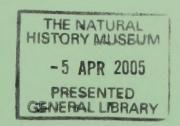
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The Reading Naturalist

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THE READING NATURALIST

No 57 for the year 2004

The Journal of the Reading and District Natural History Society

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EDITORIAL - PHENOLOGY

As part of a general review of the timing of the Society's activities, it has been decided to realign *The Reading Naturalist* to the calendar year. Consequently this edition reports meetings over the 15 months from October 2003 to December 2004. Recorders' Reports have always been based on calendar years, so these are unchanged. (Members will recollect that "phenology" is the study of the times of year when things happen, like flowering periods, bud burst and leaf fall. It is currently much in vogue as an indicator of climate change)

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OBITUARIES

Jim Newman

Jim died on 30 June 04 after a long illness. He was a member of the Society for many years and was President in 1960-2. He delivered three presidential addresses: "Man and Natural History" in 1962, "Natural History of Mosquitoes" in 1963 and "Measurements in Biology" in 1964 and was on the committee from 1973-6 and again in 1991-2. Jim audited the Society's accounts from 1990-95. He was also a regular leader of walks, particularly to Thatcham Marsh, Padworth Common and Pamber Forest. On an excursion to Frensham Ponds he started by showing a map of the geology of the area before leading the walk to see the flora and fauna. He was confined to his home for some years, but never lost his sense of humour and interest in life, especially natural history and astronomy.

Arthur Moon

After joining the Society in 1961, Arthur contributed the annual Weather Reports for *The Reading Naturalist* from 1962 to 1973. He also wrote an article on "Atmospheric Pollution" in 70/71. Despite moving out of the area many years ago, he very kindly remembered us in his will and bequeathed part of his natural history library. The sale of these books has raised a considerable sum of money for the Society.

Norman Shaw

A keen ornithologist who led occasional walks for the Society, Norman passed away on 6th January. He was a member of the Society for 23 years.

PRESIDENTIAL MUSINGS

Chris Bucke

This President came to live in the Reading area in 1972 at the instigation of his then employers rather than as a result of a reasoned decision. In fact, to someone from north west Britain, Reading ranked with Luton and Watford as one of those boring places with a Division 3 South football team and little else to recommend it. It did not have sea and Gannets or moors and Grouse. To find Heather was a matter for comment. Tinkling streams running through ferny glens over algae-covered rocks were few and far between. To work in London, which became the case in 1985, was emphatically not a lifestyle ambition.

Now it is time for this President to make a decision as retirement looms – to stay or to move. Warmer places hold little appeal, especially those with no seasons so the decision is whether to stay or to move back north. A mental pro's and con's list is well-developed, concentrating on what would be missed. To a keen gardener, Reading is a wonderful centre, with Kew, Wisley and the Savill Garden as well as many other superb private gardens readily accessible but there are other places that must be visited at least once for a year to be complete, ideally as stops during a country walk.

These days, late January is the start of the flower season. Our area has some special places for Snowdrops: my favourite is the woodland between Littlewick Green and Hurley (which has the remarkably remote Dewdrop pub as a bonus). Other early spring treats are Green Hellebores, a very special species to be found in the Warburg Reserve and beside the Ridgeway near Nuffield. It is imperative to walk beside the Kennet and Avon canal at almost any time of year, and Hosehill, especially in late April with Nightingales singing and the poplars pink with newly-burst leaf buds. The Fritillary field at Swallowfield must never be missed and usually provides other things of interest, like feral Mandarin Duck, Grass Snakes and early Orange-tip Butterflies. Moor Copse is essential for Bluebells and the extra thrill of Early Purple Orchids, then Hartslock for the chalk vegetation including, of course, the Monkey Orchids. There is never enough time in June, with so much to see and, not infrequently, poor weather to consume some of the time. My favourite June spot is Warren Bank for Bee Orchids and the first sightings of summer butterflies.

For me July is perhaps the best month in this area: the Berkshire Downs can match alpine meadows in a moist summer and the profusion of butterflies there can be wonderful. No summer is complete for me without at least one sunny afternoon spent in Pamber forest in mid-July seeking, and finding, White Admirals and Silver-washed Fritillaries. It seems to me that other species, such as the Marbled White, are more frequent there than in the past. Chalk downland still rules in August – one of Ken Thomas's walks introduced me to the field verges of Gatehampton, above Goring, which are the homes of a most impressive numbers of butterflies.

A dry September can be the most boring of months (unless you are a home wine-maker) but moisture brings out the fungi, in different abundances in different locations in different years. By October butterflies are a bonus, but what a bonus they can be! Ivy blooms feeding Commas, Red Admirals, Peacocks, Painted Ladies, Brimstones and Speckled Woods can be a delight, in particular in the Pang valley. Autumn colours enliven late October and November, in beechwoods especially, more vividly than further north and the fungi continue. December is the month for people, socialising and reminiscence about the year past, plus, ideally, frosty walks with views such as that from Lardon Chase. Which is more pleasant, thoughts of the year past or anticipation of the year to come? I am inclined to stay!

MEMBERS' OBSERVATIONS

Cath Butcher

Before each evening talk begins, members are invited to announce their observations. Here is a selection of observations from the 2003/2004 winter meetings:

- 21 Oct 03 Ted Nelson had seen 23 Golden Plover while a Red Kite at Sulham and Grass Snake were reported by Ivy Brickstock, Fiona Hoggarth had seen a dead Hare near railway tunnel, Child Beale Trust. Colin Dibb saw a Swallow at Ashampstead Common, where Martin Sell reported 3 Buzzards, 4 Red Kites and Speckled Woods & Red Admirals. John Marshall had seen a late Humming Bird Hawkmoth.

 Ken Thomas saw a white butterfly after a sharp frost; other late butterflies were 3 Small Coppers at his home on 17 Oct., following 2 Small Coppers, a Small White and a Red Admiral the previous day. On 21 Oct, late dragonflies at Cholsey Marsh: Common
- 14th Nov 03 John Marshall reported a Yellow-browed Warbler at Theale Gravel Pits on 30 Oct, a Pipistrelle bat at home and a Red admiral at Emmer Green 1 Nov Tony Rayner had had 2 darters on his pond; 2 Red Kites with 3 Buzzards on 27 Oct. Jan Hasler mentioned Redwing in her garden. Paula Dormer had 9 Small Tortoiseshells and Chris Bucke had seen Clouded Yellow and Peacock at Corfe Castle

Darters and Migrant Hawker and 10+ Siskins at his home.

- 18th Nov 03 Martin Sell reported Song Thrush earlier that day, Common Darter at Woolhampton on 16th and Mistle Thrush on 17th. Tony Rayner had also seen a Mistle Thrush and Dora Lucy had seen two, as well as Nuthatch and Muntjac. John Lerpiniere mentioned a Swallow at Searle Lane, Pingewood on 16th; and a Brambling.

 Chris Bucke reported Blewits in his garden, and Muntjac and Roe Deer on 16th. Sheila Smith saw hundreds of Lapwings near Theale Service Station Theale on 12th. Ken Palmer saw a pair of Muntjac: doe and buck, at Sulhamstead on 16th
- 2nd Dec 03 Martin Sell reported Chiffchaff. Meryl Beek had seen the first Snowdrops coming through. Jan Hasler had had a female Blackcap in her garden while Paula Dormer had Butterflies in her house. Chris Bucke mentioned 2 Moorhens by the railway in Hodsall Road Recreation Ground in the centre of Reading.

 Dora Lucy listed 2 Nuthatches in garden, and a Jay, Goldfinch and 2 Mistle Thrushes Tony Rayner had seen a Barn Owl near the Wallingford Bypass on 26th Nov.

6th Jan 04 N Dunn had a seen a bee at the end of December.

V. Vincent saw a House Sparrow at her house.

Mike Keith-Lucas mentioned a Fox eating a dead Badger.

Colin Dibb had seen a December Moth attracted to light in Tilehurst.

Tony Rayner listed: a flock of 12 Redpoll feeding on Silver Birch seeds in east end area of Cholsey from 16 Nov for some weeks; 20+ Corn Bunting over Red Cow on 22 Nov and 65 at Churn on 3rd Jan; a flock of 100+ Linnet on hill beside Breach House, Cholsey on 28th Nov; a dead young female Badger in the middle of the field opposite Cholsey Church on Christmas day, 3 Red Kites over Cholsey village centre on 27th Dec; 2 Roe Deer on Cholsey Hill on 1st and 4 on 4th; a flock of 35 Skylark at Manor Farm, Cholsey, on 4th Jan.

20th Jan 04

Chris Bucke reported a Barn Owl at South Moreton, Didcot Road the previous day and a flock of 60 Redwings in Prospect Park on 15th. Colin Dibb relayed a report of a flock of Crows reported by farmer at Checkendon. Martin Sell had seen Waxwings.

3rd Feb 04

Barn Owls were reported by Tony Rayner on 28th Jan and Ken Palmer at Grazeley. John Marshall had 25 Blackbirds on his lawn and 3 thrushes seen regularly in garden. Martin Sell had 9 Redpolls in garden on 24th Jan, a female Smew, 46 Shoveller and 2 Bitterns at Hose Hill. June Housden told us a male Red Purse Spider had been found at Goring primary school.

17th Feb 04

Mrs.Raper had seen a Crossbill. Martin Sell reported Great Grey Shrike at Berry Down and 3 Short-eared Owls in same area, and a female Blackcap in his garden. Ken Grinstead had seen Blackthorn in flower. Yvonne Robinson saw 2 black swans displaying with a white swan (between Reading & Homebase) Norman Hall described cherry blossom.

Jan Hasler reported Elder leaves and the first newt in her pond.

Dot Nelson had seen a Merlin eating a Greenfinch at Caps Lane Cholsey on Feb 8th. Tony Rayner had seen 65 Corn Buntings on 12th and 25 Yellowhammers on 13th at the same place. He also reported Blackcap in full song in the centre of Wallingford and fresh Badger diggings at Red Cow on 15th. Other members listed 5 Short-eared Owls, Hen Harrier, 12 Golden Plover and Great Grey Shrike at Bury Down, West Ilsley on 15th and a Badger crossing the Wallingford bypass on 16th.

2nd Mar 04

A Merlin at Child Beale Reed Beds was reported by Fiona Hoggarth. Dora Lucy had seen a Treecreeper in her garden. Sally Rankin saw a Grey Wagtail in Henley. Norman Hall mentioned a white almond tree, at the Three Tuns, Earley and 2 ornamental cherries in Northcourt Ave. Chris Bucke mentioned Butterbur by canal and Coltsfoot at Sheffield Bottom along with 20 Snipe. M.K.Lucas had seen 2 mating Toads and Heather Baker reported a male and female Blackcap. Ted Nelson had seen another Merlin depluming a Greenfinch. Martin Sell reported 20 Redpoll.

16th March

Tony Rayner has had Tortoiseshell, Peacock and Brimstone in his garden.
Chris Bucke mentioned Green Hellebores at Nuffield.
V. Vincent reported 3-inch square frogspawn
Stewart Hine had seen a Hairy-footed Flower Bee
Martin Sell had seen a Barn Owl at Warren and female Eider at Burghfield
Jan Hasler had had a Slow-worm in her garden.
John Marshall reported several bats in flight that night.

EXCURSIONS: October 03 - December 04

Meryl Beek

During this period there have been 38 excursions, with varieties of venues and habitats. These include 10 walks on Wednesday mornings, which have been well-supported and enjoyed. With the exception of one or two meetings, numbers have averaged about 10 people. Most of these are members of the Society, but it has been pleasing to welcome some visitors, most of whom are friends or relatives, but also a few through newspapers and other advertisements. It is hoped that some of these will become members soon.

The 2003 season began on Saturday, October 18th, when Colin Dibb led a party of 16 members and two guests on a walk over Ashampstead Common and adjacent land. The party proceeded inside the 13th century deer park boundary with chalkland plants and trees including a clump of Wild Service Trees. The open ground to the north was gained via Child's Court Farm where hedge shrubs were a feature including Barberry. A Christmas Tree plantation was crossed and an ancient coppice and standard wood seen including an old coppiced Ash with ten trunks. Beautiful autumn tree and shrub colours could be seen from an ancient hay meadow and through the woodland walk back.

A fungus foray was led by Gordon Crutchfield on 1st November in Nuney Green Woods. The first significant October rain had arrived on the 28-29th of the month, but it wasn't in time to produce many fungi for the foray. The meeting was attended by nine people. A list has been submitted to the Fungus recorder, but even the few species found were present in only very small numbers.

On 6th December, Chris Bucke and 12 other members met at Shinfield Grange and walked to Hall Farm, across the Holt, round into Bearwood, past Ellis's Hill Farm, round to Arborfield Church and back. The conditions were dull and damp at first but soon brightened and in spite of recent rain, conditions underfoot were not too muddy.

The area is good for small birds which feed on grains dropped in the area of the experimental dairy farms. Many dozens of Chaffinches were noted, also Greenfinches and Goldfinches. Fungi were prominent, with more in the hedges and ditches than the woodland. Some fine Parasols were noted, some Field Mushrooms, one or two Blewits, and several species of ink cap. One specimen of what was tentatively identified as *Panellus serotinus* was found near the Holt. In Bearwood *Trametes versicolor* was noted on several trees that had been damaged by fire.

December is not a good time to find plants but some fine specimens of Butcher's Broom were noted near the Holt, also Soft Shield Fern was present.

A visit to the Oxford Museum of Natural History was planned by Tony Rayner on Wednesday 10th December. The purpose was to see the art exhibition of butterflies, moths and other insects by Richard Lewington. Disappointingly the weather was very foggy and several members felt that the driving conditions would be difficult. As a result only five people attended.

2004

A party of 10 enthusiasts accompanied Michael Keith-Lucas on an early new year walk round Whiteknights Park and the Harris Garden on January 4th. It was a cloudy winter afternoon but free of rain. Members were pleased to see the rare Beech from Castle Howard (one of only two in the UK). This had been given to the late Catherine Olver. Other trees of note were the Caucasian Wingnut, Hickory and various oaks including *Quercus* x *Hispanicus* "Lucombe Oak", *Quercus suber* Evergreen Cork Oak and *Quercus* x *Turneri* "Turners Oak". Some of the trees had been planted by the Marquess of Blandford and in the Harris Garden a stump of Turkey Oak was counted for rings. 199 rings proved this to be one of the Marquess' plantings.

About 20 people which included members of BBOWT where led by Martin Sell at Pagham Harbour, West Sussex on Sunday January 20th. This was a sunny and still day with ideal viewing conditions. A large flock of Brent Geese was grazing in a field next to the harbour road and the tide was still rising as the party set out. Waders seen on the rapidly diminishing mudbanks included Grey Plovers, Blacktailed Godwits, Knots, Dunlins, Redshanks and Curlews. Ducks included Wigeon, Teal, Pintail, Shelduck and Goldeneye. Five Mediterranean Gulls was seen on a lagoon at one side of the harbour.

A Black-necked Grebe swam in the deeper water in the middle of the harbour. Grey Plovers, Oystercatchers, Turnstones and Ringed Plovers were roosting on the last remaining shingle island in the bay while four Slavonian Grebes were further out to sea. An unexpected sighting was a Common Seal, loafing on a mud bank, and the last discoveries of the day were a distant Little Egret and a Peregrine.

Séan O'Leary's annual Bryophyte excursion was held on February 21st in Clayfield Copse, Emmer Green. As usual, the party were taken "back to basics" – quite necessary as most people find mosses and liverworts rather difficult. 15 people were present, and apart from Bryophytes, it was interesting to see the conservation work being done in this nature reserve so near to Reading. Thank you Séan.

On a Sunday, 7th March, by popular request, a party of 12 travelled to the London Wetland Centre at Barnes. That day was enjoyed by all who visited the reconstructed ponds, pools, lakes and reedbeds and some of the wildlife it is attracting. Sir David Attenborough has described the wetland centre has "an ideal model for how the natural world and humanity might exist alongside one another in the centuries to come."

It was disappointing that the long-awaited combined meeting with the Abingdon Natural History Society only attracted three people. The visit was on 4th April to the new RSPB reserve at Otmoor. Maybe it was a bit much to expect large crowds on a Sunday morning at 10am to go to the north of Oxford, nevertheless another "get together" with Abingdon Nat's must be tried in the not-too-distant future.

