehill Copse (despite having lived in Reading for the past twenty years) and was pleasantly surprised to find this new and interesting area of woodland to explore. I made regular visits throughout the summer and notched up a fair variety of invertebrate records. By October the number of finds was dwindling and I thought it unlikely that I would find anything more of interest. However, on one of my later visits, I saw a flash of bright orange in the brambles and realised that it belonged to a very striking Ichneumonid wasp. The view was still long enough for me to get a few decent shots and I posted the results on the 'British Ichneumonoidea' group page on FaceBook. Ichneumonoidea are difficult to identify from photographs, so I was delighted when the experts on the site agreed that this one was likely to be *Spilichneumon johansoni*, a species usually found in Scandinavia. I believe this to be a first county record for Berkshire and possibly a first for the UK too. I'm now pondering on whether my bookshelves will cope with what seems to be the start of another invertebrate addiction...



Ichneumonid wasp Spilichneumon johansoni, June 2019 © Linda Fenwick

In July 2021, Caitlin Coombs from TVERC contacted me again to say that the National Trust had requested a survey of Holies Down AONB. They were particularly interested in finding evidence of the Hornet Robberfly *Asilus crabroniformis*, which had previously been recorded at this site but had not been seen there since 2010. Pleased to have the challenge, I drove out to Streatley Hill. Holies Down turned out to be a large area of chalk meadow filled with all kinds of wild flowers, including many beautiful and unusual orchids. The meadow sloped down towards a smallholding and a small herd of (mercifully) placid cattle.

The Hornet Robberfly is a large and striking Hymenopteran, which in the adult stage spends its time perching on dried cowpats waiting to pounce and prey on other insects. The sight of the cattle was therefore very promising

and I duly scoured the area for dried cowpats. There were no Robberflies to be seen that day. nor on a subsequent visit in August. In October Caitlin asked me to send in my spreadsheets, so I decided to go back and have one last look for the elusive creature. This time, to my surprise and great delight, I found a really lovely individual that was happy to pose for me on its cowpat for as long as I wished. I finally tore myself away from the cowpat (I never thought I'd find myself writing that) and started to climb the hill back to the car park. Just as I neared the top of the meadow, a second Hornet Robberfly landed at my feet and stayed there while I happily filled the remaining space on my camera's memory card with even more shots. Sometimes wee beasties seem determined to be found!

Hornet Robberfly

Asilus crabroniformis

October 2019 © Linda Fenwick



Newbury Peregrines Update 2022 by Ken & Sarah White

The nestbox and nestcam were overhauled at the beginning of February and by the 5th we observed mating of the resident Peregrine pair on the BT Exchange building. Later in the day the male 'tiercel' Black 69 (**B69**) paid a visit to the nestbox and proved that the camera was recording OK. He visited the nestbox most days and by the 12th he was lying in the gravel of the inner sanctum busy with scraping a depression in preparation for the clutch of eggs. It was not until 26th February: the female 'falcon' Mrs Newbury (**Mrs N**) made her first appearance to the nestbox which we were very pleased to see. B69 continued to visit on an almost daily basis.

17th March: Mrs N's visits became daily.

<u>20th March</u>: Mrs N finally laid the 1st egg which was 5 days earlier than 2021. That first night the egg was guarded but not brooded and the overnight temperature reached -5 °C.

22nd March: 2nd egg visible and brooded overnight and the temperature reached -2 °C.

24th March: incubation well underway and daytime temperature reached +24 °C.

25th March: 3rd egg visible. 27th March: 4th egg visible. 2nd & 3rd April: overnight temperature dropped to - 6 °C.

9th April: overnight temperature dropped to -4 °C. 10th April: overnight temperature dropped to -4 °C.

27th April: 1st chick visible; 2nd chick visible 28th;





3rd chick visible 29th; and 4th chick visible 30th.





21st May: all 4 chicks were colour-ringed by BTO ringer Jason Fathers:

Colour ring code	gender/(name)	weight (inc weighing bag)		
Blue DA	් /(Darcy)	770g		
Blue DB	$\stackrel{\frown}{}$ /(Debbie)	1,005g		
Blue DC	් /(Dean)	715g		
Blue DD	/(Deedee)	994g		



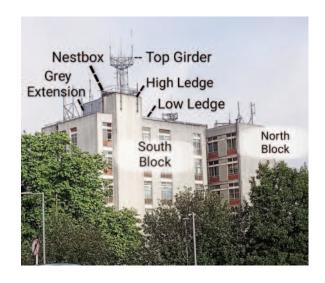


6th June: all 4 chicks had left the nest during the morning; Deedee made the 1st maiden flight from the nestbox/High ledge level down to the Low ledge main rooftop level.

7th June: Darcy joined Deedee onto the same Low ledge by early morning; all 4 juveniles were on the Low ledge together by late afternoon.

8th June: Darcy managed a short maiden flight from the Low ledge out and back, and Deedee managed a maiden flop down to Sainsbury's ground floor car park. She was rescued by members of the Newbury Peregrine WhatsApp group, taken to a local vets and then the Hawk Conservancy at Andover for checking, and returned to the rooftop the next day.

<u>9th June</u>: Dean also managed a maiden flop down to the ground, was rescued, checked out and returned to the rooftop the next day.



Newbury BT Exchange as viewed from Sainsbury's Supermarket car park, upper deck

<u>10th June</u>: Deedee managed to achieve yet another flop, was kindly found and reported by a BT engineer, then picked up, checked out and returned to the rooftop the same day.

The excellent Newbury Peregrine WhatsApp group remained vigilant and ready to rescue the next grounded juvenile, but in the ensuing days thankfully their services were not required as the juvenile Peregrines began to rapidly master and develop their flying skills. As the days and weeks went by Newbury town centre had the joy and privilege of 6 Peregrines gracing the skyline. As the heat wave summer continued the juveniles ventured further afield and it became difficult to keep tabs on all the birds at the same time.





4 juvenile Newbury Peregrines still in the nestbox

Fledged Newbury Peregrine juveniles on BT

All went well for the next 5 weeks and the 4 juveniles were regularly observed together. But this all came to abrupt end when one of the WhatsApp group received news from a jogger that there was a grounded juvenile Peregrine in Northcroft Park unable to fly and possibly injured. Members of the group quickly rallied and miraculously managed to rescue Dean from the slenderest of branches overhanging over a stream. Dean was rushed to the Hawk Conservancy in Andover. The diagnosis was a wrist fracture. He received the best of care there for 6 weeks and his original colour-ring was removed for safety reason while in captivity. He was then handed over to a falconer on the Isle of Wight who trained and prepared him for release. Dean was re-ringed Pale Blue YA and was released into the wild on the island 27th October.

The two sisters left quite early on and Darcy was the hanger-on at home, but even he finally wandered off as all juvenile Peregrines do. He was last photographed on the BT Exchange 8th October and possibly heard on the 18th late in the evening. Despite the gruelling heat and dryness of the 2022 summer for us and the breeding season for Peregrines and much of our wildflife, overall this was another successful year for the Newbury Peregrine pair B69 and Mrs N; they have now reared and fledged 10 juveniles in 3 consecutive breeding seasons, of which 8 have been colour-ringed.

We received some incredibly exciting news about the first Newbury Peregrine juvenile to be colour-ringed she was the 2020 juvenile Blue YL; she managed a maiden flop 23rd June and ended up in a car park adjacent to Newbury BT Exchange. We rescued her and Jason managed to check her out and add the colour ring; she was returned to the rooftop the same morning. After she peregrinated away from Newbury the following September she was not seen again until the following year when she was spotted on a church spire in Maidenhead in June 2021 by Dave Fuller and Patrick Crowley. She vanished again and was found a year later in mid October 2022 in full adult plumage by local birder Shaun Ferguson on a pylon on Staines Moor, Middlesex, right next to the Wraysbury Reservoirs and gravel pits; the power of colour-ringing allows us to identify individual birds wherever they turn up. Highlights and history of our fabulous Peregrines are on Twitter: search for @NewburyPeregrin

There are once again so many people to thank for being there and helping out with the Newbury Peregrines: Dean Cleall of CBRE who manages the BT site and the BT engineers & staff;

BTO ringer Jason Fathers (www.wildlifewindows.co.uk) who also keeps the nestcam and nestbox up and running;

Newbury Peregrine WhatsApp rescue group especially including Rhoda, Bob, Keith, Adrian, Dave, 2 Ians, Chris, Ailsa, 2 Marks, Jackie etc.;

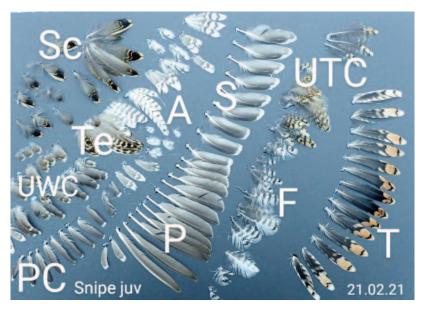
Falkland Veterinary Clinic, Newtown Rd., Newbury (www.falklandvets.co.uk);

Cedric Robert et al at the Hawk Conservancy, Andover (www.hawk-conservancy.org);

and numerous members of the public who have generously and willingly helped secure the safety and fortunes of these amazing birds.

Close encounters of the Snipe kind by Ken White

The adult pair of Peregrines that breed on Newbury BT Exchange were first observed and recorded by Sarah White on 1 April 2019. Our observations soon established that the adult male, the tiercel, is colourringed Black 69 and was hatched and reared originally on Chichester Cathedral in 2016. The female, the falcon Mrs N is unringed so we know nothing about her origin, but she has a very distinctively marked plumage and regular close-up photos confirm her identity. Most of the prey items are caught, plucked and eaten straight away, but occasionally they cache prey on the BT building, and inevitably with sloping windowsills some of the prey items roll off onto the ground. This is unintentional on their part, but it has provided me with a wonderful opportunity to view the prey items in the hand and gain



Feathers taken from a lost Snipe prey February 2021 taken by Peregrine: Sc =Scapulars, Te= Tertials, P=Primaries, S=Secondaries, F=Flank T-Tail, UTC=Upper Tail coverts, A=Axillaries, PC=Primary Coverts UWC=Upper Wing Coverts

much benefit from examining, extracting and recording the feathers. You might find it hard to understand my delight at finding a recently taken Common Snipe *Gallinago* gallinago on the ground in February 2021 and it meant that instead of trying to identify individual feathers one at a time after the wind has blown and dispersed them from the top 6th floor, I could look and examine them collectively and for once be absolutely sure what species they were from.

By examining a whole bird and photographing the various feather combinations I can look beyond just the size and the pattern of the feathers. I can examine the functional structure of these feathers as well. One has to admire the intricate aerodynamics of the feather designs: the Primary and Secondary wing feathers - the engines - thick, stiff, stout, strong, asymmetric and curved to perfection, not a straight line or square edge anywhere. Then there are rank upon rank of coverts, some long, some short, all soft and flexible. There is the tail - the rudder - again stiff and stout, all but the middle ones so asymmetric and daubed in bright rusty colours for when Snipe spread their tails and want to impress.



We all know, I hope, the wonderful sound of displaying Snipe over moorland areas in the north and west of the UK. If you don't then there are plenty of CD and online recordings to listen to (e.g.www.xeno-canto.org). The humming or "drumming" is achieved by the Snipe flying downwards in a shallow dive and pulling the outermost tail feathers further forward and causing them to rapidly vibrate, hence the strange sound. Quite clever and distinctive to make a loud noise without calling! As I removed the tail feathers one by one I was astonished at the complex structure of the quills of these outermost tail feathers. Not only are they thickened but they are also crimped and corrugated to give them extra strength to deal with the enormous pressure forces exerted on them during drumming display.

Let's not forget the incredible bill, the trademark working tool of a Snipe. A mud



probe with a battery of sense organs at the food-finding end, and nostrils forced so far the other way they are almost on its forehead. We delight in a bird that carries this exceptionally long bill with such dignity, and yet it can take off with such speed and unpredictability it takes a crack shot sniper to bring one down. Then imagine the level of a Peregrine's hunting skills and the coordination required to catch a Snipe mid-air in the talons. It's all very remarkable I hope you agree.



Botany Recorder's Report 2022 by Renée Grayer

The summer of 2022 was not a good time for wild plants and plants in general, because of the severe drought which lasted until September when the rains finally arrived. The very high temperatures in July and August added to the problems. Fortunately, nevertheless many different plant species were recorded during the RDNHS field meetings and Wednesday walks and by members during wildlife or plant recording trips in the summer. The Flora of Berkshire by M.J. Crawley (2005) was used for selection of the records, using rarity or decrease in numbers as criteria.

The 4th edition of the New Flora of the British Isles (2019) by C.A. Stace has been followed for the scientific and British names of the plant species and for the taxonomic arrangement of the species into families and higher categories. Whenever a species was recorded during a RDNHS trip or walk, often the name of the excursion leader is given after the record, even if another member of the group discovered the plant.

Abbreviations:

RN trip: seen during a RDNHS excursion, RN walk: seen during a RDNHS Wednesday walk

BBOWT Res: Berks Bucks & Oxon Wildlife Trust Reserve **HIOWT Res**: Hampshire & Isle of Wight Wildlife Trust Reserve

LNR: Local Nature Reserve, NNR: National Nature Reserve, NT: National Trust

PTERIDOPHYTES

Aspleniaceae

Asplenium ruta-muraria - Wall-rue

21/08/22 Cookham Moor (RN trip) SU892852 (IB)

Blechnaceae

Blechnum spicant - Hard-fern

25/05/22 Castle Bottom NNR (RN walk) SU798595 (FB) 17/08/22 Oare Common (RN walk) SU506734 (RS)

Dryopteridaceae

Polystichum setiferum - Soft Shield-fern

16/02/22 Blewbury (RN walk) SU532859 (RS)

ANGIOSPERMS

Papaveraceae

Roemeria argemone - Prickly Poppy

14/09/22 Hailey, Ipsden (RN walk) SU646856 (FC)

Berberidaceae

Berberis vulgaris - Barberry

14/05/22 Juniper Valley, Aston Upthorpe (RN trip) SU543831 (JH)

Ranunculaceae

Caltha palustris - Marsh-marigold

14/04/22 Pangbourne Meadows SU643764 (RS & JJW)

Helleborus viridis - Green Hellebore

20/07/22 Warburg BBOWT Res, Bix (RN walk) SU718879 (SR)

Pulsatilla vulgaris - Pasqueflower

14/05/22 Juniper Valley, Aston Upthorpe (RN trip) SU544834 (JH)

Ranunculus auricomus - Goldilocks Buttercup

20/04/22 Shiplake Row (RN walk) SU757787 (MN) 30/04/22 Park Wood, Moor Copse BBOWT Res (RN trip) SU635741 (JH)

Ranunculus fluitans - River Water-crowfoot

24/07/22 Hungerford Marsh (RN trip) SU321685 (RS)

Ranunculus sceleratus - Celery-leaved Buttercup

24/07/22 Hungerford Marsh (RN trip) SU323685 (RS)

Saxifragaceae

Chrysosplenium oppositifolium - Opposite-leaved Golden-saxifrage

20/04/22 Shiplake Copse (RN walk) SU750781 (MN)

Saxifraga granulata - Meadow Saxifrage

14/04/22 Pangbourne Meadows SU641761 (RS & JJW) 14/05/22 Hermitage, Furze Hill LNR, frequent SU511742 (JL)

Crassulaceae

Crassula helmsii - New Zealand Pigmyweed

04/09/22 Snelsmore Common BBOWT Res (RN trip) SU459705 (SuW)

Sedum album - White Stonecrop

25/05/22 Blackbushe Airfield (RN walk) SU810592 (FB)

Hylotelephium telephium - Orpine

20/07/22 Warburg BBOWT Res, Bix (RN walk) SU714878 (SR)

Fabaceae

Galega officinalis - Goat's-rue

15/06/22 Bramshill SU753615 (RS)

Lotus maritimus - Dragon's-teeth

22/06/22 Selborne, Noar Hill HIOWWT Res (RN trip) SU742319 (JC & ID)

Hippocrepis comosa - Horseshoe Vetch

14/05/22 Oven Bottom (RN trip) SU536834 (JH)

Lathyrus nissolia - Grass Vetchling

15/06/22 Bramshill SU756627 & SU755615 (RS)

Lathyrus linifolius - Bitter-vetch

08/06/22 Moorend Common (N) (RN walk) SU802907 (JW)

Lathyrus latifolius - Broad-leaved Everlasting-pea

11/08/22 Fobney Island LNR, 1 plant growing by the weir SU698712 (JL)

Genista anglica - Petty Whin

08/06/22 Moorend Common (S) (RN walk) SU801903 (JW)

Ulex minor - Dwarf Gorse

17/08/22 Oare Common (RN walk) SU505734 (RS)

Polygalaceae

Polygala serpyllifolia - Heath Milkwort

15/06/22 Bramshill SU749622 (RS) 04/09/22 Snelsmore Common BBOWT Res (RN trip) SU458706 (SuW)

Polygala calcarea - Chalk Milkwort

14/05/22 Juniper Valley, Aston Upthorpe (RN trip) SU545834 (JH)

14/05/22 Oven Bottom (RN trip) SU537835 (JH)

Rosaceae

Agrimonia procera - Fragrant Agrimony

17/08/22 Oare (RN walk) SU511741 (RS)

Geum rivale - Water Avens

30/04/22 Corner Field, Moor Copse BBOWT Res (RN trip) SU638734 (JH)

30/04/22 Park Wood, Moor Copse BBOWT Res (RN trip) SU636741 (JH)

Geum x intermedium - Hybrid Avens

30/04/22 Park Wood, Moor Copse BBOWT Res (RN trip) SU636741 (JH)

Fragaria vesca - Wild Strawberry

25/05/22 Blackbushe Airfield (RN walk) SU810592 (FB)

Urticaceae

Urtica dioica ssp. subinermis - Stingless Nettle

19/10/22 Hartley Wespall (RN walk) SU696572 (MV)

Hypericaceae

Hypericum elodes - Marsh St John's-wort

15/06/22 Bramshill SU745629 (RS)

04/09/22 Snelsmore Common BBOWT Res, leaves (RN trip) SU463707 (SuW)

Hypericum calycimum - Rose-of-Sharon

15/06/22 Bramshill SU752615 (RS)

Hypericum pulchrum - Slender St John's-wort

15/06/22 Bramshill SU745628 (RS)

Violaceae

Viola palustris - Marsh Violet

04/09/22 Snelsmore Common BBOWT Res, leaves (RN trip) SU462703 (SuW)

Euphorbiaceae

Euphorbia exigua - Dwarf Spurge

14/09/22 Hailey, Ipsden (RN walk) SU646856 (FC)

Thymelaeaceae

Daphne laureola - Spurge-laurel

08/01/22 Winterbourne Wood (RT trip) SU444720 (JL) 20/07/22 Warburg BBOWT Res, Bix (RN walk) SU720881 (SR)

Brassicaceae

Cochlearia danica - Danish Scurvygrass

29/03/2022 Tidmarsh, Roadside Verge by Moor Copse SU633739 (JL)

Cardamine amara - Large Bitter-cress

30/04/22 Hogmoor Copse, Moor Copse BBOWT Res (RN trip) SU635740 (JH)

Hesperis matronalis - Dame's-violet

08/06/22 Frieth (RN walk) SU796903 (JW)

Santalaceae

Thesium humifusum - Bastard-toadflax

06/08/22 Hartslock BBOWT Res (RN trip) SU617794 (CR) 08/10/22 The Holies NT, Streatley (RN trip) SU593799 (JH)

Viscum album - Mistletoe

16/02/22 Blewbury (RN walk) SU533858 (RS)

Droseraceae

Drosera rotundifolia - Round-leaved Sundew

04/09/22 Snelsmore Common BBOWT Res (RN trip) SU463706 & SU458706 (SuW)

Caryophyllaceae

Moehringia trinervia - Three-nerved Sandwort

24/05/22 Woodley, Aldermoors SU774739 (JL)

Stellaria holostea - Greater Stitchwort

19/10/22 Hartley Wespall, in flower in October (RN walk) SU696564 (MV)

Cerastium arvense - Field Mouse-ear

14/05/22 Juniper Valley, Aston Upthorpe (RN trip) SU544832 (JH)

Spergula arvensis - Corn Spurrey

17/08/22 Oare Common, Hermitage (RN walk) SU507738 (RS)

Silene flos-cuculi - Ragged-Robin

17/05/22 Paices Wood SU585640 (JL)

Primulaceae

Lysimachia tenella - Bog Pimpernel

04/09/22 Snelsmore Common, leaves (RN trip) SU462703 (SuW)

25/05/22 Castle Bottom NNR, Eversley (RN walk) SU798595 (FB)

Lysimachia nemorum - Yellow Pimpernel

24/05/22 Woodley, Aldermoors SU774739 (JL)

Ericaceae

Hypopitys monotropa - Yellow Bird's-nest

29/06/22 Sulham Woods SU649757 (RS)

Rubiaceae

Galium palustre - Common Marsh-bedstraw

15/06/22 Bramshill SU758626 (RS)

Gentianaceae

Gentianella amarella - Autumn Gentian

06/08/22 Hartslock BBOWT Res (RN trip) SU617794 (CR)

14/09/22 Warren Bank BBOWT Res (RN walk)

SU653857 (FC)

08/10/22 The Holies NT, Streatley, seed heads (RN trip) SU590800 (JH)

Gentianella germanica - Chiltern Gentian

08/10/22 The Holies NT, Streatley, about 10 plants (RN trip) SU593800 (JH)

Boraginaceae

Lithospermum officinale - Common Gromwell

20/07/22 Warburg BBOWT Res, Bix (RN walk) SU714881 (SR)

Convolvulaceae

Cuscuta epithymum - Dodder

06/08/22 Hartslock BBOWT Res (RN trip) SU617794 (CR)

Solanaceae

Datura stramonium - Thorn-apple

16/11/22 Stanford Dingley (RN walk) SU567724 (JC & ID)

Veronicaceae

Veronica scutellata - Marsh Speedwell

08/06/22 Moorend Common (S) (RN walk) SU802903 (JW)

Veronica anagallis-aquatica - Blue Water-speedwell

24/07/22 Hungerford Marsh (RN trip) SU321685 (RS)

Linaria repens - Pale Toadflax

08/06/22 Moorend Common (S) (RN walk) SU802903 (JW)

20/07/22 Warburg BBOWT Res, Bix (RN walk) SU721880 (SR)

14/09/22 Hailey, Ipsden (RN walk) SU646856 (FC)

08/10/22 The Holies NT, Streatley, about 10 plants (RN trip) SU592800 (JH)

Chaenorhinum minus - Small Toadflax

14/09/22 Hailey, Ipsden (RN walk) SU646856 (FC)

Lamiaceae

Scutellaria minor - Lesser Skullcap

04/09/22 Snelsmore Common BBOWT Res (RN trip) SU462703 (SuW)

Scutellaria galericulata - Skullcap

15/06/22 Bramshill SU749624, SU750624, SU750630, SU748630 (RS)

Betonica officinalis - Betony

13/08/2022 Inkpen Crocus Field, newly planted area SU369639 (JL)

Clinopodium acinos - Basil Thyme

08/10/22 The Holies NT, Streatley (RN trip) SU590800 (JH)

Orobanchaceae

Parentucellia viscosa - Yellow Bartsia

15/06/22 Bramshill SU756627 (RS)

Pedicularis sylvatica - Lousewort

15/06/22 Bramshill SU759624 (RS)

Lathraea squamaria – Toothwort

16/04/22 Harris Garden, Univ. of Reading, many plants SU737714 (RG & CW)

Lathraea clandestina - Purple Toothwort

26/03/22 Prospect Park, Reading (RN trip) SU690727 (RS)

Campanulaceae

Campanula glomerata - Clustered Bellflower

06/08/22 Hartslock BBOWT Res (RN trip) SU617794 (CR)

08/10/22 The Holies NT, Streatley) (RN trip) SU592799 (JH)

Campanula trachelium - Nettle-leaved Bellflower

20/07/22 Warburg BBOWT Res, Bix (RN walk) SU721880 (SR)

14/09/22 Ipsden Heath (RN walk) SU658855 (FC)

Asteraceae

Achillea ptarmica - Sneezewort

08/06/22 Moorend Common (S) (RN walk) SU802903 (IW)

13/08/22 Inkpen Crocus Field, occasional SU369639 (JL)

Jacobaea aquatica - Marsh Ragwort

24/07/22 Hungerford Marsh (RN trip) SU329686 (RS)

Inula conyzae - Ploughman's-Spikenard

08/07/2022 Chieveley, road verge SU479737 (JL)

Bidens tripartita - Trifid Bur-marigold

17/08/22 Oare Village Pond, Hermitage (RN walk) SU505738 (RS)

Adoxaceae

Adoxa moschatellina - Moschatel

16/03/22 Blackbird's Bottom, Whitchurch Hill (RN walk) SU631803 (JC & ID)

10/04/22 Bradfield, Rushall Farm, Owlpit Copse, many plants SU588729 (JL)

Valerianaceae

Valeriana officinalis - Common Valerian

14/07/2022 Moor Copse, Parkwood SU637740 (JL)

Dipsacaceae

Succisa pratensis - Devil's-bit Scabious

13/08/22 Inkpen Crocus Field SU369639 (JL)

Hydrocotylaceae

Hydrocotyle vulgaris - Marsh Pennywort

15/06/22 Bramshill SU750624 (RS)

Apiaceae

Sanicula europaea - Sanicle

14/05/22 Sulham Woods, in various areas, e.g. SU644749 (RS)

Berula erecta - Lesser Water-parsnip

24/07/22 Hungerford Marsh (RN trip) SU328685 (RS)

Torilis arvensis - Spreading Hedge-parsley

29/08/22 Decoy Heath, 1 plant SU612633 (JL)

Nartheciaceae

Narthecium ossifragum - Bog Asphodel

04/09/22 Snelsmore Common BBOWT Res, leaves (RN trip) SU463706 (SuW)

Melanthiaceae

Paris quadrifolia - Herb-Paris

20/07/22 Warburg BBOWT Res, Bix (RN walk) SU721880 (SR)

Liliaceae

Fritillaria meleagris - Fritillary

30/04/22 5 Acre Field, Moor Copse BBOWT Res, 2 clumps (RN trip) SU639738 (JH)

Orchidaceae

Cephalanthera damasonium - White Helleborine

14/05/22 SulhamWoods, about 40 plants scattered in the area, e.g. SU649757 (RS) 08/06/22 Frieth (RN walk) SU796903 (JW) 06/08/22 Hartslock BBOWT Res, 2 leaf spikes (RN trip)

SU617795 (CR)

Epipactis helleborine - Broad-leaved Helleborine

24/05/22 Woodley, Aldermoors, 2 plants in small area SU774739 (JL)

15/06/22 Bramshill SU751618 & SU750616 (RS)

Epipactis purpurata - Violet Helleborine

14/11/22 Hook Lane, Axmansford, one plant only SU568609 (AB)

Neottia nidus-avis - Bird's-nest Orchid

20/07/22 Warburg BBOWT Res, Bix (RN walk) SU720881 (SR)

Neottia ovata - Common Twayblade

22/06/22 Selborne, Noar Hill HIOWWT Res (RN trip) SU740320 (JC & ID)

Herminium monorchis - Musk Orchid

22/06/22 Selborne, Noar Hill HIOWWT Res (RN trip) SU739319 (JC & ID)

Gymnadenia conopsea - Chalk Fragrant-orchid

22/06/22 Selborne, Noar Hill HIOWWT Res (RN trip) SU741320 (JC & ID)

Coeloglossum viride - Frog Orchid

22/06/22 Selborne, Noar Hill HIOWWT Res (RN trip) SU741320 (JC & ID)

Dactylorhiza maculata - Heath Spotted -orchid

08/06/22 Moorend Common (N) (RN walk) SU801907 (JW)

Dactylorhiza praetermissa - Southern Marsh-orchid

08/06/22 Moorend Common (N) (RN walk) SU801907 (JW)

15/06/22 Bramshill SU7569762763 (RS)

Orchis mascula - Early-purple Orchid

30/04/22 Moor Copse BBOWT Res, 8 plants (RN trip) SU639738 (JH)

Anacamptis pyramidalis - Pyramidal Orchid

30/05/22 University of Reading, Whiteknights SU741720 (DO)

09/06/22 Basildon Park NT, 1 plant SU607772 (RG & CW)

15/06/22 Fobney Island LNR, 1 plant SU704710 (JL)

15/06/22 Bramshill SU750618 (RS)

22/06/22 Lambourn Woodlands, Paines Bank, abundant SU328774 (JL)

22/06/22 Selborne, Noar Hill HIOWWT Res (RN trip) SU740320 (JC & ID)

08/07/22 Chieveley, 1 plant on roadside verge SU479737

20/07/22 Warburg BBOWT Res, Bix (RN walk) SU714881 (SR)

Himanthoglossum hircinum - Lizard Orchid

16/06/22 Basingstoke Rd, Reading, flowering for the 4th year SU717697 (RS)

Ophrys insectifera - Fly Orchid

22/06/22 Selborne, Noar Hill HIOWWT Reserve (RN trip) SU742318 (JC&ID) 20/07/22 Warburg BBOWT Res, Bix (RN walk) SU717881

Ophrys apifera - Bee Orchid

16/06/22 Paices Wood SU586635 (JL) 22/06/22 Selborne, Noar Hill HIOWWT Res (RN trip) SU740318 (JC & ID) 25/06/22 Newbury, on grass by Tesco petrol station, 6+ plants SU475652 (SW)

Amaryllidaceae

(SR)

Allium paradoxum - Few-flowered Garlic 20/04/22 Binfield Heath (RN walk) SU747787 (MN)

Leucojum aestivum ssp. aestivum - Loddon Lily

15/04/22 Loddon river bank, clumps SU776721 & SU776723 (DO)

15/04/22 Sandford Lane, marshy area nr Black Bridge, many plants SU775718 (DO)

Leucojum aestivum ssp. **pulchellum - Spring Snowflake** 15/04/22 University of Reading, Whiteknights, nr Ice House SU737722 (DO)

Asparagaceae

Ruscus aculeatus - Butcher's-broom

16/03/22 Cold Harbour, Whitchurch Hill (RN walk) SU633800 (JC & ID) 04/11/22 Sulham, 1 plant SU644744 (JL)

Cyperaceae

Cyperus eragrostis - Pale Galingale

06/04/22 Woolhampton Gravel Pit, area where spoil dumped, clump SU567663 (SW)

Poaceae

Hordeum jubatum - Foxtail Barley

16/06/22 Paices Wood, 1 plant SU586636 (JL)

Catapodium marinum - Sea Fern-grass

25/06/22 Newbury, on grass by Tesco petrol station, few plants SU475652 (SW)

Botany report contributors. Thanks are due to the following members and friends for their submissions:

AB Andrew Bolton, CR Chris Raper, CW Christine Williams, DO David Owens, FB Fiona Brown, FC Fiona Cummins, IB Inge Beck, ID Ian Duddle, JC Julia Cooper, JH Jan Haseler, JL John Lerpiniere, JJW Janet & Jerry Welsh, JW Jim Wills, MN Maria Newham, MV Marion Venners, RG Renée Grayer, RS Rob Stallard, SR Sally Rankin, SW Sarah White, SuW Sue White

Lepidoptera Report 2022 by Norman Hall

I spent less time in Reading in 2022 than usual, so had fewer records of my own to contribute to the Naturalist. However, it was equally hot where I did most of my 2022 moth trapping - in Wiltshire (Salisbury) and Dorset (West Parley) and for me it was one of my best years for a long while.