On 29th April, which was a dull but still evening after a wet day, Chris Bucke led six members and a dog from the end of The Warren, up Gravel Hill and across Caversham Heath golf course, through Chazey Wood down to the grain store and back along the bridle path. The main target was to enjoy the Bluebells in Chazey Wood and these were duly admired, albeit in rather dull light, together with a good range of other woodland species. After a moist spring, a very good range of fungi was seen, including a *Peziza* species, *Agrocybe praecox*, *Bolbitius vitellinus*, *Pluteus cervinus*, and Wood Ears. It was a quiet, unspectacular walk but enjoyed by all.

"A south-facing slope with dry acid soil at the top, a wet area across the mid-slope, and an acid sandy flatter area, adjacent to water, at the bottom. Most of the field is cut for hay, but with uncut areas reverting to woodland." This is a good description of Ron Ward's Flower Meadow at Tadley, around which Graham Saunders led a party on 8th May. Seven members were present. Among other plants, Marsh Thistle, Henbit Deadnettle, Yellow Rattle and Bitter Vetch were recorded.

"Almost the biggest excursion of all time" could be the description of Martin Sell's annual trip to the gravel pits at Theale on the 12th May. 17 members were present, and in excess of 25 BBOWT guests came. In spite of large numbers, the Nightingale was heard well, and the evening was voted a success.

On 22nd May Colin Dibb led another excursion to Rushall Manor Farm and its surrounding fields and woods, including a private nature reserve by the River Pang. A good variety of plantlife was observed in all the locations, including Solomon's seal, Hemlock Water-dropwort, Star of Bethlehem, Water Avens, and Water Chickweed in the nature reserve. Some members stayed on late and and walked to an abandoned field to the north of Rushall Farm where unusual white Bugle was flowering. The orchids with spotted leaves were not yet in flower. For these and other goodies another visit will have to be made to this field later in the season, perhaps next year?

A visit to Dogmersfield to see the Basingstoke Canal and Tundry Pond was held on 30th May. Michael Keith-Lucas led, with 15 other people present. Good lists of botanical finds were made at various points on the route, including Bird's Nest Orchid, Scaly Male-fern and Small-leaved Lime on the canalside. At Tundry pond and by the footpath were Fen Bedstraw, Celery-leaved Buttercup, Early Forget-me-not, and Brooklime among other things. A female Banded Agrion was also recorded. A pleasant afternoon – in spite of some rain!

It was Rod d'Ayala's turn to lead a group on 5th June, and the party of 15, which included two members of BBOWT, looked at the Turville Heath area, including a lime avenue on the Northend Road. Plants seen included Germander Speedwell with a Lighthouse Gall, Small-leaved Lime, White Helleborine in the roadside leaf litter, Green-flowered Helleborine and Wood Barley, which is a Chilterns speciality. Insects included a Silver-ground Carpet moth, a grey fly-induced gall on a Male Fern, and a Redheaded Cardinal Beetle.

On 9th June 11 members met on a warm evening at the south end of Circuit Lane in Southcote, a new area to most of those present, and walked through water meadows to the Holy Brook and on to Southcote Mill, then along the canal to the rather spectacular weir, returning to walk beside the Kennet almost to Burghfield and back along the towpath. There was interest for all: a pile of gravelly soil had Corn Marigolds and Cornflowers, with signs of other interesting species to come. The water meadows were rich in Comfrey, Valerian, the usual wetland umbellifers, buttercups, handsome grasses and, in the mill race and the canal, Yellow Waterlilies. The first knapweeds of the year for most members were spotted close to the weir. Birds and damselflies starred though! Banded Agrions were plentiful and there were some areas of grass almost blue with roosting Common Blue and Blue-tailed Damselflies. Some of the party spotted a Kingfisher and all heard Cetti's Warblers, Willow Warblers, Sedge Warblers, Reed Warblers, Garden Warblers, Blackcaps and a Nightingale. A Common Tern fished spectacularly in the canal and some time was spent in attempting to determine how many families of Canada Geese there were in the crèche of goslings on the canal – the consensus was three. Thank you Chris Bucke for this walk. A list of species seen was compiled by Susan Twitchett.

The coach outing to Corfe Castle was well supported on 19th June and 38 people enjoyed the day out "doing their own thing". A number decided on the railway down to Swanage, and some others attended a craft show in the castle grounds – including three witches in the party who bought broomsticks! Others maintained proper natural history interests, and the main party headed off to the west and found both wet and dry heathland areas to explore. A number of others botanically explored the lower slopes of the castle and were able to record Wild Clary (*Salvia horminoides*), Bastard Toadflax (*Thesium humifusum*) and Bee Orchid (*Ophrys apifera*). Vervain (*Verbena officinalis*) was seen growing on the castle walls. An excellent day!

Veronica Vincent led the party round Lardon Chase on 3rd July and this ever-popular site attracted 19 people. Some good plants were in flower including Sweetbriar, Long-stalked Cranesbill and White Horehound which is a comparative rarity. After tea and a time on Lardon Chase, the party continued up to the golf course. This part of the excursion produced Pale Toadflax, with some white-flowered plants; also many other late summer chalk grassland species. Thank you Veronica!

An outstanding event of the summer was the superb mothing night at The Red Cow, Cholsey on 16th July, with twenty-one people present – including at least four experienced "mothers". 164 species were recorded and grateful thanks are extended to Ro and Tony Rayner for hosting this event, including the peaceful walk round their fields and garden before darkness fell, and the refreshments in their house.

It is some years since the society has been to Hungerford Marsh, but this was corrected on 24th July when Roger Frankum, the warden of this BBOWT reserve, took a party of 16 members round. Plants seen in the reserve included Fen Bedstraw and in the marsh area, Monkey Flower, Marsh Ragwort, Water Speedwell, Skullcap, and *white* Ragged Robin. The birds in the marsh included a Dabchick and a Common Tern

On 31st July 16 people met for a walk across Padworth Common on a sultry afternoon. The first stop was the pond on the northern side where pines have been removed to open up the habitat. There is a good population of Marsh Pennywort here and Sally Rankin found the tiny pink-tinged umbels of flowers under the leaves. Broad-leaved Helleborine was seen under the birch on the way to the start of the Alder gully. Good finds here were Marsh Violet, Opposite-leaved Golden Saxifrage, Greater Tussock Sedge, Bulbous Rush and Hard Fern.

After sorting out the three heathers (Ling not yet in a flower), the larger southern area of heath to Burnt Common was crossed where damp acidic grassland has Creeping Willow, Marsh Speedwell and what appeared to be Meadow Thistle. Dwarf Gorse is scattered along the track sides and its bright green foliage contrasts with the golden flowers. West Berkshire Council, the owners of Padworth Common, have recently declared the site a Local Nature Reserve and plan to fence and graze it in the near future. It will be interesting to see how the site develops. Janet Welsh, the afternoon's leader, will keep the Society informed.

The afternoon of 8th August was extremely hot and sultry, with threatening rain, which came later. As a result only four people turned up for Kit Brownlee's walk round the Tilehurst Parks. In the circumstances, only McIlroy Park was visited, and in the open space there were good views across the River Thames to Mapledurham. Quite a large number of butterflies were seen including a Gatekeeper, more than five

Holly Blues, more than 12 Meadow Browns, two Small Coppers and a Speckled Wood. In the wooded area there were two Sparrowhawks and a Jay calling, and a variety of common flowers including Ling. Dead Man's Fingers fungus was also seen. This is a beautiful oasis in a quite heavily built up area of Reading. The Society must go back soon to complete the rest of the parks.

August numbers are generally low, and it was a party of only six people who got to Scuthammer Knob on the Downs for a pleasant afternoon's walk down to the source of the Ginge Brook (dried up!) During the excursion, led by Meryl Beek, the plants growing on chalk were contrasted with the ones lower down on the greensand. It was a day of far reaching views, which added to the interest and tested members map-reading skills.

An afternoon with a difference was held on 5th September when Graham Saunders led a "Spider Afternoon" on Tadley Common. With the help of books, about six spiders were identified within a few yards of the car-park. These included several crab spiders, (including at short-legged green one); the Garden Spider, also *Araneus quadratus*; *Linyphia triangularis*; "buzzing spider" (*Anyphaena accentuata*) and *Drassodes cupreus*. Afterwards Graham invited the party to his home nearby where they were able to look closer at the spiders with the aid of his microscope. Seven people attended.

Alice Ayers, assisted by Eric Ayers, led a group of eight from Waltham St Lawrence to explore the locality and Shottesbrooke Park on 12 September. A large number of plants were recorded, including Field Pepperwort and the Duke of Argyll's Tea-plant. A number of fungi were found, and birds included a Peregrine Falcon and a Turtle Dove. An interesting insect was an Elephant Hawkmoth larva. Thank you Alice for leading.

Malcolm Storey lead a combined group of 10 people from the Society and the Thames Valley Fungus Group on a walk around the old Bomb Dump, Bowdown Woods. After a damp start the weather improved and members saw fungi in abundance and variety. Notable finds included *Lactarius citriolens*, *Lepiota grangei* and *Pluteus leoninus*.

Gordon Crutchfield led another fungus foray on Saturday 24th October to Lackmore Wood, near Woodcote. This wood was a favourite haunt of Alan Brickstock, although the Society had not visited it for a long time. Far more fungi were found this October and a list has been submitted to the recorder. A non-specialist remarked on its being "the year of the Butter Cap" – they were everywhere! 11 members present.

14 members and friends arrived at Farley Hill Village car-park on Saturday 27th November for Chris Bucke's walk down to the Rivers Whitewater and Blackwater – and their joining point the Broadwater. Over 20 birds were recorded including Long-tailed Tits, a Tree Creeper, Fieldfares, a Kestrel and a Red Kite. Marsh Chickweed was growing (and in flower) in a wet patch. Other plants still flowering included Field Pansies, Creeping Buttercup, Dove's Foot Cranesbill and Fumitory, also quite a lot of fungi (unrecorded).

And so the Society comes to the end of another year of excursions, which all will agree have been numerous and diverse. Special thanks go to all the walk leaders, especially two or three who are reasonably new to the job.

Colin Dibb must be especially thanked for his sterling work in keeping records at 24 of the excursions. Thanks go to various other people who have made records at different times. The Society is always grateful for the large number of experts that it has available, who are always ready to teach others graciously and to share their natural history expertise. Now the society goes forward into the new year – let's make it even better – if that is possible!

WEDNESDAY WALKS

Ken Thomas has excelled himself this year with the variety of venues his morning walks have covered. During the winter months of November 2003 and January and March 2004 he has led "informal walks" which means phoning him for a venue not more than 48 hours beforehand. These have covered the Checkendon area, where Beech leaves were still falling on 12th November (12 people), Beenham on the 21st January (11 people, who saw a large number of winter birds), and Cane End on 17th March (10 people, who saw Buzzards and Skylarks and Lesser Celandine in flower).

The six summer season walks started on the 7th April which was attended by 18 people in the Curridge area. A number of plants including Yellow Archangel, Moschatel and Common Dog Violet were in flower. On 5th May 7 people explored the Hambleden area; Steventon and Milton was the venue on 2nd June and was attended by 10 people. These villages are just within the Society's 20 mile radius for records.

7th July saw a party of 13 visit Dunsden and the area very near Caversham. Interesting plants included Trailing St John's Wort, Round-leaved Fluellen, Corn Marigold and Many-seeded Goosefoot. A party of 17 walked from Aldermaston Wharf on 4th August and again identified Corn Marigold amidst other flora and fauna. The last summer walk was on 1st September with nine members and two guests meeting at Eversley Church. A good number of fungi were identified and Bog Myrtle was a good find.

On November 17th, another informal walk was held to the well-loved area of Sulham. After looking at the church, the party continued through familiar woods and open ground, where the Skylarks sang beautifully in the autumn sky. At the pond Burr Marigold and Water Blinks were recorded. It is good that this area remains so open and clear considering its nearness to Tilehurst. Long may it remain so!

The social side has been important after all these walks, with the chance of a drink or pub snack. It has helped to make good friends of other members. "Just like a family" was a remark recently heard – but do not be put off – come and join the RDNHS family!

MEMBERSHIP

Norman Hall

The following members were welcomed to the Society in calendar year 2004:

Philip Allen Catherine Bailey Mrs Alfreda Butler Howell Davies Mrs Patricia Dixon Anne Scruby Mrs Ailsa Smith Mrs Joan South

THE FISHLOCK PRIZE

Fishlock Prize has not been awarded this year.

Rare truffles leave farmer feeling like a pig in clover

"The Newbury" or 23rd September, reported that a farmer near Little Bedwyn found a bumper crop of summer truffles, said to be worth £3,000. Roger Phillips examined the finds and sent samples to the mycology section at Kew Gardens. The farmer wished to remain anonymous to prevent his land being overrun by truffle hunters. The splendid haul ended up at *The Harrow* in Little Bedwyn, where the chef cooked up an enormous wild mushroom and truffle risotto for the farmer's freezer.

Flying Mushrooms!

Malcolm Storey

While walking through our local woods in Upper Bucklebury on 4th October, I saw and heard something fall to the ground with a thump a couple of yards from where I was standing. On investigation it turned out to be a tatty old (and rather smelly) *Russula nigricans*. I looked up to see where it had come from, and there was a Grey Squirrel watching me from about 15-20ft up the tree above. Presumably I'd disturbed its meal.

MEETINGS (2003-2004)

Colin Dibb

On 7 October, 2003, the speaker was Martin Harvey who spoke on "The Moths of Berkshire and Hampshire" illustrated by slides from computer. There are about 2,600 British moths of which 800 are macro moths and the remainder micro moths but the distinction is not scientific. They appear in all habitats and are an important part of biodiversity being pollinators and food for bats, birds and small animals. Some are declining and others under severe threat. This is a good time for studying them with an increase in recording and web sites with pictures.

Camouflage was illustrated by an Elephant Hawkmoth larva with eyespot and "trunk" on Rosebay Willowherb and often found on *Fuchsia*; the Dot moth; Spectacled moth; Merveille du Jour; Buff-tip on birch and Buff Arches showing broken lines. Aids to identification include Butterfly Conservation, local Wildlife Groups, County Recorder networks, Berkshire Moth group and a new Thames Valley Scheme. The UK Moths website has pictures of 1000 species, both adults and larvae. Others include the Malcolm Storey site and the Steve Nash site with migrant Lepidoptera including the Convolvulus Hawkmoth which has had an exceptional 2003. Books include *Enjoying Moths* by Roy Leverton and *Field Guide to the Moths of Great Britain and Ireland* by Paul Waring and Martin Townsend illustrated by Richard Lewington.

Looking for moths includes searching for eggs, caterpillars and pupae and attracting the adults to lights; the National Moth Night is on Saturday 22 May 2004. Ninety five species of macro moth fly in Berkshire during October-December including the Winter Moth and the rarer Northern Winter Moth. There are day flying moths such as the Six-spot (on one wing) Burnet. The Forester moth is found at Silwood Park. The Cinnabar moth has a red streak on the wing and the caterpillars feed on Ragwort and there is concern that the proposed tightening of regulations to prohibit Ragwort growing will reduce numbers. The Mother Shipton moth bears a wing marking resembling the facial outline of the eponymous lady.

Conserving moths— twenty five species have gone extinct since 1900 with decline in other species. Causes include loss of habitat, bad management, possibly climate change and light pollution. The Swallowtail is flying earlier in spring and later in autumn. The Clouded Yellow is surviving the winter in the south. There has been a vast loss of habitat in the past fifty years including 97% of flower-rich meadows. The Reddish Buff moth is found only on a nature reserve on the Isle of Wight. The caterpillars are monitored by vacuum sampling and the adults caught in light traps to monitor their population. Sawwort is their host plant but this grows elsewhere but with no moths so there is an undiscovered factor at work on this unusual heathy/grassy site.

The Berkshire (including Old Berkshire) moth database holds over 63,000 records of 1420 species but with 46 macro moths not recorded since 1990. There are 150 recorders but four contributed 50%. More data are waiting to be entered. The three most abundant moths are the Large Yellow Underwing, Heart and Dart and Setaceous Hebrew Character. The three most widespread are Yellow Shell, Silver Y and Heart and Dart. The Least Carpet is increasing but the Argent and Sable has not been reported since 1984. The V-moth is found on garden currants but is also doing badly.

The National Macromoth Recording Scheme shows that the Garden Tiger is doing badly in the south in spite of the "woolly bear" caterpillars living on docks and plantains. Rothamstead moth records are not fully analysed but show that some species have declined by 90%.