On 1 January, an unusually warm night, Paul Black's moth trap at Snelsmore Common contained Narrow-winged Pug, Winter Moth, Common Quaker, Spring Usher, Mottled Umber, Small Brindled Beauty and Common Quaker. It was a very early and interesting start to the new recording year. On 8 February, also at Snelsmore, Paul trapped 184 Spring Ushers. On 25 June, Paul and I led the annual RDNHS mothing event at Withymead. This was quite successful despite a high wind and being restricted to the railway side of the reserve. The catch was good and those members coming to see it next day were very satisfied. In July and August, the temperature reached 30 °C on 8 days, with a maximum of 38 °C on 19 July. On 18 July, Paul Black saw 4 Light Crimson Underwings at Snelsmore Common between 02.30 & 03.30 and Jan Haseler recorded 12 Jersey Tigers in her trap at Tilehurst. On 26 July, I recorded a White-spotted Pinion in Earley and on 2 August Ian Esland recorded another at Waltham Place. It is an elm feeder, which seemed to disappear after Dutch Elm Disease wiped out most of the mature elms in the 1970s and might be staging a recovery. On 1 October, Paul recorded 10 Southern Chestnuts at Snelsmore Common. It has now been seen there for 4 years in succession, but this is the first time it has been seen there in quantity. It has also been a good year for migrant Humming-bird Hawk-moths. I received 16 records in all but expect that many more members have seen and enjoyed them.

The systematic list that follows includes records from up to about 20 miles from Reading, from Vice County 22 (VC22), which is Berkshire S or W of the Thames, VC23, Oxfordshire N or E of the Thames, or VC12, North Hampshire. Records without a Vice County number are from VC22. For both butterflies and moths, if the first record listed begins with a date, *all* other records received for that species will be listed below it. If it begins with a word, a *selection or summary* of records follows.

There is an entry for *every* butterfly species recorded, however common. This includes the earliest and latest dates it was recorded anywhere. For butterflies, records for Red Cow Cottage, Cholsey, are the earliest and latest dates seen there or the date when most were seen. Red Cow butterfly records are singled out because they form part of an ongoing dataset of comparable records. Few moth records are listed for species considered common in the standard field guides. Attributions in rounded brackets at the end of each record such as (PB, R. Stace) give whoever submitted the record, followed by others who saw it, or identified it, or may even have trapped it.

The status categories at the end of my species headings are based on those given in Waring & Townsend (3rd edition). The rarest native species are taken to be those listed in the **Red Data Book** (**RDB**) (Shirt, 1987) as in danger of extinction, or occurring in 15 or less 10km squares in the UK. Then follow **Notable A**, **Notable B**, **Local** and **Common**, depending on the number of 10 km squares it occurs in. '**Adventive**' indicates that the species is assumed to have been originally imported accidentally. **BAP** for some butterflies indicates that there is a Biodiversity Action Plan to promote the conservation of the species.

Many moths are trapped using Actinic (Act.) (fluorescent) lamps, but most trappers use Mercury Vapour (MV) lamps, which are much brighter. If records are not marked Act. it can be assumed that MV lamps were used.

Please note:

63.030 Paratalanta hyalinalis. Notable B

Keep a look out for this species especially on chalk grassland. It would be helpful if records were submitted with a photograph at least.

63.054 Cydalima perspectalis Box-tree Moth. Established pest species

Anyone unfamiliar with this species should Google it, especially if they have Box bushes with leaves being devoured by caterpillars. They will find that there is a black and white form and an all dark form with a mother-of-pearl sheen, both of which occur commonly.

ERIOCRANIIDAE

02.003 Eriocrania unimaculella Local

15/04/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

HEPIALIDAE

03.003 Korscheltellus fusconebulosa Map-winged Swift

Local

22/06/22 Hill Green SU451767 (PB)

ADELIDAE

07.002 Nemophora metallica Notable B

16/07/22, 2 Templeton, Cold Harbour SU344670 (JL) 20/07/22 Ewhurst Pk, Ramsdell SU564577 VC12 (AB)

TINEIDAE

12.012 Triaxomera parasitella Local

17/06/22 Dinton Pastures SU782717 (NH)

12.038 Monopis obviella Local

03/06/22 Crowthorne SU839638 Act. (IE)

ROESLERSTAMMIIDAE

13.002 Roeslerstammia erxlebella Local

15/05/22 Crowthorne SU839638 Act. (IE, JT)

GRACILLARIIDAE

15.017 Calybites phasianipennella Local

17/06/22 Dinton Pastures SU782717 (NH)

YPONOMEUTIDAE

16.005 Yponomeuta rorrella Willow Ermine Local

18/07/22 Westwood Rd, Tilehurst SU666742 (JH)

YPSOLOPHIDAE

17.009 Ypsolopha sylvella Local

29/10/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

ARGYRESTHIIDAE

20.015 Argyresthia curvella Local

17/06/22 Dinton Pastures SU782717 (NH)

OECOPHORIDAE

28.008 *Metalampra italica* Established adventive 21/06/22 to 05/08/22, 6 records from 3 locations. Max count 4 (NH)

28.024 *Tachystola acroxantha* Estabished adventive 03/5/22 to 18/10/22, 26 records from 4 locations. Max

count 10 (NH)

28.025 Pleurota bicostella Local

10/05/22 & 09/06/22 Decoy Heath SU610633 (JL)

ETHMIIDAE

33.001 Ethmia dodecea Local

25/06/22 Withymead SU601827 VC23 (NH)

GELECHIIDAE

35.026 Acompsia cinerella Local

23/07/22 Tidgrove Warren, Overton SU526543 VC12 (AB, MW)

35.081 Oxypteryx atrella Local

23/07/22 Tidgrove Warren, Overton SU526543 VC12 (AB, MW)

35.099 Gelechia senticetella Notable B

17/06/22 Dinton Pastures SU782717 (NH)

35.118 *Scrobipalpa ocellatella* Beet Moth Notable B 02/09/22, 3 Crowthorne SU839638 Act. (IE, SP)

35.147 *Carpatolechia decorella* Notable B 13/03/22 Crowthorne SU839638 Act. (IE, SP)

35.157 Recurvaria leucatella Local

09/07/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

35.160 Stenolechia gemmella Local

05/08/22, 2 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

COLEOPHORIDAE

37.002 Coleophora lutarea Notable B

22/05/22, 18 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

25/05/22, 2 Smithleys Copse, Axmansford SU564608 VC12 (AB)

37.032 Coleophora albitarsella Local

09/07/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

37.035 Coleophora alcyonipennella Clover Case-bearer

10/08/22 Tidgrove Warren, Overton SU526543 VC12 (AB)

MOMPHIDAE

40.004 Mompha propinguella Local

10/08/22 Tidgrove Warren, Overton SU526543 VC12 (AB)

TORTRICIDAE

49.014 Archips crataegana Brown Oak Tortrix Local

17/06/22 Dinton Pastures SU782717 (NH)

49.018 Choristoneura hebenstreitella Local

26/05/22 Waltham Place SU856771 (IE, JT)

49.078 Acleris aspersana Common

23/07/22 Tidgrove Warren, Overton SU526543 VC12 (AB, MW)

31/07/22 Crowthorne SU839638 Act. (IE)

49.087 Acleris literana Local

09/03/22 & 26/03/22 Westwood Rd, Tilehurst SU666742, 3rd record for garden, last seen 2017 (JH)

49.193 Endothenia quadrimaculana Local

05/08/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

10/08/22 Tidgrove Warren, Overton SU526543 VC12 (AB)

49.200 Enarmonia formosana Cherry-bark Moth Local 18/07/22 & 04/09/22 Crowthorne SU839638 Act. (IE)

49.264 Eucosma obumbratana Local

23/07/22 Tidgrove Warren, Overton SU526543 VC12 (AB, MW)

49.316 Dichrorampha seguana Local

02/06/22 Old House Fm, Wolverton SU542582 VC12 (AB)

49.343 *Cydia amplana* Established colonist (NH) 31/07/22 Crowthorne SU839638 Act. (IE, JT)

SESIIDAE

52.008 *Synanthedon formicaeformis* Red-tipped Clearwing Notable B

21/06/22 Crowthorne SU839638 Pheromone trap. Came

to FOR lure (IE, JT)

52.010 Synanthedon andrenaeformis Orange-tailed **Clearwing** Notable B

21/06/22, 2 Crowthorne SU839638 Pheromone trap. Came to VES lure (IE, JT)

52.011 Synanthedon myopaeformis Red-belted **Clearwing** Notable B

21/06/22, 3 Crowthorne SU839638 Pheromone trap. Came to CUL lure (IE, JT)

52.013 Synanthedon tipuliformis Currant Clearwing Notable B

21/06/22 Crowthorne SU839638 Pheromone trap. Came to TIP lure (IE, JT)

LIMACODIDAE

53.001 Apoda limacodes The Festoon Notable B 25/06/22 Withymead SU601827 VC23 (RDNHS, NH, PB) 06/07/22 Waltham Place SU856771 (IE)

54.010 Zygaena trifolii Five-spot Burnet Local 14/05/22, 2 Oven Bottom SU536834. A specimen with conjoined spots (photographed by Tom Walker on 16/05/2022) was probably this species ssp. palustrella (RDNHS, JH)

HESPERIIDAE

57.001 Erynnis tages Dingy Skipper BAP

Earliest: 05/05/22 Tidgrove Warren, Overton SU526543 VC12 (AB), & Paices Wood SU585636 (JL) High counts: 06/05/22, 26 Lardon Chase SU588809 (JH), & 08/05/22, 32 Aston Upthorpe Downs SU546837 (JH) 14/06/22 Red Cow SU592868. Only record from Red Cow

Latest: 16/06/22 Paices Wood SU585636 (JL)

57.002 Pyrgus malvae Grizzled Skipper BAP

Earliest: 05/05/22 Paices Wood SU583636 (JL) High count: 08/05/22, 12 Aston Upthorpe Downs SU545838 (JH)

Latest: 14/06/22, 2 Aston Upthorpe Downs (JH)

57.005 Thymelicus lineola Essex Skipper

Earliest: 03/07/22, 3 Red Cow SU592868 (AR), &

Burghfield, Moatlands SU671703 (JL) 06/07/22, 4 Red Cow (AR)

High count: 15/07/22, 25 Aston Upthorpe Downs

SU545838 (JH)

Latest: 28/07/22 Welford Wood SU4275 (JL) &

Winterbourne SU4572 (JL)

57.006 Thymelicus sylvestris Small Skipper

Earliest: 14/06/22 Owlpit Copse, Bradfield SU587734 (JL) 20/06/22, 2 & 21/06/22, 8 Red Cow SU592868 (AR) High count: 20/07/22, 15 Ewhurst Pk, Ramsdell

SU564577 VC12 (AB) 15/07/22 Red Cow (AR)

Latest: 28/07/22 Welford Wood SU4275 (JL)

57.009 Ochlodes sylvanus Large Skipper

Earliest: 02/06/22 Old House Fm, Wolverton SU542582 VC12 (AB)

10/06/22 Red Cow SU592868 (AR)

High count: 03/07/22, 10 Holly Copse SU594700 (JL et al)

14/07/22 Red Cow (AR)

Latest: 28/07/22 Holly Copse (JL et al)

PIERIDAE

58.003 Anthocharis cardamines Orange-tip

Earliest: 13/04/22 Paices Wood SU582636 (JL)

15/04/22 Red Cow SU592868 (AR)

22/05/22 Red Cow (AR)

Latest: 27/05/22, 3 Combe Hole, Kingsclere SU511568 VC12 (AB), & Tyle Mill SU627686 (JH) & Holly Copse SU597702 (JL et al)

58.006 Pieris brassicae Large White

Earliest: 29/04/22 Owlpit Copse, Bradfield SU587730 (JL

11/05/22 & 01/10/22, 2 Red Cow SU592868 (AR)

Latest: 05/10/22 Tilehurst SU670748 (JL)

58.007 Pieris rapae Small White

Earliest: 24/03/22 Red Cow SU592868 (AR)

Early 15/04/22, 2 Holly Copse SU597702 (JL et al), &

Owlpit Copse, Bradfield SU587730 (JL)

20/04/22, 2 Red Cow (AR)

High count: 20/07/22, 170 Ewhurst Pk, Ramsdell

SU564577 VC12 (AB)

High count: 14/09/22, 50 Lambourn Woodlands SU335770. Probably 100 whites, small & large along a 300m sown flower margin of mainly Phacelia and Quinoa (JL)

Late 06/10/22 Plastow Green SU537625 VC12 (KW)

Latest: 10/10/22 Red Cow (AR)

58.008 Pieris napi Green-veined White

Earliest: 24/3/22 Tilehurst SU670748 (JL) Early 11/04/22 Red Cow SU592868 (AR)

14/07/22 Red Cow (AR)

High count: 15/07/22, 12 Aston Upthorpe Downs

SU546837 (JH)

Late 14/09/22, 2 Hailey SU645857 VC23 (RDNHS, FC, JH)

Latest: 05/10/22 Tilehurst SU670748 (JL)

58.010 Colias croceus Clouded Yellow

16/07/22 Tilehurst SU665742 Nectaring on Knapweed

17/07/22 Coneygrove Copse, Wolverton SU554578 VC12 (AB)

24/07/22, 2 Tidgrove Warren, Overton SU526543 VC12 (AB)

25/08/22 Fobney Island SU703711 (JL)

31/08/22 Tidgrove Warren, Overton VC12 (AB) 14/09/22 Lambourn Woodlands SU332768 (JL)