Questions elicited that mercury vapour lights were the most commonly used but did not attract all species. A guide to lights is available. Climate and microclimate effects and predator relationships are not yet understood. Hairy caterpillars are only eaten by Cuckoos but both prey and predator are declining. Human predators are not as important as Blue Tits!

Nigel Glover-Wright gave a wide-ranging talk entitle "Mount Kenya National Park to Tarangire" on 4 November with many illustrations of birds, mammals, plants and insects from different habitats. Mount Kenya National Park is 227 sq. miles with the top of the mountain at over 17,000 ft. The Rift Valley was illustrated by a tea plantation and a soda lake with guano from Pink Flamingo droppings. Eland meat was recommended from a carnivorous menu in Nairobi. Tarangire is 1000 sq. miles with ancient Baobab

trees and dangerous Cape Buffaloes. The Serengeti - "land of endless space" in Swahili – has tropical rain forest on the volcanic rim but is hot and dry on the floor. A Cheetah with cub on a red termite mound and a flaming sunset rounded off over eighty high quality slides and over seventy species.

On 18 November, Graham Atkins spoke on The Creation of a Nature Reserve at College Lake. He had been working as an environment consultant to the company which was extracting chalk from this 300 acre site. When operations ceased, the plan was to restore the area to agriculture but the company was persuaded to opt for wildlife instead. The aims were to demonstrate maximum diversity but also the opportunity for everybody to visit including education for young people. When pumping ceased, the lowest level became a pond and plants established from wind-blown and bird-carried seeds. On somewhat higher ground, marsh was created by digging down to the water table. On 100 acres, the topsoil was still in place so a farm was created and rare breeds of cattle and sheep introduced so that rough grassland, hay meadows and sown but not harvested cereals provide other habitats. Over fourteen miles of fencing was erected and a number of trees and shrubs planted. A woodland craft centre has been built and working demonstrations of harvesting cereals with a binder and subsequent threshing operations are on view. An area is devoted to rare arable weeds and plants are available. A wide range of slides, including many of birds, animals and plants illustrated a most enjoyable and uplifting talk.

On 2 December, the final meeting in 2003, Ken Grinstead spoke on the history, archeology, wildlife and particularly the plants and flowers of Mallorca, Sardinia, Malta and Gozo. Mallorca has limestone mountains up to 4700 ft and remains of ancient civilisations. Sardinia has tombs built in 5000 BC and tower houses with internal wall passages from 1100 BC. Rocks include sandstone on the coast and granite rising to 4500 ft. Malta has alternating bands of hard and soft limestones with sea cliffs up to 800 ft. Gozo is similar with a central limestone plateau with a 3000 BC dolman. These varied habitats have produced a wide range of flowering plants some of which are endemic and others characteristic of Mediterranean flora from Spain to Egypt or even further afield including South Africa. Some plants were recognised as house and garden plants in this country and others were clearly related to our species but most were new to most listeners. All were illustrated with quality slides appreciated by a large audience.

On 6 January 2004, Mike Watts, on his third visit to the Society, spoke on the Neptune Coastal Campaign organised by the National Trust for the conservation of coasts and coastlines in England, Wales and Northern Ireland. The talk was illustrated by slides of many of the Trust's seaside sites and buildings. The National Trust was formed in 1895 (14 years after our own Society, as pointed out by the President!) and the first land was donated at Barmouth by the Bay of Cardigan. The new railways in the mid-1800's gave a great impetus to visiting the seaside. Development of the coast through caravan parks, marinas and industry accelerated after the second world war. A survey in 1963 showed only onethird of the coast was of outstanding quality and hence there was an urgent need to buy to conserve and there has been a good response to appeals for funds then and subsequently. Landscape protection includes erosion control, better footpaths and encouragement of farming tenants to adopt new practices. Nature conservation of over 600,000 acres of land includes many diverse habitats and the creation of new ones such as salt marshes by "managed retreat" on land previously enclosed from the sea. Archeological remains need conserving including more recent industrial sites such as mines and lighthouses. Local communities benefit from the Trust's activities by providing work, restoring buildings for community use and clearing up eyesores. Education of children is very important and includes litter campaigns and provision of sporting activities. There are many current problems over the 600 miles of coast under protection including potential clashes between different users, coastal erosion, pollution, wind farms and oil slicks. However, the philosophy of founding member, Octavia Hill, still remains from 1895 - "Keep those far still places for your children and your children's children".

On Tuesday 20 January 2004, Professor Hugh Dickinson, Sherardian Professor of Botany at Oxford University, spoke on the Natural History of Magdalen College and The Oxford Botanic Garden. His talk was illustrated by slides from computer and took the form of the historical developments which created the College, its garden, the Fritillary Meadow and the Botanic Garden including some land rented from Merton College. The Botanic Garden was laid out in the early 1600's as a Physic Garden which entailed moving a cemetery and bringing in 4000 cartloads of manure. The wall dates from 1650 with a rockery outside it. The main use today is educational with the theme of discovery but some natural history recording is done. The national collection of *Euphorbia* is held. The only alien plant to have escaped is the Oxford Ragwort which subsequently spread along the railway network.

The College was established in about 1420 using parts of St John's Hospital and is the only one to be founded by an educationalist – Bishop William of Wainfleet. During the Civil War, after the battle of Edgehill, Charles I retired to Grove and turned the College into an armoury – hence the old gun emplacement known as Dover Point or in the present day as Morse's Corner. The President's Garden was established in 1876. The deer park has some white Fallow Deer and they rotationally graze the Fritillary Meadow which floods periodically in winter. It is impossible to summarise the tremendous amount of detail that was presented and illustrated – so suffice it to say that the talk was extremely interesting and well received.

On 3 February, Ian Lewington spoke on Bird Identification and a close look was taken at the anatomy, topography and feathers, including the effect of the moult, of various birds followed by comparisons of species pairs and identification problems. The names and descriptions of different feathers, such as primaries, secondaries and tertials, were given and ear coverts and striping mentioned using Skylark, Rustic Bunting, Pipit, Shrike, Little Stint, Knott and Lesser Black-back Gull as examples. Features on the head such as eye ring and orbital ring were indicated. Anatomy enabled 95% of species to be immediately recognised and others, such as the Green Sandpiper, could be named on the call – but mimics, such as the Crested Lark, could be confusing. Separate distinguishing features were given for a wide range of British and non-British species. Some pairs of birds mentioned were Great Northern v. Black-throated Divers, Sedge v. Aquatic warblers, Scaup v. Lesser Scaup, Meadow Pipit v. American Tree Pipit and then v. Olive-backed Tree Pipit, Common v. Ring-billed Gull, Rock v. Scandinavian Rock Pipit, Goshawk v. Buzzard and then v. Sparrowhawk, Caspian v. Yellow-legged Gull and American Goose v. dark type Brent Goose. PowerPoint movies allowed the action to be "frozen" which enabled specific distinguishing features to be seen clearly. This was a highly technical talk which was rather difficult to follow for most of the audience.

John Birks from the Vincent Wildlife Trust spoke on "The Return of the Polecat", on 17th February. The Polecat is a native British wild mammal since just after the last ice age. It is related to the Weasel, Stoat, Otter, Badger, Mink, Pine Marten and Skunk and is widespread in continental western Europe. The Latin name of Mustela putorius means foul-smelling musk bearer referring to the pungent smell which is released from an anal gland as self defence. Polecat may be derived from the early French expression "poule-chat" (chicken-cat) due to its liking for poultry. It interbreeds with the domestic Ferret, which is an albino, and the fertile offspring can be confused with pure Polecats. Polecats have pale ear tips and pale fur above the lips which distinguishes them from Mink which also do not have pale under-fur. Very rarely, Polecats occur with gingery-red colouration. Wales and Cumbria were the last refuges until they began to regain ground before and after the second war and spread slowly eastwards as far as Leicestershire by the 1990s and into Berkshire by 1995. Being mostly nocturnal, evidence of occurrence is largely through road casualties. Over 85% of the diet is rabbits whose return after myxomatosis has helped the increase in numbers and whose burrows are favoured overnight accommodation. Farmers and gamekeepers are now more enlightened and regard Polecats as beneficial in keeping down other pests. Farm buildings are used in winter with rats as prey which leads to casualties from inadvertent ingestion of rodenticide. Surveys are now done by live trapping which shows one/two per square kilometre. The use of radio collars shows them travelling along hedges and woodland edges with males staying in different places overnight within their discrete territories. Females have four to six offspring once a year and males take no part in rearing the young. The talk was illustrated with slides and taxidermic Polecats and "The Polecat" leaflet was available. For the 2004-6 survey, members were encouraged to retrieve Polecat bodies from roadsides, deep-freeze them and contact the Vincent Wildlife Trust on 01531 636 441 for further instructions.

Jenny Steele was our speaker for the final meeting of the winter on 2nd March at which 38 members were present. Her subject was "Gardening for Wildlife" and she set forward very useful points in managing a wildlife garden.

Firstly, relax and enjoy your garden: stop mowing the grass and leave borders untouched during the winter, leaves can be left until Spring. Consider organic gardening: Jenny had not used pesticides for ten years and had no major problems: this encouraged insects which were beneficial to the garden.

Have a pond: any water feature is good, even a terracotta saucer filled with water and pebbles. Create a nectar border, concentrating on plants which attract hoverflies, bees, butterflies etc. Grow Lavender, wild Rock-rose, Jerusalem Sage, Evening Primrose, Everlasting Sweet-pea, *Nicotiana*, Night-scented Stock, Marjoram and Foxgloves.

Plant a native tree.

Have an artificial habitat booster, e.g. nest boxes, logs of wood tucked under a hedge, bury wood in earth for stag beetles. Hollow stems act as bee homes.

Be tolerant of weeds and snakes.

With all these helpful tips it was hoped members would follow suit and create their own wildlife garden.

On 5 October, Professor Chris Bucke kicked off the new winter season with a talk on "The Natural History of the Isle of Man". Our fellow member and newly elected President was born and brought up on the Island. He illustrated his talk with a map and slides showing many aspects of the geology, wildlife and Celtic and Viking history when the Kingdom was very strategically placed between the other Kingdoms of Scotland, Ireland, England, Wales and the Kingdom of Heaven! Today, it is neither part of the United Kingdom nor of Europe and the Tynwald Parliament is the second oldest (after Iceland) in the world. The diverse rocks of slate, red sandstone and limestone plus the Ice Age deposits in the north give a wide variety of topography and plant and animal life and copper, silver and lead were found in the volcanic intrusions. A few plants are Irish specialities such as the pure white sub-species (o'kellyi) of Common Spotted Orchid. Cotton Grass, Bog Asphodel, Bog Pimpernel and Bog Myrtle (used to flavour beer instead of hops) are found in wet, acid conditions. The Isle of Man Cabbage is found on the dunes with Yellow-horned Poppy, Sea Milkwort, Sea Rocket and Thrift. Naturalised introductions include New Zealand Holly and Fuchsia magellanica. Sea Spleenwort is only found where exposed to salt spray. Some lichens are unique to Britain. Coastal cliffs provide good nesting sites for seabirds and choughs appreciate the proximity of cliffs and short-grazed grassland. There are no deer, squirrels or Badgers but the Irish Hare is endemic and Rabbits have been introduced. Lizards and Frogs are present but not snakes and toads. The Herring industry, which once exported Herrings in sugar to Norway, is largely gone except for Manx kippers. Visitors come to see the TT races and to travel on the Electric Railway including the tram up to the summit of Snaefell at 621m (2036ft).

Gordon Langsbury gave an illustrated talk on "Islay - Island of Birds', on 2nd November. He has visited this island in the southern Inner Hebrides over thirty three years. The trip entails a two hour ferry ride from Kennacraig (about 100 miles from Glasgow but on the same latitude). This relatively low island, compared with the adjacent Jura, has seven distilleries and an agricultural economy. Farmers are paid compensation for the grazing of many thousands of winter visiting Barnacle and White-fronted Geese from the Arctic. Many other species of geese as well as swans, ducks, gulls, terns, sawbills, Little Egrets, waders, grebes and land birds, such as Red Grouse and introduced Black Grouse, were described with the use of high quality slides. The success of the Chough was particularly mentioned. Mammals mentioned were Red and Roe Deer, Grey and Atlantic Seals, Hares and Stoats.

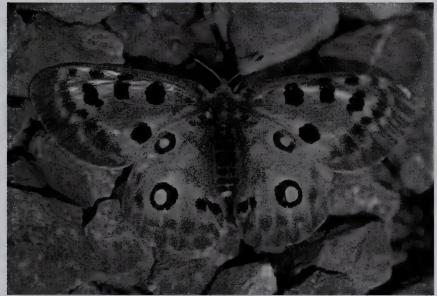
On 18 November, Dr Chris Newman and Dr Christina Buesching spoke on "Monitoring Badgers and other Forest Mammals in Wytham Woods, Oxfordshire". Chris dealt with the badgers whose density in 1996 (50/sq. kilometre) is a world record with each one identified with a tattoo. They are all caught annually in peanut-baited traps, weighed (biggest up to 15 kg), measured for length and head width, teeth examined, external parasites noted and a blood sample taken. Currently, there are 200 adults producing 20-40 cubs annually. Family territories are mapped by feeding differently coloured polystyrene beads mixed with peanuts and honey and examining the droppings in the latrines on the territory boundaries. Smaller groups have larger adults and cubs do better. For each 100 cubs born, 50 die by 2 years (some killed by dominant females) and 10 survive until 8 years old - one individual reached 16 years. 2/3 cubs are born in mid-February with mating soon after but the embryos are suspended until December giving a 56 day pregnancy. The site is ideal for worms which are the main food source, hence dry years are disastrous for the cubs. Christina mentioned Water Voles and Red Squirrels as species that would have benefitted from earlier research work before their current decline. A standardised monitoring protocol is now in place for small mammals such as Bank and Field Voles, Yellow-necked and Wood Mice and Common and Pygmy Shrews. This time consuming work is largely done by volunteers, many from the Earthwatch Institute. Muntjac, Roe and Fallow Deer are present in sufficient numbers to need culling otherwise the whole of the understorey vegetation would be destroyed. Numbers and species are determined by counting droppings which can easily be confused with beech mast. Information at www.wildcru.org, www,mammalmonitoring.con, www.mammaltrust.org and www.earthwatch.org.

IN SEARCH OF EUROPE'S BUTTERFLIES

PRESIDENTIAL ADDRESS - by Tony Rayner

(based very loosely on an illustrated talk given on 19th October 2004)

What are butterflies? We could say they are either brightly coloured insects that can best be found nectaring on Buddleias in our gardens, or nasty white insects whose caterpillars munch their way through our cabbages.



Apollo (Greece)

But what separates them from moths? Both form the insect order of Lepidoptera, so is the difference real or imagined?

Leverton lumps them all together but devotes his book entirely to moths. Butterflies are diurnal, but so are many moths. Butterflies have clubbed antennae, but so do certain moth families such as the Burnets. Butterflies are brightly coloured, but who could say that the Scarlet Tiger or the Elephant Hawkmoth were not? Most moths have a hinge and bristle feature linking their fore and hind wings — but others have nothing like this.

Personally, separation between day and night flying lepidoptera makes better sense. Interesting to see day flying moths in at least one recent British butterfly field guide.

The attractions for butterfly enthusiasts are many – there are not too many species to deter newcomers, no expensive equipment is necessary, you are led to nice locations – often plant/flower rich, in daylight, in sunny conditions, to watch good sized, brightly coloured insects that can combine wonderful aerial displays with strong territorial tendencies. With all this to recommend butterflies, it is hard to understand why more people are not enthusiasts!

Maybe the lack of first-rate field guides has not helped in the past – but now there is no such excuse. There are two excellent books covering the whole of Europe. The *Collins Guide to Butterflies of Britain and Europe* with Richard Lewington's illustrations, and Tristan Lafranchis's *Butterflies of Europe*. It is recommended to buy both as they complement each other so well.

Sadly Britain is not well endowed with many species. The following European league tables show the United Kingdom firmly in the relegation zone of Division Three!

	FIRST DIVISION	
364	Macedonia	200
277	Switzerland	196
247	Bosnia & Herzogovena	187
241	Croatia	187
229	Germany	185
221	Slovenia	181
214	Romania	179
210	Albania	176
208	Slovakia	167
207	Hungary	157
	277 247 241 229 221 214 210 208	364 Macedonia 277 Switzerland 247 Bosnia & Herzogovena 241 Croatia 229 Germany 221 Slovenia 214 Romania 210 Albania 208 Slovakia

SECOND DIVISION THIRD DIVISION Poland 151 99 Estonia Czech Republic 146 Norway 99 Andorra 145 Finland 96 Belarus 131 Luxembourg 95 Liechtenstein 120 Moldova 83 Portugal 118 Netherlands 71 Lithuania 113 Denmark 64 Latvia 109 United Kingdom 55 Sweden 107 Cyprus 53 Belgium 106 Canary Islands 32 CONFERENCE

03.11 2.12.1102

 Ireland
 28

 Malta
 19

 Madeira
 17

 Azores
 9

 Iceland
 0

Clearly Iceland is not the place to take your butterfly net!

In the Thames Valley we are well placed to find several butterflies that may be considered scarce in Britain. The Small Blue can be seen on Lardon Chase; the Dingy and Grizzled Skippers are at Hartslock; Black and Brown



Swallowtail (Spain)

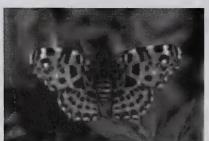
Hairstreak breed at Bernwood and Whitecross Green Wood; the Duke of Burgundy still exists at Aston Upthorpe; and Silver-spotted Skippers are easily overlooked on Watlington Hill. Adonis Blues can be found locally on chalk grassland, but numbers are low and it may be worth travelling further afield to say Martin Down on the Hampshire/Dorset border.

All the sites mentioned here are remnants of good butterfly habitat, which is why virtually all our specialists are so scarce in Britain. Indeed habitat loss in Britain has occurred at an alarming rate as this table shows:—

The picture is probably similar in

Since 1940's	
Lowland Flower-rich Grassland	97%
Fenland	90%
Chalk and Limestone Grassland	80%
Hedgerows – England	67%
Ancient Broad-leaved Woodland	50%
Since 1905	
Ancient Coppiced Woodland	95%
Since 1800	
Lowland Raised Bogs	94%
Lowland Heathland	83%

Source - Millennium Atlas of Butterflies in Britain and Ireland



Map (Poland)



Two-tailed Pasha (Corsica)

much of continental Europe.

Fortunately there are still large areas of unimproved habitat, especially in mountainous areas, alpine flower meadows for example. However it is claimed that of the 543 European butterfly species (576 if you include those that in Europe are on the edge of their range) approximately half are under threat. Source – Prime Butterfly Areas in Europe.



Twin-spot Fritillary (Hungary)

If that were not enough, with so many eastern European countries now in the Common Market, we can expect key habitat loss to accelerate as agriculture is intensified.

It is obvious from the above that the butterfly enthusiast must travel abroad to see most of Europe's species. Generally the further south and east the better it becomes. But before zipping across the Channel, field guide in hand, it is as well to reflect a little on identification problems – you are faced with potentially 500+ species! No longer is that blue butterfly almost certain to be a Common Blue – in fact there are 97 blues on the European list. Fritillaries are slightly easier – "only" 47 of them. Field guides provide valuable clues to identification

in the form of distribution maps, preferred habitat, and favoured food plants. Reliance on the bright uppersides for identification may be dodgy, and apparent distinguishing features might prove to be both

slight and variable. If possible take a close look at the undersides, especially the hindwing. Markings here very often give the game away. Fortunately there are some stars that scarcely need a field guide to assist — e.g. Swallowtail, Scarce Swallowtail, Apollo, Two-tailed Pasha and Black-veined White.

The presidential address was illustrated with scarce local species and species photographed in Ireland, Norway, Germany (Thuringia), N.E. Poland, Hungary (Bakony & Bukk/Aggtelek), Czech Republic (Eastern), Slovakia (Western), Greece (Pindos & Mt. Iti), Corsica, Switzerland, French Pyrenees, Spain (Extramadura), Morocco (Atlantic coast) and Canary Islands. In the majority of such places it should be possible to find over 100 species in a week.



Lesser Purple Emperor (Czech Republic)

Ireland's poor showing in the above tables was underlined with my sightings being restricted to Wall Brown and Green Hairstreak in two week-long visits. Norway supports some unusual Fritillaries in the northern regions, but this is not an easy country to get around quickly. Thuringia was especially good in the old border area between East and West where Purple-shot and Sooty Coppers, plus day-flying moths dominated. In a quiet valley just outside Zella-Mellis there were also plenty of Lesser Marbled Fritillaries, Silver-studded and Amanda's Blues. Poland was notable for Camberwell Beauty and European Map easily found on the fringes of the famous Biebrza Marshes in May. A species of Emperor moth sped by along Bialowieza Forest rides at regular intervals. Hungary was superb for Fritillaries and Hairstreaks. In the Bakony Hills, to the west of Budapest, it was quite intoxicating to see such a vast array of Fritillaries. Assman's, Marbled, High Brown, Glanville, Spotted, Twin-spot, Niobe to name but a



False Heath Fritillary (French Pyrenees)

few. At times the sheer number of Hairstreaks (mainly llex; Sloe and Blue-spot) on view was amazing, in complete contrast to the frantic search for just one or two specimens in Britain! Perhaps the best butterfly area in Hungary lies in the North East. Here the Bukk and Aggtelek reserves support Poplar Admirals, Hungarian Gliders, Chequered Blues and many more. The White Carpathian region of the Czech Republic was notable for the Mountain Alcon Blue and Scarce and Purple-edged Coppers. But the bounding flight of the Large Chequered Skipper on a steep mountain slope was simply amazing. Slovakia was memorable for Purple and Lesser Purple Emperors taking moisture or minerals from a muddy track after rain. Supporting acts included Mazarine and

Meleager's Blues. Central Greece was so species rich that even a Short-toed Eagle floating overhead was ignored by the lepidopterists! Based near Mt Iti it was possible to see numerous species within easy walking distance from our remote hotel. Balkan Marbled Whites flew alongside plain Marbled Whites, and the Anomalous Blue was not to confused with Ripart's Anomalous Blue. Greek Clouded Yellows were easily distinguished from our familiar Clouded Yellows. Fiery and Lesser Fiery Coppers were hard to locate, but their brilliance was well worth the search.



Lang's Short-tailed Blues (Morocco)

Even on a sight-seeing detour to Delphi it was easy to see new species such as Inky Skipper, and both Freyer's and Balkan Grayling.

Corsica excels for endemics. Corsican Heath, Corsican Swallowtail, Corsican Grayling, Corsican Fritillary and no doubt there were others if only you had the time. The Southern White Admirals were smart enough, but even these paled alongside the Two-tailed Pasha which obligingly flew onto my hand. Both the central mountainous region south of Corte, and the southern end of Corsica near Bonifacio are to be recommended.

Switzerland is the home of Apollos, Black-veined Whites and Violet Coppers among many others. The French Pyrenees in the region of Gavarnie also produced Apollos plus Clouded Apollos. The latter floated restlessly in a cloud over a very steep slope, and were almost impossible to photograph. Some of the high Pyrenean meadows were simply teeming with wildlife and each step was made carefully to avoid squashing a Field Cricket or other extraordinary insect species. The Pyrenees seemed especially rich in Skippers and Blues. Donkeys carrying tourists uphill from Gavarnie deposited dung on the track which was pounced upon by several kinds of Grizzled Skipper and British photographers alike – much to the amusement of the French tourists. Sad to say we failed to find the diminutive Gavarnie Blue, but then it is very small... Extremadura produced Swallowtails and Large Tortoiseshells even in February, and the Canary Islands have endemic forms of Speckled Wood and Large White, and it is also a place to find Monarchs. Whilst Morocco lies just beyond Europe, many of its butterflies qualify to be included



Scarce Copper (Thuringia, Germany)

here, as they can be found in this continent too — notably in southern Spain. e.g. Lang's Short-tailed Blue and African Grass Blue. Clouds of the latter to be found in the Oued Massa to the south of Agadir.

From my own limited visits to a small sample of good butterfly areas, I hope this provides a taste of what is out there. So much to see, and with excellent guide books now available – no excuse not to combine your botanising with a bit of butterfly spotting.

Photo. acknowledgements: Canary Is (John Marshall); Switzerland and Norway (Fred Rayner) Bukk & Aggtelek Reserves, Hungary and Pindos Mountains, Greece (Derek Goodban).

SENECIO CINERARIA HYBRIDS

Michael Fletcher

Senecio cineraria is a popular summer bedding plant, a short-lived shrubby perennial grown for its elegantly pinnate leaves, which are brilliant white with a thick layer of woolly tomentum, rather than for its flowers, which are yellow, very like those of other common ragworts. It is not fully hardy, though it may persist outdoors. I have even seen it naturalised near Sandwich in Kent, where new seedlings and mature bushes, up to a metre tall, grow on the barren windswept coastal shingle, making low thickets.

In 1974, as I was becoming interested in more systematic recording of plants in my own part of Central Reading, I was walking along Liverpool Road in Newtown, looking at the tiny front gardens of the terrace houses on the East side. Most were hardly over one metre deep, yet they showed a great variety, from fully controlled colourful formal planting, to completely untended patches of urban weeds, or bare cement.

In one such weedy garden, some neglected plants of Cineraria (*S. cineraria*) had persisted among other weeds, including Oxford Ragwort (*S. squalidus*). I was intrigued by several plants among them with lightly felted and similarly dissected leaves, which seemed to be intermediates. One even grew in a pavement crack outside the garden wall. It was pulled up (losing its roots), taken home and nursed back to health, then planted on a dry partly shaded bank of soil in my South Street garden.

It persisted, showing itself intermediate in habit between the two presumed parents. Unlike other British native ragworts, it is a long-lived perennial, with slightly woody stems up to a metre tall, lasting two or three years before being overtaken by fresh growths from the base. The leaves, though covered with tomentum, are still visibly green, and the flowers, so far as I could see, were like those of the 2 spp of which I assumed it to be a hybrid. It flowered freely in summer, but seemed sterile, since no viable seed was ever found. The plant could be propagated from stem cuttings taken in summer.

In summer 2001, in preparation for our intended move, I took cuttings, one of which which I brought and established in our new garden in Frome.

In a pub garden in Nunney, near Frome, in summer 2002, I saw again some neglected *S. cineraria* growing in a small garden bed among Ragwort (*S. jacobaea*), and again, some intermediate plants, One was again brought home, and planted alongside the Reading hybrid. I was even more surprised in June this year, to find several similar hybrid plants among *S. jacobaea* and various other weeds, on neglected cement around garages near our house, in the estate on the North side of Frome. There was no *S. cineraria* close by, though it is grown in several gardens on this estate. Seven such plants were seen altogether, One was again brought home and grown alongside the other two hybrids, and with a self-sown seedling of *S. cineraria* found locally (for comparison).

These three hybrids, now they can be seen together, differ very obviously in leaf shape, but seem similar in habit, being perennials with weakly shrubby stems. The only hybrid mentioned by Clapham Tutin & Warburg is *S. cineraria x jacobaea*. This, and other similar hybrids, cannot be desperately rare if I have found them in three places, and are worth looking out for.

THE NEW BERKSHIRE FLORA

The long-awaited new "Flora of Berkshire" should be available early this year. Prof MJ Crawley FRS, Imperial College, Silwood Park, Ascot, SL5 7PY

Editor's note:

The above flora can be ordered from Summerfield Books, Main St, Brough, Nr Kirkby Stephen, Cumbria, CA17 4AX. (Tel: 017683 41577, email: info@summerfieldbooks.com)

ASILUS CRABRONIFORMIS - AN UPDATE

Tony Rayner

My article in last year's *Reading Naturalist* highlighted our remarkable colony of this scarce Dipteran in Cholsey. The story does not end there as the following account for 2004 shows. Diligent record keeping over several years usually provides an insight into species life cycles and population changes. Beware.



Hornet Robberfly

for record keeping can also lead to overconfident predictions about imminent events. So it was that at their expected emergence time in 2004 there was an absence of *Asilus crabroniformis* sightings. It seemed likely that we would experience another poor year for these noble flies, as is sometimes the case. The thought even crossed our minds that some habitat change had taken place, and they might not reappear at all.

These worst fears soon evaporated when the first fly finally appeared on 28th July. Although a single fly was seen on various days up to and including 7th August, this remained the poorest early showing since records began in 1997.

Suddenly on 10th August everything changed. On this fine day a total of ten flies were found scattered all around the meadow – we appeared to be back to normal! A similar level of sightings continued for the next two days. On 13th August excitement grew as the daily count quickly reached 25 when rain intervened and the transect could not be completed. Thereafter, decent daily counts followed, although once again sudden rainfalls prevented completion of transects when prospects seemed good. One typical count was carried out by Chris Raper on the afternoon of 21st August – he found eight flies including two pairs as he tried out a new digital camera.

It is likely that Chris was more absorbed with deftly approaching flies to secure close-ups than with completing a full count. Otherwise it is difficult to explain the amazing total of 47 flies found the following day. This not only beat all previous records, it shattered them! If that were not enough, this density of

flies was to continue for almost another two weeks without quite equalling the 22nd August number.

On 5th September we decided to cut the hay, and *Asilus* numbers appeared to plummet from 30 to 3 overnight. Hopefully this has not drastically changed their future prospects, and many will have sought refuge in the neighbouring riding stables where they are thought to breed. It is also likely that once the meadow was cut, and the hay baled, the usual method of following mown paths to count flies became ineffective. With the meadow opened out, the flies could have found short vegetation anywhere, and had become much more difficult to locate.

As in previous years there were many instances of robber flies with prey – usually blow-flies. It was common too to find mating pairs and on one occasion I photographed one couple that looked a little strange – only to discover from the developed film that the 'twosome' was actually a threesome! Does anyone have an explanation for this behaviour which is unique in my experience?



The Threesome!

AN ODD STINKHORN

Malcolm Storey

During September a friend took me to photograph the Marsh Gentians at Bartley Heath, just off the M3 near Basingstoke. The gentians, although slightly past their best, still had plenty of flowers, but as it was cloudy they were mostly closed. The clouds looked to be clearing so we waited.

While we were waiting, a small group from another natural history society happened by and we chatted briefly. A few minutes later they called us over to look at a fungus they had found on the heath. I told them it was Dog Stinkhorn and took a couple of photographs because open heathland is far from its normal habitat of deep litter in broadleaf woodland. Also the tip was more carmine than orange and the stalk whiter than normal.

We returned to the gentians and in due course the sun came out, the flowers duly opened, and I got my photographs.

A few days later I happened upon the photograph of *Mutinus ravenelli* (Berk. & Curtis) Fisch (Red Stinkhorn) on p179 in Pegler *et al* (1995) which resembles my find. Apparently this was known from a nursery in Sunningdale (only 15 miles up the M3 from Bartley Heath!) for forty years from 1888 to 1929. It has since been recorded in East Anglia and is said to be widespread in continental Europe.





Mutinus ravenelli? (Red Stinkhorn)

Although probably originally from Asia or Australia, *M. ravenelli* was named from America. However the species illustrated in American books looks different from my fungus. Since then I've seen other photographs in books and on the web and there appear to be two different fungi going under the name *M. ravenelli*.

The details are as follows:

Mutinus ravenelli? (Berk. & Curtis) Fisch (Red Stinkhorn)

19/9/04, Bartley Heath, GR: SU728533, under small twiggy birch regrowth, growing from *Sphagnum* among Purple Moor-grass, Heather and Gorse in damp heath. MWS.

I'm still unsure about this record and it's difficult to know how to take it further. I don't have the specimen. It hardly differs microscopically from Dog Stinkhorn, but fresh material would enable more critical comparisons. It awaits refinding!

Reference

Pegler, D.N., Laessoe, T. and Spooner, B.M. 1995, *British Puffballs, Earthstars and Stinkhorns*, Royal Botanic Gardens, Kew.

RECORDER'S REPORT FOR BOTANY 2004

Janet Welsh

First a correction from last year. The blue scarlet pimpernel in Meryl's garden was, and hopefully still is, *Anagallis arvensis* ssp *arvensis* blue form and not ssp *foemina* as I incorrectly reported. This blue form is being encouraged by removing the red flowers as they appear.

Many thanks to Colin Dibb for the comprehensive lists from the field outings this year. The species selected below are some of the rarer ones in our area, those not often recorded or of special interest.