17/09/22 Owlpit Copse, Bradfield SU586731 (JL et al)

28/09/22 Tidgrove Warren, Overton VC12 (AB)

58.013 Gonepteryx rhamni Brimstone

Earliest: 14/03/22 Red Cow SU592868 (AR), & at least 3 Hosehill SU648694. Ten sightings over 2hrs (JL) High count: 21/04/22, 15 Tidgrove Warren, Overton SU526543 VC12 (AB)

High count: 08/05/22, 25 Aston Upthorpe Downs SU545838 (JH)

Late 16/10/22 Red Cow (AR)

Latest: 26/10/22 Plastow Green SU537625 VC12 (KW)

NYMPHALIDAE

59.003 Pararge aegeria Speckled Wood

Earliest: 15/03/22 Westwood Rd, Tilehurst SU666742

Early 13/04/22 Paices Wood SU584638 (JL)

16/04/22 Red Cow SU592868 (AR)

High count: 15/06/22, 20 Holly Copse SU592700 (JL et al) 18/08/22 Red Cow (AR)

Late 06/10/22 Moor Copse SU633737 (JL) & Plastow

Green SU537625 VC12 (KW)

Latest: 26/10/22 Moor Copse SU638734 (JL) & Plastow Green VC12 (KW)

59.005 Coenonympha pamphilus Small Heath BAP

Earliest: 08/05/22, 5 Aston Upthorpe Downs SU546837

(JH)

09/05/22 & 21/06/22 Red Cow SU592868 (AR)

High count: 23/8/22, 22 Aston Upthorpe Downs (JH) Late 14/09/22 Hailey SU645857 VC23 (RDNHS, FC, JH)

Latest: 16/09/22 Holies SU592799 (JH)

59.009 Aphantopus hyperantus Ringlet

Earliest: 14/06/22 Owlpit Copse, Bradfield SU587730 (JL)

17/06/22 Red Cow SU592868 (AR)

High count: 04/07/22, 64 Owlpit Copse, Bradfield (JL)

29/07/22 Red Cow (AR)

Latest: 08/08/22 Holly Copse SU599701 (JL)

59.010 Maniola jurtina Meadow Brown

Earliest: 01/06/22 Red Cow SU592868 (AR)

10/06/22, 20 Red Cow (AR)

High count: 14/07/22, 37 Ewhurst Pk, Ramsdell

SU569575 VC12 (AB) 02/09/22 Red Cow (AR)

Latest: 08/10/22, 3 Holies SU592799 (JH)

59.011 Pyronia tithonus Gatekeeper

Earliest: 28/06/22, 2 Fobney Island SU704709 (JL)

06/07/22 Red Cow SU592868 (AR)

High count: 20/07/22, 36 Owlpit Copse, Bradfield

SU587730 (JL *et al*) 08/08/22 Red Cow (AR)

Latest: 19/08/22, 3 Padworth Lane SU607668 (JL) & 2

Paices Wood SU584635 (JL)

59.012 Melanargia galathea Marbled White

Earliest: 11/06/22, 4 Holly Copse SU597702 (JL)

13/06/22, 3 Red Cow SU592868 (AR) High count: 21/06/22, 63 Red Cow (AR)

15/07/22, 4 Red Cow (AR)

Latest: 20/07/22, 4 Ewhurst Pk, Ramsdell SU564577 VC12 (AB), & 5 Owlpit Copse, Bradfield SU587730 (JL et al), & Hosehill SU650694 (JL) & 3 Warburg Reserve

SU719880 VC23 (JH, RDNHS, SR)

59.017 Argynnis paphia Silver-washed Fritillary

Earliest: 20/06/22, 2 Owlpit Copse, Bradfield SU588734 (JL) & Owlpit Copse, Bradfield SU587730 (JL)

High count: 08/07/22, 13 Frith Fm, Wheathold SU545600

VC12 (AB)

Latest: 04/08/22 Owlpit Copse, Bradfield (JL) Also reported from Holly Copse (JL et al), Starvale Woods, Mortimer (JH), Rushall Fm, Bradfield (JH, RDNHS, JL), near Malshanger House (AB), Ewhurst Pk, Ramsdell (AB), Poughley (JL), Little Common (JL), Coneygrove Copse, Wolverton (AB), Tilehurst (JL), Warburg Reserve (JH,RDNHS,SR), Chaddleworth (JL) &

Down Copse, Welford, (JL)

59.019 Speyeria aglaja Dark Green Fritillary

09/07/22 Bradfield, Rushall Fm SU587732 (JL, RDNHS, JH)

13/07/22 near Malshanger House SU573527 VC12 (AB)

59.021 Limenitis camilla White Admiral BAP

14/06/22 Owlpit Copse, Bradfield SU586734 (JL) 16/06/22 & 20/06/22, 3 & 21/06/22 Paices Wood SU586640 (JL *et al*)

22/06/22, 2 Sleeper's Copse, Ashford Hill SU564611 VC12 (AB)

05/07/22, 3 Wokefield Common SU656662 (JL) 09/07/22, 2 Rushall Fm, Bradfield SU587732 (JH, JL,

RDNHS)

10/07/22 Paices Wood SU583638 (JL)

13/07/22 Silchester Common SU623622 VC12 (SWo)

14/07/22 Ewhurst Pk, Ramsdell SU569575 VC12 (AB)

16/07/22 Little Common SU3565 (JL)

59.022 Apatura iris Purple Emperor

13/07/22 near Malshanger House SU573527 VC12 (AB)

59.023 Vanessa atalanta Red Admiral

Earliest: 26/02/22 Plastow Green SU537625 VC12 on

Lonicera fragratissima (KW)

Early 25/03/22 Stratfield Mortimer SU670641 (JH)

Early 20/04/22 Red Cow SU592868 (AR) Late 12/11/22 Plastow Green VC12 (KW)

Latest: 14/11/22, 2 Red Cow (AR)

59.024 Vanessa cardui Painted Lady

Earliest: 17/05/22 Paices Wood SU587635 (JL)

26/05/22 Red Cow SU592868 (AR)

02/06/22 Red Cow (AR)

Latest: 28/08/22, 2 Westwood Rd, Tilehurst SU666742

(JH)

59.026 *Aglais io* Peacock

Earliest: 01/01/22 Caversham SU709755 VC23 fluttering

in garden shed (JL)

Early 27/02/22 Westwood Rd, Tilehurst SU666742 (JH)

21/03/22, 2 Red Cow SU592868 (AR)

27/08/22 Red Cow (AR)

Late 07/09/22 Holly Copse SU600703 (JL)

Latest: 12/11/22 Crux Easton SU433573 flying up &

down a bridleway (KW)

59.027 Aglais urticae Small Tortoiseshell

Earliest: 19/03/22 Red Cow SU592868 (AR)

High count: 10/06/22, 50 Fobney Island SU705709 (JL)

12/07/22 Red Cow (AR)

Late 29/10/22 Plastow Green SU537625 VC12 (KW)

Latest: 12/11/22 Plastow Green VC12 (KW)

59.031 Polygonia c-album Comma

Earliest: 11/02/22 Englefield roundabout SU631706 (JL) Early 14/03/22 Westwood Rd, Tilehurst SU666742 (JH)

18/03/22 Red Cow SU592868 (AR)

High count: 13/07/22, 8 near Malshanger House

SU573527 VC12 (AB)

Late 17/09/22, 2 Owlpit Copse, Bradfield SU588734 (JL et

al)

Latest: 16/10/22 Red Cow (AR)

59.033 Euphydryas aurinia Marsh Fritillary BAP

14/05/22 Oven Bottom SU537835 (JH, RDNHS) 08/06/22 Moorend Common SU803908 VC24 (JH,

RDNHS, Jim Wills)

RIODINIDAE

60.001 *Hamearis lucina* **Duke of Burgundy** BAP 08/05/22 The Hollow Way, Crog Hill, Lambourn

SU322834 (JL)

LYCAENIDAE

61.001 Lycaena phlaeas Small Copper

Earliest: 07/05/22, 2 Red Cow SU592868 (AR)

High count: 19/07/22, 7 Red Cow (AR)

20/07/22 Hosehill SU648694 (JL)

04/08/22 Red Cow (AR)

15/09/22 Red Cow (AR)

Latest: 26/10/22 Moor Copse SU638734 (JL)

61.004 Favonius quercus Purple Hairstreak

Earliest: 09/07/22 Rushall Fm, Bradfield SU587732 (JL, RDNHS)

Latest: 08/08/22 Paices Wood SU583638 (JL)

61.005 Callophrys rubi Green Hairstreak

08/05/22, 12 Aston Upthorpe Downs SU546837 (JH) 14/05/22, 8 Aston Upthorpe Downs (JH, RDNHS) 14/05/22, 5 Oven Bottom SU537835 (JH, RDNHS) 17/05/22, 3 Paices Wood SU587635 (JL) 19/05/22 Tidgrove Warren, Overton SU526543 VC12

27/05/22 Paices Wood (JL)

61.006 Satyrium w-album White-letter Hairstreak BAP 11/07/22 Laverstoke Lane SU490468 VC12 (AB)

61.010 Cupido minimus Small Blue BAP

08/05/22, 12 The Hollow Way, Crog Hill, Lambourn SU322834 (JL)

19/05/22, 7 Tidgrove Warren, Overton SU526543 VC12 (AB)

27/05/22, 9 Tidgrove Warren, Overton VC12 (AB)

31/05/22 Combe Hole, Kingsclere SU511568 VC12 (AB)

12/06/22, 100 Crog Hill, Hollow Way SU322833 (JL)

12/06/22, 4 Lambourn Woodlands SU332768 (JL)

15/06/22 Lardon Chase SU588809 (JH)

22/06/22, 2 Lambourn Woodlands SU329773 (JL)

11/08/22 Tidgrove Warren, Overton VC12 (AB)

61.012 Celastrina argiolus Holly Blue

Earliest: 21/03/22, 2 Grazeley Churchyard SU699669 (JH)

24/03/22 Red Cow SU592868 (AR)

07/08/22 Red Cow (AR)

Late 18/09/22 Tilehurst SU665742 (JL)

Latest: 16/10/22 Westwood Rd, Tilehurst SU666742 (JH)

61.015 Aricia agestis Brown Argus

Earliest: 12/05/22 Red Cow SU592868 (AR) Early 17/05/22 Reading Services, westbound M4 SU669699 (JH) & 27/05/22 Paices Wood SU587635 (JL) Next generation 08/07/22 Tilehurst SU665742 (JL) 14/07/22, 3 Red Cow (AR)

High count: 26/08/22, 7 Bradfield Southend SU594697.

Either side of a hedge (JL) 27/08/22 Red Cow (AR)

Latest: 21/09/22 Fobney Island SU703711 (JL)

61.018 Polyommatus icarus Common Blue

Earliest: 06/05/22 Aston Upthorpe Downs SU546837 (JH) 13/05/22, 2 Red Cow SU592868 (AR)

High count: 02/06/22, 41 Old House Fm, Wolverton SU542582 VC12 (AB)

Latest: 29/09/22 Red Cow (AR)

61.019 Polyommatus bellargus Adonis Blue

20/08/22, 2 Lardon Chase SU588809 (JH)

23/08/22, 2 Aston Upthorpe Downs SU546837 (JH)

61.020 Polyommatus coridon Chalk Hill Blue

15/07/22, 8 Aston Upthorpe Downs SU546837 (JH) 16/07/22, 107 Lardon Chase SU588809 (JH)

11/08/22 Tidgrove Warren, Overton SU526543 VC12 (AB)

20/08/22, 12 Lardon Chase (JH)

23/08/22, 4 Aston Upthorpe Downs (JH)

PYRALIDAE

62.010 Elegia similella Notable B

21/06/22 Crowthorne SU839638 Act. (IE, JT)

62.032 Nephopterix angustella Local

10/08/22, 10 Tidgrove Warren, Overton SU526543 VC12 (AB)

22/09/22 Harcourt Dr, Earley SU735709 (NH)

62.038 Acrobasis consociella Local

06/07/22 Waltham Place SU856771 (IE)

CRAMBIDAE

63.009 Pyrausta nigrata Local

14/05/22, 3 Aston Upthorpe Downs SU544833 (JL)

63.014 Sitochroa palealis Local

12/08/22 Watts Bank Reserve SU331771 (JL) 14/08/22 Fobney Island SU703711 (JL)

63.016 Anania fuscalis Local

08/05/22, 10 The Hollow Way, Crog Hill, Lambourn, SU322834. (Linear 300m stretch along Berkshire side of county boundary) (JL)

22/05/22 Cleeve Hill SU333766 (JL)

63.028 Ostrinia nubilalis European Corn-borer Local 29/06/22 Crowthorne SU839638 Act. (IE) to 03/09/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB). Now common in our area (NH)

63.030 Paratalanta hyalinalis Notable B

21/07/22 Tilehurst SU670747. A possible hyalinalis at a chalky allotment with Knapweed and Mullein present

02/09/22 Red Cow SU592868. Late for hyalinalis, though Sterling & Parsons say the flight period extends to early Sept (AR)

63.052 Nomophila noctuella Rush Veneer Migrant 23 records from 17/07/22 Crowthorne SU839638 Act. (IE) to 29/10/22, 6 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB). These will include descendants of earlier migrants (NH)

63.054 Cydalima perspectalis Box-tree Moth

Established pest species

19 records from 22/06/22 Crowthorne SU839638 Act. (IE) to 23/08/22, 6 Harcourt Dr, Earley SU735709 (NH)

63.059 Evergestis limbata Notable B

23/07/22 Tidgrove Warren, Overton SU526543 VC12 (AB, MW)

03/09/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

This species has spread widely and is becoming far more common (NH)

63.079 Calamotropha paludella Local

17/06/22, 2 Dinton Pastures SU782717 (NH) 23/07/22 & 10/08/22 Tidgrove Warren, Overton SU526543 VC12 (AB)

63.087 Crambus hamella Notable B

04/09/22 Crowthorne SU839638 Act. (IE, JT)

63.091 Agriphila latistria Local

16/08/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

63.092 Agriphila selasella Local

14/08/22 Crowthorne SU839638 Act. (IE)

16/08/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

19/08/22 Paices Wood SU585636 (JL)

22/08/22 Harcourt Dr, Earley SU735709 (NH)

DREPANIDAE

65.003 *Watsonalla cultraria* Barred Hook-tip Local 09/07/22 Snelsmore SU463710 (PB) 27/08/22 Westwood Rd, Tilehurst SU666742 (JH) 18/09/22 Snelsmore (PB)

65.011 *Tethea or* Poplar Lutestring Local 12/08/22 Hill Green SU451767 (PB)

65.014 *Cymatophorima diluta* Oak Lutestring Local 03/09/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

65.015 *Polyploca ridens* Frosted Green Local 6 records from 28/03/22 to 09/05/22 all Hill Green SU451767 (PB)

SPHINGIDAE

69.007 *Sphinx pinastri* **Pine Hawk-moth** Local 8 records from 21/05/22 Bowdown Woods SU510654 (PB, R. Stace) to 02/08/22 Hill Green SU451767 (PB)

69.010 Macroglossum stellatarum Humming-bird Hawkmoth Frequent immigrant

16 records in all from 27/06/22 Westwood Rd, Tilehurst SU666742 (JH) to 10/10/22 Plastow Green SU537625 VC12, still finding the last few *Buddleja* flowers (KW) Also reported from Red Cow (AR), Owlpit Copse (JL), Tilehurst (JL), Burghfield Common, visiting a hanging basket (RWo), Newbury town centre, feeding on *Buddleja* regrowth (KW), Greenham Mill (PB), Kings Rd, Newbury (PB) & Ullswater Dr, Tilehurst (DC, NH)

69.017 *Deilephila porcellus* Small Elephant Hawk-moth Local

01/06/22 Hill Green SU451767 (PB) 07/06/22 Red Cow SU592868 (AR) 17/06/22, 4 Red Cow (AR) 12/07/22, 2 Red Cow (AR) 18/07/22 Hill Green (PB)

GEOMETRIDAE

70.004 *Idaea rusticata* Least Carpet Local 17 records from 25/06/22 Withymead SU601827 VC23 (RDNHS, NH) to 22/09/22 Harcourt Dr, Earley SU735709 (NH) Now fairly common in our area (NH)

70.015 *Idaea emarginata* Small Scallop Local 03/07/22 & 05/07/22, 2 & 27/07/22 Red Cow SU592868 (AR)

70.018 *Idaea straminata* Plain Wave Local 09/07/22 & 16/07/22 Snelsmore SU463710 (PB)

70.025 *Scopula immutata* Lesser Cream Wave Local 12/07/22 Red Cow SU592868 (AR) 16/07/22 Snelsmore SU463710 (PB) 11/08/22 Fobney Island SU698712 (JL)

17/08/22 Decoy Heath SU610634. Disturbed from tall vegetation (JL)

70.027 Scopula floslactata Cream Wave Local 4 records from 10/05/22 Decoy Heath SU613634 (JL) to 28/06/22 Fobney Island SU703711 (JL)

70.031 *Cyclophora annularia* **The Mocha** Notable B 14/05/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

19/05/22 Hill Green SU451767 (PB)

70.037 *Cyclophora linearia* Clay Triple-lines Local 3 records from 04/06/22 Snelsmore SU463710

(PB,BBOWT) to 12/07/22 Westwood Rd, Tilehurst SU666742 (JH)

70.038 *Rhodometra sacraria* **The Vestal** Immigrant 25/06/22 Withymead SU601827 VC23 (NH, PB, RDNHS) 03/09/22, 3 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

05/09/22 Doves Fm, Hungerford SU325646 (PB) 11/09/22, 2 Holly Copse SU594700 (JL *et al*)

14/09/22 Doves Fm, Hungerford (PB) 27/10/22 Hill Green SU451767 (PB)

29/10/22, 2 Gt Haughurst Copse, Axmansford VC12 (AB) 30/10/22 Stanmore/Peasemore SU467783 (PB)

70.047 *Nycterosea obstipata* The Gem Immigrant 18/07/22 Crowthorne SU839638 Act. (IE, JT)

70.050 *Xanthorhoe biriviata* Balsam Carpet Local 11/06/22 Snelsmore SU463710 enigmatic, wrong habitat (PR)

70.055 Xanthorhoe quadrifasiata Large Twin-spot Carpet Local

25/06/22 Withymead SU601827 VC23 (NH, PB, RDNHS) 15/07/22 Chapel Wood, Chieveley SU457752 (PB)

70.056 Catarhoe cuculata Royal Mantle Local 18/07/22 Hill Green SU451767 (PB)

70.062 Epirrhoe rivata Wood Carpet Local 03/07/22 Red Cow SU592868 (AR)

70.064 Euphyia biangulata Cloaked Carpet Notable B 12/07/22 Westwood Rd, Tilehurst SU666742 new record for garden (JH)

70.065 *Euphyia unangulata* Sharp-angled Carpet Local 14/05/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

21/05/22 Bowdown Woods SU510654 (PB) 05/08/22 Gt Haughurst Copse, Axmansford VC12 (AB)

70.083 *Thera cupressata* Cypress Carpet Local 22/09/22 Harcourt Dr, Earley SU735709 (NH)

70.106 *Operophtera brumata* **Winter Moth** Common Very early 01/01/22 Snelsmore SU463710 (PB)

70.104 *Lampropteryx otregiata* **Devon Carpet** Notable B 14/05/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

21/05/22 Bowdown Woods SU510654 (PB, P.Olive) 04/06/22 Snelsmore SU463710 (PB)

70.117 *Minoa murinata* **Drab Looper** Notable B 14/05/22 Fence Wood SU5171 daytime (PB)

18/05/22, 3 Bradfield, Mirams Copse SU577731 (JL) 21/05/22 Bradfield Southend SU597701 western end of valley ride (JL)

21/05/22, 2 Bradfield Southend SU598702 damp woodland ride (JL)

70.118 *Philereme vetulata* Brown Scallop Local 02/07/22 Snelsmore SU463710 (PB) 06/07/22 Waltham Place SU856771 (IE)

70.119 Philereme transversata Dark Umber Local

09/07/22 Red Cow SU592868 (AR)

15/07/22 Red Cow (AR)

15/07/22 Chapel Wood, Chieveley SU457752 (PB)

18/07/22 Hill Green SU451767 (PB)

23/07/22 Tidgrove Warren, Overton SU526543 VC12 (AB, MW)

70.121 Rheumaptera undulata Scallop Shell Local 16/07/22 Snelsmore SU463710 (PB)

70.134 Perizoma bifaciata Barred Rivulet Local 03/07/22 Red Cow SU592868 (AR)

70.136 Perizoma blandiata Pretty Pinion Local 11/07/22 Red Cow SU592868 (AR)

70.137 Perizoma albulata Grass Rivulet Local

19/05/22 Hill Green SU451767 (PB)

24/05/22 Red Cow SU592868 (AR)

11/06/22 Red Cow (AR)

11/06/22 Snelsmore SU463710 (PB)

12/06/22 Hollow Way, Crog Hill SU322833. Along a stretch through parts of 6 monads (JL)

70.148 Eupithecia inturbata Maple Pug Local

18/07/22 Hill Green SU451767 (PB)

23/07/22 Tidgrove Warren, Overton SU526543 VC12 (AB, MW)

02/08/22 Hill Green (PB)

70.159 Eupithecia phoeniceata Cypress Pug Local 9 records from 24/08/22, 2 to 17/10/22 all Harcourt Dr, Earley SU735709 (NH)

70.160 Eupithecia tripunctaria White-spotted Pug Local

08/05/22 Red Cow SU592868 (AR)

09/05/22 Westwood Rd, Tilehurst SU666742 earliest

record for garden, prev. earliest 22/05/08 (JH)

21/05/22 Bowdown Woods SU510654 (PB, R.Stace)

18/07/22 Westwood Rd, Tilehurst SU666742 (JH)

03/08/22 Red Cow (AR)

10/08/22 Tidgrove Warren, Overton SU526543 VC12 (AB)

27/08/22 Snelsmore SU463710 (PB)

70.168 Eupithecia nanata Narrow-winged Pug Common Very early 01/01/22 Snelsmore SU 463710 (PB)

70.174 Eupithecia insigniata Pinion-spotted Pug Notable B

07/05/22 Red Cow SU592868 (AR)

70.179x Eupithecia absinthiata or goossensiata Ling **Pug or Wormwood Pug**

25/06/22 Withymead SU601827 VC23 (PB)

13/08/22 Snelsmore SU463710 (PB)

70.189 Eupithecia subumbrata Shaded Pug Local 16/06/22 Hill Green SU451767 enigmatic, wrong habitat

09/07/22 Snelsmore SU463710 enigmatic, wrong habitat (PB)

70.198 Lobophora halterata The Seraphim Local

09/05/22 Hill Green SU451767 (PB)

14/05/22 Snelsmore SU463710 (PB)

70.208 Ligdia adustata Scorched Carpet Local 7 records from 11/04/22 to 18/08/22 all Red Cow SU592868 (AR)

70.224 Plagodis dolabraria Scorched Wing Local 8 records from 09/05/22 to 22/06/22 all Hill Green SU451767 (PB)

70.231 Apeira syringaria Lilac Beauty Local 11/06/22 Snelsmore SU463710 (PB) 17/06/22 Dinton Pastures SU783719 (PB)

70.233 Ennomos quercinaria August Thorn Local 12 records from 06/07/22, 2 Waltham Place SU856771 (IE) to 19/09/22, 2 Crowthorne SU839638 Act. (IE)

70.246 Apocheima hispidaria Small Brindled Beauty Local

01/01/22 Snelsmore SU463710. Very early on an unusually warm night (PB)

23/01/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (Anne Ayres)

13/03/22 Snelsmore (PB)

70.253 Agriopis leucophaearia Spring Usher Common Early 01/01/22 Snelsmore SU463710 (PB) High count & Latest: 08/08/22, 184 Snelsmore (PB)

70.256 Erannis defoliaria Mottled Umber Common Early 01/01/22 Snelsmore SU463710 (PB)

70.267 Hypomecis roboraria Gt Oak Beauty Notable B 17/06/22 Dinton Pastures SU783719 (PB)

70.273 Parectropis similaria Brindled White-spot Local 04/06/22 Snelsmore SU463710 (PB)

70.288 Cleorodes lichenaria Brussels Lace Local 01/08/22 Doves Fm, Hungerford SU325646 (PB)

70.295 Perconia strigillaria Grass Wave Local 09/06/22 Decoy Heath SU610634 (JL)

70.300 Comibaena bajularia Blotched Emerald Local

11/06/22 Snelsmore SU463710 (PB)

17/06/22, 4 Dinton Pastures SU782717 (NH)

22/06/22 Hill Green SU451767 (PB)

70.302 Hemistola chrysoprasaria Small Emerald Local

06/07/22 Waltham Place SU856771 (IE)

08/07/22 Hill Green SU451767 (PB)

18/07/22 Hill Green (PB)

NOTODONTIDAE

71.001 Thaumetopoea processionea Oak Processionary Establising pest species

28/07/22 Hill Green SU451767 (PB)

02/08/22, 21 Waltham Place SU856771 (IE)

19/08/22 Waltham Place (IE)

71.016 Peridea anceps Gt Prominent Local 5 records from 15/04/22, 3 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB) to 26/05/22 Waltham Place SU856771 (IE)

71.022 Ptilodon cucullina Maple Prominent Local 7 records from 11/06/22 Snelsmore SU463710 (PB) to 20/08/22 Red Cow SU592868 (AR)

71.027 Clostera curtula Chocolate-tip Local

30/04/22 Snelsmore SU463710 (PB)

14/05/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

18/05/22 Harcourt Dr, Earley SU735709 (NH)

27/07/22 Doves Fm, Hungerford SU325646 (PB)

EREBIDAE

72.004 Hypena rostralis Buttoned Snout Notable B 09/05/22, 2 Westwood Rd, Tilehurst SU666742 (JH)

72.009 Leucoma salicis White Satin Moth Local 15/07/22 Red Cow SU592868 (AR)

72.010 Lymantria monacha Black Arches Local 9 records from 05/07/22 Crowthorne SU839638 Act. (IE) to 19/08/22 Waltham Place SU855773 (B.Clark, PB)

72.011 *Lymantria dispar* **Gypsy Moth** Establishing pest species

26/07/22 & 27/07/22 Harcourt Dr, Earley SU735709 (NH) 02/08/22 Waltham Place SU856771 (IE)

11/08/22, 2 Westwood Rd, Tilehurst SU666742 2nd record for garden (JH)

16/08/22 Ullswater Dr, Tilehurst SU668755 photos (DC, NH)

18/08/22 Hill Green SU451767 (PB) 19/08/22 Red Cow SU592868 (AR)

72.012 Euproctis chrysorrhoea Brown-tail Local 6 records from 25/06/22 Withymead SU601827 VC23 (NH) to 15/07/22 Red Cow SU592868 (AR)

72.029 *Callimorpha dominula* Scarlet Tiger Local 7 records from 12/06/22 Abbots Rd, Newbury SU473662 daytime (PB) to 10/07/22 Paices Wood SU584635 (JL)

72.030 Euplagia quadripunctaria Jersey Tiger Notable B Earliest: 12/07/22 Westwood Rd, Tilehurst SU666742 (JH)

High count: 18/07/22, 12 Westwood Rd, Tilehurst SU666742 (JH)

High count: 11/08/22, 10 Westwood Rd, Tilehurst SU666742 (JH)

Last: 19/08/22 Waltham Place SU855773 (PB) 11 records in all inc. Crowthorne (IE), Harcourt Dr, Earley (NH), Red Cow (AR) & Tilehurst (JL)

72.035 *Miltochrista miniata* Rosy Footman Local 13 records from 17/06/22 Dinton Pastures SU782717 (NH, PB) to 02/08/22 Waltham Place SU856771 (IE)

72.037 *Thumatha senex* Round-winged Muslin Local 15/07/22 Chapel Wood, Chieveley SU457752 (PB)

72.038 *Cybosia mesomella* Four-dotted Footman Local 04/06/22 & 09/7/22 Snelsmore SU463710 (PB)

72.041 *Lithosia quadra* **Four-spotted Footman** Notable A

23/07/22 Tidgrove Warren, Overton SU526543 VC12 (AB, MW)

72.043 *Eilema depressa* **Buff Footman** Local 9 records from 23/06/22 Newtown Rd Cemetery SU470662 (PB) to 04/08/22 Red Cow SU592868 (AR)

72.047 *Eilema caniola* Hoary Footman Notable B 12/07/22 Westwood Rd, Tilehurst SU666742 (JH) 18/07/22, 5 Westwood Rd, Tilehurst SU666742 (JH) 26/07/22 Harcourt Dr, Earley SU735709 (NH) 27/07/22 Harcourt Dr, Earley SU735709 (NH) 12/08/22 Crowthorne SU839638 Act. (IE)

72.052 *Macrochilo cribrumalis* **Dotted Fan-foot** Notable R

25/06/22 Withymead SU601827 VC23 (RDNHS, PB)

72.061 *Schrankia costaestrigalis* Pinion-streaked Snout Local

02/07/22 Snelsmore SU463710 (PB) 05/08/22 & 03/9/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

72.066 *Parascotia fuliginaria* Waved Black Notable B 15/07/22 Chapel Wood, Chieveley SU457752 (PB)

72.076 *Catocala fraxini* **Clifden Nonpareil** Established and increasing 27/08/22 Snelsmore SU463710 (PB) 18/09/22 Red Cow SU592868 (AR)

01/10/22 Snelsmore (PB)

72.081 *Catocala sponsa* Dark Crimson Underwing RDB 19/08/22 Waltham Place SU855773 (PB, JT, IE)

72.082 Catocala promissa Light Crimson Underwing RDB

From 09/07/22 Snelsmore SU463710 to 16/08/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB) PB saw 7 during the year at Snelsmore & memorably saw 4 between 02.30 & 03.30 on 18/07/22. On that night 111 macro species were seen! (PB)