Personal botanising was restricted this summer but I was pleased to find some rare arable plants very close to home. In addition, I was involved with others in the re-survey of a tetrad around Shillingford as part of the BSBI Local Change project. The wide variety of habitats included river margin, wet grassland, woodland and neglected calcareous grassland. Many additional species were found compared with the first survey in 1987/8, probably a reflection of the amount of time spent in total.

Thinking about the flora response to climatic change, might we now see a contraction of the ribbons of Danish scurvygrass along our major roads with a reduction of salt applications over the winter? Lin Carter estimated thousands of plants in 2000 in Berkshire on our heavily salted roads.

Pteropsida (Ferns)

Polypodium vulgare Common Polypody

Fairly plentiful on earth banks beside Bear Wood Park. Reported as rare in Bowen's flora. SU769684 CB

Blechnum spicant Hard Fern 31/7/04 Alder gully on the north edge of Padworth Common. Three plants only. SU616649 JW 27/9/04 One clump in a wet hollow in an unmanaged field. Rushall Farm. SU589735 CD/JW

Athyrium filix-femina Lady Fern 5/6/04 Beech woodland at Turville SU745915 Rd'A

Polystichum setiferum Soft Shield-fern 6/12/03 A single specimen on earth bank near Ellis's Hill Farm, Arborfield. SU771678 CB 5/6/04 Hedgebank at Turville SU744913 Rd'A

Magnoliidae

30 Ranunculaceae

Helleborus foetidus Stinking Hellebore 7/4/04 Woodland edge near Curridge. SU489726. CD Myosurus minimus Mousetail
11/5/04 Roughly 70 plants in the corner of an arable field by Carversham Park recreational

area. Rare in Oxon, this might be a new 10 Km square record. SU732768. JW

32 Papaveraceae

Papaver argemone Prickly Poppy 13/6/04 In fruit. On gravelly bulldozed surface beside pit, SW end of cleared area, Harts Hill Gravel Pit. SU530684. Col/ld: MWS

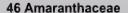
40 Myricaceae

Myrica gale Bog Myrtle
1/9/04 Abundant in moist area
near Cudbury Clump,
Bramshill. (Very local and
decreasing
in Berks, any sightings
welcome.) SU762605 CB

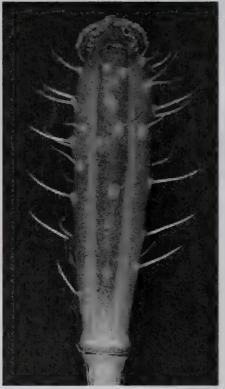
45 Chenopodiaceae

Chenopodium polyspermum Many-seeded Goosefoot

7/7/04 Edge of an arable field near the Flowing Spring. (Not often recorded but the Oxon Flora records it as possibly increasing.) SU746766. MS



*Amaranthus hybridus Green Amaranth 24/7/04 A number of plants on a footpath near Brightwell cum Sotwell. SU585924. JW



Prickly Poppy
Papaver argemone

*Amaranthus retroflexus Common Amaranth 24/7/04 A number of plants on a footpath near Brightwell cum Sotwell. SU585924. JW (Both species confirmed by Dr JL Mason)

47 Portulacaceae

Montia fontana Blinks 8/5/04 Wet grassland in Caversham Park recreational area (Rare in Oxon) SU727768. JW

48 Caryophyllaceae

Spergula arvensis Corn Spurrey 4/8/04 Plentiful in area near Aldermaston Wharf. (A declining arable species) SU602653. MS

53 Clusiaceae

Hypericum humifusum Trailing St John's-wort 7/7/04 Dunsden Green. (Scarce in Oxon, an extension of the Chilterns localities.) SU739774. MS

63 Salicaceae

Salix repens Creeping Willow 31/7/04 Flourishing on wet acid grassland on Padworth and Burnt Commons. SU 622645. JW 19/9/04 Open area, Bartley Heath. SU728533. MWS

67 Ericaceae

Vaccinium myrtillus Bilberry 7/4/04 Faircross Plantation. SU497722. CD

69 Monotropaceae

Monotropa hypopitys Yellow Bird's-nest 7/8/04 Near the bridlepath in Oveys Wood, 2 flowering spikes. SU702831 JW

71 Primulaceae

Anagallis arvensis ssp arvensis Scarlet Pimpernel 2004 A good patch in Meryl's garden in Caversham with more flowers than ever this year thanks to some encouragement. MB

Primula veris x vulgaris False Oxlip 26/4/04 Top of eastern bank, both near entrance and at far end of Homefield Wood BBOWT Reserve. SU814867 and SU814868. MWS

Primula vulgaris Primrose (Scaped form) 26/4/04 North end of field, by fence, halfway up eastern bank Homefield Wood BBOWT Reserve. SU 814868. MWS

77 Rosaceae

Rosa rubiginosa Sweet-briar 3/7/04 Lardon Chase near a hedge. SU590800. MB

Geum rivale Water Avens 22/5/04 One plant seen in wet grassland by the River Pang. (Rather uncommon in Berks.) SU580716. CD

79 Fabaceae

Ononis repens Common Rest-harrow 6/6/04 Grassland in Reading cemetery, a plant usually associated with the chalk. SU725757. JW

81 Haloragaceae

Myriophyllum spicatum Spiked Water-milfoil 20/6/04 River Thames near Dorchester. SU580933. JW

88 Santalaceae

Thesium humifusum Bastard Toadflax 9/8/04 Quite widespread on Lough Down, Streatley. SU588810. MS

111 Apiaceae

Conopodium majus Pianut 8/5/04 **Patches** in grassland in Park Caversham recreation area. this far uncommon south in Oxon. SU727768. JW

Scandix pecten-veneris
Shepherd's-needle
8/5/04 Arable field
corner bordering
Caversham Park
recreation area. About
50 plants of this
nationally scarce
species in an area
ploughed but unsown.
SU732768. JW



Yellow Bird's-nest Monotropa hypopitys

11/5/04 Field edge at Littlestead Green. 2 flowering and about 100 vegetative small plants. SU733770. JW

Heracleum mantegazzianum Giant Hogweed 6/12/03 A few in the grounds of Shinfield Grange and spilling out onto the footpath. SU742687. CB

Petroselinum segetum Corn Parsley 29/7/04 A few plants on the footpath on a chalky slope near The Flowing Spring PH. Uncommon in Oxon. (Adeclining arable species.) SU744767. JW

114 Solanaceae

Atropa belladonna Deadly Nightshade 2/6/04 Alleyway in Milton village. SU488918. MB

116 Cuscutaceae

Cuscuta europaea Greater Dodder 9/7/04 On common nettle under scrub near the Thames, a nationally scarce plant. SU580937.

122 Lamiaceae

Stachys officinalis Betony 8/5/04 Ron Ward's meadow, Tadley. SU601606. GS

Marrubium vulgare White Horehound 3/7/04 One plant in a hollow. (A rare herbal and medicinal species thought to be native only in some coastal localities.) SU588809. MS

Salvia verbenaca Wild Clary 20/6/04 Frequent along the roadside verge of



Sharp-leaved Fluellen Kickxia elatine

Nexau cum

Round-leaved Fluellen Kickxia spuria

A423 west of Shillingford. Declining and scarce in Oxon. SU594930. JW

128 Scrophulariaceae

Kickxia elatine Sharpleaved Fluellen 28/7/04 Arable field edges south of Dunsden Green. SU742768. JW

Kickxia spuria Roundleaved Fluellen 28/7/04 Arable field edges south of Dunsden Green. Less common here than the s h a r p - I e a v e d . SU742768. JW Linaria repens Pale Toadflax 3/7/04 Streatley golf course, near footpath. Some plants with white flowers. SU583813. CD and MB

*Verbascum blattaria Moth Mullein 10/7/04 Layby west of Chapel Row, Bucklebury Lower Common SU560692. MWS

Veronica scutellata Marsh Speedwell 31/7/04 Wet grassland on Burnt Common. SU622645. JW

137 Valerianaceae

Valeriana dioica Marsh Valerian 8/5/04 Ron Ward's meadow Tadley. SU601606. GS

139 Asteraceae

Chrysanthemum segetum Corn Marigold 7/7/04 Fields to the north of the Flowing Spring. SU742767. MS/MB

Erigeron acer Blue Fleabane 8/9/04 Mapledurham, a field-full. SU693755 MS

Onopordum acanthium Cotton Thistle 20/6/04 Roadside verge near Dorchester, cut by the mower, otherwise would have been a splendid display. SU581938. JW

Senecio aquaticus Marsh Ragwort 12/9/04 Near Waltham St. Lawrence. SU836760. MS

Tragopogon porrifolius Salsify 27/5/04 Meadow in the garden at Cholsey, appeared in 2003 and flowered this year. (Aplant apparently spreading in Oxon. according to the county botanical recorder.) TR

Liliidae

152 Lemnaceae

Spirodela polyrhiza Greater Duckweed 20/6/04 In a ditch with Lemna minor near the Thames, Rare in Oxon, SU587934, JW

155 Juncaceae

Juncus bulbosus Bulbous Rush 31/7/04 Alder gully on the north edge of Padworth Common. SU616649. JW

156 Cyperaceae

Carex viridula spp. oedicarpa Common Yellow-sedge 31/7/04 Wet grassland on Burnt Common. SU622645. JW

Carex panicea Carnation Sedge 31/7/04 Wet grassland on Burnt Common, SU622645, JW

157 Poaceae

Hordelymus europaeus Wood Barley 5/6/04 Beech woodland at Turville, nationally scarce. SU749919. Rd'A 31/8/04 Roadside bank in Stoke Row. SU685849. JW

162 Liliaceae

Polygonatum multiflorum Solomon's-seal 22/5/04 One or two plants only in a copse by the River Pang. SU581716. CD

Ruscus aculeatus Butcher's-broom 6/12/03 A few good specimens in The Holt, Arborfield. SU762689. CB 21/1/04 Near the Six Bells, Beenham. SU578691. MS

162 Liliaceae

Ornithogalum pyrenaicum Spiked Star-of-Bethlehem 14/6/04 3 flower spikes in roadside hedge, Harts Hill Road, Upper Bucklebury, SU534685. MWS

166 Orchidaceae

Epipactis phyllanthes Green-flowered Helleborine 3/9/04 12 plants in Lambridge Wood of this nationally scarce species. SU732842. MS NOTE All names are after Stace (1997).



The semi-chlorotic Violet Helleborine at Bucklebury Common Epipactis purpurata

Epipactis purpurata Violet Helleborine 1/8/04 7 semi-chlorotic plants, mostly single-stemmed, at roadside E of layby, Bucklebury Lower Common. SU563694. MWS

Herminium monorchis Musk Orchid 22/7/04, Top pit to the west of the path, Noar Hill HIOWWT Reserve. SU742318. MWS

Listera ovata Twayblade 8/5/04 Woodland beside Caversham Park Road, a very urban site. SU 733760. JW

Neottia nidus-avis Bird's-nest orchid 30/5/04 Woodland beside Basingstoke Canal Dogmersfield. SU781532. MKL 7/8/04 Near the bridlepath in Oveys Wood, 4 flowering spikes. SU702831. JW

Recent introductions are marked *

CONTRIBUTORS

Thanks are due to the following members and friends for their submissions:

(Rd'A) Rod d'Ayala, (MB) Meryl Beek, (CB) Chris Bucke, (CD) Colin Dibb, (MKL) Michael Keith-Lucas, (TR) Tony Rayner, (GS) Graham Saunders, (MS) Martin Sell, (MWS) Malcolm Storey and (JW) Janet Welsh

REFERENCES

Bowen, H.J.M. (1968) Clement, E.J. and Foster, M.C. (1994) Killick, J., Perry, R., Woodell, S.(1998) Preston CD et al. (2003) Stace, C (1997) 2nd Edition Stewart A. et al. (1994) The Flora of Berkshire
Alien Plants of the British Isles
The Flora of Oxfordshire
New Atlas of the British and Irish Flora
The New Flora of the British Isles
Scarce Plants in Britain.

RECORDER'S REPORT FOR MYCOLOGY 2004

Malcolm Storey

After several poor seasons, 2004 will go down in history as one of the "Good Years" for fungi! A long damp spring, produced fungi well into May, then a long damp and frost-free autumn saw fungi from mid-September until December. Nowadays, rather than be knocked back by hard frosts, the fungi seem to just peter out, as this year, although we did have a few sharp frosts in mid-November.

The Thames Valley Fungus Group continues to foray and collect records in Berkshire, and they are thanked for their contributions.

Mycology is also thriving in the two neighbouring counties within the Society's area. Both counties have groups and both of these have recently changed leadership, so the new contact details are given below.

The Oxfordshire Fungus Survey Group is working to establish a reliable database of the distribution, diversity and abundance of fungi in their county. Such data could be used in future research to assess the effects of environmental change and other influences on the fungus flora. The group shares identification skills and welcomes anybody interested in fungi for their beauty/interest/weirdness and who wants to become more competent in identifying them. The secretary is Wendy MacEachrane (Tel: 01993 811828 or email: wmaceachrane@aol.com)

There is also an active Hampshire Fungus Recording Group with similar aims. The contact is Stuart Skeates (Tel: 01794 522192 or email: HFRG@hampshirefungi.org.uk)

Zygomycota

Chaetocladium brefeldii
(a zygomycete)
21/2/04, Upper Bucklebury,
SU542683, on rat droppings from
plastic compost bin after 36hrs
culturing. MWS

Chaetocladium jonesii (a zygomycete) 21/2/04, with above. MWS

Kickxella alabastrina
(a zygomycete)
20/2/04, with above after 48hrs
culturing. Looking like a tiny
Coprinus! MWS

Phycomyces nitens (a zygomycete) 22/2/04, Upper Bucklebury, SU542683, on rat droppings, on top of compost in plastic compost bin. Sporangiophores bright egg yellow when young, then hyaline, unbranched, to 7cm long, finally steel grey after a week or so. MWS

Ascomycota

Anthracobia melaloma (a discomycete) 25/11/04, Kingwood Common, SU697827, on old fire site. MWS

Chlorosplenium aeruginascens Green Wood Cup 6/10/04, on decaying log between pond and 5-acre Field, under oak. MGTR



Mitrophora semilibera a morel

Mitrophora semilibera (a morel) 26/4/04, Homefield Wood, SU814366, 7 scattered fruitbodies on disturbed soil at entrance and several more further up the road. MWS

Morchella esculenta Garden Morel 14/4/04, Park Wood, Moor Copse, a group of 15 just over the bridge by the barbed wire field fence MGTR

Leotia lubrica (an ascomycete fungus)

24/10/04, Holly Wood, SU531694, Singly and in groups of up to 6

fruitbodies, at roadside, in leaf litter under Beech, Holly, Birch. MWS.

This seems much less common in recent years

Basidiomycota

Hymenomycetes

Laxitextum bicolor

26/10/04, On fallen oak branch, Lambridge wood, SU731842, Oxon. TVFG

Scytinostroma portentosum

17/10/04, On dead fallen Beech trunk, Sulham Woods, SU648745, RED DATALIST. TVFG

Ceriporiopsis gilvescens

26/10/04, On rotten Beech branch. Lambridge wood, SU731842, Oxon. TVFG

Dacryobolus karstenii 20/11/04, On pine wood. The Lookout, SU876661. TVFG

Junghuhnia nitida (a bracket fungus)
17/10/04, on Beech branch, Sulham Woods,
SU648745. TVFG

Litschauerella clematidis (a resupinate fungus) 25/11/04, On Clematis stem, Kingwood Common, SU697828, Oxon. TVFG

Oligoporus ptychogaster (a bracket fungus) 20/11/04, on Pine stump, The Lookout, SU876661. TVFG

Boletus parasiticus (a bolete) 11/9/04, The Avenue, Bucklebury Lower Common, SU581699, on Scleroderma citrinum. MWS

Paxillus rubicundulus (a bolete) 15/10/04, under Italian Alder at side of lake, Thatcham Discovery Centre, SU507667. MWS

Lactarius citriolens (a milk-cap) 25/9/04, Bomb Dump BBOWT Reserve, SU508654, on Society foray

Russula xerampelina var. graveolens (a Russula) 10/10/04, Under birch, Pamber Forest, SU616622, North Hants. TVFG

Amanita porphyria (an agaric) 10/10/04, under birch, Pamber Forest, SU616622, North Hants., TVFG.