NOCTUIDAE

73.010 *Macdunnoughia confusa* Dewick's Plusia Immigrant, established colonist 19/05/22 Fobney Island SU701710 disturbed from nettles (JL) 23/07/22 Tidgrove Warren, Overton SU526543 VC12 (AB, MW)

73.036 *Acronicta alni* **Alder Moth** Local 7 records from 08/05/22 Red Cow SU592868 (AR) to 26/05/22 Hill Green SU451767 (PB)

73.039 *Acronicta aceris* The Sycamore Local 16/06/22 Westwood Rd, Tilehurst SU666742 (JH) 12/07/22, 3 Westwood Rd, Tilehurst (JH) 16/07/22 Snelsmore SU463710 (PB)

73.048 Panemeria tenebrata Small Yellow Underwing Local

14/05/22 North Heath, Chieveley SU475740 daytime (PB)

21/05/22 Red Cow SU592868 (AR)

22/05/22 Bowdown Woods SU510654 (PB)

73.059 *Calophasia lunula* **Toadflax Brocade** Established colonist

16/08/22 Ullswater Dr, Tilehurst SU668756 photos (DC, NH)

73.070 *Pyrrhia umbra* Bordered Sallow Local 08/07/22 Hill Green SU451767 (PB)

73.074 *Heliothis peltigera* Bordered Straw Immigrant 17/06/22 Dinton Pastures SU783719 (PB) 17/08/22 Crowthorne SU839638 Act. (IE, JT)

73.082 *Cryphia algae* Tree-lichen Beauty Established colonist

12 records from 18/07/22 to 04/08/22 both Crowthorne SU839638 Act. (IE)

High count: 27/07/22, 8 Harcourt Dr, Earley SU735709 (NH)

73.105 *Dypterygia scabriuscula* Bird's Wing Local 21/05/22 Bowdown Woods SU510654 (P.Olive, PB)

73.107 *Mormo maura* **Old Lady** Local 28/08/22 Grove Rd, Newbury SU461683 at blackberries (PB)

73.142 *Coenobia rufa* Small Rufous Local 14/08/22 Crowthorne SU839638 Act. (IE, JT) 20/08/22 Snelsmore SU463710 (PB)

73.157 *Apamea anceps* Large Nutmeg Local 19/05/22 Hill Green SU451767 (PB) 30/05/22 Tilehurst SU665742 UV overnight (JL) 25/06/22 Withymead SU601827 VC23 (NH, PB, RDNHS)

73.164 Apamea sublustris Reddish Light Arches Local

16/06/22 Red Cow SU592868 (AR) 16/06/22 Hill Green SU451767 (PB)

08/07/22 Hill Green SU451767 (PB)

73.191 Agrochola haematidea Southern Chestnut RDB 01/10/22, 10 Snelsmore SU463710 (PB)

Also recorded in the previous 3 years at Snelsmore, but not in such numbers (NH)

73.197 *Conistra rubiginea* **Dotted Chestnut** Notable B 5 records from 21/03/22 Hill Green SU451767 (PB) to 20/04/22 Waltham Place SU856771 (IE, JT) 28/03/22, 2 Red Cow SU592868 (AR)

73.201 Lithophane socia Pale Pinion Local

14/03/22 Harcourt Dr, Earley SU735709 (NH) 02/05/22 Westwood Rd, Tilehurst SU666742 last seen in 2017 (JH)

73.209 *Xylena vetusta* Red Sword-grass Local 04/04/22 Hill Green SU451767 (PB)

73.214 Cosmia diffinis White-spotted Pinion pRDB

26/07/22 Harcourt Dr, Earley SU735709 (NH)
02/08/22 Waltham Place SU856771 (IE, JT)
Hopefully it is making a come-back. It feeds on Elm and few have been recorded since Dutch Elm Disease killed off most of the mature elms (NH).

73.215 Cosmia affinis Lesser-spotted Pinion Local

18/07/22 Hill Green SU451767 (PB) 02/08/22 Waltham Place SU856771 (IE) 02/08/22 Hill Green (PB)

73.217 *Cosmia pyralina* Lunar-spotted Pinion Local 17/06/22 Dinton Pastures SU782717 (PB, NH)

16/07/22 Snelsmore SU463710 (PB)

73.221 *Parastichtis suspecta* **The Suspected** Local 02/07/22 & 16/07/22 Snelsmore SU463710 (PB)

73.222 Apterogenum ypsillon Dingy Shears Local

17/06/22 Dinton Pastures SU783719 (PB)

15/07/22 Chapel Wood, Chieveley SU457752 (PB)

73.237 *Polymixis flavicincta* Large Ranunculus Local 22/09/22 Hill Green SU451767 (PB)

73.244 Orthosia cerasi Common Quaker Common

Very early 01/01/22 Snelsmore SU463710 on an unusually warm night (PB)

In past records I have seen them in every month of the year except July - September. The min night temps around New Year's Day were an unprecedented level (ca 13 °C) & the surprise was that it was warm enough for moths to fly at all (NH)

73.246 *Orthosia populeti* Lead-coloured Drab Local 19/03/22 Snelsmore SU463710 (PB)

73.265 *Lacanobia contigua* Beautiful Brocade Local 18/07/22 Crowthorne SU839638 Act. (IE, JT)

73.289 *Mythimna pudorina* Striped Wainscot Local 09/07/22 Snelsmore SU463710 (PB)

27/07/22 Red Cow SU592868 (AR)

73.292 Mythimna favicolor Mathew's Wainscot

Jncertain

23/07/22 Tidgrove Warren, Overton SU526543 VC12 (AB, MW)

The status of this moth is uncertain. Some consider it a (mainly) coastal form of Common Wainscot from which it cannot be separated even by dissection (NH)

73.294 *Mythimna straminea* **Southern Wainscot** Local 25/06/22, 2 Withymead SU601827 VC23 (NH, PB, RDNHS)

73.295 Mythimna vitellina The Delicate Immigrant

01/05/22 Stanmore/Peasemore SU467783 (PB)

28/08/22 Snelsmore SU463710 (PB) 20/10/22 Hill Green SU451767 (PB)

73.302 Leucania obsoleta Obscure Wainscot Local

25/06/22 Withymead SU601827 VC23 (RDNHS,NH, PB)
73.307 Peridroma saucia Pearly Underwing Immigrant

73.327 Agrotis ipsilon Dark Sword-grass Immigrant

27/07/22, 2 Harcourt Dr, Earley SU735709 (NH)

28/07/22 Hill Green SU451767 (PB)

23/08/22 Hill Green SU451767 (PB)

16/08/22 Gt Haughurst Copse, Axmansford SU568612 VC12 (AB)

11/09/22 Red Cow SU592868 (AR)

12/09/22 Hill Green (PB)

73.355 Xestia castanea Neglected Rustic Local

20/08/22 & 18/09/22 Snelsmore SU463710 (PB)

NOLIDAE

74.002 Meganola albula Kent Black Arches Notable B

06/07/22 Waltham Place SU856771 (IE, JT)

09/07/22 Snelsmore SU463710 (PB)

12/07/22 Red Cow SU592868 (AR)

18/07/22 Hill Green SU451767 (PB)

74.007 Bena bicolorana Scarce Silver-lines Local

16/06/22, 2 Westwood Rd, Tilehurst SU666742 (JH)

17/06/22 Dinton Pastures SU783719 (PB)

09/07/22 Snelsmore SU463710 (PB)

18/07/22 Westwood Rd, Tilehurst (JH)

74.009 *Nycteola revayana* **Oak Nycteoline** Local 6 records 21/03/22 to 18/07/22 all Hill Green SU451767 (PB)

Lepidoptera report contributors

Thanks are due to the following members and friends for their submissions:

AB Andy Bolton, AR Tony Rayner, DC Dick Croker, IE Ian Esland, JH Jan Haseler, JL John Lerpiniere, JT John Thacker, KW Ken White, NH Norman Hall, PB Paul Black. RWo Rachel Woolnough, SWo Steve Woolnough, SP Stephen Palmer. MW is Mike Wall, who sometimes traps with Andy Bolton. I am grateful to Rachel and Steve Woolnough and Dick Croker, who also contributed useful records and to RDNHS leaders Fiona Cummins FC and Sally Rankin SR.

Vertebrates Report 2022 by John Lerpiniere

A few bird records are included but these are well recorded elsewhere, by far the most of these are collated by Berkshire Ornithological Club, see their website:

http://berksoc.org.uk/recording/annual-reports/

The majority of Herpetiles (Amphibians and Reptiles) and Mammals are secretive and not easily seen but a few are more obvious such as Common Frog or urban Foxes hence many records for some, especially Muntjac. Many of the sightings are of road kills and most of these are not recorded, but a few are included here. An abundance of one is assumed in each record unless indicated by the value given after the date and before the place name. The initials or name of the contributor or the RDNHS trip leader are given in brackets at the end of each record.

Abbreviations:

ad(s): adult, juv(s): juvenile, imm(s): immature, m(s): male, fem(s): female, GP(s): gravel pit, inc: including, **sev**: several.

RN trip: seen during a RDNHS excursion, RN walk: seen during a RDNHS Wednesday walk

BBOWT Res: Berks Bucks & Oxon Wildlife Trust Reserve

LNR: Local Nature Reserve, NNR: National Nature Reserve, NT: National Trust

The nomenclature has been updated using current listings on the national recording website iRecord_run primarily by the Centre for Ecology and Hydrology. This is a very versatile one-stop shop for all your records if you wish to record your sightings. The records are then available for use by relevant authorities including Thames Valley Environment Centre (TVERC) who make good use of them.

FISH

No records received

AMPHIBIANS

Bufo bufo - Common Toad

16/04/22 Paices Wood SU58396367 (JL) 09/07/22 Owlpit Copse, Bradfield SU587730 (RN

31/10/22 Paices Wood glade, half grown SU584638 (JL)

Lissotriton vulgaris - Smooth Newt

15/03/22 Englefield, SU625719 (LB) 14/04/22, 5 Bradfield Southend, torch search of pond SU593704 (JP)

Lissotriton helveticus - Palmate Newt

25/01/22, 5 Decoy Heath, under logs with GCNs (see below) SU610635 (JL)

Triturus cristatus - Great Crested Newt

25/01/22, 2 Decoy Heath, under logs SU610635 (per

15/03/22 Englefield, under refuge SU625719 (LB)

Rana temporaria - Common Frog

10/01/22, 5 Hosehill, disturbed while cutting Blackthorn SU648694 (JL)

14/02/22 Tilehurst, first garden sighting of year

SU666742 (JH)

18/02/22 Paices Wood, patch of spawn now on dry ground SU583636 (JL)

23/02/22 The Cowsey, Whitley, very large patch of spawn SU727703 (JL)

01/03/22, 30 Tilehurst, 1st spawn in garden pond SU666742 (JH)

22/03/22 Rushall Farm, Bradfield, 10 patches of spawn SU584723 (JL)

01/06/22 Tilehurst, garden, imm, & large ad 29/09/22 SU665742 (JL)

11/07/22 Ufton Bridge meadow SU622687 (JH)

21/08/22 Widbrook Common, Cookham SU893837

(RN trip, Inge Beck)

26/08/22 Bradfield Southend, froglets SU593704 (JP)

03/11/22 Tilehurst, allotment, large ad, & imm

04/11/22 SU670748 (JL)

REPTILES

Zootoca vivipara - Common Lizard

26/02/22, 2 Nettlebed Common, basking, becoming more common as habitat is improved SU7087 (Sally Rankin)

07/04/22 Mortimer, 100 Acre Piece SU637650 (JH)

Anguis fragilis - Slow-worm

17/03/22 Tilehurst, ad 3, 1st of year in garden SU665742 (JL)

18/03/22 Paices Wood, ad 3 & 2 on 25/03/22

SU583636 (JL)

25/03/22 Padworth Common ad & SU618647 (JL)

01/04/22 Tilehurst, allotments, regular sightings on trail camera SU670742 (KJ)

08/04/22, 6 Tilehurst, garden, and 7 on 24/04/22 SU665742) (JL)

02/05/22 Tilehurst, garden compost heap SU666742 (JH)

03/05/22 Hosehill LNR, ad SU648694 (JL)

05/05/22, 3 Padworth Common, south side,

separate, all imm near SU619645 (JL)

27/05/22 Rushall Farm, Bradfield SU588729 (JP)

28/05/22, 2 Fobney SU705710 (JL)

02/06/22, 2 Paices Wood SU 584639 and SU583636 (JL)

04/07/22, 2 Decoy Heath BBOWT Res, imm SU611633 & SU610634 (JL)

27/08/22, 3 Tilehurst, garden inc ad over 30cm & new-born juv SU665742 (JL)

22/10/22 Tilehurst, allotment, last sighting SU670748 (JL)

Natrix helvetica - Grass Snake

03/05/22 Hosehill LNR, ad SU6469 (JL)

05/05/22, 2 Padworth Common, ad SU619645 & imm SU621646 (JL)

02/06/22 Paices Wood SU584637 (JL)

26/06/22 Withymead Nature Res, Goring SU600827 (RN trip, Pete Morton)

04/07/22 Decoy Heath BBOWT Res, ad SU61296335 (JL)

28/08/22 Holly Copse, Bradfield, skin under refuge SU599701 (LB)

17/09/22 Holly Copse, Bradfield, imm SU599701 (LB)

Vipera berus - Adder

05/05/22, 2 Padworth Common, ad $\stackrel{\frown}{\sim}$ SU619645 & ad m SU621646 (JL)

BIRDS

Perdix perdix - Grey Partridge

25/01/22 Englefield SU6270 (JL)

Coturnix coturnix - Quail

04/06/22 Plastow Green, singing from cereal fields, videoed, & present next day SU537625 (KW)

Egretta garzetta – Little Egret

11/02/22 Whiteknights Lake SU737723 (DO)

Haliaeetus albicilla - White-tailed Eagle

16/02/22 Plastow Green, imm treetop level chased by Carrion Crows SU537625, then reported later in Wiltshire SU537625 (KW)

Falco peregrinus - Peregrine

15/02/22 Plastow Green, ad ♂ unringed (not Newbury B69) SU537625 (KW)

19/02/22 Newbury town centre, ad 3 B69

repeatedly dive-bombed Red Kite near BT exchange SU473671 (KW)

20/06/22, 6 Newbury BT exchange, 4 eggs hatched & 4 juvs, all have been colour-ringed and fledged. On this date all juvs flying freely about the town SU4767 (KW)

13/07/22 Plastow Green, unringed juv so not Newbury bird SU537625 (KW)

29/08/22, 3 Newbury town centre, 2 ad & 1 juv, other juvs have dispersed SU473671 (KW)

Buteo buteo -Buzzard

29/08/22 Ufton, ad dead on road close to fresh Rabbit corpse SU614689 (JL)

Burhinus oedicnemus - Stone Curlew

09/06/22 The Fair Mile, heard SU541827 (KJ)

Scolopax rusticola – Woodcock

08/01/22, 2 Winterbourne Wood, SU443721 & SU446717 (RN trip, JL)