Melanophyllum echinatum (an agaric) 25/9/04, Bomb Dump BBOWT Reserve, SU508654, on Society foray

Hygrocybe colemanniana (a waxcap) 7/10/04, Noar Hill HIOWNT Reserve, N. Hants, SU7432. MWS

Hygrocybe irrigata (a waxcap) 26/10/04, grassland, St. Nicholas, Rotherfield Greys, SU726823, Oxon. TVFG.

Lepiota grangei (a parasol) 25/9/04, Bomb Dump BBOWT Reserve, SU508654, on Society foray

Lepiota ignivolvata (a parasol) 23/10/04, Cobham Frith, N. Wilts, SU253669, Rather pale specimen, in shade, at roadside, in leaf litter. MWS

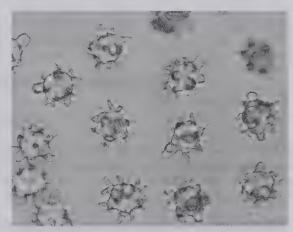
Pluteus leoninus (an agaric) 25/9/04, Bomb Dump BBOWT Reserve, SU508654, on Society foray Armillaria mellae agg. Honey Fungus 1/11/04, numerous fruitbodies in grass on road verge, Crawshay Drive, Reading, JHFN

Lepista saeva (Field Blewits)
24/10/04, Lackmore Wood, GC on Society Foray

Mycena adonis (an agaric)
17/10/04, in Beech litter, Sulham Woods, SU648745. TVFG

Omphalina ericetorum (an agaric) 13/11/04, in grassland, The Coombes, Arborfield, SU775675. TVFG

Tricholoma portentosum (an agaric) 20/11/04, under Pine, The Lookout, SU876661, Berks. TVFG



Pick-a-back *Asterophora lycoperdoides* chlamydospores (photomicrograph)

Nyctalis parasitica (an agaric) 10/10/04, on Russula nigricans, Pamber Forest, SU616622, North Hants. TVFG. 25/11/04, on Russula nigricans, Kingwood Common, SU697828, Oxford. TVFG

Asterophora lycoperdoides Pick-a-back 24/10/04, Holly Wood, SU531694, roadside, under oak, Beech, Holly. MWS

Clitocybe umbilicata (a funnel-cap toadstool) 25/9/04, Bomb Dump BBOWT Reserve, SU508654, Society foray

Cortinarius bolaris (an agaric) 10/10/04, under oak, Hazel. Pamber Forest, SU616622, North Hants. TVFG

Cortinarius calochrous (an agaric) 17/10/04, under Beech, Sulham Woods, SU648745. TVFG

Cortinarius pholideus (an agaric) 10/01/04, under birch, Pamber Forest SU616622, North Hants. TVFG Ripartites metrodii (an agaric) 25/11/04, in litter, Kingwood Common, SU 697828, Oxon. TVFG

Stropharia aeruginosa (an agaric) 26/10/04, in leaf litter, Lambridge Wood, SU731842, Oxon. TVFG.

Tulasnella violea 26/10/04, on fallen Beech trunk, Lambridge wood, SU731842, Oxon. TVFG

Urediniomycetes

Phleogena faginea (a basidiomycete fungus) 13/11/04, The Coombes, SU775675, on dead standing birch trunk. SC.

CONTRIBUTORS

Thanks are due to the following members for their submissions:

(GC) Gordon Crutchfield, (JHFN) John Notton, (MGTR) Martin Raper, (MWS) Malcolm Storey, (Rd'A) Rod d'Ayala, (SC) Sandra Conn, (TVFG) Thames Valley Fungus Group.

RECORDER'S REPORT FOR LEPIDOPTERA 2004

John Notton

The order of families and nomenclature used is that given in the standard Royal Entomological Society checklists, supplemented by Bradley and Fletcher for the Lepidoptera. Records presented are selected and edited. Full details of all records are available for examination on application to the recorders. It is encouraged that voucher specimens be retained.

2004 was again an above average year for domestic species, although weather conditions seem to have been less favourable for major influxes of continental species. The Society's Moth Night at Red Cow, Cholsey on 16th July 2004 was a great success with over 160 species being recorded, many of which were new records for the site.

Zygaena filipendulae stephensi, Six-spot Burnet After three successive years at Red Cow, Cholsey when the moths were too numerous to count, the best daily total in 2004 was just 3, (TR). However, at Emmer Green, the small colony in the garden was at the same strength as the previous three years. Early concerns about cold and damp weather during the larval growth period did not appear to be justified in this case (JHFN).

More records are obviously needed.

Monopsis laevigella, Skin moth (a micro-moth) At Emmer Green, 10/5/04, adult moths in the greenhouse as well as larvae eating green-house underfelt. (JHFN).

Bembecia ichneumoniformis, Six-belted Clearwing

One in a meadow at Red Cow, Cholsey during the Society's moth night, 16/7/04 (MWS/TR); one in the garden in Emmer Green, 17/7/04 (JHFN).

[The present status of all the UK clearwing species is unclear and records from all sources during 2005 will be very welcome.]



Six-belted Clear-wing Bembecia ichneumoniformi

Coleophora limosipennella (a micro-moth) Larvae and feeding traces found in Homefield Wood, 2/6/04, (MWS).

Acleris ferrugana (a Tortrix moth)

Female at lighted window in Berry's Road, Upper Bucklebury, 27/11/04, genitalia confirmed (MWS). Probably an under-recorded species due to confusion with the similar *A. tripunctana*.

Pyrausta aurata (a Pyralid moth)

Reared from larvae in webs on Large Thyme bought from RHS Garden Centre, Wisley, 11/7/04, (MWS). Apparently a new food plant record. Four recorded from 30/5/04 to 5/6/04 at Tilehurst (JH).

Pyrausta nigrata (a Pyralid moth)

One at Noar Hill HIOWWT Reserve, 22/7/04, (MWS); one at the Holies, 24/4/04 (JH). The last is a very early record.

Elegia similella, (a Pyralid moth)

One at Emmer Green, 15/6/04 (JHFN). A scarce species, said to spend all its life cycle in the upper branches of mature oak trees. Prior records noted by Brian Baker are mostly from woodland.

Thymelicus sylvestris, Small Skipper

Two at Battle Hospital Car Park, 5/7/04 and a mating pair at Tilehurst, in the garden, 14/7/04, (JH).

Thymelicus lineola, Essex Skipper

Three at Lardon Chase, Streatley, 4/7/04 and one at Tilehurst, 14/7/04 (JH).

Colias croceus, Clouded Yellow

Two at Lough Down, 8/8/04, 14/8/04 (MS); one at Emmer Green, 11/8/04 (JHFN); one at Calcot, SU657724, 14/8/04 (JH); recorded on 8 days at Red Cow, Cholsey 4-11/8/04 with a maximum of three, including one female form *helice*, (TR)

Pieris brassicae, Large White

Almost full-grown larvae found feeding on kale in the garden at Emmer Green, 5/12/04 (JHFN). Global warming??

Neozephyrus quercus, Purple Hairstreak One at the Harris Garden, University of Reading, 13/7/04, (JH)

Lycaena phlaeas, Small Copper

Recorded on 86 days from 13/5/04 to 18/10/04 at Red Cow, Cholsey, with a peak count of 35, (TR); one at Shinfield Cemetery, Spencer's Wood, 13/5/04 and three at the Harris Garden, University of Reading, 7/10/04 (JH); several at Aldermaston churchyard, 4/8/04 and several at Lough Down 8/8/04 (MS). A good year for this species in the right habitat.

Lysandra bellargus, Adonis Blue

Two males and two females at Lardon Chase, Streatley, 21/8/04, (JH). The numbers of this beautiful insect seem to be recovering in line with habitat control work.

Limenitis camilla, White Admiral

One in Bernwood Forest, early June, (TR); one, a most unusual visitor to the garden at Emmer Green, 21/7/04 (JHFN).

Vanessa cardui, Painted Lady

One at Grovelands Garden Centre, Spencer's Wood, 10/6/04 and one at Battle Hospital, Reading, 14/8/04 (JH); one near Eversley, 1/9/04 (CD).

Aglais urticae, Small Tortoiseshell

One at Emmer Green, 8/2/04 (JHFN); five seen at the Harris Garden, University of Reading, 31/3/04, (JH). Generally much commoner than last year.

Inachis io, Peacock

One at Emmer Green, 16/3/04 (JHFN); two seen at the Harris Garden, University of Reading, 31/3/04, (JH); several at Mapledurham, 16/4/04 (MS); one seen near Aldermaston Wharf, 4/8/04 (CD). Generally much less common than last year.

Polygonia c-album, Comma

Three seen at Ferndown Avenue, Caversham Heights, 16/3/04, 2/4/04 and several seen at Mapledurham, 16/4/04 (MS). An absence of records of the autumn brood?

Argynnis paphia, Silver-washed Fritillary A female seen at Berry's Road, Upper Bucklebury, 30/7/04, (MWS).

Tethea ocularis octogesimea, Figure of Eighty Three recorded from 30/5/04 to 25/6/04 at Tilehurst (JH); recorded at Red Cow, Cholsey on seven occasions from 05/6/04 to 17/6/04 with a peak of 10 on 06/6/04 (TR); one at Emmer Green, 11/6/04 (JHFN).

Catarhoe cuculata, Royal Mantle

One at Red Cow, Cholsey 14/6/04 (TR). A new record for the site.

Minoa murinata, Drab Looper

Ten recorded at Ashampstead Common, 19/5/04, and one at Moor Copse, 23/5/04 (JH). A nationally scarce species which needs to be studied further.

Agriopis aurantiaria, Scarce Umber A male seen at Berry's Road, Upper Bucklebury, 11/12/04, near a light which had been left on all night, (MWS).



Privet Hawk-moth Sphinx ligustri

Sphinx ligustri, Privet Hawk-moth
One at light at Emmer Green, 6/6/04 (JHFN).
This was generally a good year for most hawk-moths.

Hyloicus pinastri, Pine Hawk-moth One at house lights, Berry's Road, Upper Bucklebury, 25/7/04, (MWS).

Mimas tiliae, Lime Hawk-moth One on 24/4/04, a local equal-earliest record, and a total of eight throughout the year (JH); one at Emmer Green, 23/5/04, (JHFN)

Smerinthus ocellata, Eyed Hawk-moth Six at Red Cow, Cholsey between 23/5/04 and 17/6/04 (TR); one at Emmer Green, 18/6/04 (JHFN).

Macroglossum stellatarum, Humming-bird Hawk-moth

Two seen at Ferndown Avenue, Caversham Heights, 11 & 13/8/04 and one seen at Mapledurham 24/9/04 (MS); seen at Red Cow, Cholsey on four dates from 13/6/04 to 18/9/04 (TR).

Clostera curtula, Chocolate-tip
One at Red Cow, Cholsey, 2/6/04 (TR). The second record for the site.

Diaphora mendica, Muslin moth
One at Emmer Green, 23/5/04 (JHFN). Many of
the moths which have furry larvae are reported to
be in decline. Records of Ermines and Tiger
moths are thus of interest.

Tyria jacobaeae, Cinnabar One near Rushall Manor, 22/5/04 (CD); two at Decoy heath, 13/6/04 (JH); This species will be threatened if new regulations for Ragwort control are enforced.



Striped Lychnis - ova and larva Shargacucullia lychnitis

Shargacucullia lychnitis, Striped lychnis
A female in the light trap at Emmer Green,
19/7/04 (JHFN). Eggs were laid on Black Mullein
Verbascum nigrum and the resulting larvae were
typical.

Brachionycha sphinx, Sprawler Seen at 1am at a lighted window at Berry's Road, Upper Bucklebury, 12/11/04 (MWS).

Lithophane ornitopus, Grey shoulder-knot One at Emmer Green, an early emergence from hibernation, 19/1/04 (JHFN).

Conistra rubiginea, Dotted Chestnut
One at Tilehurst, 16/4/04 (JH). This species is
classified as nationally scarce, but its range has
recently expanded. It is similar in habits to the
related Chestnut and Dark Chestnut, but its life
cycle in the wild is not well understood.

Apamea sublustris, Reddish Light Arches Three at Emmer Green, 18-25/6/04 (JHFN). The early stages of this species are apparently unknown in the wild. The larva is believed to feed on grasses.

Apamea anceps, Large Nutmeg
Four at Tilehurst from 11-19/6/04 (JH); one at
Red Cow, Cholsey, 16/6/04, a first record for the
site (TR).

Nycteola revayana, Oak Nycteoline
One at light at Emmer Green after hibernation,
1/4/04 and another before hibernation on 25/9/04
(JHFN). A macro-moth which is a *Tortrix* lookalike.

Colocasia coryli, Nut-tree Tussock One on 17/3/04, the first of seven recorded at Tilehurst on dates up to 4/8/04 (JH). A new local early record. Tyta luctuosa, Four-spotted
One at Red Cow, Cholsey 16/7/04 during the Society's moth night (TR). A new site record.

Lygephila pastinum, Blackneck One at Red Cow, Cholsey 16/7/04 during the Society's moth night (TR). A new site record.

CONTRIBUTORS

Thanks are due to the following members for their submissions:

(CD) Colin Dibb, (JH) Jan Haseler, (JHFN) John Notton, (MS) Martin Sell, (MWS) Malcolm Storey, (TR) Tony Rayner.

RECORDER'S REPORT FOR ENTOMOLOGY and OTHER INVERTEBRATES 2004

Chris Raper

I'm not sure what your impressions were of the year but to me it typified a 'good'year – not exceptional but reassuringly 'normal' in a decade of wild swings in the weather and predictions of impending doom. In our area we didn't have serious droughts or floods – and after a slow start the insect life seemed to flourish.

The general trend for warmer winters and mild summers seems to have benefited species that have recently colonised the UK or that have strongholds in the warmer parts of continental Europe. I help run a recording scheme for tachinid flies and we have noticed a group of species, which have always been uncommon here, are now definitely expanding their range and this has been ably demonstrated in our area with the finding of many new sites for *Cistogaster globosa* (extremely rare) and *Phasia barbifrons* (new to the UK in 1999).

This trend was also backed up with the plethora of Hornet (*Vespa crabro*) sightings recently and the continued spread of Roesell's Bush-cricket (*Metrioptera roeselii*). There can't be many grassy places around Reading where it isn't possible to hear their distinctive high-pitched cicada-like trill. Though I have noticed that many people (even some birdwatchers with good hearing) fail to pick them out, so they must have a very limited frequency range.

Many thanks to all those members who took the time to contribute records – your efforts are much appreciated. I hope everyone sees plenty of interesting things in 2005 – note them down and send them in for the next Naturalist!

Crustacea

Amphipoda

Crangonyx pseudogracilis (an amphipod) 14/3/04, Kintbury Newt Ponds BBOWT Reserve, SU388663, Top Pond. [MWS] An introduced North American species.

Physa (not fontinalis) (introduced bladder snails) 14/3/04, Kintbury Newt Ponds BBOWT Reserve, SU388663, Bottom Pond. Shell sinistral, mantle with short finger-like processes. Spire too long and processes too short for the native *P. fontinalis*. [MWS] Another gift from somebody's aquarium!

Insecta

Orthoptera

Metrioptera roeselii Roesel's Bush Cricket Heard in the meadow on numerous occasions through the summer, Red Cow, Cholsey [AR] 20/7/04, Red Cow, Cholsey, SU593868, in long grass, East Meadow, [MWS] 5/9/04, 5-acre Field, Moor Copse, Tidmarsh, Berks [MGTR]

Leptophyes puntatissima Speckled Bush Cricket 23/8/04, 1 seen in garden. Purley-on-Thames, Berks. "on wall of house in the drive" [MGTR]

Odonata

Libellula depressa Broad-bodied Chaser
One or two on various dates between 13/5/04 22/6/04, Red Cow, Cholsey [AR]
10/6/04. 1 seen in Park Wood, Moor Copse
Reserve, Tidmarsh, Berks. "over pond – unusual
record for Moor Copse" [MGTR]

Calopteryx splendens Banded Demoiselle Vagrants probably drifting up from the Thames – singles on 8/6/04, 10/6/04, 23/7/04, 9/8/04 and 1/9/04, Red Cow, Cholsey [AR]

Calopteryx virgo Beautiful Demoiselle 14/6/04, 2 seen mating in Hogmoor Copse, Moor Copse Reserve, Tidmarsh, Berks. [MGTR]

Coenagrion puella Azure Damselfly 10/6/04, 6 mating near the pond in Park Wood, Moor Copse Reserve, Tidmarsh, Berks. [MGTR]

Gomphus vulgatissimus Club-tailed Dragonfly 30/5/04, 1 seen in garden, Purley-on-Thames, Berks. [MGTR]

Anax imperator Emperor Dragonfly
Singles on 19/6/04, 14/8/04, 18/8/04, 19/8/04
and a pair on 11/9/04, Red Cow, Cholsey [AR]

Aeshna cyanae Southern Hawker Singles on 19/6/04, 14/8/04, 18/8/04, 19/8/04 and a pair on 24/8/04, Red Cow, Cholsey [AR] 21/8/04, 20 in 5-acre field, Moor Copse Reserve, Tidmarsh, Berks. [MGTR]

Aeshna juncea Common Hawker 6/8/04, 4 in Moor Copse Wood, Tidmarsh, Berks. [MGTR]

Aeshna mixta Migrant Hawker
One or two seen on various dates between 23/8/04 and 11/9/04, Red Cow, Cholsey [AR]

Aeshna grandis Brown Hawker Singles on 5 days between 15/7/04 and 10/8/04, Red Cow, Cholsey [AR]

Ephemeroptera

Ephemera lineata (a mayfly) 31/5/04, Hartslock Reserve, Oxon, SU616795. [CMTR] This rare mayfly is locally common along the Thames in our area and can often be found miles from the river.

Coleoptera

Cychrus caraboides Snail Hunter 13/6/04, Blacklands Copse, SU543682, under rotting Pine log. Hissed when prodded! [MWS] Cylindrinotus laevioctostriatus (a darkling beetle)

12/2/04, Prospect Park, SU692728, after dark, numerous adults, some *in cop*, at base of Horse Chestnut trunk and in cracks in bark, near offices. [MWS]

Sinodendron cylindricum Rhinoceros Beetle 31/5/04, on fallen Beech log, Bowdown BBOWT Reserve, SU505654, just off Bomb Dump plateau. [MWS]

Dorcus parallelipipedus Lesser Stag Beetle 4/6/04 one on gravel drive & 1/8/04 one in meadow, Red Cow, Cholsey. [AR]

Lucanus cervus Stag Beetle

Red Cow, Cholsey:

7/6/04, 4 on wooden posts in orchard between 21.30 and 22.00.

8/6/04. At least 5 (two on same posts at dusk.) 9/6/04. Female on ground near meadow entrance.

29/6/04, 2 flying at 21.30

14/7/04, 1 flying in garden at 21.45 [TR]

25/5/04, 1 in garden, Purley-on-Thames, Berks. "flying 11am being attacked by Bluetit" [MGTR] 14/6/04, 2 in Hogmoor Copse, Moor Copse Reserve, Tidmarsh, Berks. "One flying 10am landed on me! The other on ground" [MGTR]

Melolontha melolontha Cockchafer

A record year for this species at Red Cow, Cholsey. Moth trap counts in 04, 26th April: 2, 9th May: 33, 10th May: 55, 14th May: 9, 22nd May: 1, and 10th June: 1. [AR]

Amphimallon solstitialis Summer Chafer Specific dates not recorded but seen regularly at Red Cow, Cholsey during late June/ early July [AR]

Cetonia aurata Rose Chafer

3 seen flying around a bush in my garden in Tilehurst, Reading on various dates a week either side of 14/5/04. [CMTR]

Cassida rubiginosa Thistle Tortoise Beetle 7/7/04, Black Dam, Hants, SU653516, Pale brownish larvae on Lesser Knapweed, Meadow. Reared. While feeding the larvae retain a mass of excrement on the two posterior appendages. When fully grown they shed this and remain stationary for about a week (eg caught 7th, pupa found on 13th) before pupating. (This food plant is not listed in Bullock.) [MWS]

Cassida vibex (a tortoise beetle) 7/7/04, Black Dam, SU653516, Green larva on Lesser Knapweed, Meadow. Reared. [MWS]

Pyrochroa serraticornis Red-headed Cardinal beetle 5/6/04, Turville Heath [CD]

Diptera

Conops ceriaeformis (a fly) 16/8/04, Upper Bucklebury, SU542683, Female on cultivated Golden Rod flowers. [MWS]

Sicus ferrugineus (a fly) 7/7/04, Black Dam, SU653516, Meadow. [MWS]

Asilus crabroniformis Hornet Robber Fly A record year for this species at Red Cow, Cholsey. [AR] See separate article.

Leptarthrus brevirostris (a robber fly)
May 04, Hartslock Reserve, Oxon. [CMTR]

Leucozona laternatia (a hoverfly)
7/8/04. Moor Copse Reserve, Tidmarsh,
Berkshire. [CMTR]

Volucella inanis (a hoverfly) 3/8/04. Tilehurst, Reading, Berks. Seen nectaring on garden plants. [CMTR]

Acinia corniculata (a gall fly)

7/7/04, Black Dam, SU653516, on Lesser Knapweed, Meadow. Only one specimen seen, but this seen three times as it kept disappearing into the plant when I tried to photograph it, then crawling back to the top when I next went past. Identified from photos (mainly wing pattern). [MWS]

Rhinophora lepida (a fly)

12/7/04, Upper Bucklebury, SU542683, Visiting Ox-eye Daisy in meadow. Eyes bare, arista with short hairs, parafacalia setulose [MWS]

Cistogaster globosa (a parasitic fly) 20/7/04, Red Cow, C h o l s e y , SU593868, Small or ange-bodied parasite fly feeding on Wild Carrot flowers, East Meadow. [MWS] A new location for



Cistogaster globosa

this very rare species.

8/8/04, Hartslock Reserve, Oxon, SU616796. [CMTR] Another new location.

Phania funesta (a parasitic fly) 20/7/04, Red Cow, Cholsey, SU593868, Small black parasite flies feeding on Yarrow and Oxeye Daisy flowers, East Meadow, [MWS]

Phasia barbifrons (a parasite fly) 19/8/04, Male, Upper Bucklebury, :SU542683, Male, on garden goldenrod flowers. [MWS]

Phasia hemiptera (a parasite fly0 24/4/04, nectaring on Lesser Celandine flowers. Moor Copse Reserve, Tidmarsh, Berks. [CMTR]. This species is usually seen in the second brood in mid summer – the early brood is rarely seen. 3/8/04. Tilehurst, Reading, Berks. Many individuals seen nectaring on garden plants. [CMTR]

Chaoborus crystallinus (a phantom midge) 14/3/04, Kintbury Newt Ponds BBOWT Reserve, SU388663, larva in Top Pond. Pupated 18th or 19th; adult emerged 23rd March (between 10am and 7pm). Keys out to *C. crystallinus*, but abdomen banded. [MWS]

Ornithomya avicularia (a flat fly)
28/7/04, Upper
Bucklebury, SU542683, on dead juvenile
Blackbird under window.
Wing length 7mm. 8
scutellar bristles. With attached phoretic feather louse (Mallophaga).
[MWS]



Ornithomya avicularia

Hymenoptera

Dipogon variegatus (a spider-hunting wasp) 21/8/04, Female, Upper Bucklebury, SU542683, Female, indoors, at window, indoors. [MWS]

Abia sericea (a clubhorned sawfly) Hill 22/7/04. Noar **HIOWWT** Reserve. SU741320, Male imago Ash and Dogwood/Clematis leaves, High ground between pits. When disturbed by photography the sawfly moved between two small patches of shrubby regrowth about 20m apart. Although of different species (Ash regrowth vs. a clump of Traveller's Joy and Dogwood) they were of similar size (about 1.5m across and 0.6m high) colour, tone, morphology (multi-stemmed regrowth) and even leaf shape (Ash and Clematis). [MWS]

Diplolepis rosae (Robin's pincushion gall wasp) 15/5/04, Hartslock Reserve, Oxon, SU616796. Observed ovipositing on fresh Sweet Briar shoots. This species is very small (5mm) but surprisingly easy to observe and photograph – just spend a few minutes looking on Sweet Briar on Hartslock in late May and you can usually find one or two. [CMTR]

Gasteruption assectator (a parasitoid wasp) 31/7/04, Female at Moor Copse Reserve, Tidmarsh, Berks. [CMTR]

Gasteruption jaculator (a parasitoid wasp)
31/7/04, Female at Moor Copse Reserve,
Tidmarsh, Berks. [CMTR]

Osmia bicolor (a solitary bee)

16/5/04. Hartslock Reserve, Oxon. Seen building its wigwam nests out of grass over the snail shell it had previously stocked with food and eggs. [CMTR]

Vespa crabro Hornet
4/8/04 near Aldermaston Wharf [CD]
1/9/04 near Eversley [CD]
23/5/04, 1 in Moor Copse Wood, Tidmarsh,
Berks and
21/7/04 common at same spot "going in & out of
usual nest in split ash tree" [MGTR]

CONTRIBUTORS

Thanks are due to the following members for their submissions:

Tony Rayner [AR], Colin Dibb [CD], Chris Raper [CMTR], Martin Raper [MGTR], Malcolm Storey [MWS]

Siphonaptera

Ctenophthalmus nobilis (a mammal flea) 16/3/04, Upper Bucklebury, SU542683, small female flea from nest in plastic compost bin collected 29 Feb 04. Genal comb with 3 spines. Spiracular fossa of tergum VIII Y-shaped. [MWS]

Hystrichopsylla talpae talpae Mole flea 16/3/04, Upper Bucklebury, SU542683, large male flea from nest in plastic compost bin collected 29 Feb 04. Very large blind flea with well-developed genal and pronotal comb, and further combs on TII, TIII, TIV. [MWS]



Mole flea Hystrichopsylla talpae talpae

RECORDER'S REPORT FOR VERTEBRATES 2004

Tony Rayner

There are still too many gaps in this report - in particular will members please keep records in 2005 of any frog spawning, toad breeding sites, bats, water voles, and adders. We have to go back to 1999 for the last reports of Adders in this journal. Sadly we often rely on road casualties for records of mammals - it would be helpful to have more reports of sightings as you travel from home to work or supermarket!

My personal contributions all relate to Red Cow, Cholsey SU592868 unless stated otherwise

PISCES

Cottus gobio Bullhead In the Thames and Loddon. (TDFC)

Salmo salar Salmon
Found in the Thames in very small numbers.
(TDFC)

Salmo trutta sp. Sea Trout Found in the Thames and Loddon in very small numbers. (TDFC)

Salmo trutta Brown Trout In the Thames and Loddon. (TDFC)

Cyprinus carpio Common Carp In the Thames and Loddon, Pavillons Pond, Ruscombe and Causeway Lake, Charvil. (TDFC)

Carassius carassius Crucian Carp Found in Pavillions Pond, Ruscombe (TDFC) Mirror Carp

In the Thames and Causeway Lake, Charvil. (TDFC)

Leuciscus leuciscus Dace In the Thames and Loddon. (TDFC)

Leuciscus cephalus Chub

4/8/04 In Kennet, near Aldermaston Wharf (CD) In the Thames and Loddon, Pavillons Pond, Ruscombe and Causeway Lake, Charvil. (TDFC)

Barbus barbus Barbel In the Thames and Loddon. (TDFC)

Gobio gobio Gudgeon In the Loddon. (TDFC)

Rutilus rutilus Roach

In the Thames and Loddon, Pavillons Pond, Ruscombe and Causeway Lake, Charvil. (TDFC)

Alburnus alburnus Bleak In the Thames, Loddon, and Causeway Lake, Charvil. (TDFC)

Abramis brama Bream
In the Thames, Loddon, and
Causeway Lake, Charvil.
(TDFC)

Tinca tinca Tench

In the Thames, Loddon, Pavillons Pond, Ruscombe and Causeway Lake, Charvil. (TDFC)

Perca cernua Pope or Ruffe In the Thames and Loddon. (TDFC)

Perca fluviatilis Perch

In the Thames, Loddon, Pavillons Pond, Ruscombe and Causeway Lake, Charvil. (TDFC)

Scardinus erythrophthalmus Rudd
In Pavillons Pond, Ruscombe and Causeway
Lake, Charvil. (TDFC)

Esox lucius Pike In the Thames, Loddon, and Causeway Lake, Charvil. (TDFC)

Phoxinus phoxinus Minnow In the Thames and Loddon. (TDFC)

Anguilla anguilla Eel In the Thames and Loddon, Pavillons Pond, Ruscombe and Causeway Lake, Charvil. (TDFC)

AMPHIBIA

Bufo bufo Common Toad

One adult in Caps Lane Cholsey on 9/9/04 - a former breeding site. (RR/TR)

N.B. No Red Cow records for third successive year.

Rana temporaria Common Frog

One in garden on 11/5/04. This the only Red Cow record for the year. (TR)

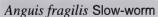
First Frog seen at garden pond in Park Lane, Tilehurst (RG31) on 1/3/04 and 9 balls of spawn produced on 10/3/04.(exactly as in 2003). Only a few tadpoles appeared, possibly due to later frost. (CD)

REPTILIA

Lacerta vivipara Common Lizard

Seen on 48 days from 10/5/04 to 18/10/04.

These facts represent a significant increase in this local population. On occasions two or more were seen together, and in September several young could be found basking on most days. This is the first record of breeding success for the site. (RR/TR)



Seen on 121 days from 16/3/04 to 10/10/04. One mating seen on 25/5/04. No evidence of successful breeding, but it now seems that a sighting of newborn young may be rare. The numerous records of one year old Slow-worms shows that breeding was achieved in 2003 despite the lack of proof during that year. The maximum number

of these lizards seen was 9 on 25/4/04 and 29/8/04. All of which represents the best ever population figures for the site. (RR/TR)

Colony previously reported in Wokingham (RG41) compost heap and adjacent log pile still present. On 26/7/04 young one about 7cm long seen undulating and disappearing down worm hole. (CD)

Natrix natrix Grass Snake

Seen on 77 days from 16/4/04 to 9/10/04. Although not a vintage year, 2004 showed a welcome sign of improvement from the previous year's low. Occasional sightings of this year's young from late August onwards and plenty of first year young suggesting successful breeding on or near the site in 2003. Maximum number



Common Lizard Lacerta vivipara



Grass Snake Natrix natrix

recorded just 3, but this count was achieved on numerous days through the season. (RR/TR) These snakes continue to be observed in Moor Copse under corrugated sheets. Earliest record not until 1/5/04 and last record 6/10/04. On 6/8/04 a skin measuring 91cm was found under a tin. (MR)

CHIROPTERA

Pipistrellus pipistrellus Pipistrelle Bat

Two flying on 11/4/04 - an early record. At least four flying on 14/4/04. Further sightings through the year, but no large numbers. Impression is of fewer bats than previous years. (TR)

INSECTIVORA

Erinaceus europaeus Hedgehog

23/6/04 One in Caversham garden, SU702762, (MS)

29/6/04 Highdown Hill Rd, Emmer Green (GC) 16/7/04 Young animal on drive – the first live record at Red Cow since 2001. Another on the drive on 21/7/04 at 22.30 (TR)

3/8/04 One snuffling in hedge bottom at Red Cow at 21.00 (TR/RR)

14/9/04 One accidentally caught in rat trap in garden, Berry's Road, Upper Bucklebury (SU542683) (MWS)

Sorex araneus Common Shrew

58 sightings in the year from 5/3/04 to 9/10/04. i.e. virtually unchanged in abundance from 2003. Would probably have been found beyond this period had monitoring continued. (TR)

At Moor Copse on 16/3/04 and 13/7/04 under sheets. (MR)

Sorex minutus Pigmy Shrew 6 sightings in the year from 30/3/04 to 11/9/04. (TR)

Talpa europaea Mole

One individual seen above ground on 19/9/04. Molehills as usual in neighbour's orchard. (TR)

CARNIVORA

Meles meles Badger Fresh latrine on 27/3/04 and fresh digging under fencing on 17/10/04. (TR)

Mustela nivalis Weasel 28/12/04 Caps Lane, Cholsey (RR)

Mustela erminea Stoat 19/3/04 Streatley Hill - (GC) 14/4/04 Cox's Lane, Ipsden SU

14/4/04 Cox's Lane, Ipsden SU627880 (GC) 3/6/04 A417 near West Hagbourne SU501881 (GC)

Stoat

Mustela erminea

24/7/04 Binfield Heath SU 735778 (GC)

Mustela putorius Polecat/Ferret

Polecat reported dead in Newbury area - Oct 04? 15/8/04 One white Ferret in Cow Lane, Reading. (HB)