Psittacula krameri - Ring-necked Parakeet

09/04/22 Tilehurst, flew over SU667739 (KJ) 03/10/22, 8 Tilehurst, flew over SU670742 (KJ)

Cuculus canorus – Cuckoo

01/06/22 Plastow Green, singing all day, & 04/06/22 from 05:30 SU537625 (KW)

Tyto alba - Barn Owl

24/02/22 Plastow Green SU537625 (KW)

Apus apus – Swift

01/07/22, 2 Tilehurst, pair in nest box SU666739 (KJ)

Lullula arborea – Woodlark

28/09/22 Plastow Green, singing over stubble turnip field SU537625 (KW)

11/10/22, 2 Plastow Green, still singing & disputing territory over turnip stubble, 4 dates since 30/09/22 SU537625 (KW)

Delichon urbica - House Martin

11/05/22 Bradfield Southend, arrived to occupy 10 nests on house SU592703 (LB)

Turdus viscivorus - Mistle Thrush

30/09/22, 11 Plastow Green, post breeding flock, usually seen annually here SU537625 (KW)

Turdus pilaris - Fieldfare

15/03/22, 150 Plastow Green, with 3 Redwings SU537625 (KW)

26/10/22 Plastow Green garden, sev regular from this date SU537625 (KW)

01/11/22 Brimpton Common garden SU573630 (Grahame Hawker)

Sitta europaea - Nuthatch

21/11/22 Reading garden, 1 or 2 visiting feeders over sev months SU737725 (DO)

Certhia familiaris - Treecreeper

11/02/22 Whiteknights Lake SU738722 (DO)

Sturnus vulgaris - Starling

05/10/22, 100+ Christchurch bridge, Reading, preroost gathering on 2 nights SU716742 (David Cliffe)

Garrulus glandarius - Jay

08/04/22, 2 Tilehurst Station, one carrying food SU675752 (KJ)

Corvus frugilegus – Rook

24/03/22 Tilehurst Station, rookery 60 nests SU675752 (KJ) 01/04/22 Padworth, rookery 50 nests by A4 SU610685 (KJ)

Corvus corax - Raven

18/09/22, 4 Newbury town centre, family of 2 ad & 2 juv high over BT exchange SU473671 (KW)

Carduelis carduelis - Goldfinch

31/08/22 Plastow Green, newly fledged family feeding on sunflower hearts from dispenser SU537625 (KW)

Pyrrhula pyrrhula - Bullfinch

03/07/22 Sheffield Bottom, ♂ SU670695 (KJ) 09/11/22 Plastow Green, feeding on Lemon Balm seedheads in garden, & on 12/11/20 SU537625 (KW)

Fringilla montifringilla - Brambling

10/02/22 Plastow Green, on sunflower seed SU537625 (KW)

MAMMALIA - Mammals

RODENTIA - Rodents

Sciurus carolinensis - Grey Squirrel

08/01/22 Winterbourne Wood SU444722 (RN trip, JL)

Glis glis – Edible Dormouse

04/12/22 Nuney Green, rapid increase to 227

trapped under licence in 4 houses using strawberries as bait SU67217916 (TM)

Rattus norvegicus - Brown Rat

23/01/22 & 08/02/22 Tilehurst garden, ad SU665742 & sev sightings in Nov (JL) 27/03/22 Shefford Woodlands SU360735 (JL) 16/06/22 Aldermaston, imm crossed the road

16/06/22 Aldermaston, imm crossed the road SU591648 (JL)

05/07/22 Tilehurst, allotment by rubbish pile

26/08/22 Bradfield Southend, in a garden SU593704 (JP)

Apodemus sylvaticus - Wood Mouse

18/03/22 Tilehurst, garden, also 26/06/22 & 25/09/22 SU665742 (JL)

Apr 2022 Reading garden, eating primroses SU750712 (TM)

Muscardinus avellanarius - Hazel Dormouse

No records received

SU670748 (JL)

Micromys minutus - Harvest Mouse

19/11/22 Hosehill LNR, 2 nests found in reeds SU647695 (JL)

Microtus agrestis - Field Vole

12/02/22, 2 Hosehill LNR, under refuge SU651696 (JL)

Myodes glareolus - Bank Vole

29/01/22, 2 Hosehill LNR, under refuge SU652696 (JL)

12/02/22, 4 Hosehill LNR, under refuges, 3 SU648694 & one SU650694 (JL)

05/05/22 Padworth Common SU620646 (JL)

19/11/22 Hosehill LNR east meadow SU652696 (JL)

Arvicola amphibius - Water Vole

16/07/22 Fobney Is., R. Kennet SU700712 (John & Anne Booth)

LAGOMORPHA - RABBITS & HARES

Lepus europaeus - Brown Hare

08/01/22, 3 Winterbourne Wood, one SU444722 & 2 SU445720 (RN trip, JL)

25/01/22 Englefield SU624704 & 24/02/22 SU618707 (JL)

16/02/22, 2 Blewbury SU540864 (RN trip leader RS)

27/02/22 Halfway, dead on road SU389685 (JL)

03/04/22 Farnborough SU442832 (JL)

10/04/22, 2 Radley SU363707 & SU366696 (JL)

03/05/22, 2 Rushall Fm, Bradfield SU586724 (LB)

04/05/22, 6 Holly Copse, Bradfield Southend SU6070 (LB)

20/06/22 Paices Wood main car park SU587639 (JL)

22/06/22, 2 Plastow Green, grown juvs running down gravel track SU537625 (KW) 23/07/22, 2 Inkpen Crocus Field & 2, 14/10/22 SU369639 (JL) 06/10/22 Snelsmore Common, dead on road SU465703 (JL) 16/10/22 Eastbury SU349764 & 27/11/22 SU346758

Oryctologus cuniculus - Rabbit

(JL)

18/01/22 Theale, Wigmore Lane GPs, ad SU634702 (JL)

15/03/22 Hosehill LNR, droppings on tree stump SU649694 (JL)

18/03/22, 6 Paices Wood SU585636 (JL)

25/03/22 Padworth, juv SU616656 (JL)

03/04/22, 2 Farnborough, ad & juv SU4382 (JL)

06/05/22 Wigmore Lane, Theale, juv SU 633703(JL)

04/08/22 Dinton Pastures SU781729 (DO)

ERINACEOMORPHA - HEDGEHOGS

Erinaceus europaeus - Hedgehog

03/03/22 Bradfield Southend, 1st of year in garden then several often fighting. Most unusually, none present mid summer probably due to lack of food during drought SU592703 (LB)

May to Sep 2022 Reading garden, regular sightings often eating bird seed SU720712 (TM)

13/05/22 Polsted Road, Tilehurst, trail camera SU670742 (KJ)

12/08/22 Great Shefford, dead on road SU383751 (JL)

29/08/22, 3 Tilehurst, The Withies, trail camera SU671743 (per KJ)

30/09/22 Bradfield Southend, finally a sighting in garden after rare summer absence SU592703 (LB)

SORICOMORPHA – SHREWS AND MOLES

Sorex araneus - Common Shrew

18/03/22 Paices Wood SU586635 (JL)

Sorex minutus - Pygmy Shrew

No records received

Neomys fodiens - Water Shrew

No records received

Talpa europaea - Mole

15/06/22 Fobney Is., dead on path SU704710 (JL) 18/08/22 Bradfield, Greathouse Wood, dead on path SU588734 (JP)

CHIROPTERA -- BATS

Pipistrellus pipistrellus - Common Pipistrelle

20/06/22 Armour Hill, Tilehurst, flying, detector & seen (SU671743 (KJ)

Pipistrellus pygmaeus - Soprano Pipistrelle

20/06/22 Armour Hill, Tilehurst, flying, detector & seen SU671743 (KJ)

Nyctalus noctula - Noctule Bat

20/06/22, 3 Armour Hill, Tilehurst, flying, detector & seen SU671743 (KJ)

CARNIVORA -- Caniformia

Vulpes vulpes – Fox

Jan to Feb 2022 Reading, vixen calling regularly, garden sightings of foxes regular in 2022 SU750712 (TM)

12/02/22 Tilehurst, healthy ad sitting in garden at midday SU670742 (per JL)

01/03/22 to 05/10/22 Tilehurst, The Withies, trail camera SU671743 (per KJ)

01/04/22 Tilehurst, allotments, regular sightings on trail camera SU670742 (KJ)

07/04/22, 2 Tilehurst, trail camera in garden SU666742 (JH)

24/04/22 Wickham, dead on M4 SU387721 (JL) 05/05/22 Padworth Common, scat on path SU621647 (JL)

29/05/22, 5 Earley, regular in garden, on this date a young small thin vixen lying on lawn suckling 4 cubs SU735710 (Renée Grayer)

24/06/22, 3 Holly Copse, Bradfield Southend, ad with 2 cubs SU5969 (per LB)

29/06/22 Tidmarsh, dead on road SU632735 &

04/07/22 Englefield SU631725 (JL)

01/08/22 to 05/10/22 Tilehurst, The Withies, juv on trail camera SU671743 (per KJ)

11/10/22 Harris Gardens, Whiteknights SU738713 (DO)

05/11/22 Tilehurst, scat left on prominent perch in garden SU665742 (JL)

CANIVORA -- Mustelidae

Meles meles – Badger

08/01/22 Winterbourne Wood, dead ad near active sett SU444722 (RN trip, JL)

09/02/22 Bradfield Southend, ad dead on road, & another 11/09/22 SU599710 (JL)

01/03/22,2 Tilehurst, The Withies, pair, active sett, trail camera SU671743 (per KJ)

27/03/22 Farncombe, ad dead on road SU319783 (JL)

01/04/22 to 05/10/22 Tilehurst, allotments, sightings throughout period on trail camera SU670742 (per KJ)

10/04/22 Chieveley SU461730 (JL)

12/04/22 Tilehurst, trail camera in garden SU666742 (JH)

05/06/22 Malpas, dead on M4 SU641729 (JL)

14/06/22 to 05/10/22, 2 Tilehurst, The Withies, juvs, trail camera SU671743 (KJ)

06/07/22 Wokefield Common, active sett SU656650 (JL)

17/09/22 Marsh Benham, dead on A4 SU4268 (JL) 03/10/22, 2 Tilehurst , scrub by allotments feeding, trail camera SU671742 (KJ)

03/10/22, 2 Tilehurst, scrub by allotments, trail camera SU671743 (per KJ)

13/11/22 Lambourn, The Holloway, active sett SU329834 (JL)

Mustela nivalis - Weasel

24/03/22 Rowstock SU473891 (RS) 12/11/22 Tidmarsh, by Moor Copse, dead on road SU634740 (JL)

Mustela erminea - Stoat

no records received

Mustela putorius - Polecat

27/03/22, 2 East Garston Woodlands, dead on road at SU354739 & SU346742 (JL) 08/05/22 Chieveley dead on road SU4573 (JL)

Mustela vison - American Mink

07/02/22, 2 dead on road Streatley SU346742 & Moulsford SU354739 (JL)

Lutra lutra Otter

05/03/22 Moor Copse BBOWT Res SU635740 (per Anne Booth)

15/05/22 Paices Wood, old corpse SU5863 (JL)

20/09/22 Thatcham reedbeds SU5065 (FB)

08/10/22 Beale Park, diving in lake SU618783 (per JL)

26/11/22 Moor Copse BBOWT Res SU635740 (Ailsa Claybourn)

ARTIODACTYLA - Cervidae - Deer

Muntiacus reevesi - Chinese Muntjac

07/01/22 Hosehill LNR SU646696 & $\ ^{\circ}$ 14/03/22 (JL) 15/02/22 Plastow Green, in garden & 17/02/22 SU537625 (KW)

01/03/22 to 05/10/22 Tilehurst, The Withies, on trail camera SU671743 (per KJ)

13/03/22 Plastow Green, eating dry birdseed from dispenser SU537625 (KW)

27/03/22 East Garston Woodlands, juv dead on road SU343745 (JL)

07/04/22 Tilehurst, eating tulips in garden SU666742 (JH)

14/04/22, 2 Owlpit Copse, Bradfield SU586731 (JP) 15/04/22 Chieveley SU4573 (JL)

05/05/22 Ufton Nervet SU640667 & 04/07/22 SU643674 (JL)

27/05/22 Moor Copse BBOWT Res car park, ad $\stackrel{\bigcirc}{\hookrightarrow}$ SU633738 (JL)

09/06/22 Aldermaston, imm dead on road SU617643 (JL)

13/07/22 Rushall Fm, Bradfield, SU584729 (JL)

08/08/22 Holly Copse, Bradfield Southend &

11/09/22 SU597701 (LB)

28/08/22 Bartons Copse, Moor Copse BBOWT Res, calling loudly SU641735 (JL)

24/09/22 Tilehurst, Cornwell Copse , crossed road SU656741 (JL)

05/10/22 Englefield, yet another large mammal corpse on this stretch of road over the M4 SU632735 (JL)

11/10/22, 2 Plastow Green, on bridleway SU537625 (KW)

Capreolus capreolus - Roe Deer

03/01/22, 6 Oven Bottom SU537835 (JH)

08/01/22, 3 Winterbourne Wood, separate

SU444721 (RN trip, JL)

19/01/22, 2 Sulham, eating cereal SU644744 (JL)

26/01/22, 2 Decoy Heath BBOWT Res SU610633 (JL)

08/02/22, 4 Caversham, 3 lying down, one grazing short turf SU706768 (JL)

27/02/22, 2 Hungerford, ad & juv both dead on road SU343687 (JL)

16/04/22, 3 Welford SU431724 (JL)

17/04/22 Lambourn Woodlands SU317761 (JL)

08/07/22, 6 Starvale Woods, Mortimer SU655654 (JH)

30/07/22 Moor Copse BBOWT Res, imm SU638733 (JL)

Dama dama - Fallow Deer

03/04/22, 13 Farnborough SU442832 (JL) 04/05/22, 8 Holly Copse, Bradfield, SU6070 (LB) 13/11/22 Lambourn Woodlands, Cleeve Hill, ad \bigcirc SU331763 (JL)

Vertebrates report contributors

With thanks to those who have contributed to this report. The names of some of the contributors are abbreviated and these include:

(FB) Fiona Brown; (JH) Jan Haseler; (KJ) Katie Jenks; (JL) John Lerpiniere; (LB) Liz Butcher, (DO) David Owens; (JP) Jo Parsons, (RS) Rob Stallard, (TM) Tris Marcousé, (KW) Ken White; (SW) Sarah White.

A blast from the past....1949

An excerpt from the online Naturalist (https://rdnhs.org.uk >blog)

The Naturalist Volume 1 No.1 1949, pp 3-4 (Naturalist01w.pdf)

THE OXFORD RAGWORT by Miss B. M. Jones

When one considers the numbers of plants that are continually being imported from other countries-for instance the small seeds in mud on shoes, mixed with corn and other grains, or clinging to rough cloth, wool, and hides-it seems strange that so few newcomers are recorded as being firmly established in Britain. Yet, even if a new species finds our climate suitable, it is not easy for it to become established in natural conditions, where a fierce struggle for existence is already taking place among an association of plants well adapted to the environment. The Oxford Ragwort, or Berkshire Groundsel, is therefore of particular interest to us, as during the last sixty years its spread has been so rapid.