Mustela vison American Mink

Reported as being "everywhere" including by the Thames, Loddon, St Patricks Stream, and Causeway Lake, Charvil. (TDFC)

Seen on several occasions by anglers at Cholsey Marsh. (TR)

Vulpes vulpes Fox

2/2/04, 7/2/04 and 9/7/04 One in Caversham garden SU702762. Another in same garden 27/12/04 badly affected by mange. (MS)

13/5/04 Five cubs found at play in the Moor Copse sunshine at 11AM. Continued to be seen during daylight, on and off until 4/6/04 when the bracken became too tall to allow further views. (MR)

14/5/04 One large animal disturbed in Red Cow meadow at 17.00 (TR)

28/6/04 Two at Stanford Dingley SU598728 (MS) 1/7/04 Two, probable young, crossing B481 at Sonning Common SU711805 by speed camera. (GC/JCC)

13/7/04 Large animal at Red Cow at 5.00 (RR) 28/7/04 One trying to catch Pheasant at Red Cow at 20.15 (RR)

26/10/04 Large animal disturbed in Meadow at 16.30 – many dark mangy patches.(TR) (One of our spaniels was found to have fox mange in early October)

5/11/04 Same Fox disturbed in Meadow at 15.15 (TR)

26/11/04 Fox reported expired and buried near Wells Cottage, Caps Lane. SU603866 (CM) 15/12/04 Two dead beside Henley road by May's Farm. SU656889 (TR/RR)

Regular visitor to Wokingham garden (RG41) throughout year. (CD)

ARTIODACTYLA

Muntiacus muntjak Muntjac

4/4/04, 4/6/04 and 28/12/04 Moor Copse inside the deer fence. (MR)

17/4/04 Reading Golf Course (JCC)

22/4/04 Sonning Eye (GC)

23/4/04 & 24/4/04 Reading Golf Course (JCC)

29/4/04 Two in woods at Goring Heath by King Charles Head (GC)

20/5/04 Checkendon, near Uxmore Farm (GC) 28/6/04 At/near Stanford Dingley one at

28/6/04 At/near Stanford Dingley one at SU598728, another on 10/7/04 at SU583720. (MS)

25 & 26/11/04 One in Caversham garden SU702762 (MS)

Capreolus capreolus Roe Deer

1/1/04 Two on Cholsey Hill – seen during Cholsey 1000+ annual Welly Walk (TR)

21/1/04 Two near Beenham (CD)

4/4/04 Four on Cholsey Hill – seen during Souster Amblers & Strollers walk (TR)

11/4/04 Woods at Kingswood Common (GC/JCC)

5/5/04 One near Hambledon (CD)

8/5/04 Three female, two male at Tadley (CD)

22/5/04 One heavily pregnant female near

Stanford Dingley CD

28/6/04 (two) and 10/7/04 (one) at Bucklebury Common SU559689 (MS)

31/7/04 One near Padworth (CD)

LAGOMORPHA

Lepus capensis Brown Hare

25/3/04 One at Red Cow (TR)

6/4/04 One on A4074 at Woodcote. (GC)

5/5/04 One near Hambledon (CD)

30/5/05 Fifteen at Starveall Farm, SU542805 (MS)

7/6/04 Two at Sheepcote Farm, Crowmarsh Gifford SU624875 (GC)

14/6/04 One at Red Cow at 9.30 (TR)

15/6/04 Three at East End Farm at 5.00 (TR)

28/6/04 One at Stanford Dingley, SU598728 (MS)

3/8/04 Two in East End farm at 7.00 (TR)

1/9/04 Two in field at harvest - Red Cow (TR)

Oryctolagus cuniculus Rabbit

Still common, no notable change from 2003.

CONTRIBUTORS

Thanks are due to the following members, friends and organisations for their submissions:-

(CD) Colin Dibb, (CM) Colin MacInnes, (GC) Gordon Crutchfield, (HB) Heather Baker, (JCC) Jane Crutchfield, (MR) Martin Raper, (MS) Martin Sell, (MWS) Malcolm Storey, (RR) Ro Rayner, (TDFC) Twyford & District Fishing Club, (TR) Tony Rayner

RODENTIA

Sciurus carolinensis Grey Squirrel

Appeared to be more numerous in Cholsey than in recent years. (TR)

Seen eating Yew berries at Checkendon on12/11/03. Autumn visitor to oak tree in Park Lane, Tilehurst RG31.Seen throughout year in large wooded garden in RG41 Wokingham (all CD)



Wood Mouse Apodemus sylaticus

Apodemus sylaticus Wood Mouse

A better year for this species. 18 sightings in the year concentrated in periods 6/8/04 to 3/9/04 and from 26/9/04 to 29/9/04 when young were found. (TR)

Found at Moor Copse in dormouse nest boxes only during Spring and Autumn, up to 4 in a box. (MR)

Microtus agrestis Field Vole

166 sightings in the year from 13/3/04 to 17/10/04. Several nests of live young found. (TR) Often found at Moor Copse between 23/4/04 and 5/11/04. (MR)

Clethrionomys glareolus Bank Vole

174 sightings in the year from 5/3/04 to 17/10/04. Several nests of live young found. For the first time this species slightly more often found than Field Vole. (TR)

One under a corrugated sheet at Moor Copse on 10/5/04. (MR)

THE WEATHER AT READING DURING 2004

Ken Spiers

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This was a disappointing year, following the previous year's record daily temperatures and a string of dry, sunny months. A mild winter and a warm summer and autumn, without any extreme temperatures, still produced a year in the top ten warmest years, making it the fifth warmest since 1921. It was also the eighth year in a row with its annual mean temperature above the 1971-2000 average, with the mean minimum temperature for the year the highest since 1921. It was also the first year since 1998 when no daily maximum temperature reached 30.0°C. There were some notable wet months, namely August and October, with August the second wettest month since October 1987. There was a lack of sunshine at times, with only June producing two hundred hours or more. For the third year running, December was the dullest month of the year. With only three months recording totals above average, the total sunshine for the year was the lowest since 2000. 2004 was a windy year, with the mean wind speed the highest since 1992, however, the number of foggy days was the lowest since before 1960.

January began cool and dull, then the weather became unsettled and remained so throughout the month. There was a short cold spell between the 28th and the 30th, with heavy snow on the 28th accompanied by thunder. There were no real extremes of note during the month. The mean monthly temperature was the highest since 1999, with the number of air and ground frosts just below the long term average. The rainfall for the month was 29% above average, the highest since 1999 and sunshine just above average, with the 29th, 7.9 hours, the sunniest January day since 1994.

February started unsettled and wet, with most of the month's rainfall being recorded in the first week. During this period it became very mild with a maximum temperature on the 4th, 15.5°C, the highest since 1998 and the minimum temperatures on the 4th and 5th, 11.5°C, the highest since 1971. The second and third week saw temperatures dropping to near normal, becoming dry but dull as high pressure dominated our weather. The last week witnessed a cold spell, with light snow showers on the last four days. Overall, this February was the driest since 1998 and the dullest since 1997.

March began with three days of very low night-time temperatures. However, temperatures soon recovered to near normal, remaining fairly dry in the process. With high pressure to the west of the British Isles, cold winds blew from a northerly direction, bringing snow showers, with a moderate fall on the night of the 11th into the early hours of the 12th. From the 13th onwards it became unsettled, wet, dull and rather mild. However, temperatures settled down to near normal by the fourth week, becoming dry, with the last couple of days very spring-like, warm and very sunny. This was the thirteenth month since the start of year 2003, with its mean temperature above average.

April started in true fashion, showers merging to give longer periods of rain with sunny periods and temperatures around average. The middle of the month saw high pressure near to the British Isles producing dry and fairly sunny days with daytime temperatures above average and ground frosts at night. From the 17th there was an unsettled spell with rain heavy at times. However, by the 22nd, this had again been replaced by high pressure, with temperatures in the low twenties and very sunny days. With three days recording above 20°C, this April had the second highest number of days above this temperature in the last fifteen years. The month ended unsettled with further rain, making this the wettest April since 2000. Although the month's mean temperature was above average, it was still the coolest April since 2001. It was also the first time since 1994 that no air frost has been recorded.

May opened very unsettled and wet with temperatures below average. By the 10th, high pressure began to establish itself to the west of the British Isles bringing with it dry, sunny and rather warm days. These conditions remained till the end of the month, when the weather became more changeable for the last few days. Mean temperatures were above average with the total sunshine and rainfall for the month around average. The number of ground frosts was the lowest since the year 2000.

June brought summer early, enjoying very warm, dry and sunny conditions, as high-pressure stretched across the southern part of the country. It was not until the 17th that any rain was recorded. From then on, until the end of the month, the weather became changeable, with temperatures dropping back to

normal for June and rain heavy at times. However, the mean temperature for the month was the second highest since 1992. It still remained sunny during the latter period of the month, in fact the sunshine was the main feature of the month, with the total nearly two-hundred and twenty hours, the highest for June since 2001 and the sixth highest in the last twenty years.

July started changeable with scattered showers and reasonable amounts of sunshine. Temperatures were disappointingly below average, with a ground frost being recorded on the 13th. However, as the month progressed, high pressure began to be the dominant feature, becoming very hot and oppressive by the end of the month. Temperature-wise, this was the first month since last October that the mean monthly temperature was below average and the second month in the last seventeen with its mean temperature below average. Although there were some very sunny days, this was the fifth month this year with its total sunshine below average. This is quite a contrast from last year when by this time five months had recorded above average sunshine.

August had only seven days with daily pressure above the month's average; as a result the month was dominated by thundery lows and their associated fronts. This gave us some very heavy rain at times, with the total on the 9th of 44.2 mm, the wettest August day since 1999 and the twelfth wettest day, for any month of the year, since 1921. It was also the wettest August since 1921. There were some very hot days during the early part of the month, culminating on the 8th, when a temperature of 29.7°C was recorded, the highest maximum this year. Overall, the mean temperature for the month was the sixth highest since 1971.

September had a very hot, sunny and dry start to the month. The maximum on the 5th, 27.7°C, and the minimum on the 7th, 16.5°C, were the highest for any September day, for over twelve years. The rest of the month saw temperatures remain around average, with the mean temperature for the month the highest since 1999. There was no rainfall until the 9th and with daily amounts, apart from the 12th with 7.6 mm, light. This September was the ninth driest since 1971. Sunshine was the main feature, with a very sunny start which helped to make this September the sunniest since 1971 and the fourth sunniest since 1956 (when sunshine records first started).

October had virtually the same pattern of weather throughout the month, characterised by numerous low pressures and fronts passing over the British Isles in quick succession. With only seven days with daily pressure readings above the month's average, the mean pressure for the month was the lowest since 1976. The result of all this activity was that the total rainfall for the month made this October the wettest since 2000 and the fifth wettest since 1971. As would be expected the sunshine was in short supply, with this October the dullest since 1998. Temperatures remained around normal, throughout the month, with the number of ground and air frosts the lowest for three years.

November had high pressure stationed to the south of the British Isles, so depressions and fronts tracked a more northerly path. Because of this daily rainfall amounts were light making this November the driest since 1990 and the seventh driest since 1921. Although it was a dry month, it was disappointingly cloudy. With the number of sunless days the highest since 1994, the total sunshine for the month was the lowest, also since 1994. On the 20th it was cold enough for rain to turn to snow for a time, however temperatures remained around or just above normal throughout most of the month.

December had short periods of mild and then rather cold weather conditions. Nearly all the rain fell in the second half of the month, however, this December was still the driest for three years. Daytime temperatures and night-time temperatures were just above and below average respectively. However, this month was only the second this year and the fifth in the last three years with its mean temperature below average. On the 20th, 6.4 hours of sunshine was recorded, the sunniest December day since 1990. However, the total sunshine was below average but it was still the sunniest December for three years.

DAILY WEATHER RECORDS: 2004 - UNIVERSITY OF READING (WHITEKNIGHTS)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Daily Temperatures °C									11 1111120 21				
Maximum	8.7	8.7	10.7	14.2	17.4	21.3	21.8	23.1	20.1	14.5	10.8	8.4	15.0
Minimum	2.8	3.3	3.4	5.2	8.2	11.5	12.1	14.0	11.7	8.3	5.7	2.2	7.4
Mean	5.8	6.0	7.1	9.7	12.8	16.4	17.0	18.6	15.9	11.4	8.3	5.3	11.2
Range	5.9	5.4	7.3	9.0	9.2	9.8	9.7	9.1	8.4	6.2	5.1	6.2	7.2
and the Assembly													
Extreme Maximum	12.1	15.5	19.4	21.0	23.1	29.0	28.6	29.7	27.2	17.3	14.5	13.2	29.7
Date	29th	4th	31st	24th	17th	8th	29th	8th	5th	24th	12th	30th	8th Aug
Extreme Minimum	-3.0	-4.0	-5.1	1.2	3.0	6.0	8.2	5.8	4.3	2.5	-0.5	-3.5	-5.1
Date	29th	26th	2nd	9th	23rd	19th	6th	9th	16th	19th	14th	20th	2 Mar
Extreme Grass													
Minimum	-8.0	-11.0	-12.5	-6.1	-6.0	-3.0	-0.1	2.7	-3.5	-3.4	-7.4	-8.6	-12.5
Date	3rd	26th	1st	12th	23rd	21st	13th	28th	25th	19th	14th	27th	1st Mar
Days with:													
air frost	8	10	3	0	0	0	0	0	0	0	1	8	30
ground frost	19	15	20	16	6	3	1	0	2	6	11	20	119
Hours at/below 0°C	95.0	80.0	34.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	104.0	317.0
Sunshine Hours													
Total	58.5	68.3	98.0	141.4	188.3	219.8	172.4	184.8	178.3	89.7	45.2	44.5	1489.2
% of possible	22.2	23.3	26.6	34.1	39.1	44.6	34.7	41	47	26.9	16.8	17.9	33.2
Daily mean	1.89	2.34	3.16	4.71	6.07	7.33	5.56	5.96	5.94		1.51	1.44	4.07
Precipitation													
Amount in mm	76.8	21.1	39.8	76.4	49.0	33.9	28.7	136.3	21.3	113.1	27.5	42.6	666.7
Rain days	20	11	15	14	12	8	11	18	11	21	15	8	164
										-			
Maximum rain in one day													
mm	11.1	6.3	7.8	15.4	13.6	13.5	13.1	44.2	7.6	16.3	5.9	13.4	44.2
Date	11th	1st	12th	27th	3rd	22nd	7th	9th	12th	4th	20th	18th	9 Aug
				7.7									3
Mean wind speed													
mph	5.5	5.1	4.8	4.1	3.0	3.9	3.4	3.1	4.6	4.8	2.7	3.3	4.0
p.i	0.0	0.,	1.0		0.0	0.0	0.1	0				0.0	
Days with													
Snow or sleet	1	4	4	0	0	0	0	0	0	0	1	1	11
Snow lying	1	0	1	0	0	0	0	Ö	0	0	Ö	Ó	2
Fog at 09.00 GMT	ó	0	2	0	0	0	0	0	0	0	0	1	3
Thunder	1	0	1	3	0	0	1	5	0	1	0	o	12
Hail	Ö	0	3	1	0	0	Ö	0	0	o	0	1	5
i idii	·	· ·	Ü		·	Ü	·	Ü	Ů	·	· ·		
Mean Pressure													
mbs	1000.0	1023.4	1021 2	1013.5	1019 1	1019.9	1017.0	1011.0	1010 /	1007.8	1024.0	1010.8	1016.9
IIIDO	1009.0	1020.4	1021.2	1010.0	1010.1	1010.0	1017.0	1011.0	1013.4	1007.0	1024.0	1013.0	1010.3
Highest	1028.2	1037.3	1037.3	1035.3	1028.8	1032.1	1033.4	1028.0	1022.3	1034.2	1022.2	1038.6	1038.6
Date	18th	9th	2nd	24th	16th	13th	24th	1026.0 1st	8th	31st	14th	8th	8 Dec
Date	1001	3111	ZIIU	24111	10111	10111	24111	131	Otti	0131	1701	Olli	0 560
Lowest	986.5	1002.4	1004.9	979.7	981.2	989.9	1005.7	999.2	996.3	991.3	1014.0	995.7	979.7
Date	13th	27th	21st	18th	5th	23rd	8th	18th	14th	20th	28th	17th	18 Apr
Date	13111	2/11	2151	TOUT	3111	2310	Olli	10111	(40)	2011	2011	17111	10 Apr