The plant is a close relation of the Groundsel Senecio vulgaris, though larger and more branched. Its flowers are more handsome bright yellow in ,colour, with a central cushion of disc florets surrounded by a circle of about thirteen long ray florets. Flowering begins in March, and is most profuse towards the end of April, but continues intermittently until the winter. It is usually an annual, but specimens often survive for a second year, and sometimes even for a third. On the continent of Europe it is uncommon, flourishing on the piles of cinders erupted by Etna and Vesuvius, and in Sicily it is known as "St. Peter's Herb" In 1699 a few individuals were grown in the Herbarium at Oxford. The hairy seeds are blown considerable distances by the wind, and in 1794 a few struggling plants were noted growing on a near-by wall. By I 877 plants were observed near the railway station, the species having migrated less than two miles in nearly two hundred years. Here, in the clinkery railway sidings, it found conditions reminiscent of its native volcanic cinders, and it spread rapidly along the permanent way. The rush of wind from the trains helps to disperse the seeds, each with its parachute of silky hairs, and doubtless some of these actually avail themselves of the transport provided. Thus, some seeds were observed to float into a carriage at Oxford, later blowing out again at Tilehurst. By 1890 the plant was found at Swindon, and by 1916 it had travelled to Denbighshire. It has been recorded at Bideford, in Devon, and has made its way to Ireland, spreading along the railway from Cork to Dublin. Since the War it has been among the early colonists of the burned and bombed sites of London. It seems to be a town dweller, often being soon established on disused building sites, and other bare spots. In rural districts it is rarely found unless there is a railway close at hand.

This alien is abundant in Reading - on the walls of the Abbey ruins, on Air Raid shelters and waste ground, on dumps from Gas Works and Biscuit factory, and in side streets, as well as in the goods yards and railway sidings. The species seems to show considerable variation. G.C.Druce mentions a variety whose leaves have very jagged edges, which is the usual form found on walls and dry ground around Oxford and Reading. Varieties with broadly lobed, and even with nearly entire leaves grow in rich waste ground. As these forms are often mingled with the cut-leaved variety, it is difficult to relate these differences in habit to the environment. Suspected hybrids between the Oxford Ragwort and the common Groundsel have also been reported. It will be interesting to note what further ground is colonised by this unkindly named plant-for "Squalidus" means inelegant, which hardly seems suitable. The name adopted in the Prodromus was Senecio chrysanthemifolius - the chrysanthemum-leaved, but perhaps the most fitting name of all is that of "The Railway Ragwort."

The Weather in Reading during 2022 by Roger Brugge

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Averages and anomalies mentioned in this report refer to the climatological period 1991-2020. Historical records date back to 1901 for rainfall, 1956 for sunshine and to 1908 for most other weather elements.

2022 was the warmest year on record in Reading (1.0 degC warmer than normal) with the air temperature of 37.6 °C on 19th July being the highest temperature ever recorded there. It was almost 0.1 degC warmer than the previous warmest year, 2006. The warmest five years in the record have been during the period 2006-2022. As well as this warmth, 2022 was notable for dry spells and months until the end of the summer, that led to very dry soils and a hosepipe ban. Despite the wet autumn and December, the year's rainfall was about 10% less than normal. It was also a sunny year with 14% more bright sunshine than normal – although recently both 2018 and 2020 were even sunnier.

January

The year began with a very warm New Year's Day as the temperature reached 14.7 °C. The month soon turned cool, however, and overall was the only colder-than-average month in 2022 locally apart from December. It was also a dry month – the driest of the year apart from July and the driest January for 30 years. The 2nd was the wettest day, but only 2.9 mm fell that day making it the driest 'wettest January day' in the record. From the 12th until 2nd February just 0.9 mm of rain fell. On the 15th/16th pressure pulses from the Tonga volcanic explosion could be seen on the Reading barograph.

February

February was a very mild month, 2.0 degC warmer than average overall. There were only 2 slight air frosts and no snowfall, although the month was wetter than normal due to a wet spell around, and shortly after, mid-month. However, it was also a sunnier-than-normal month. It was the warmest February since 2002 and the sunniest for three years. The 18th was a windy day due to storm Eunice with a gust of 59 mph recorded, the strongest gust since February 2020.

March

March was mild, wet and unusually sunny. There was little air frost, and daytime temperatures were unusually high during the 21st to 26th. It was largely dry after mid-month while the 17th to 26th saw about 10 hours of bright sunshine each day. It turned cool on the 30th, with light snow falling on the 31st. On the 16th there was a fall of Saharan dust that was quite noticeable on exposed surfaces for several days and there was another, lesser fall on the 28th.

April

April was slightly milder than average, but also drier and sunnier than normal. The 9th to 30th recorded no measurable rain — a sign of things to come during the summer months. The temperature dropped to -3.6 $^{\circ}$ C early on the 3rd, the joint second coldest April night in the entire Reading record; only 2 April 1922 with -4.2 $^{\circ}$ C was colder in April. The temperature at grass tip level dropped and fell to -12.1 $^{\circ}$ C (the lowest of the entire winter-spring period) and this, along with the low air temperature, caused some damage to early buds that had been sprouted by the recent warmth.

May

May was warm but with near-normal sunshine and rainfall totals. There were a lack of cold nights with the lowest air temperature of 4 °C being higher than in any other May since 1999 and 2000. There were, however, 9 ground frosts during the month. Daytime temperature peaked mid-month and then slowly declined towards the close of May.

June

June was slightly warmer than average overall, despite being cooler than normal overnight under frequently clear skies. 5 nights had a ground frost, the final one being as late as the 21st – a few

days after the daytime temperatures had peaked at 31.3 °C. This heatwave was ended by the passage of a front that produced some large pressure fluctuations on the 18th and 19th, with a fall of Saharan dust on the 18th. It was mostly dry from the 6th to 24th, a period when there were many very sunny days helping to make this the second sunniest June this millennium.

July

July will be remembered for its warmth and shortage of rainfall. It was the fifth warmest July on record and was 3 degC warmer than average during the day. This was largely due to a heatwave that produced the highest temperatures on record over both Reading and much of the UK. Temperatures reached 30 °C on the 11th and 12th while overnight into the 13th 20.0 °C was the highest July minimum temperature on record – at least until 20.1 °C was recorded on the 19th. On the 18th the air temperature rose 21.9 degC to 34.9 °C, which was the fourth highest July temperature until the 19th when 37.6 °C was recorded - the highest air temperature in the entire Reading record. Thereafter, daytime temperatures returned to values closer to those expected at the end of July. Just 3.1 mm of rain during the month made this the driest July on record – with most of this (2.6 mm) falling on the 20th. Indeed from 1 July to 23 August just 6.8 mm of rain fell and, with very sunny conditions during the first three weeks, soils were very dry by the end this period.

August

August was warmer than average (especially by day), dry and the sunniest month of the year. The 8th, 11th and 12th were three of the five sunniest August days on record. The 5th to 14th had over 10 hours of sunshine each day, and the total of 250 hours of sunshine made this the fourth sunniest August on record and the sunniest since 1995. It was also the fourth warmest August on record and was another month that was exceptionally warm by day overall, with another hot spell during the 7th to 15th when temperatures reached 30 °C on five days. Three-quarters of the month's rain fell on the 24th. A total of 62.7 mm of rain made this the fifth driest summer on record, while it was also the joint warmest summer on record with 2006 and 2018.

September

September was a relatively wet and dull month, with temperatures close to normal overall. Temperatures by day and night followed the gradual decline expected at the time of year with the first winter ground frost occurring on the 17th. Most of the rain fell during the first eight days with the 8th being the second wettest day of 2022.

October

October was a warm month both by day and night and was the third warmest October on record. There were no air frosts and the warmest days occurred as late as the 27th and 29th. The rainfall total was close to normal overall, but much of the rain fell during the period 16th-23rd.

November

November continued the warm trend and was the tenth consecutive warmer-than-average month in Reading. It was also the joint third warmest November on record and did not record any air frosts. It was the wettest month of 2022 with the 2nd being the wettest day of the year. It was also a dull month — the dullest of the year apart from a duller December. Overall, 2022 had the joint second warmest autumn on record (with 2011), while the four warmest autumns have been since 2006.

December

December brought the main cold spell of 2022 between the 7th and 18th; this cold spell ended rapidly on the 18th when the temperature range was 17.0 degC, the second highest on record for December. Indeed, the 18th-31st saw a return to unusually mild conditions, although this was not enough to prevent December being the coldest month of the year with the coldest nights of the year during the 15th-18th. There was almost no precipitation during the first 17 days (there was some snowfall on the 12th but not enough to give a complete cover of lying snow) but the month overall had a near-normal precipitation total.

This report was compiled using the daily weather observations made at the University of Reading climatological station — most of these being made by our chief observers Cahyo Leksmono, Ashley Dobie and Martin Lindupp. The University also operates an automatic weather station that gathers weather information continuously. Details can be seen at

https://research.reading.ac.uk/meteorology/atmospheric-observatory/atmospheric-observatory-data/-there is even a mailing list that you can subscribe to in order to have daily weather reports sent direct to your inbox.

Temperature 2022

	Mean Max temp	Mean Max anom aly	Mean Min temp	Mean Min anom aly	Mean temp	Mean temp anom aly	Highest Max temp	Date	Lowest Max temp	Date	Highest Min temp	Date	Lowest Min temp	Date	Lowest grass Min temp	Date
	°C	°C	°C	°C	°C	°C	°C		°C		°C		°C		°C	
J	8.5	0.5	0.9	-1.2	4.8	-0.4	14.7	1	4.0	24	11.8	1	-4.0	6	11.4	6
F	11.0	2.4	3.7	1.6	7.4	2.0	14.5	16	7.7	24	7.6	2	-2.5	26	-6.5	23
M	12.6.	1.4	3.6	0.1	8.1	0.8	19.4	23	7.1	5	8.5	10	-2.0	21	-10.5	8
Α	15.2	1.0	4.3	-0.8	9.8	0.1	21.5	15	8.9	1	9.4	12	-3.6	3	-12.1	3
M	18.7	1.3	8.8	0.9	13.8	1.1	24.5	17	12.5	1	12.9	16	4.0	9	-3.5	9
J	21.9	1.5	10.2	-0.6	16.1	0.4	31.3	17	15.7	5	15.1	18	5.2	2	-2.5	2
J	25.7	3.0	13.6	0.7	19.7	1.9	37.6	19	20.5	1	20.1	19	7.2	5	0.0	4
Α	25.9	3.6	13.8	1.1	19.9	2.4	33.0	12/13	19.1	25	19.1	24	8.6	7	0.2	6
S	19.4	0.1	10.8	0.4	15.1	0.2	26.0	12	15.0	28	16.1	4	3.1	17	-1.5	17
0	17.8	2.7	9.4	1.5	13.6	2.1	21.2	29	15.4	14	15.1	5	1.5	11	-5.0	11
N	13.0	2.0	7.0	2.3	10.0	2.2	17.4	12	6.7	29	12.5	11	2.5	28	-4.0	20
D	7.6	-0.8	0.7	-1.8	4.1	-1.4	14.0	30	-0.1	11	8.5	31	-6.9	15	-13.6	15
2022	16.5	1.6	7.3	0.4	11.9	1.0	37.6	July	-0.1	Dec	20.1	July	-6.9	Dec	-13.6	Dec

Precipitation 2022

	Total precip itation	% of mean precip itation	No. days with 0.2mm or more	No. days with 1.0mm or more	Greatest fall in 24 hrs	Date	No. days with air frost	No. days with ground frost	No. days with snow /sleet falling	No. days with 50% ground snow cover 0900GMT	No. days with thunder	small	No. days with hail over 5mm diam	No. days with fog 0900GMT
	mm	%	days	days	mm		days	days	days	days	days	days	days	days
J	15.2	24	11	5	2.9	2	15	22	3	0	0	0	0	3
F	56.6	126	15	9	17.2	13	2	13	0	0	0	2	0	0
M	47.0	117	13	6	14.1	16	2	18	1	0	0	1	0	4
Α	20.0	41	5	4	10.5	6	5	22	0	0	1	1	0	0
M	43.7	100	17	12	10.7	15	0	9	0	0	1	1	0	0
J	30.7	65	12	7	7.5	5	0	5	0	0	1	0	0	0
J	3.1	6	3	1	2.6	20	0	0	0	0	0	0	0	0
Α	28.9	51	4	3	21.7	24	0	0	0	0	1	0	0	0
S	81.5	164	14	11	23.1	8	0	5	0	0	3	0	0	1
0	72.3	98	17	13	18.2	23	0	6	0	0	1	0	0	2
N	120.5	167	17	16	25.7	2	0	9	0	0	0	0	1	1
D	68.4	105	12	10	15.3	31	14	22	1	0	0	0	0	2
2022	587.9	90	140	97	25.7	Nov	38	131	5	0	8	5	1	13

Sunshine & Soil Temperature 2022

	Total sunshine	% of average sunshine	Greatest daily sunshine	Date	No. of sunless days	Mean 10cm soil	Mean 30cm soil	Mean 100cm soil
			total			temp	temp	temp
	hrs	%	hrs		days	°C	°C	°C
J	70.1	127	6.9	14	9	3.7	6.2	8.2
F	100.1	128	9.6	27	4	5.3	6.9	8.0
M	161.8	136	10.7	24	8	6.8	8.1	8.6
Α	195.6	115	12.8	21	0	10.0	10.1	10.1
M	191.3	96	13.1	27	1	15.4	13.8	12.7
J	242.3	124	13.6	20	2	18.5	16.3	14.8
J	239.9	118	14.1	14	0	21.8	18.9	16.8
Α	250.0	130	13.9	7	1	20.9	19.6	18.1
S	118.7	83	9.9	17	1	15.3	16.6	17.0
0	127.4	118	8.3	6	1	12.1	13.7	14.7
N	54.3	92	5.4	4	6	9.0	10.9	12.8
D	32.6	71	4.2	15	15	3.6	6.0	8.7
2022	1784.1	114	14.1	July	48	11.9	12.3	12.5

Wind details 2022

	No.days with Gales	No. days with Northerly winds	No. days with NE'ly winds	No. days with Easterly winds	No. days with SE'ly winds	No. days with Southerly winds	No. days with SW'ly winds	No. days with Westerly winds	No. days with NW'ly winds	No. days with calm winds at
	days	days	days	days	days	days	days	days	days	days
J	0	1	0	2	2	1	8	11	4	2
F	0	1	0	0	2	3	12	10	0	0
M	0	1	8	10	4	3	2	1	1	1
Α	0	1	6	9	1	3	1	6	3	0
M	0	2	3	1	0	2	8	11	4	0
J	0	0	8	2	4	3	8	5	0	0
J	0	6	1	2	2	2	5	12	1	0
Α	0	2	10	5	0	1	5	6	2	0
S	0	3	3	1	3	6	2	5	7	0
0	0	2	1	3	4	4	12	4	0	1
N	0	1	2	3	2	8	9	3	2	0
D	0	3	4	3	1	3	8	4	5	0
2022	0	23	46	41	25	39	80	78	29	4